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January 12, 2023

Matthew W. Szabo, Chair  
Municipal Facilities Committee  
200 N. Main Street, Room 1500  
Los Angeles, CA 90012

**REQUEST FOR APPROVAL OF CALIFORNIA ENVIRONMENTAL QUALITY ACT  
COMPLIANCE AND PROJECT FOR AN ALL-ELECTRIC BUS MAINTENANCE  
FACILITY FOR THE PROPERTY LOCATED AT 740 AND 800 EAST 111TH PLACE,  
LOS ANGELES, CA 90059 (APN: 6071-002-009, 6071-002-013)**

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**RECOMMENDATION**

That the Municipal Facility Committee approve the report recommendations and authorize staff to transmit for Council approval subject to the approval of the Mayor, the following:

1. CONSIDER the LADOT All-Electric Bus Maintenance Facility Initial Study/Mitigated Negative Declaration (IS/MND), in accordance with the California Environmental Quality Act (CEQA);
2. FIND that, on the basis of the whole record, there is no substantial evidence that the proposed Project will have a significant effect on the environment and that the IS/MND reflects the City's independent judgment and analysis;
3. ADOPT the IS/MND and the Mitigation Monitoring Program;
4. SPECIFY that the documents constituting the record of proceedings in this matter are in the files of the Department of Public Works Bureau of Engineering, Environmental Management Group located at 1149 South Broadway, Los Angeles;
5. APPROVE the Project as described in the IS/MND;
6. DIRECT the completion of any remaining National Environmental Policy Act (NEPA) requirements to access the federal funds for the proposed Project;



7. DIRECT Los Angeles Department of Transportation, with the assistance of the Bureau of Sanitation, to pursue an agreement with Department of Toxic Substances Control and continue to work with them on any additional site characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency; and
8. That the Los Angeles City Council, subject to the approval of the Mayor, DIRECT and AUTHORIZE the Department of General Services, with the assistance of the City Attorney, to take all remaining, necessary actions to complete the transaction for the acquisition of the Property located at 740 East and 800 East 111th Place, APN: 6071-002-009, -013.

## **SUMMARY**

On behalf of the Department of Transportation (LADOT), who prepared this report, the Department of General Services (GSD) requests consideration of the LADOT All-Electric Bus Maintenance Facility Initial Study/Mitigated Negative Declaration (IS/MND), in accordance with the California Environmental Quality Act (CEQA), for property located at 740 and 800 East 111th Place, APNs: 6071-022-009 and 6071-022-013, (collectively, "Property") (Exhibit "A"), and ADOPT the recommendations contained in this report. LADOT intends to use this Property as a bus maintenance facility for transit service operations.

## **BACKGROUND**

In 2004, the LADOT initiated the LADOT Bus Facility Purchase Program to replace leased transit facilities with City-owned transit facilities. At the time, the cost to lease LADOT's operation and maintenance facilities had increased as much as 200 percent over the previous contract term. The Program's goal is to address skyrocketing lease costs and achieve cost savings over time for the City.

On November 9, 2017, the City Council directed LADOT to take numerous actions to ensure a transition to a 100 percent zero-emission transit bus fleet by 2030 or earlier (C.F. 17-0739). On February 10, 2020, the Mayor of Los Angeles issued Executive Directive No. 25, directing LADOT to achieve a 100 percent zero-emission transit bus fleet in time for the 2028 Olympic and Paralympic Games. In order to support its future all-electric bus fleet, LADOT bus yards will need to be equipped with electric charging infrastructure. LADOT must install charging equipment and make electrical upgrades on property that it owns in order to secure the City's investment and avoid increasing the value of a leased property and the lease costs.

On September 30, 2020, City Council adopted the Information, Technology, and General Services Committee Report relative to the acquisition of the Property for use by the LADOT as a bus maintenance facility for transit service operations (C.F. No. 20-1129).

Since 2004, LADOT has purchased three of its four operations and maintenance facilities: its North Yard (12760 Foothill Boulevard), Mid-City Yard (1910-1950 Washington Boulevard), and Downtown Yard (454 Commercial Street). The City's final leased operations and maintenance transit facility is LADOT's South Yard, located in the City of Compton. Approval of the CEQA documents and closing the acquisition of this property will allow LADOT to secure a fourth and final yard within the City of Los Angeles, and thereby vacate the yard located in Compton.

## **DISCUSSION**

### **Project Description**

Through its LADOT Bus Facility Purchase Program, the Department seeks to purchase and develop an Electric Bus Maintenance Facility (EBMF, or proposed Project) to serve as its new South Yard; the new yard will support a larger and cleaner zero-emissions bus fleet. Currently, LADOT leases a bus operations and maintenance facility at 14011 South Central Avenue in Compton, California. The 95 buses housed and serviced at the yard in Compton are operated on DASH, Commuter Express and CityRide routes in the South Los Angeles and Harbor area. The proposed EBMF would enable LADOT to provide maintenance services, parking, charging, inspection, and dispatch functions to approximately 130 battery-electric buses to be used for DASH and Commuter Express.

After more than two years of searching, LADOT finally identified a 5.5-acre site, owned by the Watts Labor Community Action Committee (WLCAC) at 740 and 800 East 111th Place in South Los Angeles as a potential site for the EBMF. At present, the site includes two industrial buildings that require demolition.

The proposed EBMF would be composed of a two-story operations and maintenance building, 11 bus maintenance bays, a service building, a bus wash building, a bus parking/charging area, a second-story parking deck with a canopy and a photo-voltaic system. Electrification equipment, including electrical transformers, switch cabinets and bus chargers would also be included. Approximately 312 employees would be working on site and the facility would be open 24 hours per day, seven days a week.

### **Land Acquisition Agreement**

On May 27, 2021, GSD entered into an agreement with the WLCAC; on behalf of LADOT, to purchase the 5.5-acre site for \$24 million dollars. The agreement requires the City to complete an environmental review of the Property, and Council approval of the CEQA review, prior to completing the purchase.

### **CEQA Process**

The City began its environmental review process in May 2021. Led by the Department of Public Works Bureau of Engineering (BOE) with support from the Bureau of Sanitation, the City completed an Initial Study / Mitigated Negative Declaration (IS/MND). The

IS/MND analyzes potential project impacts on resource areas such as noise, hazardous materials, paleontological resources, transportation, geology and soils, and others. The IS/MND includes mitigation measures for biological resources, cultural resources, noise, hazardous materials including the contaminated soils on the Property, and tribal cultural resources to reduce environmental impacts from the proposed Project to less-than-significant levels. A Soil Management Plan shall be developed and additional measures as recommended in the Phase II Environmental Site Assessment (see Exhibit "B") shall be taken to clean up the tetrachloroethene contamination in the soil plume underneath the site. The soil contamination presents some risk for the City of Los Angeles as discussed below under Environmental Study Findings.

The Draft IS/MND was published on the BOE's website at [bit.ly/111EBMF](https://bit.ly/111EBMF) and circulated for public review and comment from September 16, 2022 to October 17, 2022. A Notice of Intent/Notice of Availability (NOI/NOA) was published in the Los Angeles Times and La Opinión on September 15, 2022. The NOI/NOA was mailed to interested parties and to the owners and occupants of the properties within 500 feet of the proposed Project site. The NOI/NOA was also filed with the Los Angeles County Clerk.

The Draft IS/MND received one comment during the public review period. Copies of the correspondence along with responses can be found in the "Response to Comments on the Draft IS/MND" section of the Final IS/MND (see Exhibit "C"). The comment received did not require changes to the proposed Project or the conclusion or findings of the IS/MND or in the mitigation measures. In addition to the public participation noted above, the BOE, during the pre-design phase, held two public outreach meetings.

### Environmental Site Assessment

During the City's pre-acquisition environmental due diligence period, the City discovered that the Property's soil is contaminated with tetrachloroethene, a chemical compound also known as PCE. One possible source of the contamination is aerospace manufacturing that took place at the site decades ago. If the City acquires the Property, it will be required to develop and implement a Soil Management Plan. The Soil Management Plan is a mitigation measure from the IS/MND that provides health and safety guidance to construction personnel on how to handle, characterize and dispose of contaminated soils and wastes encountered during construction. The City's consultants who prepared the study estimate that the Soil Management Plan will take one to two years to develop and may include further soils testing as well as mitigation measures like soil vapor barriers, which will require design, operation, and maintenance. The City will perform additional site characterization to identify the extent of the PCE contamination. Following completion of site characterization, the City shall report the "unauthorized release" to the appropriate agency, likely the Department of Toxic Substances Control (DTSC), for regulatory oversight. Once a case is opened, the City shall comply with any additional characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency to protect construction workers, facility workers, and neighboring residences from exposure to impacted media (i.e., soil, groundwater, and/or soil vapor). This remediation effort is estimated to cost approximately \$2.5 million and has been accounted for by LADOT in its funding plan. The amount was estimated by the City's

environmental consultant approximately 1-2 years ago based upon the known contamination on the acquisition parcels only. It does not take into account changes since then, or any potential additional costs from the risks further described, below, in this section. Prior to entering the Land Acquisition Agreement, the City had completed a Phase I and Phase II Environmental Site Assessment and understood that some soil remediation would be necessary. Additional testing and site characterization was completed after entering into the Land Acquisition Agreement.

In addition to the known site cleanup on the acquisition parcels, the environmental reports show that related soil contamination could extend towards the east; however, the City was not permitted, by their owners, to test neighboring properties as part of its pre-acquisition assessment, so it cannot confirm whether any related contamination exists on the adjacent property to the east at 810 East 111th Place, where a charter middle school has operated since 2013. In addition to the contamination discovered at 740 and 800 East 111th Place, there may be multiple sources of contamination underneath the surrounding properties. The seller of the properties at 740 and 800 East 111th Place also previously owned the property at 810 East 111th Place so it may have had common historical industrial usage and thus contamination.

The City could be subject to unknown costs and risks from potential claims by individuals or from the regulatory oversight agencies requiring additional testing and remediation efforts off-site on the neighboring properties. Disputes may arise about which source caused the contamination on the acquired site and adjacent properties if there are overlapping multiple sources, and who should be responsible for releases caused by the prior owners and/or operators on the affected sites. Also, there could be unknown additional costs and risks related to additionally treating known contaminated areas once formal regulatory oversight of the remedial action plan begins, further testing occurs, and if adjusting cleanup procedures are needed.

The City will work on an Agreement with the DTSC related to their oversight as the regulatory agency for cleaning up contamination on the site. Regardless of the nature of that oversight agreement, the City's acquisition will continue to have the above-noted risks.

The City should consider these risks prior to approving the CEQA documents and acquiring the site, since approving the City's CEQA documents and acquiring the site will require the City to take certain actions related to addressing the environmental contamination.

LADOT is fully aware of the environmental concerns and desires to continue with the purchase as outlined in this report due to the Property's size, location, scarcity of similar sites and their necessity to secure a location for its bus maintenance facility.

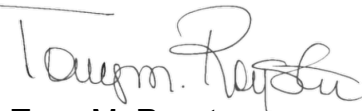
### Construction Schedule

If the City adopts the IS/MND and Mitigation Monitoring Plan (see Exhibit "D"), GSD expects to finalize the purchase in Spring 2023. After finalizing the purchase, LADOT and BOE will begin coordination with the Federal Transit Administration (FTA) to complete compliance with the National Environmental Policy Act (NEPA) to access the federal funding. Site remediation and project design are expected to take one to two years. The EBMF construction is anticipated to start June 2025 and end June 2027, in time for the 2028 Olympics.

GSD has continued to search for alternative locations; however, there are currently no other sites available in the marketplace meeting LADOT's criteria for a bus maintenance facility. No other sites of this size and required criteria have become available in the marketplace in the past three years.

### FISCAL IMPACT

Funding for the Project is expected to include funds from the City's Bus Facility Purchase Program, FTA's Urbanized Area Formula Program Grants (49 U.S.C. Chapter 53, Sections 5307 & 5340), and other State and Federal grant programs that may become available.



Tony M. Royster  
General Manager

Attachment: Exhibit A - Legal Description of Property  
Exhibit B - Phase II Environmental Site Assessment  
Exhibit C - Final IS/MND  
Exhibit D - Mitigation Monitoring Plan

**EXHIBIT A**

**LEGAL DESCRIPTION**

3. THE LAND REFERRED TO HEREIN IS SITUATED IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF LOT "B", TRACT NO. 6478, IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 68 PAGES 93 THROUGH 99 INCLUSIVE OF MAPS, IN THE OFFICE OF THE RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTHEASTERLY LINE OF SAID LOT B AT THE SOUTHWEST CORNER OF THE 2 ACRE PARCEL OF LAND DESCRIBED IN THE DEED TO N.A. KESSIER, TRUSTEE, RECORDED AS INSTRUMENT NO. 1359 ON DECEMBER 5, 1950 IN INSTRUMENT, IN BOOK 35024 PAGE 317 OF OFFICIAL RECORDS, OF SAID COUNTY, SAID POINT BEING S 68° 37' 27" W 504.62 FEET, MORE OR LESS FROM THE SOUTHEAST CORNER OF SAID LOT "B"; THENCE CONTINUING SOUTHWESTERLY ALONG SAID SOUTHEASTERLY LINE, S 68° 37' 27" W 183.67 FEET, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE NORTHWESTERLY AND PARALLEL WITH THE NORTHEASTERLY LINE OF PARCEL 1 OF DOCUMENT NO. 96-1586326, RECORDED SEPTEMBER 26, 1996 IN SUCH OFFICIAL RECORDS, N 21° 22' 33" W 379.30 FEET; THENCE WESTERLY AT RIGHT ANGLE TO SAID PARALLEL LINE, S 68° 37' 27" W 10.61 FEET; THENCE NORTHWESTERLY AND PARALLEL TO SAID NORTHEASTERLY LINE OF SAID PARCEL 1, N 21° 22' 33" W 46.34 FEET TO THE NORTHWESTERLY LINE OF SAID LOT B; THENCE SOUTHWESTERLY ALONG SAID NORTHWESTERLY LINE, S 88° 38' 00" W 555.71 FEET TO THE SOUTHWESTERLY LINE OF PARCEL 2 OF SAID DOCUMENT NO. 96-1586326; THENCE SOUTHEASTERLY ALONG SAID SOUTHWESTERLY LINE OF PARCEL 2, S 21° 22' 33" E 425.73 FEET TO THE SAID SOUTHEASTERLY LINE OF LOT B; THENCE NORTHEASTERLY ALONG SAID SOUTHEASTERLY LINE, N 68° 37' 27" E 566.32 FEET TO THE TRUE POINT OF BEGINNING.

Assessor Parcel Numbers 6071-022-009 and 6071-022-013

# EXHIBIT "B"

## Phase II Environmental Site Assessment and Additional Site Assessment Report

740 East & 800 East 111th Place,  
Los Angeles, CA 90059



Prepared for:  
Solid Resources Citywide Recycling Division  
City of Los Angeles, Department of Public  
Works  
LA Sanitation and Environment (LASAN)  
1149 S. Broadway  
Los Angeles, CA 90015

Prepared by:  
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290 Conejo Ridge Avenue  
Thousand Oaks, CA 91361

Stantec Project No. 185751046

October 31, 2019



# Sign-off Sheet

This document entitled Phase II Environmental Site Assessment and Additional Site Assessment Report was prepared by Stantec Consulting Services Inc. for the account of City of Los Angeles, Department of Public Works, LA Sanitation and Environment (LASAN; the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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# PHASE II ENVIRONMENTAL SITE ASSESSMENT AND ADDITIONAL SITE ASSESSMENT REPORT

740 East & 800 East 111<sup>th</sup> Place,  
Los Angeles, California 90059  
October 31, 2019

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### Executive Summary

On behalf of the City of Los Angeles, Department of Public Works, LA Sanitation and Environment (LASAN), Stantec Consulting Services Inc (Stantec) has prepared this report documenting the results of a Phase II Environmental Site Assessment (ESA) conducted between July 31, 2019 and August 15, 2019 at 740 East & 800 East 111<sup>th</sup> Place in Los Angeles, California (Figure 1; the "Property"). Based on the findings and results of the initial assessment completed, a follow up site assessment was conducted on 800 East 111<sup>th</sup> Place (only) between September 30, 2019 and October 10, 2019.

The assessments were completed as part of the City of Los Angeles's due diligence process for the purchase of the Property and was initiated in response to findings presented in Stantec's *Phase I Environmental Site Assessment Report* dated June 18, 2019 (Stantec 2019). The report identified recognized environmental conditions in connection with the Property which included the historic presence of fuel underground storage tanks, previous environmental case listings, and the current use of the Property for chemical storage with indications of release.

It is Stantec's understanding that the Department of General Services (GSD) is considering purchase of the Property for use as an electric bus facility, on behalf of the City of Los Angeles Department of Transportation (LADOT).

#### Phase II Environmental Site Assessment

The Phase II ESA consisted of a soil and sub-slab soil vapor investigation and was conducted at the Property to evaluate the potential for subsurface volatile organic compounds (VOCs), metals, and total petroleum hydrocarbons (TPH) to be present in concentrations that could potentially pose a risk to future users of the Property.

A total of 16 soil borings were advanced to a maximum depth of approximately 25 feet below ground surface (ft bgs). A total of 112 soil samples were collected, of which a total of 49 were selected and analyzed for VOCs, TPH and metals. All other remaining soil samples collected were placed 'on-hold' for future testing, if warranted.

Limited detections of VOCs and TPH were reported in soil at the Property; however, not at concentrations that would be considered hazardous to human health. Arsenic was reported in all but one sample at concentrations which exceed the commercial use screening levels maintained by the Department of Toxic Substances Control (DTSC). However, it should be noted that all of the reported arsenic concentrations fell within the generally accepted native soil background levels typical of southern California.

A total of 12 sub-slab Cox-Colvin Vapor Pins™ were installed within the slab of the existing buildings at the Property. A total of 13 sub-slab soil vapor samples (12 primary and one replicate) were subsequently collected and analyzed for VOCs, fixed gases, and methane.



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Elevated concentrations of tetrachloroethene (PCE) were detected in sub-slab soil vapor collected at the Property. The commercial use soil vapor screening level derived for PCE is 66.7  $\mu\text{g}/\text{m}^3$ . This screening level was exceeded in seven of the 13 sub-slab soil vapor samples submitted for chemical analysis, indicating a high potential for vapor intrusion to indoor air at both properties. In particular, concentrations of PCE reported from 800 East 111<sup>th</sup> Place ranged from 900  $\mu\text{g}/\text{m}^3$  to 1,200  $\mu\text{g}/\text{m}^3$  (Figure 3).

Due to the detection of elevated concentrations of PCE, a potentially carcinogenic chemical, in sub-slab soil vapor, Stantec recommended an additional assessment of the parcel located at 800 East 111<sup>th</sup> Place to further characterize and assist in identifying the likely source of the PCE detected in. The additional site assessment was completed between September 30, 2019 and October 10, 2019.

### Additional Site Assessment

An additional site assessment was conducted to further evaluate the VOCs (primarily PCE) detected in soil and soil vapor. The assessment consisted of the installation and sampling of seven dual-nested and three triple-nested soil vapor probes at accessible locations across 800 East 111<sup>th</sup> Place (the Site).

A total of 10 soil borings (SV-1 through SV-10) were advanced across the Site. Shallow soil borings SV-1 through SV-7 were advanced to a total depth of 15.5 ft bgs. Deep soil borings SV-8 through SV-10 were advanced to a total depth of 30.5 ft bgs. Five soil samples were collected from each shallow boring and eight soil samples were collected from each deep soil boring, for a total of 59 soil samples. All soil samples were analyzed for VOCs including PCE.

The soil analytical results obtained from the Site during the additional site assessment confirm results obtained during the Phase II ESA, in particular, low levels of VOCs (including PCE) were detected in shallow soil. However, the concentrations of VOCs reported in soil would not be considered hazardous to human health.

Shallow soil borings SV-1 through SV-7 were completed as dual nested soil vapor probes with vapor implants centered at five ft bgs and 15 ft bgs. Deep soil borings SV-8 through SV-10 were completed as triple nested soil vapor probes with implants centered at five ft bgs, 15 ft bgs, and 30 ft bgs.

A total of 17 soil vapor samples (16 primary and one replicate) were collected from the Site. Soil vapor samples were successfully collected at the 15 ft depth from SV-1 through SV-3 but could not be collected from SV-4 through SV-10. Soil vapor samples were collected from all five ft depth soil vapor implants and all 30 ft depth soil vapor implants installed at the Site.

Elevated concentrations of PCE were detected in soil vapor collected during the additional site assessment. The 66.7  $\mu\text{g}/\text{m}^3$  commercial use soil vapor screening level was exceeded in 15 of the 17 soil vapor samples submitted for chemical analysis, indicating a potential for soil vapor

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intrusion to existing buildings or future development exists. The highest concentrations of PCE appear to be centered along the southern boundary of 800 East 111<sup>th</sup> Place. The plume appears to extend to the north beneath the on-Site building, to the west beneath the building located at the 740 East 111<sup>th</sup> Place, and to the east beneath the Animo James B. Taylor Charter Middle School.

### CONCLUSIONS

Soil at the Property is impacted with VOCs and TPH, although not at concentrations considered hazardous to human health. Native arsenic was detected in soil at concentrations above residential use screening levels; however, within ranges that are generally accepted as background for southern California.

Soil vapor at 800 East 111<sup>th</sup> Place is impacted with PCE, to a depth of at least 30 feet below ground surface at concentrations that are considered hazardous to human health. The PCE soil vapor plume which exceeds residential and commercial use screening levels extends to beneath the building located on 740 East 111<sup>th</sup> Place and likely beneath the adjacent Animo James B. Taylor Charter Middle School.

The known historic use of 800 East 111<sup>th</sup> Place as an aircraft component and equipment supplier, and the known current use as a waste storage facility, suggest that there may have been an undocumented release of chemicals to soil at the Property. In addition, there is a documented release of solvents to soil and groundwater at the Lanzit Project located approximately 1,000 feet east of the Property. It is Stantec's opinion that the PCE detected in soil vapor at the Properties is the likely result of on-site releases to soil, which may extend to groundwater, as well as potential comingling of solvent impacted vapors sourced from contaminated groundwater from the Lanzit Project to the east.

It is Stantec's opinion that other impacts to soil at the Property may exist but are currently inaccessible based on the current storage of waste, equipment and other debris.

### RECOMENDATIONS

It is Stantec's understanding that the City of Los Angeles, Department of General Services (GSD) is considering purchase of the Property for use as an electric bus facility, on behalf of the LADOT. Based on the analytical data collected from the Property and presented in this report, and the planned future commercial use as an electric bus facility, Stantec provides the following recommendations should the City acquire the Property comprised of both 740 East and 800 East 111<sup>th</sup> Place.

Stantec recommends all stored chemicals, equipment, and waste/debris be removed from the Property prior to purchase and a pre-acquisition inspection be performed to confirm the removal of all hazardous materials and other solid and liquid wastes stored on the Properties.

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Stantec recommends a *Soil Management Plan* (SMP) be developed for the Property in the event of future planned excavation or other activities involving ground disturbance. A SMP provides guidance to workers from a health and safety perspective (personal protective equipment, action levels, etc.), describes a site and project specific protocol to be followed in the event of encountering chemically impacted soil, and facilitates excavation activities by eliminating downtime associated with waste characterization and identification of appropriate waste receiving facilities.

Impacts to soil vapor may be at levels that, if provided to the LARWQCB, may require additional action including detailed site characterization and active remediation as well as the designation of a responsible party. Because the contaminant plume may extend offsite, Stantec suggests consultation with legal counsel to determine if notification to the LARWQCB of the potential unauthorized release is warranted. Legal counsel can also provide guidance on the most appropriate party to provide notification to the LARWQCB.

Stantec recommends mitigation measures (i.e., engineering controls such as vapor barriers) be installed within the current buildings at the Property, or within new construction, to address residual impacts of PCE in soil vapor in the event remediation is not pursued or completed or that may remain following remediation. These measures typically consist of installation of passive/active venting and/or application of a vapor barrier that is chemically resistant to chlorinated solvents. It is recommended that vapor barriers be applied across the entire ground level of occupied structures.

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### 1.0 INTRODUCTION

On behalf of the City of Los Angeles, Department of Public Works, LA Sanitation and Environment (LASAN), Stantec Consulting Services Inc (Stantec) has prepared this report documenting the results of a Phase II Environmental Site Assessment (ESA) conducted between July 31, 2019 and August 15, 2019 at 740 East & 800 East 111th Place in Los Angeles, California (Figure 1; the "Property"). Based on the findings and results of the initial assessment completed, a follow up site assessment was conducted on 800 East 111th Place (only) between September 30, 2019 and October 10, 2019.

The assessments were completed as part of the City of Los Angeles's due diligence process for the purchase of the Property and was initiated in response to findings presented in Stantec's Phase I Environmental Site Assessment Report dated June 18, 2019 (Stantec 2019). The report identified recognized environmental conditions in connection with the Property which included the historic presence of fuel underground storage tanks (USTs), previous environmental case listings, and the current use of the Property for chemical storage with indications of release.

It is Stantec's understanding that the Department of General Services is considering purchase of the Property for use as an electric bus facility, on behalf of the City of Los Angeles Department of Transportation (LADOT).



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## 2.0 PROPERTY BACKGROUND AND CHARACTERIZATION

### 2.1 PROPERTY LOCATION & FACILITY DESCRIPTION

The Property is located in a primarily residential part of the City of Los Angeles. A preschool (Kedren Head Start) and middle school (Animo James B. Taylor) are located adjacent to the property on the west and east, respectively. The Property is bounded to the north and south by residential properties. Surrounding properties consist of residential and commercial development. The Property is comprised of two parcels identified by Los Angeles County AIN 6071-022-009 (740 East 111<sup>th</sup> Place) and 6071-022-013 (800 East 111<sup>th</sup> Place) totaling approximately 5.37 acres. The parcel at 740 East 111<sup>th</sup> Place is developed with an approximately 118,800 square foot (sf) single story building constructed in 1956. The parcel at 800 East 111<sup>th</sup> Place is developed with an approximately 32,250 sf single story building constructed in 1957.

A Property location map is provided as Figure 1. A Property map illustrating the main features of the Property as well as all sampled locations is provided as Figure 2.

### 2.2 PHASE I ENVIRONMENTAL SITE ASSESSMENT FINDINGS

Pertinent Phase I findings in connection with the Property are summarized below:

- The historic presence of fuel USTs with documented release;
- Potential for multiple fuel USTs to remain in place; and
- Current use of the Property for chemical storage with evidence of spills.

Based on the above findings, a Phase II ESA comprised of soil and sub-slab soil vapor sampling was recommended to evaluate the potential presence of volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and metals that may exist at the Property. The results would be used to inform the City on potential risks that may exist should they acquire the Property and how those risks may affect the developability of the Property, construction workers and future occupants for the intended use as a bus depot.

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### 3.0 PHASE II ENVIRONMENTAL SITE ASSESSMENT

Between July 31, 2019 and August 15, 2019 Stantec completed a Phase II ESA of the Property to evaluate the potential presence of VOCs, TPH and metals within shallow soil and sub-slab soil vapor at the Property. The following tasks were completed as part of the assessment.

#### 3.1 PRE-FIELD ACTIVITIES

##### 3.1.1 Health & Safety Plan

A Health and Safety Plan was prepared as required by the Occupational Health and Safety Administration Standard "Hazardous Waste Operations and Emergency Response" guidelines (29 CFR 1910.120). The document was reviewed and signed by all consulting personnel and subcontractors prior to performing work at the Property.

##### 3.1.2 Soil Boring Permitting

Soil boring permits were obtained from the County of Los Angeles, Environmental Health – Drinking Water Program. Copies of the permits are provided as Attachment B.

##### 3.1.3 Property Walk and USA Delineation

A walkthrough of the Property was conducted by Stantec on July 31, 2019 to identify and mark appropriate soil and sub-slab soil vapor sampling locations. In addition, Underground Service Alert (USA) was contacted to request USA members identify the location of known subsurface utilities in the vicinity of the Property.

#### 3.2 GEOPHYSICAL SURVEY AND UST INVESTIGATION

On August 5, 2019, Stantec oversaw a private utility locating company, Pacific Coast Locators (PCL) of La Crescenta, California, perform a subsurface investigation to clear and mark-out utilities within the project areas. PCL additionally utilized a GSSI Utility Scan SIR 3000 ground penetrating radar unit and a Schonstedt GA-52Cx Magnetic Locator to search for the presence of USTs within the areas identified in the Phase I. No evidence of remaining USTs was identified within the areas of concern surveyed that were selected based Stantec's review of historical records and prior environmental reports prepared for the Property by others. A *Geophysical Survey and UST Investigation Report* completed by PCL is provided as Attachment A.

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### 3.3 SOIL INVESTIGATION

#### 3.3.1 Soil Boring Advancement

Between August 7, 2019 and August 9, 2019, a total of 16 soil borings (SB-1 through SB-16) were advanced across the Property. Soil borings SB-1 through SB-12 were completed by Interphase Environmental, Inc. of Los Angeles, California. Soil borings SB-13 through SB-16 were completed by Strongarm Environmental Field Services, Inc. of Fullerton, California. Each boring was initiated by coring an opening into the asphalt/concrete surface. As an additional precaution against damaging unidentified subsurface features, each borehole was advanced via hand auger from ground surface to approximately eight feet below ground surface (ft bgs). A Geoprobe direct-push drill rig was utilized thereafter to advance each boring to the maximum depth of 25 ft bgs. Once the target depth of 25 ft bgs was reached and sampled, the borehole was abandoned as required by permit and the surface completed to match the existing grade.

#### 3.3.2 Soil Classification

Soil recovered from all borings was logged in the field using the Unified Soil Classification System by Stantec staff working under the direct supervision of a registered Professional Geologist. Soil types encountered predominately consisted of poorly graded sand and silty sand. No bedrock or groundwater was observed during advancement of the soil borings. Copies of Stantec's boring logs are provided as Attachment C.

#### 3.3.3 Soil Sampling

Seven soil samples were collected from each of the 16 soil borings for a total of 112 soil samples. Soil samples collected at one, three, and five ft bgs were collected directly from the hand auger. Soil samples collected from all other depths were obtained by cutting and capping an acetate liner over a targeted interval (10 ft bgs, 15 ft bgs, etc.). All soil samples were submitted by courier to Eurofins Calscience LLC of Garden Grove, California following chain-of-custody procedures. Select samples were analyzed for the presence of VOCs by EPA Method 8260B, TPH in the gasoline range (GRO), diesel range (DRO), and oil range (ORO) by EPA Method 8015B, and metals by EPA Method 6010B/7471A. The certified analytical laboratory reports are provided as Attachment D.

#### 3.3.4 Soil Analytical Results

All soil samples were analyzed at Eurofins Calscience of Garden Grove, California. Of the 112 soil samples collected, a total of 49 were selected for analysis. All other remaining samples collected were placed 'on-hold' for future analysis if needed based on results. Analytical results were compared to screening levels published by the California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note Number 3 – Modified Screening Levels for Soil (DTSC 2019). Due to the intended future use of the Property as an electric bus

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facility, 'industrial/commercial use' thresholds were applied. The soil analytical laboratory reports are provided as Attachment D.

Soil analytical results are presented in Table 1 and Table 2 and are summarized below.

- TPH in the diesel range (DRO) was detected in 19 soil samples. The minimum concentration reported was 4.9 milligrams per kilogram (mg/kg) from SB-7 at 25 ft bgs and SB-13 at 25 ft bgs. The maximum concentration reported was 24 mg/kg from SB-3 at 1 ft bgs. The DTSC does not specify a screening level for DRO in soil; however, the Los Angeles Regional Water Quality Control Board (LARWQCB) typically uses a screening level of 1,000 mg/kg for DRO when soil is 20-150 ft above groundwater.
- TPH in the oil range (ORO) was detected in four soil samples. The minimum concentration reported was 31 mg/kg from SB-1 at five ft bgs. The maximum concentration reported was 87 mg/kg from SB-3 at one ft bgs. The DTSC does not specify a screening level for ORO in soil; however, the LARWQCB maintains a screening level of 10,000 mg/kg for ORO when soil is 20-150 ft above groundwater.
- Acetone was detected in one soil sample, SB-14, at five ft bgs at a concentration of 63 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). The DTSC does not specify a screening level for acetone in soil. It is Stantec's opinion that the low level of acetone detected in soil is a lab contaminant and not indicative of acetone being sourced from soils collected from the Properties.
- Benzene was detected in 15 soil samples. The minimum concentration reported was 0.88  $\mu\text{g}/\text{kg}$  from SB-4 at three ft bgs. The maximum concentration reported was 2.2  $\mu\text{g}/\text{kg}$  from SB-3 at 3 ft bgs. The DTSC commercial screening level for benzene in soil is 1,400  $\mu\text{g}/\text{kg}$ .
- Toluene was detected in five soil samples. The minimum concentration reported was 0.78  $\mu\text{g}/\text{kg}$  from SB-3 at one ft bgs. The maximum concentration reported was SB-2 at five ft bgs (1.8  $\mu\text{g}/\text{kg}$ ). The DTSC commercial screening level for toluene in soil is 5,300,000  $\mu\text{g}/\text{kg}$ .
- Tetrachloroethene (PCE) was detected in one soil sample, SB-3, at one ft bgs at a concentration of 1.1  $\mu\text{g}/\text{kg}$ . The DTSC commercial screening level for PCE in soil is 2,700  $\mu\text{g}/\text{kg}$ .
- Barium, beryllium, cadmium, chromium, cobalt, copper, molybdenum, mercury, nickel, selenium, silver, vanadium and zinc were detected at concentrations below DTSC commercial screening levels (where applicable).
- Lead was detected at concentrations below the DTSC commercial screening level of 320 mg/kg in all samples. However, one sample, SB-3 at one ft bgs, reported a concentration of 138 mg/kg ft bgs, which is well above the typical background concentrations for southern California soils.

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- Arsenic was detected above DTSC commercial screening levels (0.36 mg/kg) but below typical southern California background concentrations (12 mg/kg) in all but one sample (which was non-detect for arsenic). The maximum concentration of arsenic reported was 11.3 mg/kg from SB-15 at five ft bgs.

### 3.3.5 Soil Analytical Discussion

Soil at the Property does not appear to contain concentrations of VOCs or TPH that would be considered hazardous to human health. Arsenic was reported in all but one sample at concentrations which exceed the commercial use screening levels maintained by the DTSC. However, it should be noted that all of the reported arsenic concentrations are within the generally accepted native soil background levels typical of southern California.

Additionally, one soil sample, SB-3 at one ft bgs, reported a concentration of lead of 138 mg/kg. This is below the commercial screening level of 320 mg/kg, but well above typical background concentrations of lead for southern California.

It is Stantec's opinion that other impacts to soil at the Property may exist but are currently inaccessible for assessment based on the current storage of waste, equipment and other debris.

## 3.4 SUB-SLAB SOIL VAPOR INVESTIGATION

### 3.4.1 Sub-Slab Soil Vapor Pin Installation

On August 15, 2019, Stantec oversaw H&P Mobile Geochemistry of Signal Hill, California (H&P) install 12 Cox-Colvin Vapor Pins™ within the concrete slabs of each of the existing buildings at the Property. The purpose of the sub-slab pins was to evaluate the potential for vapor intrusion conditions to exist at the existing buildings located on the Property. The pins were installed following the manufacturer's recommended installation procedure at the approximate locations shown on Figure 3. Following sample collection, each pin was removed and the surface restored to match the existing grade.

### 3.4.2 Sub-Slab Soil Vapor Sample Collection

A total of 12 primary samples (SSV-1 through SSV-12) and one replicate sample (at SVV-8) were collected during this investigation. Sub-slab vapor samples were collected at each location in general conformance with the DTSC's *Advisory on Active Soil Gas Investigations* (DTSC 2015). A minimum of two hours of equilibration time was observed prior to sample collection. Following a leak and shut-in test, each location was purged then sampled at a rate that did not exceed 200 millimeters per minute. All samples were collected in the presence of 1,1-difluoroethane, a DTSC approved leak check compound (LCC). Samples collected for VOC analysis were collected into a glass syringe and analyzed by EPA Method TO-15 using a certified mobile laboratory. Samples collected for fixed gas analysis and methane were collected into a Tedlar bag and

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analyzed by ASTM International (formerly American Society for Testing and Materials) Method D1945 and EPA Method 8015M, respectively, at a fixed laboratory.

### 3.4.3 Sub-Slab Soil Vapor Analytical Results

All sub-slab vapor samples were analyzed by H&P. Analytical results were compared to screening levels published by the DTSC HERO Note Number 3 – Modified Screening Levels for Ambient Air. The commercial use screening levels referenced have been calculated by applying the DTSC recommended attenuation factor of 0.03 for sub-slab soil gas and ‘near-source’ exterior soil gas (DTSC 2019). The sub-slab soil vapor analytical laboratory reports are provided as Attachment E.

Sub-slab soil vapor analytical results are presented in Table 3 and Table 4 and summarized below.

- Methane was not detected in any of the sub-slab vapor samples. Fixed gases oxygen, nitrogen, and carbon dioxide were reported in typical ranges.
- 1,2-dichloroethane was detected in one sub-slab soil vapor sample, SSV-1, at a concentration of 27 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). The DTSC does not specify a screening level for 1,2-dichloroethane in ambient air or soil vapor.
- 1,1-difluoroethane (DFA) was detected in one sub-slab soil vapor sample, SSV-7, at a concentration of 72  $\mu\text{g}/\text{m}^3$ . The DTSC does not specify a screening level for DFA in ambient air or soil vapor.
- Xylenes were detected in two sub-slab vapor samples: SSV-1 at a concentration of 24  $\mu\text{g}/\text{m}^3$  and SSV-11 at a concentration of 49  $\mu\text{g}/\text{m}^3$ . The DTSC does not specify a commercial screening level for xylenes in soil vapor.
- Toluene was detected in one sub-slab soil vapor sample, SSV-1, at a concentration of 420  $\mu\text{g}/\text{m}^3$ . The DTSC commercial screening level for toluene in soil vapor is 43,333  $\mu\text{g}/\text{m}^3$ .
- PCE was detected in seven sub-slab vapor samples. The minimum concentration reported was 91  $\mu\text{g}/\text{m}^3$  from SSV-8. The maximum concentration reported was 1,200  $\mu\text{g}/\text{m}^3$  from SSV-12. The DTSC commercial screening level for PCE in soil vapor is 66.7  $\mu\text{g}/\text{m}^3$ .

### 3.4.4 Sub-Slab Soil Vapor Analytical Discussion

DFA, the LCC used by H&P during sample collection, was detected in the soil vapor sample collected at SSV-7. The DFA detected is not likely sourced from sub-slab soil vapor at the Property but rather the consequence of a small leak present during sample collection. According to the DTSC, unacceptable leakage occurs when the concentration of the LCC exceeds 10 times the laboratory reporting limit, which in this case would be 270  $\mu\text{g}/\text{m}^3$ . Because

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DFA was detected at a concentration of 72 µg/m<sup>3</sup> the results obtained from this location are considered valid. No other VOCs were detected in SSV-7.

Significant concentrations of PCE were detected in sub-slab soil vapor collected at the Property indicating a high potential for vapor intrusion to indoor air at the buildings of the Property. The DTSC commercial use soil vapor screening level derived for PCE is 66.7 µg/m<sup>3</sup>. This screening level was exceeded in seven of the 13 sub-slab soil vapor samples submitted for chemical analysis. In particular, concentrations of PCE reported from 800 East 111<sup>th</sup> Place ranged from 900 µg/m<sup>3</sup> to 1,200 µg/m<sup>3</sup> (Figure 3). The magnitude of these exceedances, and the potential for PCE in soil vapor to underly adjacent properties, warranted additional investigation.

### 3.5 WASTE HANDLING & STORAGE

Investigation derived wastes (IDW) generated during the assessment (soil cuttings, decontamination water, etc.) were placed in California Department of Transportation-approved, 55-gallon drums and temporarily stored at the Property pending characterization results and transfer to an appropriate waste receiving facility. The IDW was picked up by Belshire Environmental Services (Belshire) on Tuesday October 29, 2019. Waste manifests, when available, will be provided to LASAN.

### 3.6 CONCLUSIONS AND RECOMENDATIONS

It is Stantec's understanding that the City of Los Angeles, Department of General Services is considering purchase of the Property for use as an electric bus facility, on behalf of the LADOT. Based on the analytical data collected from the Property and presented in this report, Stantec provides the following conclusions:

- Elevated concentrations of PCE were detected in sub-slab soil vapor collected at the Property.
- The commercial use soil vapor screening level derived for PCE is 66.7 µg/m<sup>3</sup>. This screening level was exceeded in seven of the 13 sub-slab soil vapor samples submitted for chemical analysis. In particular, concentrations of PCE reported from 800 East 111<sup>th</sup> Place ranged from 900 µg/m<sup>3</sup> to 1,200 µg/m<sup>3</sup>.
- The magnitude of these exceedances presents significant risk and liability and may require regulatory notification of a potential unauthorized release to the Los Angeles Regional Water Quality Control Board. Of concern is the potential for vapor intrusion conditions to exist at the adjoining James B. Taylor Charter Middle School property.

Due to the detection of concentrations of PCE, a potentially carcinogenic chemical, in sub-slab soil vapor, Stantec recommended an additional assessment of the parcel located at 800 East 111<sup>th</sup> Place to further characterize and assist in identifying the likely source of the PCE detected

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in soil and soil vapor. A proposal for completion of the additional site assessment was submitted to LASAN on September 3, 2019. Stantec received a LADOT notice to proceed in a letter dated September 25, 2019. The additional site assessment was completed between September 30, 2019 and October 10, 2019. Details of the assessment are provided in Section 4.0.



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### 4.0 ADDITIONAL SITE ASSESSMENT

Between September 30, 2019 and October 10, 2019 Stantec completed an additional site assessment of the 800 East 111<sup>th</sup> Place address (the Site). The assessment was conducted to further evaluate the VOCs (primarily PCE) detected in soil and soil vapor. The assessment consisted of the installation and sampling of seven dual-nested soil vapor probes and three triple-nested soil vapor probes at accessible locations across the Site. The scope of work completed, analytical results obtained, and a discussion of results are provided below.

#### 4.1 PRE-FIELD ACTIVITIES

##### 4.1.1 Health & Safety Plan

The HASP previously developed for the Phase II ESA scope of work was updated to include the new tasks associated with the additional site assessment. The HASP was reviewed and signed by all consulting personnel and subcontractors prior to performing work at the Property.

##### 4.1.2 Soil Boring Permitting

Soil boring permits for installation of the 10 soil vapor probes were not required from the County of Los Angeles, Environmental Health – Drinking Water Program. Based on the permitting requirements for soil vapor probes available on the County's website: *No permit is required for Soil Vapor Probe(s) installed in the vadose zone. A permit will be required if they reach the saturated zone during the installation of the probe.*

##### 4.1.3 Underground Service Alert

Underground Service Alert (USA) was contacted on September 27, 2019 to request USA members identify the location of known subsurface utilities in the vicinity of the Site.

#### 4.2 GEOPHYSICAL SURVEY AND UST INVESTIGATION

On September 30, 2019, Stantec oversaw a private utility locating company, Pacific Coast Locators (PCL) of La Crescenta, California, perform a subsurface investigation to clear and mark-out utilities within the project areas. PCL additionally attempted to locate, trace, and mark-out sewer lines and floor drain piping within the footprint of the on-Site building. The sewer drain was not located; however, some floor drains associated with former restrooms were identified.

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### 4.3 ADDITIONAL SOIL INVESTIGATION

#### 4.3.1 Soil Boring Advancement

Between October 3, 2019 and October 4, 2019, a total of 10 soil borings (SV-1 through SV-10) were advanced across the Site by Interphase Environmental, Inc. of Los Angeles, California. Soil borings SV-1 through SV-7 were advanced to a total depth of 15.5 ft bgs. Soil borings SV-8 through SV-10 were advanced to a total depth of 30.5 ft bgs. Each boring was initiated by coring an opening into the asphalt/concrete surface. As an additional precaution against damaging unidentified underground utilities, each borehole was advanced via hand auger from ground surface to approximately eight ft bgs. A direct-push drill rig was utilized thereafter to advance each boring to their respective maximum depth. The only exceptions were SV-2 and SV-3 which, due to limited access, were advanced to 15.5 ft bgs completely by hand auger. After reaching total depth, each boring was converted into a nested soil vapor probe as described in Section 4.4.1.

#### 4.3.2 Soil Classification

Soil recovered from all borings was logged in the field using the Unified Soil Classification System by Stantec staff working under the direct supervision of a registered Professional Geologist. Soil types encountered predominately consisted of poorly graded sand and silty sand. No bedrock or groundwater was observed during advancement of the soil borings. Copies of Stantec's boring logs are provided as Attachment C.

#### 4.3.3 Soil Sampling

Five soil samples were collected from each of the seven shallow soil borings (SV-1 through SV-7) and eight soil samples were collected from each of the three deep soil borings (SV-8 through SV-9) for a total of 59 soil samples. All soil samples were collected following EPA Method 5035 preservation protocols. Soil samples collected at one, three, and five ft bgs were collected directly from the hand auger bucket. Soil samples collected from all other depths were obtained directly from the direct push drill rig's acetate liner. All soil samples were submitted via courier to Eurofins Calscience LLC (Calscience) of Garden Grove, California following chain-of-custody procedures and analyzed for the presence of VOCs by EPA Method 8260B.

#### 4.3.4 Soil Analytical Results

All soil samples were analyzed by Calscience. Analytical results were compared to screening levels published by the California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note Number 3 – Modified Screening Levels for Soil (DTSC 2019). Due to the intended future use of the Property as an electric bus facility, 'industrial/commercial use' thresholds were applied. The soil analytical laboratory reports are provided in Attachment D.

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Soil analytical results from the additional assessment are presented in Table 1 are summarized below.

- Acetone was detected in two soil samples, SV-8, at one ft bgs at a concentration of 45 µg/kg and SV-9, at one ft bgs at a concentration of 50 µg/kg. The DTSC does not specify a screening level for acetone in soil.
- Benzene was detected in 24 soil samples. The minimum concentration reported was 0.79 µg/kg from SV-8 at 30 ft bgs. The maximum concentration reported was 4.0 µg/kg from SV-8 at one ft bgs. The DTSC commercial screening level for benzene in soil is 1,400 µg/kg.
- Toluene was detected in twelve soil samples. The minimum concentration reported was 0.86 µg/kg from SV-2 at five ft bgs. The maximum concentration reported was 3.4 µg/kg from SV-8 at one ft bgs. The DTSC commercial screening level for toluene in soil is 5,300,000 µg/kg.
- PCE was detected in eight soil samples. The minimum concentration reported was 0.99 µg/kg from SV-4 at 10 ft bgs. The maximum concentration reported was 3.5 µg/kg from SV-9 at one ft bgs. The DTSC commercial screening level for PCE in soil is 2,700 µg/kg.

### 4.3.5 Soil Analytical Discussion

The soil analytical results obtained from the Site during the additional site assessment confirm results obtained during the Phase II ESA; in particular, low levels of benzene, toluene and PCE are present in shallow soil. However, the concentrations of VOCs reported would not be considered hazardous to human health.

It is Stantec's opinion that other impacts to soil at the Property may exist but are currently inaccessible based on the current storage of waste, equipment and other debris.

## 4.4 SOIL VAPOR INVESTIGATION

### 4.4.1 Soil Vapor Probe Installation

After reaching total depth, each soil boring was converted into a nested soil vapor probe. Borings SV-1 through SV-7 were completed as dual nested soil vapor probes with vapor implants centered at five ft bgs and 15 ft bgs. Borings SV-8 through SV-10 were completed as triple nested soil vapor probes with implants centered at five ft bgs, 15 ft bgs, and 30 ft bgs. All soil vapor probes were installed in general accordance with guidance provided in the DTSC 2015 *Advisory on Active Soil Gas Investigations*.

### 4.4.2 Soil Vapor Sample Collection

On October 10, 2019, after observing a six to seven-day equilibration period, a total of 16 primary soil vapor samples and one replicate soil vapor sample were collected from the Site by



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technicians from H&P. Soil vapor samples were collected in general accordance with the DTSC's *Advisory on Active Soil Gas Investigations*. Following a leak test and shut-in test, each location was purged then sampled at a rate that did not exceed 200 millimeters per minute. All samples were collected in the presence of DFA, a DTSC approved LCC.

Soil vapors samples could not be obtained from all the 15 ft bgs soil vapor implants due to potential pinching of the tubing installed. It is Stantec's opinion that the pinching likely occurred due to the highly sandy nature of the subsurface soils. Soils vapor sample were successfully collected at the 15 ft depth from SV-1 through SV-3 but could not be collected from SV-4 through SV-10. Soil vapor samples were collected from all five ft bgs and all 30 ft bgs soil vapor implants installed at the Site.

All soil vapor implants were removed, and the boreholes abandoned following sample collection. The surface at each location was completed to match the existing grade.

### 4.4.3 Soil Vapor Analytical Results

All soil vapor samples were analyzed by H&P. Analytical results were compared to screening levels published by the DTSC HERO Note Number 3 – Modified Screening Levels for Ambient Air. The commercial use screening levels referenced have been calculated by applying the DTSC recommended attenuation factor of 0.03 for sub-slab soil gas and 'near-source' exterior soil gas (DTSC 2019). The soil vapor analytical laboratory reports are provided as Attachment F.

Soil vapor analytical results are presented on Figures 4 through 6, in Table 5, and are summarized below.

- PCE was detected in all 17 soil vapor samples. The minimum concentration reported was 11  $\mu\text{g}/\text{m}^3$  from SV-5 at five ft bgs. The maximum concentration reported was 2,100  $\mu\text{g}/\text{m}^3$  from SV-4 at five ft bgs. The DTSC commercial screening level for PCE in soil vapor is 66.7  $\mu\text{g}/\text{m}^3$ .
- Trichlorofluoromethane was detected in 13 soil vapor samples. The minimum concentration reported was 8.2  $\mu\text{g}/\text{m}^3$  from SV-3 at five ft bgs. The maximum concentration reported was 140  $\mu\text{g}/\text{m}^3$  from SV-7 and SV-9 both at five ft bgs. The DTSC commercial screening level for trichlorofluoromethane in soil vapor is 176,667  $\mu\text{g}/\text{m}^3$ .
- Toluene was detected in five soil vapor samples. The minimum concentration reported was 4.2  $\mu\text{g}/\text{m}^3$  from SV-1 at five ft bgs and SV-8 at 30 ft bgs. The maximum concentration reported was 42  $\mu\text{g}/\text{m}^3$  from SV-2 at 15 ft bgs. The DTSC commercial screening level for toluene in soil vapor is 43,333  $\mu\text{g}/\text{m}^3$ .
- Bromodichloromethane was detected in one soil vapor sample, SV-2 at 15 ft bgs, at a concentration of 8.2  $\mu\text{g}/\text{m}^3$ . The DTSC commercial screening level for bromodichloromethane in soil vapor is 11  $\mu\text{g}/\text{m}^3$ .

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- Dibromochloromethane was detected in one soil vapor sample, SV-2 at 15 ft bgs, at a concentration of 9.1  $\mu\text{g}/\text{m}^3$ . The DTSC commercial screening level for dibromochloromethane in soil vapor is 11  $\mu\text{g}/\text{m}^3$ .
- Carbon disulfide was detected in one soil vapor sample, SV-2 at 15 ft bgs, at a concentration of 10  $\mu\text{g}/\text{m}^3$ . The DTSC has not established a screening level for carbon disulfide in soil vapor.
- Dichlorodifluoromethane was detected in four soil vapor samples. The minimum concentration reported was 5.6  $\mu\text{g}/\text{m}^3$  from SV-3 at five ft bgs. The maximum concentration reported was 44  $\mu\text{g}/\text{m}^3$  from SV-9 at 30 ft bgs. The DTSC has not established a screening level for dichlorodifluoromethane in soil vapor.
- Dichlorotetrafluoroethane was detected in one soil vapor sample, SV-9 at 30 ft bgs, at a concentration of 11  $\mu\text{g}/\text{m}^3$ . The DTSC has not established a screening level for dichlorotetrafluoroethane in soil vapor.
- Ethylbenzene was detected in one soil vapor sample, SV-2 at 15 ft bgs, at a concentration of 13  $\mu\text{g}/\text{m}^3$ . The DTSC has not established a screening level for ethylbenzene in soil vapor.
- Xylenes were detected in three soil vapor samples. The minimum concentration reported was 6.3  $\mu\text{g}/\text{m}^3$  from SV-8 at five ft bgs. The maximum concentration reported was 77  $\mu\text{g}/\text{m}^3$  from SV-2 at 15 ft bgs. The DTSC has not established a screening level for xylenes in soil vapor.
- 4-Ethyltoluene was detected in one soil vapor sample, SV-2 at 15 ft bgs, at a concentration of 9.4  $\mu\text{g}/\text{m}^3$ . The DTSC has not established a screening level for 4-ethyltoluene in soil vapor.
- 1,3,5-Trimethylbenzene was detected in two soil vapor samples. The minimum concentration reported was 6.2  $\mu\text{g}/\text{m}^3$  from SV-3 at 15 ft bgs. The maximum concentration reported was 14  $\mu\text{g}/\text{m}^3$  from SV-2 at 15 ft bgs. The DTSC has not established a screening level for 1,3,5-trimethylbenzene in soil vapor.
- 1,2,4-Trimethylbenzene was detected in three soil vapor samples. The minimum concentration reported was 6.6  $\mu\text{g}/\text{m}^3$  from SV-8 at five ft bgs. The maximum concentration reported was 43  $\mu\text{g}/\text{m}^3$  from SV-2 at 15 ft bgs. The DTSC has not established a screening level for 1,2,4-trimethylbenzene in soil vapor.
- DFA was detected in two soil vapor samples. The minimum concentration reported was 6.2  $\mu\text{g}/\text{m}^3$  from SV-3 at five ft bgs. The maximum concentration reported was 20  $\mu\text{g}/\text{m}^3$  from SV-2 at 15 ft bgs. The DTSC has not established a screening level for DFA in soil vapor.

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### 4.4.4 Soil Vapor Analytical Discussion

DFA, the LCC used by H&P during sample collection, was detected in the soil vapor sample collected from SV-3 at five ft bgs and SV-2 at 15 ft bgs. The DFA detected is not likely sourced from soil vapor at the Property but rather the consequence of a small leak present during sample collection. According to the DTSC, unacceptable leakage occurs when the concentration of the LCC exceeds 10 times the laboratory reporting limit which, in this case, would be 55  $\mu\text{g}/\text{m}^3$ . Because DFA was detected below this value, the results obtained are considered valid.

Elevated concentrations of PCE were detected in soil vapor collected during the additional site assessment. The DTSC commercial use soil vapor screening level derived for PCE is 66.7  $\mu\text{g}/\text{m}^3$ . This screening level was exceeded in 15 of the 17 soil vapor samples submitted for chemical analysis indicating potential soil vapor intrusion to existing buildings exists. Based on a review of the concentration maps provided as Figures 4 through 6, the highest concentrations of PCE appear to be centered along the southern boundary of the 800 East 111<sup>th</sup> Place address. The plume appears to extend to the north beneath the on-Site building, to the west beneath the building located at the 740 East 111<sup>th</sup> Place, and to the east beneath the Animo James B. Taylor Charter Middle School.

Based on the known historic use of 800 East 111<sup>th</sup> Place as an aircraft component and equipment supplier, and the known current use as a waste storage facility, there could have been an undocumented release of solvents to soil at the Property. In addition, there was a documented release of solvents to soil and groundwater at the Lanzit Project located approximately 1,000 feet east of the Property. It is considered likely that the solvents detected in soil vapor at the Property are the result of a comingling of solvent impacted groundwater from the Lanzit Project and an undocumented on-Site release.

## 4.5 WASTE HANDLING & STORAGE

IDW generated during the assessment (soil cuttings, decontamination water, etc.) were placed in California Department of Transportation-approved, 55-gallon drums and temporarily stored at 740 East 111<sup>th</sup> Place pending characterization results and transfer to an appropriate waste receiving facility. The IDW was picked up by Belshire on Tuesday October 29, 2019. Waste manifests, when available, will be provided to LASAN.

## PHASE II ENVIRONMENTAL SITE ASSESSMENT AND ADDITIONAL SITE ASSESSMENT REPORT

740 East & 800 East 111<sup>th</sup> Place,  
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### 5.0 CONCLUSIONS AND RECOMMENDATIONS

A Phase II ESA was conducted at the Property between July 31, 2019 and August 15, 2019. Based on the results of that assessment, a subsequent additional site assessment was conducted at 800 East 111<sup>th</sup> Place between September 30, 2019 and October 10, 2019.

#### 5.1 CONCLUSIONS

Some soil at the Property is impacted with VOCs and TPH at concentrations not considered hazardous to human health. Native arsenic was detected in soil at concentrations above residential use screening levels however within ranges that are generally accepted as background for southern California.

Soil vapor at 800 East 111<sup>th</sup> Place is impacted with PCE, a potentially carcinogenic chemical, to a depth of at least 30 feet below ground surface at concentrations that are considered hazardous to human health. The PCE soil vapor plume which exceeds residential and commercial use screening levels extends to beneath the building located on 740 East 111<sup>th</sup> Place and likely beneath the adjacent Animo James B. Taylor Charter Middle School.

Based on the known historic use of 800 East 111<sup>th</sup> Place as an aircraft component and equipment supplier, and the known current use as a waste storage facility, there may have been an undocumented release of chemicals to soil at the Property. In addition, there is a documented release of solvents to soil and groundwater at the Lanzit Project located approximately 1,000 feet east of the Property. It is Stantec's opinion that the PCE detected in soil vapor at the Properties is the result of on-site releases to soil, which may extend to groundwater, as well as potential for a comingling of solvent impacted vapors sourced from contaminated groundwater from the Lanzit Project to the east.

It is Stantec's opinion that other impacts to soil at the Property may exist but are currently inaccessible based on the current storage of waste, equipment and other debris.

#### 5.2 RECOMMENDATIONS

It is Stantec's understanding that the City of Los Angeles, Department of General Services (GSD) is considering purchase of the Property for use as an electric bus facility, on behalf of the LADOT. Based on the analytical data collected from the Property and presented in this report, and the planned future commercial use as an electric bus facility, Stantec provides the following recommendations should the City acquire the Property comprised of both 740 East and 800 East 111<sup>th</sup> Place.

## PHASE II ENVIRONMENTAL SITE ASSESSMENT AND ADDITIONAL SITE ASSESSMENT REPORT

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Stantec recommends all stored chemicals, equipment, and waste/debris be removed from the Property prior to purchase and a pre-acquisition inspection be performed to confirm the removal of all hazardous materials and other solid and liquid wastes stored on the Properties.

Stantec recommends a *Soil Management Plan* (SMP) be developed for the Property in the event of future planned excavation or other activities involving ground disturbance. A SMP provides guidance to workers from a health and safety perspective (personal protective equipment, action levels, etc.), describes a site and project specific protocol to be followed in the event of encountering chemically impacted soil, and facilitates excavation activities by eliminating downtime associated with waste characterization and identification of appropriate waste receiving facilities.

Impacts to soil vapor may be at levels that, if provided to the LARWQCB, may require additional action including detailed site characterization and active remediation as well as the designation of a responsible party. Because the contaminant plume may extend offsite, Stantec suggests consultation with legal counsel to determine if notification to the LARWQCB of the potential unauthorized release is warranted. Legal counsel can also provide guidance on the most appropriate party to provide notification to the LARWQCB.

Stantec recommends mitigation measures (i.e., engineering controls such as vapor barriers) be installed within the current buildings at the Property, or within new construction, to address residual impacts of PCE in soil vapor in the event remediation is not pursued or completed or that may remain following remediation. These measures typically consist of installation of passive/active venting and/or application of a vapor barrier that is chemically resistant to chlorinated solvents. It is recommended that vapor barriers be applied across the entire ground level of occupied structures.



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October 31, 2019

### 6.0 LIMITATIONS & CERTIFICATION

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional environmental consulting practices existing at the time this report was prepared and applicable to the location of the Property. It was prepared for the exclusive use of LASAN, for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third-party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the Property existing at the time of the field investigation. No other warranties expressed or implied are made by Stantec.

## PHASE II ENVIRONMENTAL SITE ASSESSMENT AND ADDITIONAL SITE ASSESSMENT REPORT

740 East & 800 East 111<sup>th</sup> Place,  
Los Angeles, California 90059  
October 31, 2019

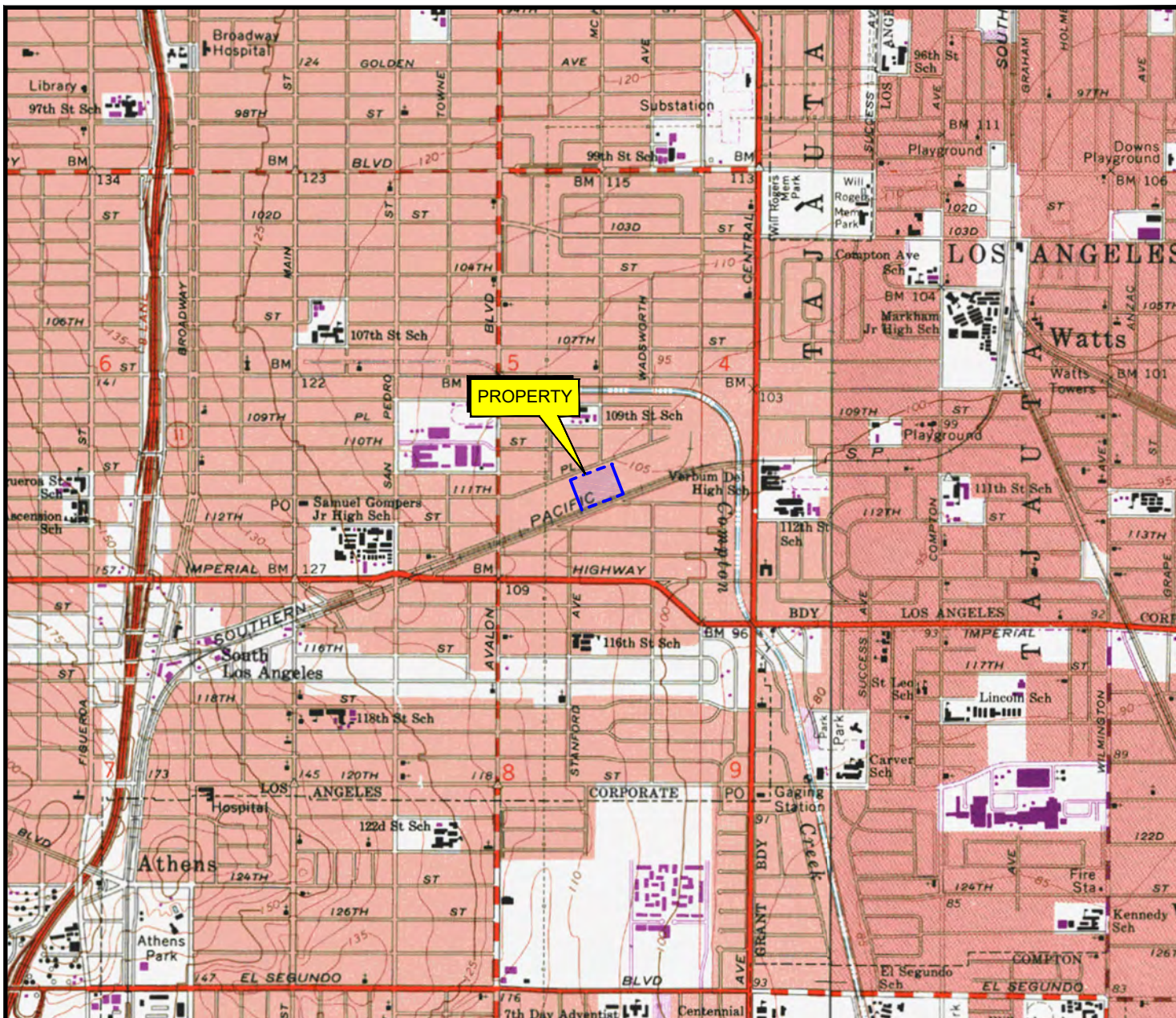
### 7.0 REFERENCES

Department of Toxic Substances Control (DTSC), 2015, *Advisory on Active Soil Gas Investigations*,  
July

Department of Toxic Substances Control (DTSC), 2019, *Human and Ecological Risk Office (HERO)  
Note Number 3*, April

Stantec Consulting Services Inc. (Stantec), 2019, *Phase I Environmental Site Assessment Report*,  
May 23.

## FIGURES




SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAPS, INGLEWOOD QUADRANGLE, 1964  
 PHOTOREVISED, 1981  
 SOUTH GATE QUADRANGLE, 1964  
 PHOTOREVISED, 1981



APPROXIMATE SCALE (FEET)

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 <p>290 Conejo Ridge Avenue          Thousand Oaks, CA 91361          PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR: City of Los Angeles Phase II ESA 740 East & 800 East 111th Place Los Angeles, CA 90059		FIGURE: Property Location Map 1	
	JOB NUMBER: 185751046.200.0005.2	DRAWN BY: R. Roman	CHECKED BY: B. Goss	APPROVED BY: C. Gdak

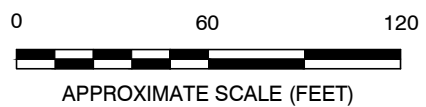


**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- SOIL BORING LOCATION (16)
- ◆ SUB SLAB VAPOR LOCATION (12)
- UST SEARCH AREA
- ▲ PROPOSED NESTED PROBES AT 5' & 15' BGS (SHALLOW)
- ⊗ PROPOSED NESTED PROBES AT 5', 15', AND 30' BGS (DEEP)

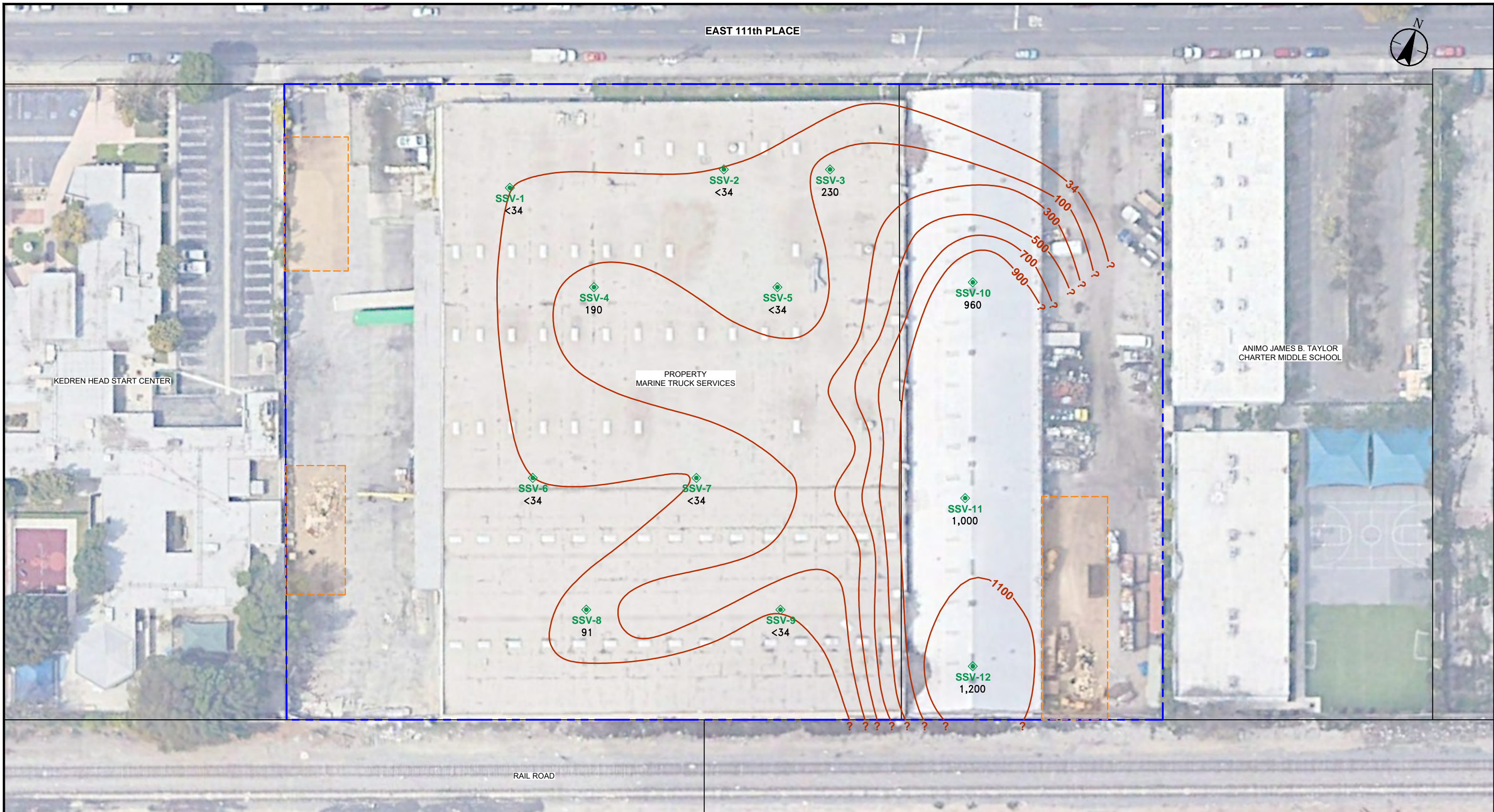
**NOTES:**

1. MAP REFERENCES; GOOGLE EARTH PRO AERIAL IMAGE, DATED MARCH 14, 2018.
2. COORDINATE SYSTEM; NAD 83 CALIFORNIA STATE PLANES, ZONE 5 (FT.). NOT A SURVEYED MAP, SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



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	JOB NUMBER:	DRAWN BY:		2
	185751046.200.0005.2	R. Roman	CHECKED BY:	DATE:
			B. Goss	APPROVED BY:
			L. Simons	10/16/19



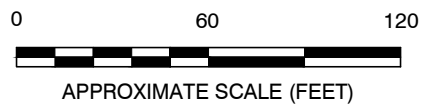
**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- SUB SLAB VAPOR LOCATION (12)
- UST SEARCH AREA
- DTSC (HERO) PCE SCREENING LEVEL  
= 15 ug/m³ (RESIDENTIAL)  
= 66 ug/m³ (COMMERCIAL)

PCE = Tetrachloroethene  
ug/m³ = Micrograms per cubic meter

**NOTES:**

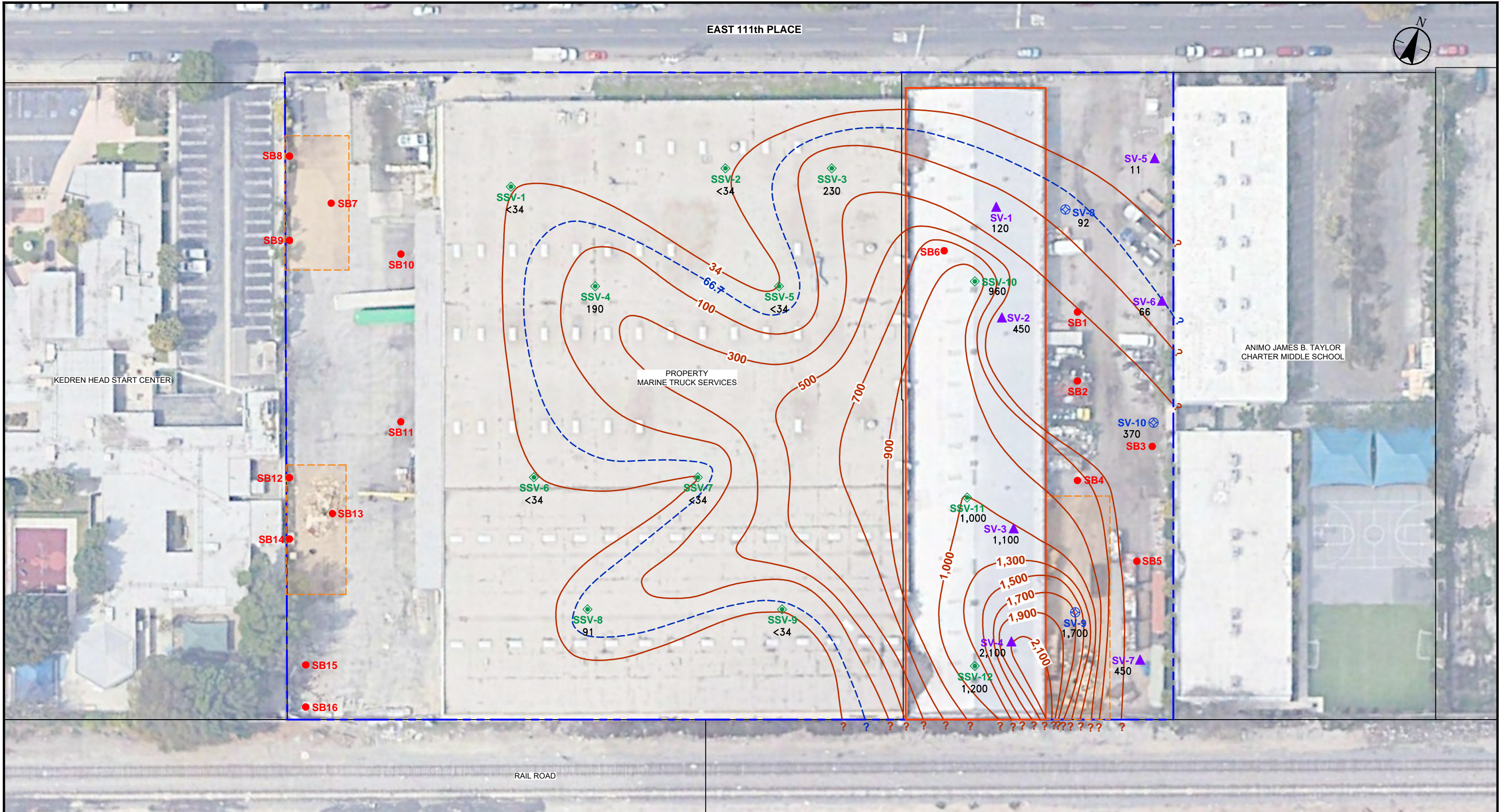
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	JOB NUMBER:		DRAWN BY:	CHECKED BY:	APPROVED BY:
	185751046.200.0005.2	R. Roman	B. Goss	C. Gdak	08/31/19

EAST 111th PLACE

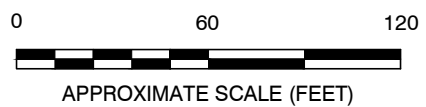


**LEGEND**

- - - - APPROXIMATE PROPERTY BOUNDARY
  - UST SEARCH AREA
  - SOIL BORING LOCATION (16)
  - ◆ SUB SLAB VAPOR LOCATION (12)
  - ▲ NESTED PROBES AT 5' & 15' BGS (SHALLOW)
  - ⊗ NESTED PROBES AT 5', 15', AND 30' BGS (DEEP)
- DTSC SCREENING LEVEL**
- RESIDENTIAL = 15.3ug/m<sup>3</sup>
  - COMMERCIAL = 66.7 ug/m<sup>3</sup>
  - - - - = ESTIMATED COMMERCIAL THRESHOLD

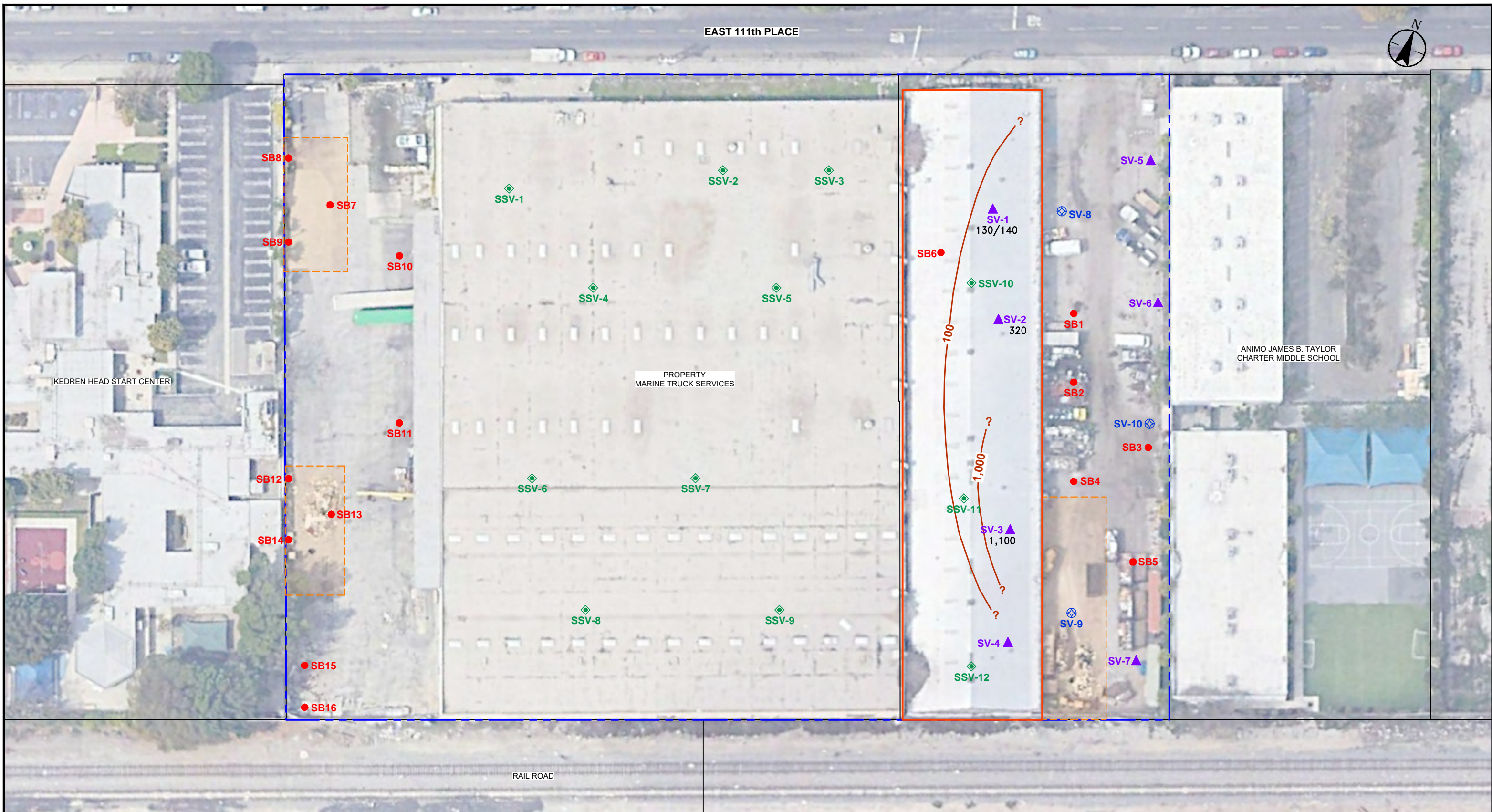
**NOTES:**

1. MAP REFERENCES; GOOGLE EARTH PRO AERIAL IMAGE, DATED MARCH 14, 2018.
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<p><b>Stantec</b></p> <p style="font-size: 8px;">290 Conejo Ridge Avenue Thousand Oaks, CA 91361 PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR:	City of Los Angeles Phase II ESA 740 East & 800 East 111th Place Los Angeles, CA 90059	<b>Site Map Showing PCE Concentrations in Soil Vapor Between 0-5 Feet (ug/m3)</b>		4
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
	185751046.200.0005.2	R. Roman	B. Goss	C. Gdak	10/31/19

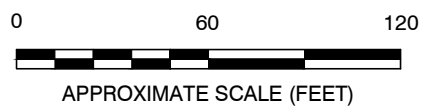


**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
  - UST SEARCH AREA
  - SOIL BORING LOCATION (16)
  - ◆ SUB SLAB VAPOR LOCATION (12)
  - ▲ NESTED PROBES AT 5' & 15' BGS (SHALLOW)
  - ⊗ NESTED PROBES AT 5', 15', AND 30' BGS (DEEP)
- DTSC SCREENING LEVEL**
- RESIDENTIAL = 15 ug/m<sup>3</sup>
  - COMMERCIAL = 66 ug/m<sup>3</sup>
  - = ESTIMATED COMMERCIAL THRESHOLD

**NOTES:**

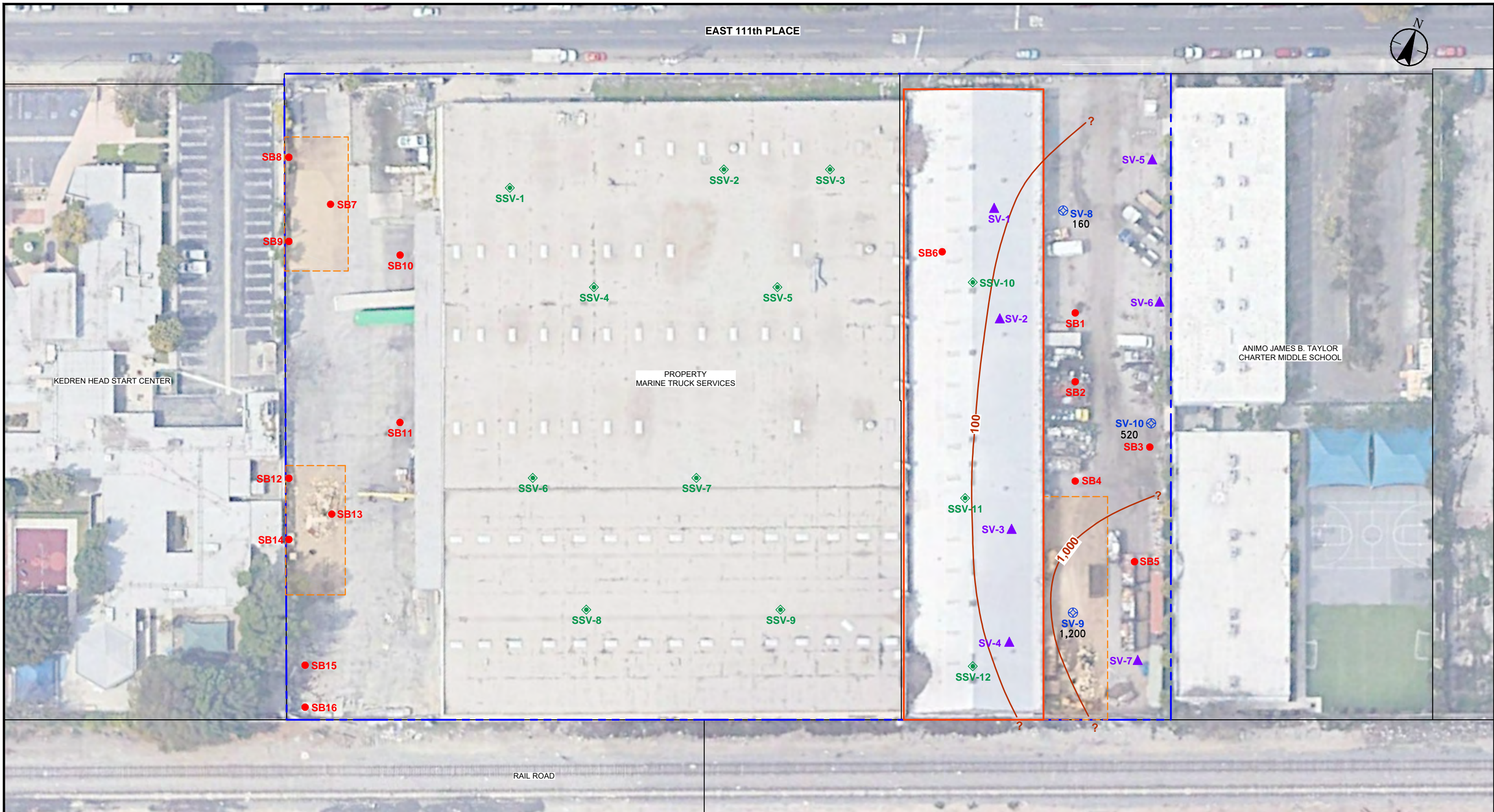
1. MAP REFERENCES; GOOGLE EARTH PRO AERIAL IMAGE, DATED MARCH 14, 2018.
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<p style="font-size: 8px; margin-top: 5px;">290 Conejo Ridge Avenue Thousand Oaks, CA 91361 PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR:	City of Los Angeles Phase II ESA 740 East & 800 East 111th Place Los Angeles, CA 90059	Site Map Showing PCE Concentrations in Soil Vapor at 15 Feet (ug/m <sup>3</sup> )		FIGURE: 5
	JOB NUMBER: 185751046.200.0005.2	DRAWN BY: R. Roman	CHECKED BY: B. Goss	APPROVED BY: C. Gdak	DATE: 10/31/19



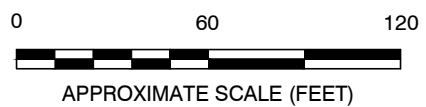


**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
  - UST SEARCH AREA
  - SOIL BORING LOCATION (16)
  - ◆ SUB SLAB VAPOR LOCATION (12)
  - ▲ NESTED PROBES AT 5' & 15' BGS (SHALLOW)
  - ⊗ NESTED PROBES AT 5', 15', AND 30' BGS (DEEP)
- DTSC SCREENING LEVEL**
- RESIDENTIAL = 15 ug/m<sup>3</sup>
  - COMMERCIAL = 66 ug/m<sup>3</sup>
  - = ESTIMATED COMMERCIAL THRESHOLD

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<p><b>Stantec</b></p> <p>290 Conejo Ridge Avenue Thousand Oaks, CA 91361 PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR: City of Los Angeles Phase II ESA 740 East & 800 East 111th Place Los Angeles, CA 90059	<b>Site Map Showing PCE Concentrations in Soil Vapor at 30 Feet (ug/m<sup>3</sup>)</b>		FIGURE: <span style="font-size: 2em; font-weight: bold;">6</span>
	JOB NUMBER: 185751046.200.0005.2	DRAWN BY: R. Roman	CHECKED BY: B. Goss	APPROVED BY: C. Gdak

# TABLES

Table 1  
 Soil Analytical Data - Volatile Organic Compounds & Total Petroleum Hydrocarbons  
 740 E & 800 E 111th Place  
 Los Angeles, California 90059

Sample Location	Sample Depth (ft bgs)	Sample Date	Acetone (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Tetrachloroethene (ug/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	All Other VOCs <sup>a</sup> (ug/kg)
SB-1	5	8/7/2019	--	--	--	--	--	13	31	--
	10	8/7/2019	--	2.0	1.4	--	--	--	--	--
	25	8/7/2019	--	--	--	--	--	--	--	--
SB-2	5	8/7/2019	--	1.5	1.8	--	--	--	--	--
	10	8/7/2019	--	1.3	--	--	--	--	--	--
	25	8/7/2019	--	--	--	--	--	--	--	--
SB-3	1	8/7/2019	--	1.7	0.78	1.1	--	24	87	--
	3	8/7/2019	--	2.2	1.1	--	--	--	--	--
	5	8/7/2019	--	1.1	--	--	--	6.2	--	--
	25	8/7/2019	--	--	--	--	--	--	--	--
SB-4	3	8/7/2019	--	0.88	--	--	--	13	50	--
	5	8/7/2019	--	--	--	--	--	21	80	--
	25	8/7/2019	--	--	--	--	--	7.7	--	--
SB-5	5	8/7/2019	--	1.9	1.2	--	--	--	--	--
	10	8/7/2019	--	1.5	--	--	--	16	--	--
	25	8/7/2019	--	--	--	--	--	5.2	--	--
SB-6	5	8/7/2019	--	1.5	--	--	--	6	--	--
	10	8/7/2019	--	--	--	--	--	16	--	--
	25	8/7/2019	--	--	--	--	--	6.7	--	--
SB-7	5	8/8/2019	--	--	--	--	--	--	--	--
	15	8/8/2019	--	--	--	--	--	15	--	--
	25	8/8/2019	--	--	--	--	--	4.9	--	--
SB-8	5	8/8/2019	--	--	--	--	--	--	--	--
	15	8/8/2019	--	--	--	--	--	5.4	--	--
	25	8/8/2019	--	--	--	--	--	--	--	--
SB-9	5	8/8/2019	--	--	--	--	--	10	--	--
	15	8/8/2019	--	--	--	--	--	5.7	--	--
	25	8/8/2019	--	--	--	--	--	--	--	--
SB-10	5	8/8/2019	--	--	--	--	--	--	--	--
	15	8/8/2019	--	--	--	--	--	--	--	--
	25	8/8/2019	--	--	--	--	--	5.0	--	--
SB-11	5	8/8/2019	--	1.2	--	--	--	--	--	--
	15	8/8/2019	--	--	--	--	--	--	--	--
	25	8/8/2019	--	--	--	--	--	--	--	--
SB-12	5	8/8/2019	--	1.7	--	--	--	--	--	--
	15	8/8/2019	--	--	--	--	--	7.8	--	--
	25	8/8/2019	--	--	--	--	--	--	--	--
SB-13	5	8/9/2019	--	--	--	--	--	--	--	--
	10	8/9/2019	--	--	--	--	--	--	--	--
	25	8/9/2019	--	--	--	--	--	4.9	--	--
SB-14	5	8/9/2019	63	--	--	--	--	--	--	--
	10	8/9/2019	--	--	--	--	--	--	--	--
	25	8/9/2019	--	--	--	--	--	--	--	--
SB-15	5	8/9/2019	--	1.8	--	--	--	--	--	--
	10	8/9/2019	--	--	--	--	--	--	--	--
	25	8/9/2019	--	1.1	--	--	--	--	--	--
SB-16	5	8/9/2019	--	--	--	--	--	--	--	--
	10	8/9/2019	--	--	--	--	--	--	--	--
	25	8/9/2019	--	1.9	--	--	--	--	--	--
DTSC - Screening Levels (Residential):			NE	330	1,100,000	590	NE	NE	2,500	Various
DTSC - Screening Levels (Commercial):			NE	1,400	5,300,000	2,700	NE	NE	21,000	Various

**Table 1**  
**Soil Analytical Data - Volatile Organic Compounds & Total Petroleum Hydrocarbons**  
**740 E & 800 E 111th Place**  
**Los Angeles, California 90059**

Sample Location	Sample Depth (ft bgs)	Sample Date	Acetone (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Tetrachloroethene (ug/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	All Other VOCs <sup>a</sup> (ug/kg)
SV-1	1	10/3/2019	--	1.5	0.99	--	NA	NA	NA	--
	3	10/3/2019	--	0.91	--	--	NA	NA	NA	--
	5	10/3/2019	--	1.0	--	--	NA	NA	NA	--
	10	10/3/2019	--	--	--	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
SV-2	1	10/3/2019	--	--	--	1.5	NA	NA	NA	--
	3	10/3/2019	--	--	--	--	NA	NA	NA	--
	5	10/3/2019	--	1.6	0.86	--	NA	NA	NA	--
	10	10/3/2019	--	2.8	2.1	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
SV-3	1	10/3/2019	--	2.3	1.5	1.1	NA	NA	NA	--
	3	10/3/2019	--	3.0	1.8	2.6	NA	NA	NA	--
	5	10/3/2019	--	1.1	--	--	NA	NA	NA	--
	10	10/3/2019	--	0.94	--	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
SV-4	1	10/4/2019	--	0.99	--	1.8	NA	NA	NA	--
	3	10/4/2019	--	2.1	1.5	1.7	NA	NA	NA	--
	5	10/4/2019	--	1.5	--	--	NA	NA	NA	--
	10	10/4/2019	--	--	--	0.99	NA	NA	NA	--
	15	10/4/2019	--	--	--	--	NA	NA	NA	--
SV-5	1	10/3/2019	--	--	--	--	NA	NA	NA	--
	3	10/3/2019	--	--	--	--	NA	NA	NA	--
	5	10/3/2019	--	3.3	3.1	--	NA	NA	NA	--
	10	10/3/2019	--	--	--	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
SV-6	1	10/3/2019	--	2.3	1.4	--	NA	NA	NA	--
	3	10/3/2019	--	0.95	--	--	NA	NA	NA	--
	5	10/3/2019	--	1.1	--	--	NA	NA	NA	--
	10	10/3/2019	--	--	--	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
SV-7	1	10/4/2019	--	2.8	2.0	--	NA	NA	NA	--
	3	10/4/2019	--	1.1	--	--	NA	NA	NA	--
	5	10/4/2019	--	3.2	1.6	--	NA	NA	NA	--
	10	10/4/2019	--	1.1	--	--	NA	NA	NA	--
	15	10/4/2019	--	--	--	--	NA	NA	NA	--
SV-8	1	10/3/2019	45	4.0	3.4	--	NA	NA	NA	--
	3	10/3/2019	--	1.1	--	--	NA	NA	NA	--
	5	10/3/2019	--	--	--	--	NA	NA	NA	--
	10	10/3/2019	--	--	--	--	NA	NA	NA	--
	15	10/3/2019	--	--	--	--	NA	NA	NA	--
	20	10/3/2019	--	--	--	--	NA	NA	NA	--
	30	10/3/2019	--	0.79	--	--	NA	NA	NA	--
SV-9	1	10/4/2019	50	--	--	3.5	NA	NA	NA	--
	3	10/4/2019	--	--	--	--	NA	NA	NA	--
	5	10/4/2019	--	--	--	--	NA	NA	NA	--
	10	10/4/2019	--	--	--	2.1	NA	NA	NA	--
	15	10/4/2019	--	--	--	--	NA	NA	NA	--
	20	10/4/2019	--	--	--	--	NA	NA	NA	--
	30	10/4/2019	--	--	--	--	NA	NA	NA	--
SV-10	1	10/4/2019	--	2.1	1.3	--	NA	NA	NA	--
	3	10/4/2019	--	--	--	--	NA	NA	NA	--
	5	10/4/2019	--	--	--	--	NA	NA	NA	--
	10	10/4/2019	--	--	--	--	NA	NA	NA	--
	15	10/4/2019	--	--	--	--	NA	NA	NA	--
	20	10/4/2019	--	--	--	--	NA	NA	NA	--
	30	10/4/2019	--	--	--	--	NA	NA	NA	--
DTSC - Screening Levels (Residential):			NE	330	1,100,000	590	NE	NE	2,500	Various
DTSC - Screening Levels (Commercial):			NE	1,400	5,300,000	2,700	NE	NE	21,000	Various

**Table 1**  
**Soil Analytical Data - Volatile Organic Compounds & Total Petroleum Hydrocarbons**  
**740 E & 800 E 111th Place**  
**Los Angeles, California 90059**

Sample Location	Sample Depth (ft bgs)	Sample Date	Acetone (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Tetrachloroethene (ug/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	All Other VOCs <sup>a</sup> (ug/kg)
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**Notes**

a = See laboratory report for details.

**Abbreviations:**

- ft bgs = Feet below ground surface
- '--' = Not detected above laboratory reporting limit, see laboratory report for details
- mg/kg = Milligrams per kilogram
- ug/kg = Micrograms per kilogram
- VOCs = Volatile organic compounds
- NE = Not established
- DTSC = Department of Toxic Substances Control
- NA = Not analyzed
- GRO = Gasoline Range Organics
- DRO = Diesel Range Organics
- ORO = Oil Range Organics



**Table 3**  
**Sub-Slab Soil Vapor Analytical Data - Volatile Organic Compounds**  
**740 E & 800 E 111th Place**  
**Los Angeles, California 90059**

Sample Location	Sample Date	1,2-Dichloroethane (ug/m <sup>3</sup> )	Toluene <sup>a</sup> (ug/m <sup>3</sup> )	m,p-Xylene (ug/m <sup>3</sup> )	o-Xylene (ug/m <sup>3</sup> )	Tetrachloroethene (ug/m <sup>3</sup> )	1,1-Difluoroethane (ug/m <sup>3</sup> )	All Other VOCs <sup>b</sup>
SSV-1	08/15/19	27	420	<44	24	<34	<27	--
SSV-2	08/15/19	<21	<38	<44	<22	<34	<27	--
SSV-3	08/15/19	<21	<38	<44	<22	230	<27	--
SSV-4	08/15/19	<21	<38	<44	<22	190	<27	--
SSV-5	08/15/19	<21	<38	<44	<22	<34	<27	--
SSV-6	08/15/19	<21	<38	<44	<22	<34	<27	--
SSV-7	08/15/19	<21	<38	<44	<22	<34	72	--
SSV-8	08/15/19	<21	<38	<44	<22	91	<27	--
SSV-8-REP	08/15/19	<21	<38	<44	<22	92	<27	--
SSV-9	08/15/19	<21	<38	<44	<22	<34	<27	--
SSV-10	08/15/19	<21	<38	<44	<22	960	<27	--
SSV-11	08/15/19	<21	<38	49	<22	1,000	<27	--
SSV-12	08/15/19	<21	<38	<44	<22	1,200	<27	--
DTSC - Screening Levels (Residential)		NE	10,333	NE	NE	15.3	NE	Various
DTSC - Screening Levels (Commercial)		NE	43,333	NE	NE	66.7	NE	Various

**Notes:**

DTSC attenuation factor of 0.03 for soil gas applied to all screening levels.

a = DTSC has not established a cancer endpoint screening level. Noncancer endpoint screening value used.

b = See laboratory report for details.

RED = Exceeds residential and commercial screening levels

**Abbreviations:**

- < = Chemical not detected above presented laboratory reporting limit
- ug/m<sup>3</sup> = Micrograms per cubic meter
- VOC = Volatile organic compound
- = Not detected above laboratory reporting limit, see laboratory report for details
- NE = Not established
- DTSC = Department of Toxic Substances Control

**Table 4**  
**Sub-Slab Soil Vapor Analytical Data - Fixed Gases**  
**740 E & 800 E 111th Place**  
**Los Angeles, California 90059**

Sample Location	Sample Date	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)	Methane (ppmv)
SSV-1	08/15/19	10	6.3	84	<10
SSV-2	08/15/19	4.4	14	81	<10
SSV-3	08/15/19	3.3	16	80	<10
SSV-4	08/15/19	4.8	14	82	<10
SSV-5	08/15/19	4.3	15	81	<10
SSV-6	08/15/19	3.8	16	80	<10
SSV-7	08/15/19	1.5	18	80	<10
SSV-8	08/15/19	NA	NA	NA	NS
SSV-9	08/15/19	NA	NA	NA	NS
SSV-10	08/15/19	7.7	13	80	<10
SSV-10-REP	08/15/19	8.0	12	80	<10
SSV-11	08/15/19	5.4	13	82	<10
SSV-12	08/15/19	9.1	9.9	81	<10

**Notes:**

Vapor samples for fixed gases were not collected from SSV-8 or SSV-9.

**Abbreviations:**

- < = Methane not detected above presented laboratory reporting limit
- NA = Not analyzed
- ppmv = Parts per million by volume
- % = Percent by volume



Table 5  
Soil Vapor Analytical Data - Volatile Organic Compounds  
800 E 111th Place  
Los Angeles, California 90059

Sample Location	Sample Date	Tetrachloroethene (ug/m <sup>3</sup> )	Trichlorofluoromethane <sup>a</sup> (ug/m <sup>3</sup> )	Toluene <sup>a</sup> (ug/m <sup>3</sup> )	Bromodichloromethane (ug/m <sup>3</sup> )	Dibromochloromethane (ug/m <sup>3</sup> )	Carbon Disulfide (ug/m <sup>3</sup> )	Dichlorodifluoromethane (ug/m <sup>3</sup> )	Dichlorotetrafluoroethane (ug/m <sup>3</sup> )
SV-1-5	10/10/19	120	23	4.2	--	--	--	--	--
SV-1-15	10/10/19	130	40	--	--	--	--	--	--
SV-1-15 (Duplicate)	10/10/19	140	39	--	--	--	--	--	--
SV-2-5	10/10/19	450	11	--	--	--	--	--	--
SV-2-15	10/10/19	320	19	42	8.2	9.1	10	--	--
SV-3-5	10/10/19	1,100	8.2	--	--	--	--	5.6	--
SV-3-15	10/10/19	1,100	8.9	14	--	--	--	6.8	--
SV-4-5	10/10/19	2,100	34	--	--	--	--	--	--
SV-5-5	10/10/19	11	--	--	--	--	--	--	--
SV-6-5	10/10/19	66	--	--	--	--	--	--	--
SV-7-5	10/10/19	450	140	--	--	--	--	10	--
SV-8-5	10/10/19	92	14	11	--	--	--	--	--
SV-8-30	10/10/19	160	60	4.2	--	--	--	--	--
SV-9-5	10/10/19	1,700	140	--	--	--	--	--	--
SV-9-30	10/10/19	1,200	110	--	--	--	--	44	11
SV-10-5	10/10/19	370	--	--	--	--	--	--	--
SV-10-30	10/10/19	520	--	--	--	--	--	--	--
DTSC - Screening Levels (Residential)		15.3	43,333	10,333	2.5	4.3	NE	NE	NE
DTSC - Screening Levels (Commercial)		66.7	176,667	43,333	11.0	19.3	NE	NE	NE

**Notes:**

DTSC attenuation factor of 0.03 for soil gas applied to all screening levels.  
a = DTSC has not established a cancer endpoint screening level. Noncancer endpoint screening value used.  
b = See laboratory report for details.  
**BLUE** = Exceeds residential screening levels  
**RED** = Exceeds residential and commercial screening levels

**Abbreviations:**

< = Denotes less than presented laboratory detection limit  
ug/m<sup>3</sup> = Micrograms per cubic meter  
VOC = Volatile organic compound  
-- = Not detected above laboratory reporting limit, see laboratory report  
NE = Not established  
DTSC = Department of Toxic Substances Control  
LCC = Leak check compound

Table 5  
Soil Vapor Analytical Data - Volatile Organic Compoundss  
800 E 111th Place  
Los Angeles, California 90059

Sample Location	Sample Date	Ethylbenzene (ug/m3)	m,p-Xylene (ug/m3)	o-Xylene (ug/m3)	4-Ethyltoluene (ug/m3)	1,3,5- Trimethylbenzene (ug/m3)	1,2,4- Trimethylbenzene (ug/m3)	1,1-Difluoroethane (LCC) (ug/m3)	All Other VOCs <sup>b</sup> (ug/m3)
SV-1-5	10/10/19	--	--	--	--	--	--	--	--
SV-1-15	10/10/19	--	--	--	--	--	--	--	--
SV-1-15 (Duplicate)	10/10/19	--	--	--	--	--	--	--	--
SV-2-5	10/10/19	--	--	--	--	--	--	--	--
SV-2-15	10/10/19	13	77	19	9.4	14	43	20	--
SV-3-5	10/10/19	--	--	--	--	--	--	6.2	--
SV-3-15	10/10/19	--	27	7.3	--	6.2	18	--	--
SV-4-5	10/10/19	--	--	--	--	--	--	--	--
SV-5-5	10/10/19	--	--	--	--	--	--	--	--
SV-6-5	10/10/19	--	--	--	--	--	--	--	--
SV-7-5	10/10/19	--	--	--	--	--	--	--	--
SV-8-5	10/10/19	--	14	6.3	--	--	6.6	--	--
SV-8-30	10/10/19	--	--	--	--	--	--	--	--
SV-9-5	10/10/19	--	--	--	--	--	--	--	--
SV-9-30	10/10/19	--	--	--	--	--	--	--	--
SV-10-5	10/10/19	--	--	--	--	--	--	--	--
SV-10-30	10/10/19	--	--	--	--	--	--	--	--
DTSC - Screening Levels (Residential)		NE	NE	NE	NE	NE	NE	NE	Various
DTSC - Screening Levels (Commercial)		NE	NE	NE	NE	NE	NE	NE	Various

**Notes:**

DTSC attenuation factor of 0.03 for soil gas applied to all screening levels.  
a = DTSC has not established a cancer endpoint screening level. Noncancer endpoint screening value used.  
b = See laboratory report for details.  
BLUE = Exceeds residential screening levels  
RED = Exceeds residential and commercial screening levels

**Abbreviations:**

< = Denotes less than presented laboratory detection limit  
ug/m<sup>3</sup> = Micrograms per cubic meter  
VOC = Volatile organic compound  
-- = Not detected above laboratory reporting limit, see laboratory report  
NE = Not established  
DTSC = Department of Toxic Substances Control  
LCC = Leak check compound

# ATTACHMENT A



# Subsurface Investigation Report

**Project:**

**Commercial Property  
740 & 800 E. 111<sup>th</sup> Place  
Los Angeles, CA**

**Prepared For:**

**Lewis Simons  
Stantec Consulting**

**Prepared By:**

**Pacific Coast Locators, Inc.  
EM & GPR Technicians  
2606 Foothill Blvd., Ste. G La Crescenta, CA 91214  
Ph: 818-249-7700 Fax: 818-249-7701**

## **INTRODUCTION**

Pacific Coast Locators, Inc. performed a Subsurface Investigation on Monday, August 5th, 2019 to clear and mark-out all accessible utilities within the project areas on-site for 16 proposed soil boring locations, and 12 proposed soil vapor pin locations. Our technician also performed a sweep & scan to attempt to identify Underground Storage Tank(s), associated features and/or evidence of excavation within the areas of concern on-site.

## **METHODOLOGY AND EQUIPMENT**

The GSSI UtilityScan SIR 3000 Ground Penetrating Radar unit with 400MHz antenna sends a dielectric signal into the earth, which registers with the density of the soil that it is penetrating. Any other material of varied density will either speed up the signal creating an inverted hyperbola or slow it down leaving a hyperbola trail. This is similar to a rock in a creek. The water bends around the rock leaving a tail wake. The GPR signal is not bending however; it is sending back a continuous signal of the curvature of the anomaly or buried feature it encounters. GPR findings are not always accurate due to certain site conditions such as soil lithology, moisture and soil make-up. These can limit the depth to which the GPR antenna can penetrate to locate buried features.

The RD8100 Electro-Magnetic Transmitter & Receiver has Inductive & Conductive capability to locate buried conductive underground utilities, such as copper, steel and galvanized metal water pipes, electrical lines, power lines, tele-communication lines, metal and steel gas lines, and metal and steel pipelines. The RD8100 features include multiple active frequencies to delineate actively the depth and location of the target utility or pipe. The RD4000 receiver has a peak and null gain feature that pinpoints the target utility or pipe in congested areas. The audible signal to noise feature makes it easy for the locating technician to determine accurately the location of a directly connected utility or pipe by sound.

According to Radio Detection, the specifications of the RD8100 include

Sensitivity: 6E-15 Tesla 5 $\mu$ A at 1 meter (33kHz)

Dynamic range: 140dB rms/ $\sqrt$ Hz

Selectivity: 120dB/Hz

Depth measurement precision:  $\pm$  3%

Locate accuracy:  $\pm$  5% of depth

The Jameson Duct Hunter 300 Traceable Rodder uses the RD8100 transmitter to energize the rod which is pushed into underground pipe to emit signal that is picked up by the RD8100 receiver above ground. This allows an entire buried utility pipe to be traced and marked continuously from above ground by one man without digging. The rod's ferrule attaches to a 512 Mhz sonde, roller guide, or pulling eye. 5/16" diameter rod has 6" bend radius and is recommended for 2"- 4" conduit.

The Schonstedt GA-52Cx Magnetic Locator detects iron and steel objects underground, such as USTs, buried oil wells and buried metal monitoring well lids. The Schonstedt GA-52Cx Magnetometer provides audio detection signals with frequencies that vary with gradient field intensity. The signals peak in frequency when the locator's tip is held directly over the target.

**Field work performed by Chris Knerr, EM & GPR Technician,  
Pacific Coast Locators, Inc.**

## **LIMITATIONS**

Please be advised that there are limitations to any Subsurface Investigation. The equipment may not achieve maximum effectiveness due to soil conditions, above ground obstructions, reinforced concrete, and a variety of other factors. No Subsurface Investigation or equipment can provide a complete image of buried features. Our results should always be used in conjunction with as many methods as possible including: Consultation of existing plans and drawings, exploratory excavation or potholing, visual inspection of above ground features and utilization of services such as Dig Alert/Underground Service Alert.

## **SITE AREA**

The project site is located at 740 & 800 E. 111<sup>th</sup> Place. in Los Angeles, CA. Below is an aerial view of the site that shows the proposed locations/project areas.



## **ANALYSES / INTERPRETATIONS AND FINDINGS**

Our technician performed a Subsurface Investigation to clear and mark-out all accessible utilities within the project areas on-site for 9 proposed boring locations. Our technician also performed a sweep & scan to attempt to identify potential Underground Storage Tank(s), associated features and/or evidence of excavation within the areas of concern on-site. All confirmed utilities were delineated with color coded marking paint. Below is a list of findings:

- Dig Alert Ticket was called in and provided on-site.
- Water lines were located and marked-out with blue paint within the project areas on-site.
- All water meter covers were removed to ensure no additional water lines to be located.
- Electrical Lines were located and marked-out with red paint from pole/transformer to electrical panel.
- Electrical lines for area lighting were located and marked-out with red paint.
- Telephone lines were found to be aerial.
- Cable lines found to be aerial.
- Gas line was located out of work scope area.
- Sewer line was located out of work scope area.
- No evidence of an existing Underground Storage Tank found within the area of concern on-site.

# ATTACHMENT B



# ENVIRONMENTAL HEALTH

## Drinking Water Program



5050 Commerce Drive, Baldwin Park, CA 91706  
 Telephone: (626) 430-5420 • Facsimile: (626) 813-3013 • Email: [waterquality@ph.lacounty.gov](mailto:waterquality@ph.lacounty.gov)  
[http://publichealth.lacounty.gov/eh/ep/dw/dw\\_main.htm](http://publichealth.lacounty.gov/eh/ep/dw/dw_main.htm)

**SR0191919**  
**740 East 111th Place, Los Angeles, CA 90059**  
**Work Plan Approval**

WORK SITE ADDRESS	CITY	ZIP	EMAIL ADDRESS FOR WELL PERMIT APPROVAL
740 East 111th Place	Los Angeles	90059	<a href="mailto:Lewis.Simons@stantec.com">Lewis.Simons@stantec.com</a>

**NOTICE:**

- WORK PLAN APPROVALS ARE VALID FOR 180 DAYS. 30 DAY EXTENSIONS OF WORK PLAN APPROVALS ARE CONSIDERED ON AN INDIVIDUAL (CASE-BY-CASE) BASIS AND MAY BE SUBJECT TO ADDITIONAL PLAN REVIEW FEES (HOURLY RATE AS APPLICABLE).
- WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- WORK PLAN APPROVALS ARE LIMITED TO COMPLIANCE WITH THE CALIFORNIA WELL STANDARDS AND THE LOS ANGELES COUNTY CODE AND DOES NOT GRANT ANY RIGHTS TO CONSTRUCT, RENOVATE, OR DECOMMISSION ANY WELL. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL OTHER NECESSARY PERMITS SUCH AS WATER RIGHTS, PROPERTY RIGHTS, COASTAL COMMISSION APPROVALS, USE COVENANTS, ENCROACHMENT PERMISSIONS, UTILITY LINE SETBACKS, CITY/COUNTY PUBLIC WORKS RIGHTS OF WAY, ETC.
- THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED BY THE DEPUTY HEALTH OFFICER. WORK SHALL NOT BE INITIATED WITHOUT A WORK PLAN APPROVAL STAMPED BY THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- **ONCE APPROVED NOTIFY INSPECTOR AT [ytaye@ph.lacounty.gov](mailto:ytaye@ph.lacounty.gov) PREFERABLY 3 BUSINESS DAYS BEFORE WORK IS SCHEDULED TO BEGIN.**

**WORK PLAN APPROVED (10 soil borings)**

**DATE: July 30, 2019**

**ADDITIONAL APPROVAL CONDITIONS:**

- Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
- Sealing material must be mixed in accordance with the [California Well Standards \(Bulletins 74-81 and 74-90\)](#).
  - Cement grout mix ratio of 5-6 gallons of water per 94-pound bag of Portland cement.
  - Up to 6% of Bentonite may be added to the cement-based mix. The water demand of bentonite shall be taken into account when water is added to the mix.
  - Bentonite alone shall not be used as a sealing material.
- Exploration holes must comply with all applicable requirements published in the [California Well Standards \(Bulletins 74-81 and 74-90\)](#) and [Los Angeles County Code](#).



REHS NO. 7115  
  
 Yonas Taye, REHS

<input type="checkbox"/> ANNULAR SEAL FINAL INSPECTION REQUIRED	<input type="checkbox"/> WELL COMPLETION LOG REQUIRED
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature
<input type="checkbox"/> WATER QUALITY—BACTERIOLOGICAL STANDARDS REQUIRED	<input type="checkbox"/> WATER QUALITY—CHEMICAL STANDARDS REQUIRED
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature
<input type="checkbox"/> WATER SUPPLY YIELD REQUIRED	<input type="checkbox"/> OTHER REQUIREMENT
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature





# ENVIRONMENTAL HEALTH

## Drinking Water Program



5050 Commerce Drive, Baldwin Park, CA 91706  
 Telephone: (626) 430-5420 • Facsimile: (626) 813-3013 • Email: [waterquality@ph.lacounty.gov](mailto:waterquality@ph.lacounty.gov)  
[http://publichealth.lacounty.gov/eh/ep/dw/dw\\_main.htm](http://publichealth.lacounty.gov/eh/ep/dw/dw_main.htm)

**SR0191916**  
**800 East 111th Place, Los Angeles, CA 90059**  
**Work Plan Approval**

WORK SITE ADDRESS	CITY	ZIP	EMAIL ADDRESS FOR WELL PERMIT APPROVAL
800 East 111th Place	Los Angeles	90059	<a href="mailto:Lewis.Simons@stantec.com">Lewis.Simons@stantec.com</a>

**NOTICE:**

- WORK PLAN APPROVALS ARE VALID FOR 180 DAYS. 30 DAY EXTENSIONS OF WORK PLAN APPROVALS ARE CONSIDERED ON AN INDIVIDUAL (CASE-BY-CASE) BASIS AND MAY BE SUBJECT TO ADDITIONAL PLAN REVIEW FEES (HOURLY RATE AS APPLICABLE).
- WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- WORK PLAN APPROVALS ARE LIMITED TO COMPLIANCE WITH THE CALIFORNIA WELL STANDARDS AND THE LOS ANGELES COUNTY CODE AND DOES NOT GRANT ANY RIGHTS TO CONSTRUCT, RENOVATE, OR DECOMMISSION ANY WELL. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL OTHER NECESSARY PERMITS SUCH AS WATER RIGHTS, PROPERTY RIGHTS, COASTAL COMMISSION APPROVALS, USE COVENANTS, ENCROACHMENT PERMISSIONS, UTILITY LINE SETBACKS, CITY/COUNTY PUBLIC WORKS RIGHTS OF WAY, ETC.
- THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED BY THE DEPUTY HEALTH OFFICER. WORK SHALL NOT BE INITIATED WITHOUT A WORK PLAN APPROVAL STAMPED BY THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- **ONCE APPROVED NOTIFY INSPECTOR AT [ytaye@ph.lacounty.gov](mailto:ytaye@ph.lacounty.gov) PREFERABLY 3 BUSINESS DAYS BEFORE WORK IS SCHEDULED TO BEGIN.**

**WORK PLAN APPROVED (6 soil borings)**

**DATE: July 30, 2019**

**ADDITIONAL APPROVAL CONDITIONS:**

- Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
- Sealing material must be mixed in accordance with the [California Well Standards \(Bulletins 74-81 and 74-90\)](#).
  - Cement grout mix ratio of 5-6 gallons of water per 94-pound bag of Portland cement.
  - Up to 6% of Bentonite may be added to the cement-based mix. The water demand of bentonite shall be taken into account when water is added to the mix.
  - Bentonite alone shall not be used as a sealing material.
- Exploration holes must comply with all applicable requirements published in the [California Well Standards \(Bulletins 74-81 and 74-90\)](#) and [Los Angeles County Code](#).



REHS NO. 7115  
  
 Yonas Taye, REHS

<input type="checkbox"/> ANNULAR SEAL FINAL INSPECTION REQUIRED	<input type="checkbox"/> WELL COMPLETION LOG REQUIRED
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature
<input type="checkbox"/> WATER QUALITY—BACTERIOLOGICAL STANDARDS REQUIRED	<input type="checkbox"/> WATER QUALITY—CHEMICAL STANDARDS REQUIRED
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature
<input type="checkbox"/> WATER SUPPLY YIELD REQUIRED	<input type="checkbox"/> OTHER REQUIREMENT
DATE ACCEPTED: REHS signature	DATE ACCEPTED: REHS signature

# ATTACHMENT C

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB1**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/7/2019** COMPLETED: **8/7/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND; SP; (2.5Y-3/1)</b> dark gray; fine-grained sand; loose; dry; no odor; no staining; trace silt with clay		08:30 SB1-1			0.0		
		SP	<b>POORLY GRADED SAND; SP; (2.5Y-4/1)</b> dark gray; fine-grained sand; very loose; dry; no odor; no staining; trace clay		08:40 SB1-3			0.0		
5		SP	<b>POORLY GRADED SAND; SP; (2.5Y/4/3)</b> olive brown; fine-grained sand; very loose; dry; no odor; no staining; trace clay		08:50 SB1-5			0.0	5	
10		SM	<b>SILTY SAND; SM; (2.5Y-3/1)</b> very dark gray; fine-grained sand; low plasticity; medium dense; moist		09:00 SB1-10			0.0	10	
15		SM	<b>SILTY SAND; SM; (5Y-4/2)</b> olive gray; fine-grained sand; medium dense; moist		09:10 SB1-15			0.0	15	← High-Solids Bentonite Grout
20		SP	<b>POORLY GRADED SAND; SP; (5Y-5/2)</b> olive gray; fine-grained sand; very loose; moist		09:15 SB1-20			0.0	20	
25		SP	SP; same as above Borehole terminated at 25 feet bgs.		09:25 SB1-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB2**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/7/2019** COMPLETED: **8/7/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
								0.0		← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-5/3) brown; fine-grained sand; loose; dry; no odor; no staining; trace silt		10:00 SB2-1					
		SP	SP; same as above; (10YR-2/2) very dark brown; loose; moist		10:05 SB2-3			0.0		
5		SP	<b>POORLY GRADED SAND</b> ; SP; (2.5Y-4/2) dark gray; very loose; moist		10:08 SB2-5			0.0	5	
10		SM	<b>SILTY SAND</b> ; SM; (5Y-3/1) very dark gray; fine-grained sand; low plasticity; medium dense; moist; silty with clay		10:20 SB2-10			0.0	10	← High-Solids Bentonite Grout
15		SM	SM; same as above; (10YR-4/2) dark grayish brown; no odor; no staining		10:30 SB2-15			0.0	15	
20		SM	SM; same as above; fine-grained sand; moist; no odor		10:35 SB2-20			0.0	20	
25		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-4/2) dark grayish brown; very loose; no odor; no staining Borehole terminated at 25 feet bgs.		10:40 SB2-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185751046.200.0005.2

WELL / PROBEHOLE / BOREHOLE NO:



**SB3**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 8/7/2019 COMPLETED: 8/7/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Jar / Voa's / Liners

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 25.0  
 STATIC DTW (ft): N/A WELL DEPTH (ft): N/A  
 WELL CASING DIAM. (in): N/A BOREHOLE DIAM. (in): 2  
 LOGGED BY: T. Aguilar CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (2.5Y-3/1) very dark gray; fine-grained sand; medium dense; moist; no staining; trace silty sand; trace clay		11:52 SB3-1			1.3		
		SP	<b>POORLY GRADED SAND</b> ; SP; (2/5Y-4/4) olive brown; loose to medium dense; no staining		11:58 SB3-3			3.5		
5		SP	SP; same as above		12:04 SB3-5			1.4	5	
10		SM	<b>SILTY SAND</b> ; SM; (5Y-2.5/1) black; medium dense; moist		12:10 SB3-10			0.0	10	
15		SM	<b>SILTY SAND</b> ; SM; (5Y-4/2) olive gray; dense; moist; no staining; trace coarse-grained sand; trace clay & silt		12:13 SB3-15			0.0	15	← High-Solids Bentonite Grout
20		SP	<b>POORLY GRADED SAND</b> ; SP; (2.5Y-5/4) light olive brown; very loose; moist; no staining; trace fine silty sand		12:15 SB3-20			0.0	20	
25		SP	SP; same as above Borehole terminated at 25 feet bgs.		12:25 SB3-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB4**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/7/2019** COMPLETED: **8/7/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND; SP; (10YR-3/3)</b> dark brown; fine to coarse-grained sand; loose; moist; no staining; trace clay		12:45 SB4-1			0.0		
		SP	SP; same as above		12:48 SB4-3			0.0		
5		SP	SP; same as above		12:52 SB4-5			0.0	5	
10		SP	SP; same as above; trace coarse gravel (<3/8 dia.)		12:55 SB4-10			0.0	10	
15		SP	<b>POORLY GRADED SAND; SP; (10YR-4/4)</b> dark yellowish brown; fine to coarse-grained sand; very loose; moist; trace silt		13:00 SB4-15			0.0	15	← High-Solids Bentonite Grout
20		SP	<b>POORLY GRADED SAND; SP; (10YR-5/6)</b> yellowish brown; very loose; moist; trace silty sand		13:05 SB4-20			0.0	20	
25		SP	SP; same as above Borehole terminated at 25 feet bgs.		13:10 SB4-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB5**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/7/2019** COMPLETED: **8/7/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND; SP; (10YR-2/1)</b> black; very loose; moist; no odor; no staining; trace silty sand & clay		13:50 SB5-1			0.0		
		SP	SP; same as above		13:53 SB5-3			0.0		
5		SP	<b>POORLY GRADED SAND; SP; (10YR-4/1)</b> dark gray; very loose; moist; trace fine silty sand		13:57 SB5-5			0.0	5	
10		SM	<b>SILTY SAND; SM; (10YR-2/1)</b> black; medium dense; moist; no odor; no staining; trace clay with silt		14:00 SB5-10			0.0	10	
15		SM	<b>SILTY SAND; SM; (10YR-3/6)</b> dark yellowish brown; fine to coarse-grained sand; dense; moist; trace clay with silt		14:05 SB5-15			0.0	15	← High-Solids Bentonite Grout
20		SP	<b>POORLY GRADED SAND; SP;</b> fine to coarse-grained sand; loose; moist; no odor; no staining		14:10 SB5-20			0.0	20	
25		SP	<b>POORLY GRADED SAND; SP; (10YR-4/3)</b> brown; very loose; moist; no odor; no staining Borehole terminated at 25 feet bgs.		14:15 SB5-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB6**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/7/2019** COMPLETED: **8/7/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND; SP; (10YR-3/3)</b> dark brown; loose; moist; no odor; no staining; trace silty sand & clay		15:05 SB6-1			0.0		
		SP	<b>POORLY GRADED SAND; SP; (10YR-3/3)</b> dark brown; very loose; moist; trace silty sand & clay		15:10 SB6-3			0.0		
5		SP	SP; same as above; (10YR-4/4) dark yellowish brown; low plasticity		15:18 SB6-5			0.0	5	
10		SM	<b>SILTY SAND; SM; (10YR-4/4)</b> dark yellowish brown; fine to coarse-grained sand; medium dense; moist; trace sandy silt		15:25 SB6-10			0.0	10	
15		SP	<b>POORLY GRADED SAND; SP; (2.5Y-4/4)</b> olive brown; very loose; moist; trace silty sand		15:30 SB6-15			0.0	15	
20		SP	SP; same as above		15:35 SB6-20			0.0	20	
25		SP	SP; same as above		15:40 SB6-25			0.0	25	
			Borehole terminated at 25 feet bgs.							← High-Solids Bentonite Grout

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19



PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185751046.200.0005.2

WELL / PROBEHOLE / BOREHOLE NO:



**SB7**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 8/8/2019 COMPLETED: 8/8/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Jar / Voa's / Liners

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 25.0  
 STATIC DTW (ft): N/A WELL DEPTH (ft): N/A  
 WELL CASING DIAM. (in): N/A BOREHOLE DIAM. (in): 2  
 LOGGED BY: T. Aguilar CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-3/1) very dark gray; fine-grained sand; loose; moist; no odor; no staining		08:15 SB7-1			0.0		
		SP-SM	SP-SM; same as above; (10YR-4/3) brown; very loose; moist; no odor; no staining		08:00 SB7-3			0.0		
5		SP-SM	SP-SM; same as above		08:23 SB7-5			0.0	5	
10		SM	<b>SILTY SAND;</b> SM; (10YR-3/1) very dark gray; fine-grained sand; low plasticity; medium dense; moist; trace clay		08:30 SB7-10			0.0	10	
15		SM	SM; same as above; (10YR-3/4) dark yellowish brown; no odor; no staining; trace coarse gravel		08:35 SB7-15			0.0	15	← High-Solids Bentonite Grout
20		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-4/3) brown; fine-grained sand; very loose; moist; no odor; no staining		08:40 SB7-20			0.0	20	
25		SP-SM	SP-SM; same as above Borehole terminated at 25 feet bgs.		08:45 SB7-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814\_BLOG\_185751046.GPJ STANTECUS1342\_GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB8**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/8/2019** COMPLETED: **8/8/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-3/1) very dark gray; fine-grained sand; loose; moist; no odor; no staining		09:15 SB8-1			0.0		
		SP-SM	SP-SM; same as above		09:20 SB8-3			0.0		
5		SP-SM	SP-SM; same as above; (10YR-3/2) very dark grayish brown; very loose; no odor; no staining		09:25 SB8-5			0.0	5	
10		SM	<b>SILTY SAND;</b> SM; (10YR-3/2) very dark grayish brown; medium dense; moist; no odor; no staining; trace coarse gravel		09:35 SB8-10			0.0	10	
15		SP	<b>POORLY GRADED SAND;</b> SP; (10YR-4/4) dark yellowish brown; very loose		09:40 SB8-15			0.0	15	
20		SP	SP; same as above; (10YR-4/6) dark yellowish brown		09:45 SB8-20			0.0	20	
25		SP	SP; same as above; (10YR-5/6) yellowish brown Borehole terminated at 25 feet bgs.		09:50 SB8-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB9**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/8/2019** COMPLETED: **8/8/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-4/6) dark yellowish brown; fine-grained sand; very loose; moist; no odor; no staining; trace gravel 3/8" dia.		10:25 SB9-1			0.0		
		SP-SM	SP-SM; same as above; (10YR-3/4) dark yellowish brown		10:30 SB9-3			0.0		
5		SP-SM	SP-SM; same as above		10:43 SB9-5			1.7	5	
10		SP-SM	SP-SM; same as above; (10YR-5/1) gray		10:55 SB9-10			0.0	10	
15		SP-SM	SP-SM; same as above		11:00 SB9-15			0.0	15	← High-Solids Bentonite Grout
20		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-4/4) dark yellowish brown; loose; no gravel		11:05 SB9-20			0.0	20	
25		SP-SM	SP-SM; same as above Borehole terminated at 25 feet bgs.		11:10 SB9-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB10**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/8/2019** COMPLETED: **8/8/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-3/2) very dark grayish brown; fine-grained sand; loose; moist; no odor; no staining		12:00 SB10-1			0.0		
		SP-SM	SP-SM; same as above; (10YR-4/4) dark yellowish brown; very loose; moist; no staining		12:10 SB10-3			1.7		
5		SP-SM	SP-SM; same as above; (10YR-2/1) black; loose; moist; trace clay		12:15 SB10-5			4.2	5	
10		SP-SM	SP-SM; same as above; (10YR-3/1) very dark gray; very loose; moist		12:20 SB10-10			0.0	10	
15		SP-SM	SP-SM; same as above; (10YR-3/2) very dark grayish brown		12:25 SB10-15			0.0	15	← High-Solids Bentonite Grout
20		SP-SM	SP-SM; same as above		12:30 SB10-20			0.0	20	
25		SP-SM	SP-SM; same as above Borehole terminated at 25 feet bgs.		12:35 SB10-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG\_185751046.GPJ STANTECUS1342\_GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB11**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/8/2019** COMPLETED: **8/8/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-2/1) black; fine-grained sand; loose; moist		13:00 SB11-1			0.0		
		SP-SM	SP-SM; same as above		13:05 SB11-3			0.0		
5		SP-SM	SP-SM; same as above		13:10 SB11-5			2.2	5	
10		SP-SM	SP-SM; same as above		13:15 SB11-10			0.0	10	
15		SP-SM	SP-SM; same as above; fine to coarse-grained sand; medium dense; moist; trace clay		13:20 SB11-15			0.0	15	← High-Solids Bentonite Grout
20		SP-SM	SP-SM; same as above; (10YR-4/4) dark yellowish brown; very loose; fine-grained silty sand		13:25 SB11-20			0.0	20	
25		SP-SM	SP-SM; same as above Borehole terminated at 25 feet bgs.		13:30 SB11-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185751046.200.0005.2

WELL / PROBEHOLE / BOREHOLE NO:



**SB12**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 8/8/2019 COMPLETED: 8/8/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Jar / Voa's / Liners

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 25.0  
 STATIC DTW (ft): N/A WELL DEPTH (ft): N/A  
 WELL CASING DIAM. (in): N/A BOREHOLE DIAM. (in): 2  
 LOGGED BY: T. Aguilar CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR-5/8) yellowish brown; loose; moist; no odor; no staining		14:00 SB12-1			0.0		
		SP-SM	SP-SM; same as above; (10YR-2.5/1) black; trace clay		14:10 SB12-3			0.0		
5		SP-SM	SP-SM; same as above		14:13 SB12-5			0.0	5	
10		SP-SM	SP-SM; same as above		14:20 SB12-10			0.0	10	
15		SP	<b>POORLY GRADED SAND;</b> SP; (10YR-3/4) dark yellowish brown; very loose		14:25 SB12-15			0.0	15	
20		SP	SP; same as above		14:30 SB12-20			0.0	20	
25		SP	SP; same as above		14:35 SB12-25			0.0	25	
			Borehole terminated at 25 feet bgs.							← High-Solids Bentonite Grout

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG\_185751046.GPJ STANTECUS1342\_GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB13**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/9/2019** COMPLETED: **8/9/2019**  
 DRILLING COMPANY: **Strongarm Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-3/2) very dark grayish brown; fine-grained sand; no odor; 5% silt		09:07 SB13-1			0.0		
		SP	SP; same as above; increasing moisture		09:20 SB13-3			0.7		
5		SP	SP; same as above; (10YR-5/2) brown; soft		09:25 SB13-5			9.9	5	
10		SM	<b>SILTY SAND</b> ; SM; (10YR-2/1) black; hard; mica		11:10 SB13-10			0.0	10	
										← High-Solids Bentonite Grout
15		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-5/3) brown; dry; white flecks; no silt		11:15 SB13-15			0.0	15	
20		SP	SP; same as above; (10YR-8/2) very pale brown; loose; 5% silt; trace mica		11:20 SB13-20			0.0	20	
25		SP	SP; same as above; increasing moisture Borehole terminated at 25 feet bgs.		11:25 SB13-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185751046.200.0005.2**

WELL / PROBEHOLE / BOREHOLE NO:



**SB14**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **8/9/2019** COMPLETED: **8/9/2019**  
 DRILLING COMPANY: **Strongarm Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Jar / Voa's / Liners**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **25.0**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **N/A**  
 WELL CASING DIAM. (in): **N/A** BOREHOLE DIAM. (in): **2**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-4/4) dark yellowish brown; fine-grained sand; no odor; 5% silt		08:50 SB14-1			0.0		
		SP	SP; same as above; (10YR-3/2) very dark grayish brown; 10% silt		08:55 SB14-3			0.0		
5		SP	SP; same as above; increasing silt (20%); increasing hardness		09:00 SB14-5			0.0	5	
10		SM	<b>SILTY SAND</b> ; SM; (10YR-2/1) black; no odor; mica		10:35 SB14-10			0.0	10	← High-Solids Bentonite Grout
15		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-5/3) brown; dry; white flecks; no silt		10:40 SB14-15			0.0	15	
20		SP	SP; same as above; (10YR 5/2) brown; loose; 5% silt; no mica		10:45 SB14-20			0.0	20	
25		SP	SP; same as above; increasing moisture; trace mica Borehole terminated at 25 feet bgs.		10:50 SB14-20			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG\_185751046.GPJ STANTECUS1342.GDT 8/20/19



PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185751046.200.0005.2

WELL / PROBEHOLE / BOREHOLE NO:



**SB15**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 8/9/2019 COMPLETED: 8/9/2019  
 DRILLING COMPANY: Strongarm Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Jar / Voa's / Liners

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 25.0  
 STATIC DTW (ft): N/A WELL DEPTH (ft): N/A  
 WELL CASING DIAM. (in): N/A BOREHOLE DIAM. (in): 2  
 LOGGED BY: B. Goss CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-4/4) dark yellowish brown; fine-grained sand; loose; no odor; 5% silt		08:30 SB15-1			0.0		
		SP	SP; same as above		08:35 SB15-3			0.0		
5		SP	SP; same as above; (10YR-5/2) brown		08:45 SB15-5			1.3	5	
10		SM	<b>SILTY SAND</b> ; SM; (10YR-2/1) black; hard; no odor; mica		10:05 SB15-10			0.0	10	← High-Solids Bentonite Grout
15		SM	SM; same as above; (10YR-5/3) brown; orange staining		10:07 SB15-15			0.0	15	
20		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR 8/1) whiteish; fine-grained sand; loose; no silt		10:15 SB15-20			0.0	20	
25		SP	SP; same as above; 5% silt; increasing hardness Borehole terminated at 25 feet bgs.		10:20 SB15-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG\_185751046.GPJ STANTECUS1342\_GDT 8/20/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185751046.200.0005.2

WELL / PROBEHOLE / BOREHOLE NO:



**SB16**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 8/9/2019 COMPLETED: 8/9/2019  
 DRILLING COMPANY: Strongarm Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Jar / Voa's / Liners

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 25.0  
 STATIC DTW (ft): N/A WELL DEPTH (ft): N/A  
 WELL CASING DIAM. (in): N/A BOREHOLE DIAM. (in): 2  
 LOGGED BY: B. Goss CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Borehole Backfill
										← Cement Cap
		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-4/4) dark yellowish brown; fine-grained sand; loose; no odor; 5% cobbles		08:10 SB16-1			0.0		
		SP	SP; same as above; (10YR-3/2) brown; 5% silt		08:15 SB16-3			0.0		
5		SP	SP; same as above; (10YR-6/4) light yellowish brown; loose; soft		08:20 SB16-5			0.0	5	
10		SM	<b>SILTY SAND</b> ; SM; (10YR-2/1) black; moist; no odor		09:45 SB16-10			0.0	10	
										← High-Solids Bentonite Grout
15		SP	<b>POORLY GRADED SAND</b> ; SP; (10YR-6/4) light yellowish brown; dry		09:50 SB16-15			0.0	15	
20		SP	SP; same as above; (10YR-6/6) brownish yellow; very fine-grained sand; loose		09:55 SB16-20			0.0	20	
25		SP	SP; same as above; (10YR-7/1) light gray; 5% silt Borehole terminated at 25 feet bgs.		09:57 SB16-25			0.0	25	

GEO FORM 304 STANTEC ENVIRO 101613 20190814 BLOG 185751046.GPJ STANTECUS1342.GDT 8/20/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185804578.200.0004

WELL / PROBEHOLE / BOREHOLE NO:

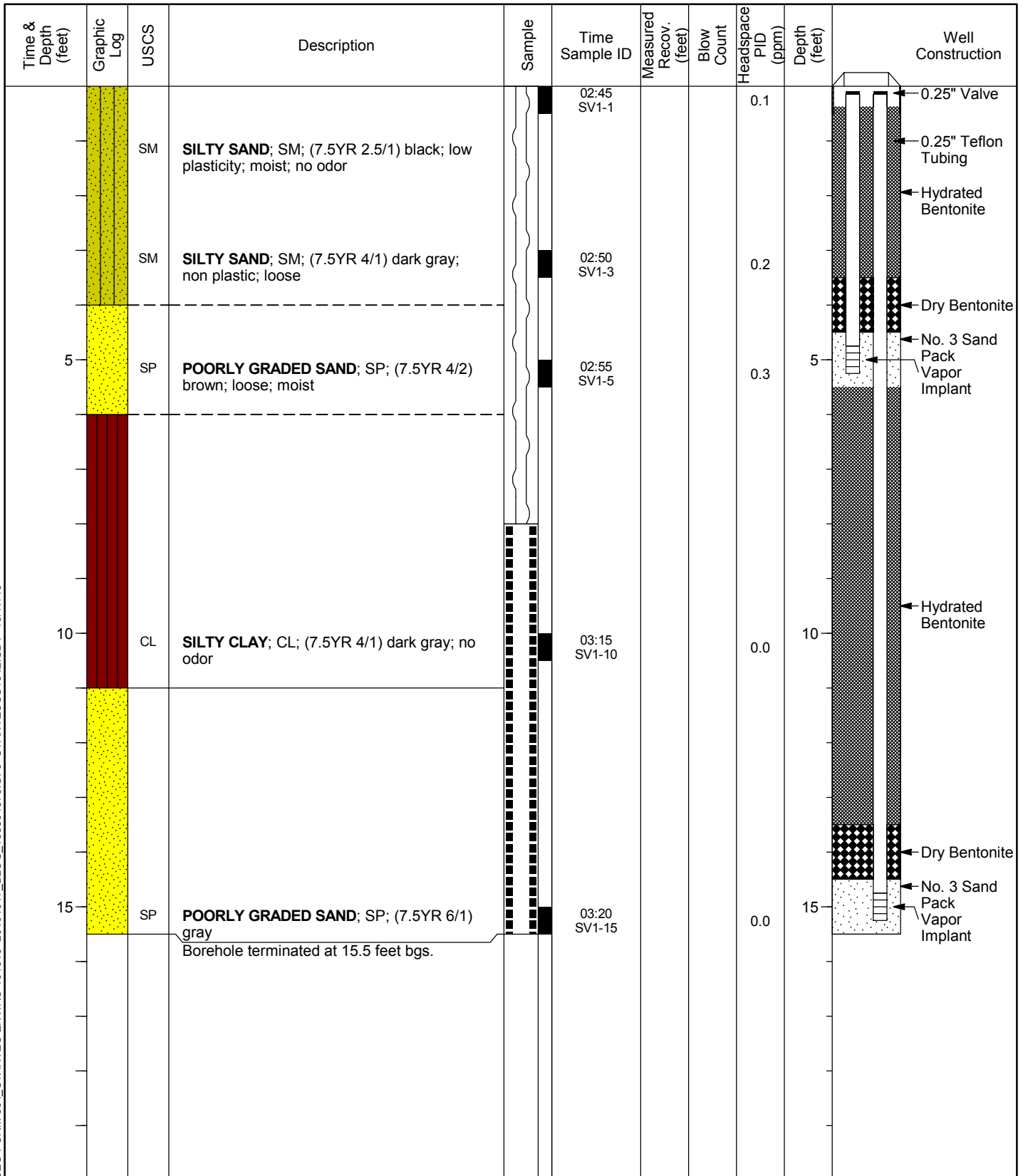


**SV1**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 10/3/2019 COMPLETED: 10/3/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Encore™

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 15.5  
 STATIC DTW (ft): N/A WELL DEPTH (ft): 5,15  
 WELL CASING DIAM. (in): 0.25 BOREHOLE DIAM. (in): 2.25  
 LOGGED BY: B. Goss CHECKED BY: L. Simons



GEO FORM 304 STANTEC ENVIRO 101613 20191017 BLOG\_185804578.GPJ STANTECUS1342.GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:

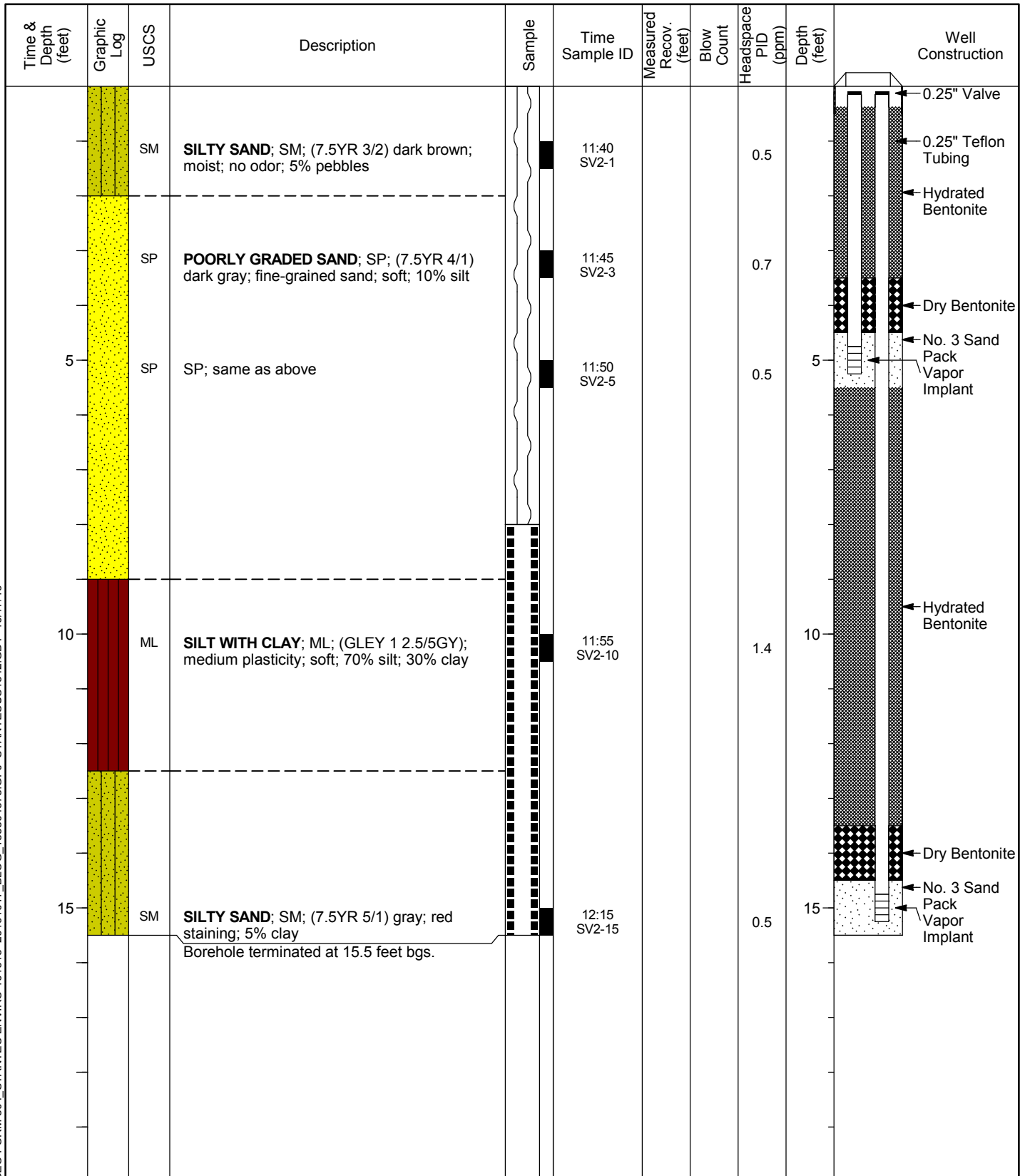


**SV2**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/3/2019** COMPLETED: **10/3/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **15.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**



GEO FORM 304 STANTEC ENVIRO 101613 20191017 BLOG\_185804578.GPJ STANTECUS1342.GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:

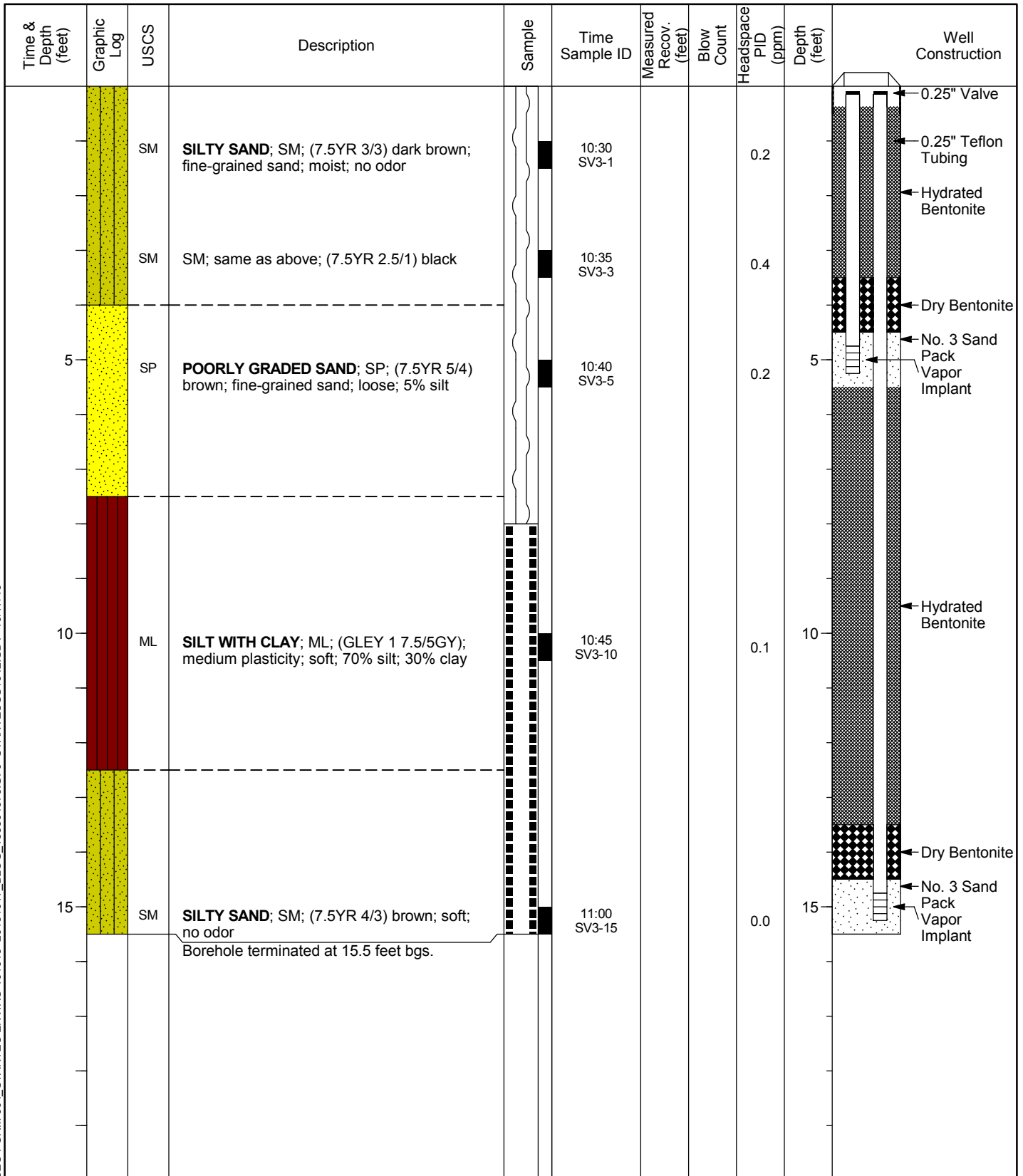


**SV3**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/3/2019** COMPLETED: **10/3/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **15.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**



GEO FORM 304 STANTEC ENVIRO 101613 20191017\_BLOG\_185804578.GPJ STANTECUS1342\_GDT 10/17/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185804578.200.0004

WELL / PROBEHOLE / BOREHOLE NO:

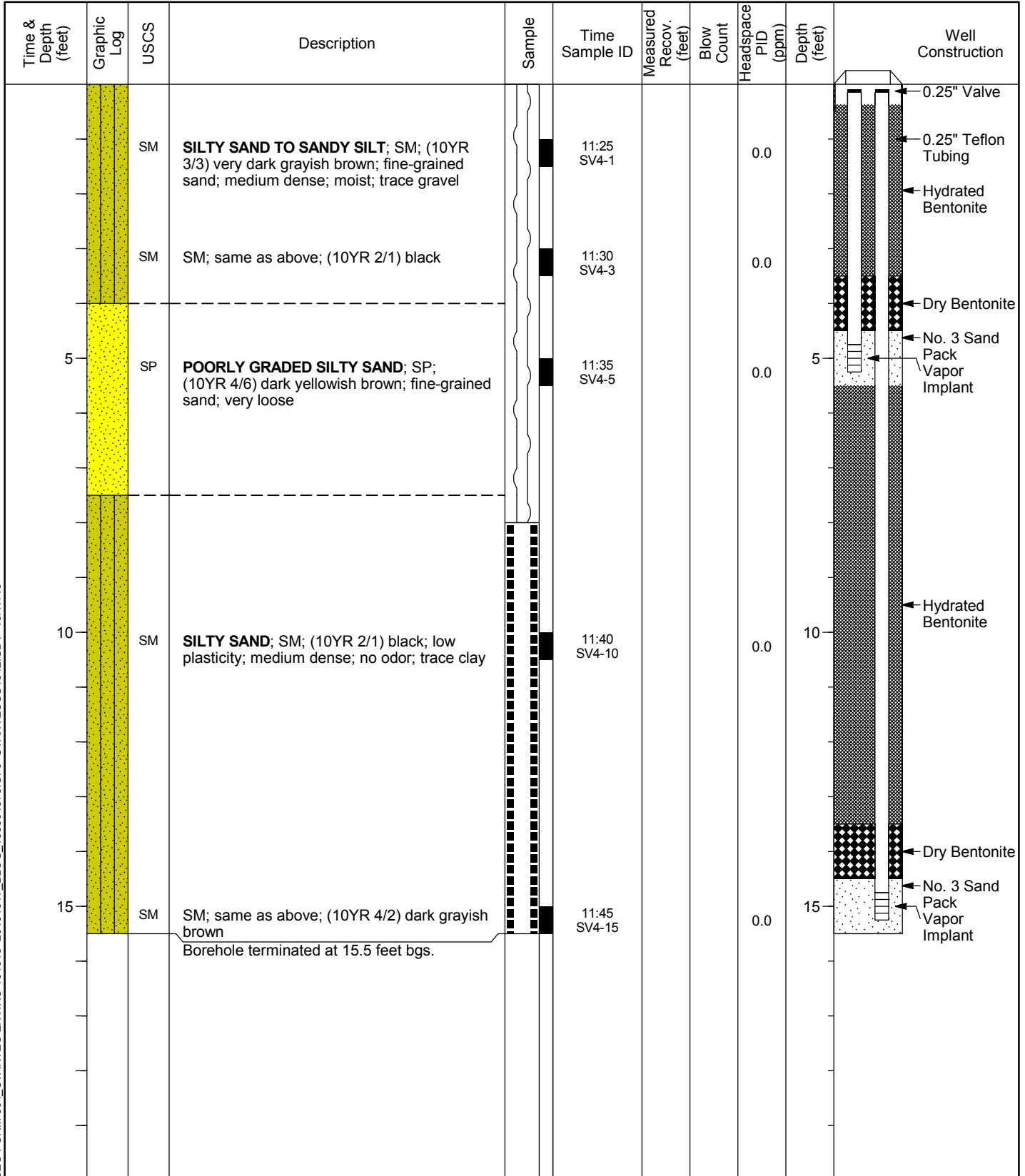


**SV4**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 10/4/2019 COMPLETED: 10/4/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Encore™

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 15.5  
 STATIC DTW (ft): N/A WELL DEPTH (ft): 5,15  
 WELL CASING DIAM. (in): 0.25 BOREHOLE DIAM. (in): 2.25  
 LOGGED BY: T. Aguilar CHECKED BY: L. Simons



GEO FORM 304 STANTEC ENVIRO 101613 20191017 BLOG\_185804578.GPJ STANTECUS1342.GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:



**SV5**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/3/2019** COMPLETED: **10/3/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **15.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Well Construction
0.0		SP	<b>POORLY GRADED SAND; SP; (7.5YR 3/3)</b> dark brown; fine-grained sand; no odor; 5% silt		08:30 SV5-1			0.0	0.0	0.25" Valve 0.25" Teflon Tubing Hydrated Bentonite
0.0		SP	SP; same as above		08:35 SV5-3			0.0	0.0	Dry Bentonite
5.0		SM	<b>SILTY SAND; SM; (2.5YR 2.5/1)</b> black; low plasticity; moist; no odor; 50% silt; 30% sand; 20% clay		08:38 SV5-5			1.2	5.0	No. 3 Sand Pack Vapor Implant
10.0		SM	<b>SILTY SAND; SM; (2.5YR 3/3)</b> dark reddish brown; medium plasticity; no odor; 5% sand		08:45 SV5-10			0.0	10.0	Hydrated Bentonite
15.0		SP	<b>POORLY GRADED SAND; SP; (7.5YR 4/4)</b> brown; fine-grained sand; no odor; 5% silt Borehole terminated at 15.5 feet bgs.		08:50 SV5-15			0.0	15.0	Dry Bentonite No. 3 Sand Pack Vapor Implant

GEO FORM 304 STANTEC ENVIRO 10/16/13 20191017 BLOG\_185804578.GPJ STANTECUS1342.GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:

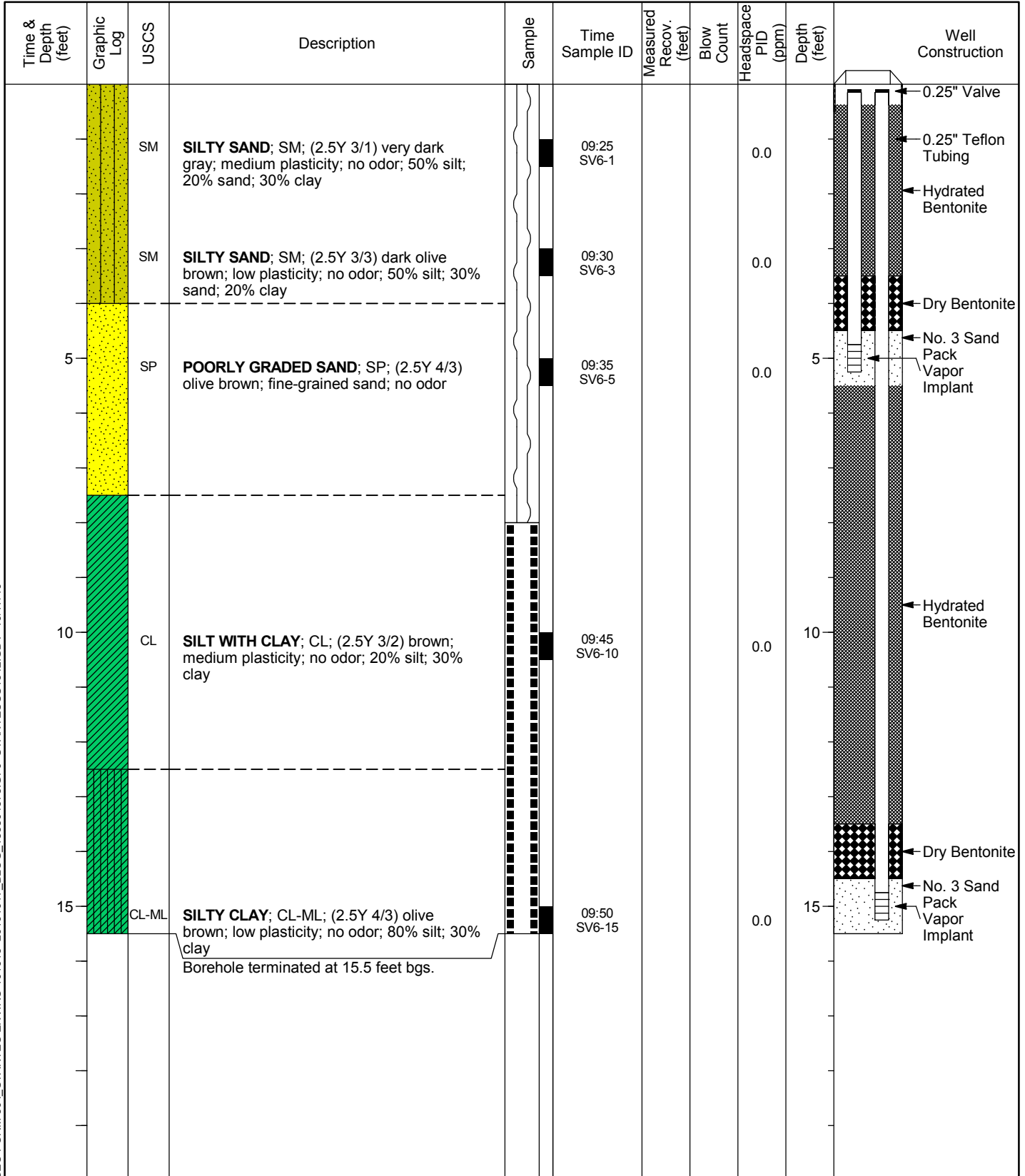


**SV6**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/3/2019** COMPLETED: **10/3/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **15.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **D. Law** CHECKED BY: **L. Simons**



GEO FORM 304 STANTEC ENVIRO 10/16/13 20191017\_BLOG\_185804578.GPJ STANTECUS1342\_GDT 10/17/19



PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:



**SV7**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/4/2019** COMPLETED: **10/4/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **15.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Well Construction
		SM	<b>SILTY SAND; SM; (10YR 3/1) very dark gray; fine-grained sand; medium dense; moist; no odor</b>		09:15 SV7-1			0.1		0.25" Valve
		SM	SM; same as above; (10YR 3/4) dark yellowish brown; low plasticity; medium dense; trace clay		09:20 SV7-3			0.1		0.25" Teflon Tubing
5		SM	<b>SILTY SAND; SM; (10YR 3/1) very dark gray; low plasticity; medium dense; moist; no odor; trace clay</b>		09:25 SV7-5			0.0	5	Hydrated Bentonite
										Dry Bentonite
										No. 3 Sand Pack Vapor Implant
10		SM	SM; same as above; (10YR 2/2) very dark brown; low plasticity; medium dense; moist; trace clay		09:30 SV7-10			0.0	10	Hydrated Bentonite
										Dry Bentonite
15		SM	<b>SILTY SAND; SM; (10YR 4/6) dark yellowish brown; low plasticity; medium dense; moist; no odor; trace clay; trace iron oxide</b>		09:35 SV7-15			0.0	15	No. 3 Sand Pack Vapor Implant
			Borehole terminated at 15.5 feet bgs.							

GEO FORM 304 STANTEC ENVIRO 10/16/13 20191017\_BLOG\_185804578.GPJ STANTECUS1342\_GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:

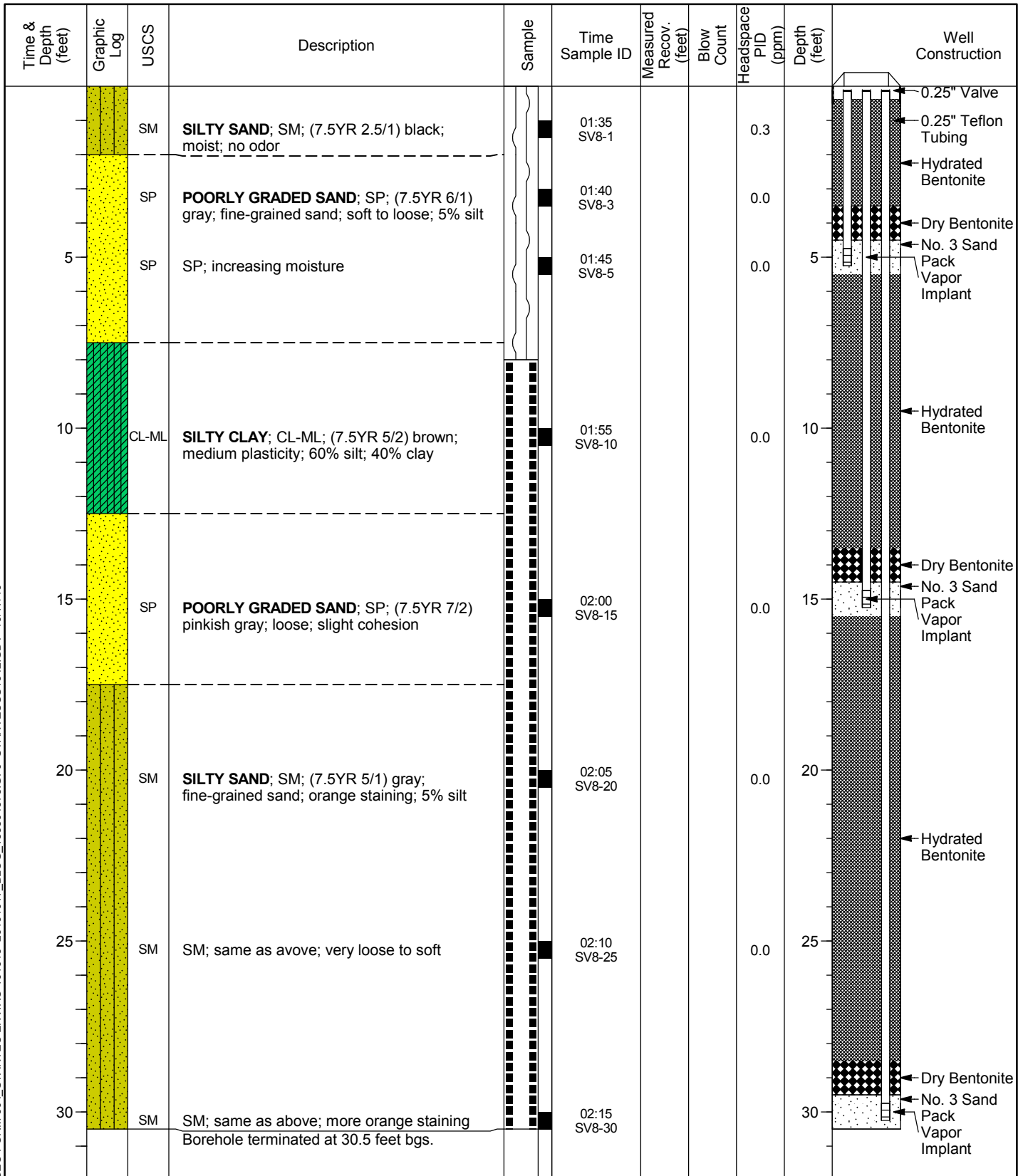


**SV8**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/3/2019** COMPLETED: **10/3/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **30.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15,30**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **B. Goss** CHECKED BY: **L. Simons**



GEO FORM 304 STANTEC ENVIRO 101613 20191017 BLOG\_185804578.GPJ STANTECUS1342\_GDT 10/17/19

PROJECT: **City of Los Angeles**  
 LOCATION: **740 & 800 East 111th Place, Los Angeles, CA 90059**  
 PROJECT NUMBER: **185804578.200.0004**

WELL / PROBEHOLE / BOREHOLE NO:



**SV9**

PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: **10/4/2019** COMPLETED: **10/4/2019**  
 DRILLING COMPANY: **InterPhase Environmental, Inc.**  
 DRILLING EQUIPMENT: **Hand Auger / Geoprobe**  
 DRILLING METHOD: **Hand Auger / Direct Push**  
 SAMPLING EQUIPMENT: **Encore™**

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): **N/A** BOREHOLE DEPTH (ft): **30.5**  
 STATIC DTW (ft): **N/A** WELL DEPTH (ft): **5,15,30**  
 WELL CASING DIAM. (in): **0.25** BOREHOLE DIAM. (in): **2.25**  
 LOGGED BY: **T. Aguilar** CHECKED BY: **L. Simons**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Well Construction
0.4		SM	<b>SILTY SAND; SM;</b> (10YR 2/2) very dark brown; moist; no odor; coarse gravel; trash		10:15 SV9-1				0.4	0.25" Valve
0.1		SP-SM	<b>POORLY GRADED SAND WITH SILT;</b> SP-SM; (10YR 5/6) yellowish brown; loose; no odor; no staining		10:20 SV9-3				0.1	0.25" Teflon Tubing
5.0		SP-SM	SP-SM; same as above		10:25 SV9-5				5.0	Hydrated Bentonite
10.0		SM	<b>SILTY SAND; SM;</b> (10YR 2/1) black; low plasticity; medium dense; moist; no odor; trace clay		10:30 SV9-10				10.0	Dry Bentonite
15.0		SM	SM; same as above; (10YR 4/4) dark yellowish brown		10:35 SV9-15				15.0	No. 3 Sand Pack Vapor Implant
20.0		SM	SM; same as above		10:40 SV9-20				20.0	Hydrated Bentonite
25.0		SP	<b>POORLY GRADED SAND; SP;</b> (10YR 6/3) pale brown; fine-grained sand; very loose; no odor; silty fines		10:45 SV9-25				25.0	Dry Bentonite
30.0		SP	SP; same as above Borehole terminated at 30.5 feet bgs.		10:50 SV9-30				30.0	No. 3 Sand Pack Vapor Implant

GEO FORM 304 STANTEC ENVIRO 101613 20191017\_BLOG\_185804578.GPJ STANTECUS1342\_GDT 10/17/19

PROJECT: City of Los Angeles  
 LOCATION: 740 & 800 East 111th Place, Los Angeles, CA 90059  
 PROJECT NUMBER: 185804578.200.0004

WELL / PROBEHOLE / BOREHOLE NO:



**SV10**

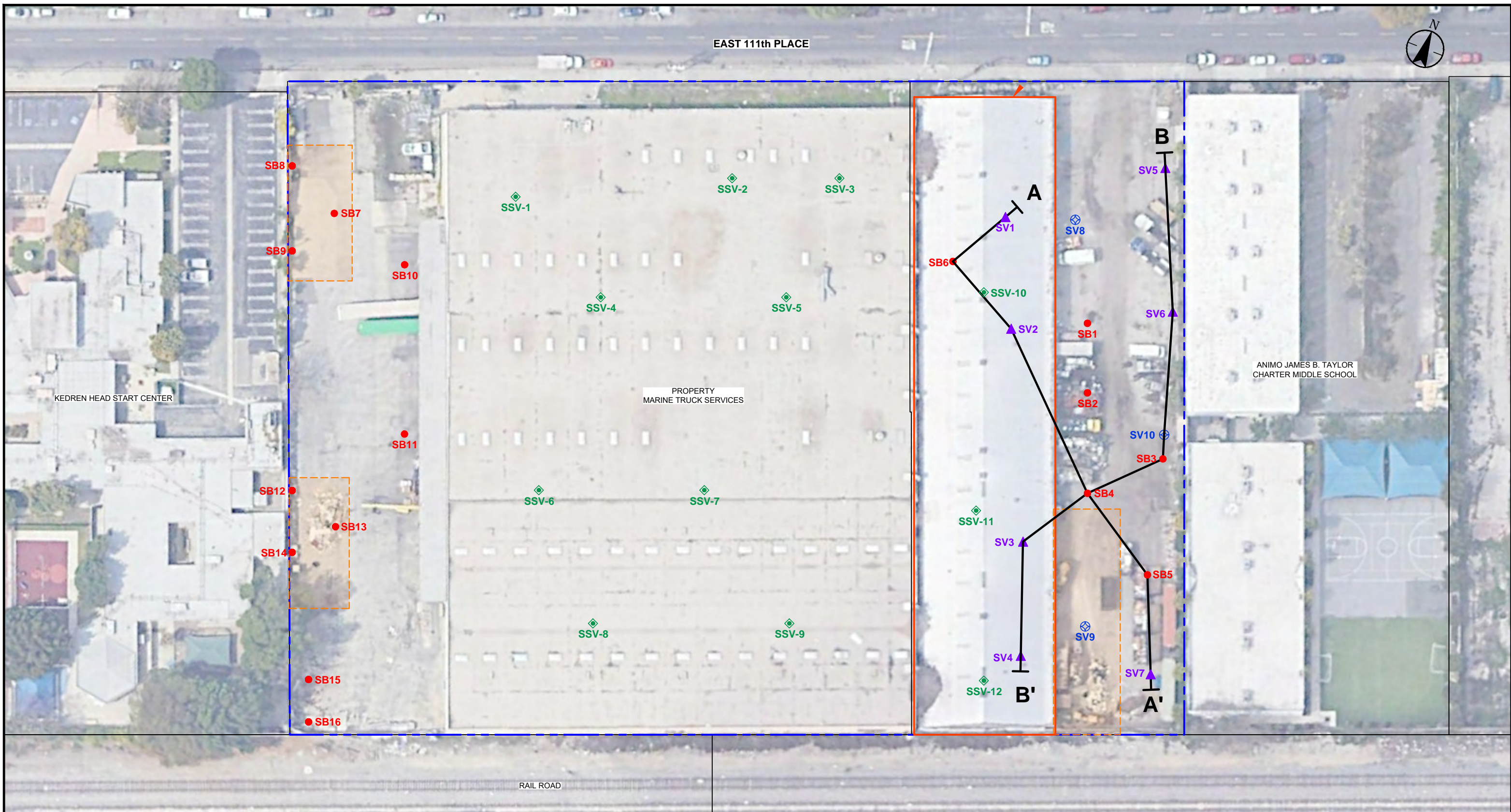
PAGE 1 OF 1

DRILLING / INSTALLATION:  
 STARTED: 10/4/2019 COMPLETED: 10/4/2019  
 DRILLING COMPANY: InterPhase Environmental, Inc.  
 DRILLING EQUIPMENT: Hand Auger / Geoprobe  
 DRILLING METHOD: Hand Auger / Direct Push  
 SAMPLING EQUIPMENT: Encore™

NORTHING (ft): EASTING (ft):  
 LATITUDE: LONGITUDE:  
 GROUND ELEV (ft): TOC ELEV (ft):  
 INITIAL DTW (ft): N/A BOREHOLE DEPTH (ft): 30.5  
 STATIC DTW (ft): N/A WELL DEPTH (ft): 5,15,30  
 WELL CASING DIAM. (in): 0.25 BOREHOLE DIAM. (in): 2.25  
 LOGGED BY: T. Aguilar CHECKED BY: L. Simons

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)	Well Construction
0.0		SM	<b>SILTY SAND</b> ; SM; (7.5YR 2.5/1) black; moist; no odor; no staining; trace clay		08:20 SV10-1				0.0	0.25" Valve
0.0		SM	SM; same as above		08:25 SV10-3				0.0	0.25" Teflon Tubing
5.0		SP-SM	<b>POORLY GRADED SAND WITH SILT</b> ; SP-SM; fine-grained sand; loose		08:30 SV10-5				5.0	Hydrated Bentonite
10.0		CL-ML	<b>SILTY CLAY</b> ; CL-ML; (7.5YR 4/2) brown; fine-grained sand; medium plasticity; moist		08:35 SV10-10				10.0	Dry Bentonite
15.0		SM	<b>SILTY SAND</b> ; SM; (7.5YR 5/2) brown; fine-grained sand; low plasticity; moist		08:40 SV10-15				15.0	No. 3 Sand Pack Vapor Implant
20.0		SP	<b>POORLY GRADED SAND</b> ; SP; fine-grained sand; loose; no odor; no staining; trace fines		08:45 SV10-20				20.0	Hydrated Bentonite
25.0		SP	SP; same as above		08:50 SV10-25				25.0	
30.0		SP	SP; same as above Borehole terminated at 30.5 feet bgs.		08:55 SV10-30				30.0	Dry Bentonite
										No. 3 Sand Pack Vapor Implant

GEO FORM 304 STANTEC ENVIRO 101613 20191017 BLOG\_185804578.GPJ STANTECUS1342.GDT 10/17/19

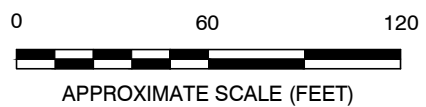


**LEGEND**

- APPROXIMATE PROPERTY BOUNDARY
- SOIL BORING LOCATION (16)
- ◆ SUB SLAB VAPOR LOCATION (12)
- UST SEARCH AREA
- ▲ NESTED PROBES AT 5' & 15' BGS (SHALLOW)
- ⊗ NESTED PROBES AT 5', 15', AND 30' BGS (DEEP)

**NOTES:**

1. MAP REFERENCES; GOOGLE EARTH PRO AERIAL IMAGE, DATED MARCH 14, 2018.
2. COORDINATE SYSTEM; NAD 83 CALIFORNIA STATE PLANES, ZONE 5 (FT.). NOT A SURVEYED MAP, SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.

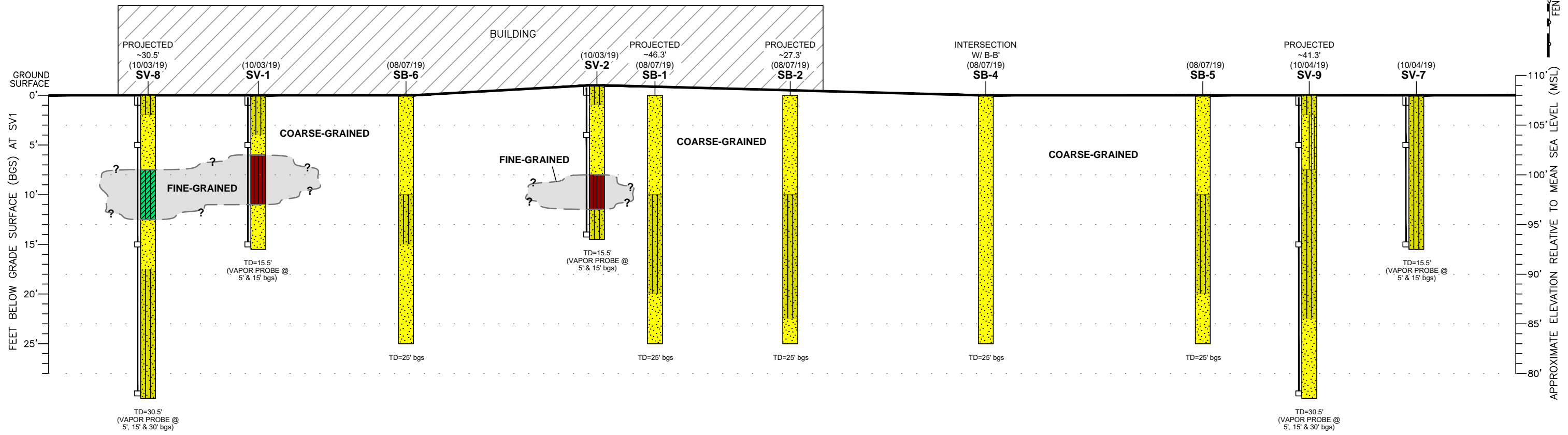
<p>290 Conejo Ridge Avenue Thousand Oaks, CA 91361 PHONE: (805) 230-1266 FAX: (805) 230-1277</p>	FOR:	City of Los Angeles Phase II ESA 740 East & 800 East 111th Place Los Angeles, CA 90059		FIGURE:
	JOB NUMBER: 185804578.200.0004	DRAWN BY: R. Roman	CHECKED BY: B. Goss	APPROVED BY: L. Simons

A  
NORTH

A'  
SOUTH

SITE PROPERTY

FENCE



**CROSS-SECTION LEGEND**

- (SP) POORLY-GRADED SAND
- (SP-SM) POORLY-GRADED SAND WITH SILT
- (SM) SILTY SAND
- (ML) SILT
- (CL-ML) SILTY CLAY
- (CL) CLAY
- APPROXIMATE CONTACT, QUERIED (?) WHERE UNCERTAIN
- SOIL VAPOR PROBE

**GENERALIZED LITHOLOGY**

- SILTS & CLAYS (FINE-GRAINED)
- GRAVELS & SANDS (COARSE-GRAINED)

**CROSS-SECTION NOTES:**

1. GROUND SURFACE ADJUSTED TO GOOGLE EARTH PRO TERRAIN, DATED MARCH 14, 2018.
2. HORIZONTAL EXAGGERATION OF WELLS AND BORINGS DONE FOR CLARITY. FIGURE DOES NOT REFLECT ACTUAL BOREHOLE DIAMETERS.

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.



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

FOR:  
City of Los Angeles  
Phase II ESA  
740 East & 800 East 111th Place  
Los Angeles, CA 90059

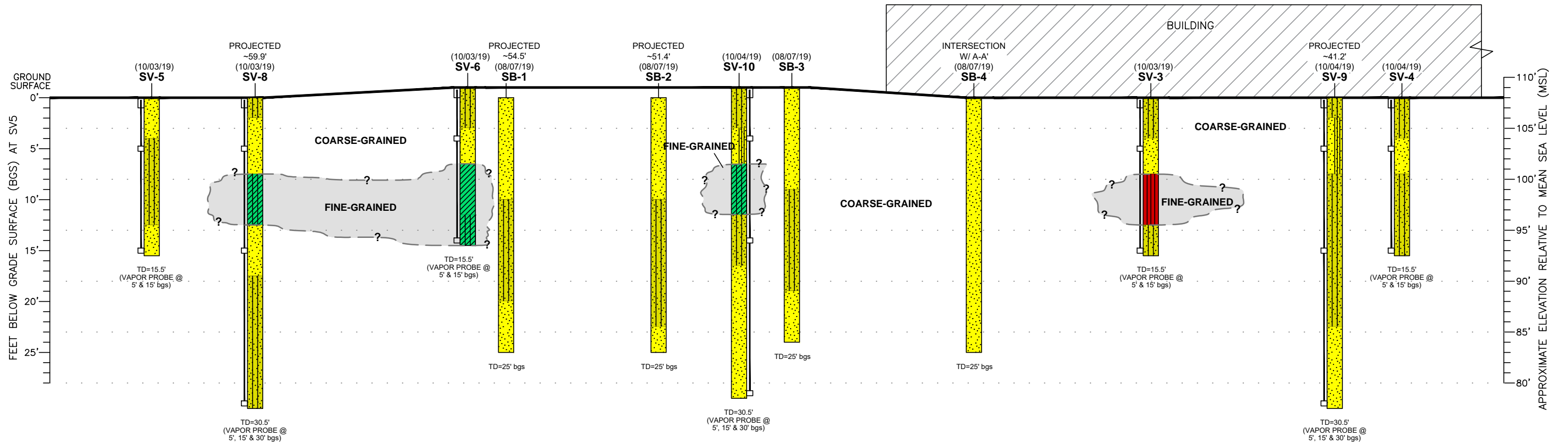
JOB NUMBER: 185804578.200.0004  
DRAWN BY: R. Roman

Cross-Section A-A'

CHECKED BY: B. Goss  
APPROVED BY: L. Simons  
DATE: 10/31/19

B NORTH B' SOUTH

SITE PROPERTY



**CROSS-SECTION LEGEND**

- (SP) POORLY-GRADED SAND
- (SP-SM) POORLY-GRADED SAND WITH SILT
- (SM) SILTY SAND
- (ML) SILT
- (CL-ML) SILTY CLAY
- (CL) CLAY
- APPROXIMATE CONTACT, QUERIED (?) WHERE UNCERTAIN
- SOIL VAPOR PROBE

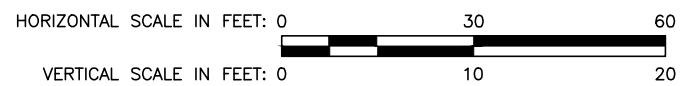
**GENERALIZED LITHOLOGY**

- SILTS & CLAYS (FINE-GRAINED)
- GRAVELS & SANDS (COARSE-GRAINED)

**CROSS-SECTION NOTES:**

1. GROUND SURFACE ADJUSTED TO GOOGLE EARTH PRO TERRAIN, DATED MARCH 14, 2018.
2. HORIZONTAL EXAGGERATION OF WELLS AND BORINGS DONE FOR CLARITY. FIGURE DOES NOT REFLECT ACTUAL BOREHOLE DIAMETERS.

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.



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

FOR: City of Los Angeles  
 Phase II ESA  
 740 East & 800 East 111th Place  
 Los Angeles, CA 90059

JOB NUMBER: 185804578.200.0004  
 DRAWN BY: R. Roman

Cross-Section B-B'

CHECKED BY: B. Goss  
 APPROVED BY: L. Simons  
 DATE: 10/22/19

# ATTACHMENT D



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

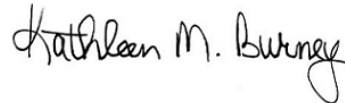
Laboratory Job ID: 570-4324-1

Client Project/Site: Phase II ESA / 185751046

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Mark Mason



---

Authorized for release by:

8/21/2019 7:04:54 PM

Kathleen Burney, Project Mgmt. Assistant  
[kathleenburney@eurofinsus.com](mailto:kathleenburney@eurofinsus.com)

Designee for

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

**Job ID: 570-4324-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

### Job Narrative 570-4324-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/9/2019 3:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.1° C, 3.3° C and 3.4° C.

#### GC/MS VOA

Method(s) 8260B: The initial calibration curve analyzed in batch 570-12922 was outside method criteria for the following analyte(s): Bromomethane and Chloromethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for preparation batch 570-12370 and analytical batch 570-13010 recovered outside control limits for the following analytes: Tetrachloroethene. Analyte was within marginal exceedance limits; therefore they will be reported.

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 570-12370 and analytical batch 570-13205 recovered outside control limits for the following analytes: Bromochloromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 570-13205.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 570-12370 and analytical batch 570-13205 recovered outside control limits for the following analytes: Tetrachloroethene.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8015B: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was inconsistent with the typical diesel fuel pattern used by the laboratory for quantitative purposes: SB13-25 (570-4324-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010B: The absolute response for Antimony and Selenium was greater than the method reporting limit (RL) in the following samples: SB13-5 (570-4324-3), SB14-5 (570-4324-10), SB15-5 (570-4324-17) and SB16-5 (570-4324-24). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Molybdenum, Antimony and Selenium was greater than the method reporting limit (RL) in the following samples: SB13-10 (570-4324-4), SB13-25 (570-4324-7), SB14-10 (570-4324-11), SB14-25 (570-4324-14) and SB16-25 (570-4324-28).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-12243 and analytical batch 570-12779 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Analytes - Chromium, Molybdenum, Nickel and Selenium

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

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## Job ID: 570-4324-1 (Continued)

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### Laboratory: Eurofins Calscience LLC (Continued)

Method(s) 6010B: The absolute response for Molybdenum and Antimony was greater than the method reporting limit (RL) in the following samples: SB15-10 (570-4324-18), SB15-25 (570-4324-21) and SB16-10 (570-4324-25).  
The instrument raw data has been manually reviewed and the result can be reported as ND.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB13-5

## Lab Sample ID: 570-4324-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.35		0.750	0.259	mg/Kg	1		6010B	Total/NA
Barium	132		0.500	0.154	mg/Kg	1		6010B	Total/NA
Beryllium	0.651		0.250	0.137	mg/Kg	1		6010B	Total/NA
Cadmium	0.768		0.500	0.135	mg/Kg	1		6010B	Total/NA
Cobalt	9.33		0.250	0.148	mg/Kg	1		6010B	Total/NA
Chromium	14.3		0.250	0.142	mg/Kg	1		6010B	Total/NA
Copper	18.5		0.500	0.135	mg/Kg	1		6010B	Total/NA
Molybdenum	1.87		0.250	0.132	mg/Kg	1		6010B	Total/NA
Nickel	10.9		0.250	0.145	mg/Kg	1		6010B	Total/NA
Vanadium	36.0		0.250	0.141	mg/Kg	1		6010B	Total/NA
Zinc	47.9		1.00	0.178	mg/Kg	1		6010B	Total/NA
Lead	0.600		0.500	0.132	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB13-10

## Lab Sample ID: 570-4324-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.41		0.743	0.256	mg/Kg	1		6010B	Total/NA
Barium	177		0.495	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.697		0.248	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	9.08		0.248	0.147	mg/Kg	1		6010B	Total/NA
Chromium	15.1		0.248	0.141	mg/Kg	1		6010B	Total/NA
Copper	22.3		0.495	0.134	mg/Kg	1		6010B	Total/NA
Nickel	13.1		0.248	0.144	mg/Kg	1		6010B	Total/NA
Vanadium	27.3		0.248	0.140	mg/Kg	1		6010B	Total/NA
Zinc	48.2		0.990	0.176	mg/Kg	1		6010B	Total/NA
Lead	1.68		0.495	0.131	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB13-25

## Lab Sample ID: 570-4324-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	4.9		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	4.26		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	168		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	1.16		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	1.10		0.490	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	14.2		0.245	0.145	mg/Kg	1		6010B	Total/NA
Chromium	18.7		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	31.6		0.490	0.132	mg/Kg	1		6010B	Total/NA
Nickel	17.8		0.245	0.142	mg/Kg	1		6010B	Total/NA
Vanadium	65.7		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	70.2		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	2.82		0.490	0.129	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB14-5

## Lab Sample ID: 570-4324-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	63		44	5.5	ug/Kg	1		8260B	Total/NA
Arsenic	10.5		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	183		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	1.01		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	1.19		0.490	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	12.2		0.245	0.145	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB14-5 (Continued)

## Lab Sample ID: 570-4324-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	20.1		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	31.6		0.490	0.132	mg/Kg	1		6010B	Total/NA
Nickel	15.5		0.245	0.142	mg/Kg	1		6010B	Total/NA
Vanadium	49.8		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	63.4		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	1.52		0.490	0.129	mg/Kg	1		6010B	Total/NA
Mercury	0.0829		0.0820	0.00578	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB14-10

## Lab Sample ID: 570-4324-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.39		0.765	0.264	mg/Kg	1		6010B	Total/NA
Barium	129		0.510	0.157	mg/Kg	1		6010B	Total/NA
Beryllium	0.870		0.255	0.140	mg/Kg	1		6010B	Total/NA
Cadmium	0.638		0.510	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	10.5		0.255	0.151	mg/Kg	1		6010B	Total/NA
Chromium	19.0		0.255	0.145	mg/Kg	1		6010B	Total/NA
Copper	22.0		0.510	0.138	mg/Kg	1		6010B	Total/NA
Nickel	14.1		0.255	0.148	mg/Kg	1		6010B	Total/NA
Vanadium	46.2		0.255	0.144	mg/Kg	1		6010B	Total/NA
Zinc	54.4		1.02	0.182	mg/Kg	1		6010B	Total/NA
Lead	1.90		0.510	0.135	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB14-25

## Lab Sample ID: 570-4324-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.80		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	144		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.852		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.780		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	11.1		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	17.4		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	22.3		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	14.0		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	44.3		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	63.0		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	0.748		0.503	0.133	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB15-5

## Lab Sample ID: 570-4324-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.8		1.3	0.17	ug/Kg	1		8260B	Total/NA
Arsenic	11.3		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	176		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	1.04		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cadmium	1.14		0.493	0.133	mg/Kg	1		6010B	Total/NA
Cobalt	12.7		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	19.8		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	31.6		0.493	0.133	mg/Kg	1		6010B	Total/NA
Molybdenum	0.781		0.246	0.130	mg/Kg	1		6010B	Total/NA
Nickel	15.4		0.246	0.143	mg/Kg	1		6010B	Total/NA
Vanadium	50.7		0.246	0.139	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB15-5 (Continued)

## Lab Sample ID: 570-4324-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	70.2		0.985	0.175	mg/Kg	1		6010B	Total/NA
Lead	7.45		0.493	0.130	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB15-10

## Lab Sample ID: 570-4324-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.07		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	83.1		0.513	0.158	mg/Kg	1		6010B	Total/NA
Beryllium	0.632		0.256	0.141	mg/Kg	1		6010B	Total/NA
Cobalt	7.22		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	14.0		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	16.2		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	10.8		0.256	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	28.7		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	42.2		1.03	0.183	mg/Kg	1		6010B	Total/NA
Lead	1.70		0.513	0.135	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB15-25

## Lab Sample ID: 570-4324-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.72	0.094	ug/Kg	1		8260B	Total/NA
Arsenic	2.42		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	183		0.513	0.158	mg/Kg	1		6010B	Total/NA
Beryllium	0.863		0.256	0.141	mg/Kg	1		6010B	Total/NA
Cadmium	0.913		0.513	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	12.8		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	17.4		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	22.6		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	17.0		0.256	0.149	mg/Kg	1		6010B	Total/NA
Selenium	1.85		0.769	0.308	mg/Kg	1		6010B	Total/NA
Vanadium	42.8		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	68.5		1.03	0.183	mg/Kg	1		6010B	Total/NA
Lead	1.81		0.513	0.135	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB16-5

## Lab Sample ID: 570-4324-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.74		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	122		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.634		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.758		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	9.16		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	15.2		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	15.6		0.503	0.136	mg/Kg	1		6010B	Total/NA
Molybdenum	0.366		0.251	0.133	mg/Kg	1		6010B	Total/NA
Nickel	11.2		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	35.5		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	50.5		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	2.14		0.503	0.133	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Detection Summary

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB16-10

## Lab Sample ID: 570-4324-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.00		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	107		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	0.686		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	0.537		0.490	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	7.84		0.245	0.145	mg/Kg	1		6010B	Total/NA
Chromium	15.4		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	17.9		0.490	0.132	mg/Kg	1		6010B	Total/NA
Nickel	11.3		0.245	0.142	mg/Kg	1		6010B	Total/NA
Vanadium	35.5		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	42.7		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	1.37		0.490	0.129	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB16-25

## Lab Sample ID: 570-4324-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.9		1.0	0.14	ug/Kg	1		8260B	Total/NA
Arsenic	1.98		0.758	0.262	mg/Kg	1		6010B	Total/NA
Barium	133		0.505	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.832		0.253	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.862		0.505	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	11.8		0.253	0.149	mg/Kg	1		6010B	Total/NA
Chromium	16.9		0.253	0.143	mg/Kg	1		6010B	Total/NA
Copper	21.9		0.505	0.136	mg/Kg	1		6010B	Total/NA
Nickel	13.9		0.253	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	43.0		0.253	0.142	mg/Kg	1		6010B	Total/NA
Zinc	63.9		1.01	0.180	mg/Kg	1		6010B	Total/NA
Lead	1.74		0.505	0.133	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.89	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1,1-Trichloroethane	ND		0.89	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1,2-Trichloroethane	ND		0.89	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1-Dichloroethane	ND		0.89	0.19	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1-Dichloroethene	ND		0.89	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,1-Dichloropropene	ND		1.8	0.29	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2,3-Trichlorobenzene	ND		1.8	0.81	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2,3-Trichloropropane	ND		1.8	0.74	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2,4-Trichlorobenzene	ND		1.8	0.28	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2,4-Trimethylbenzene	ND		1.8	0.52	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.5	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2-Dibromoethane	ND		0.89	0.23	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2-Dichloroethane	ND		0.89	0.28	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,2-Dichloropropane	ND		0.89	0.39	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,3,5-Trimethylbenzene	ND		1.8	0.49	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,3-Dichlorobenzene	ND		0.89	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,3-Dichloropropane	ND		0.89	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
1,4-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
2-Butanone	ND		18	3.3	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
2-Chlorotoluene	ND		0.89	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
2-Hexanone	ND		18	1.6	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
4-Chlorotoluene	ND		0.89	0.19	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
4-Methyl-2-pentanone	ND		18	3.8	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Acetone	ND		44	5.5	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Benzene	ND		0.89	0.12	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Bromobenzene	ND		0.89	0.19	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Bromochloromethane	ND		1.8	0.61	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Bromodichloromethane	ND		0.89	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Bromoform	ND		4.4	0.70	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Bromomethane	ND		18	8.4	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
cis-1,2-Dichloroethene	ND		0.89	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
cis-1,3-Dichloropropene	ND		0.89	0.23	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Carbon disulfide	ND		8.9	0.27	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Carbon tetrachloride	ND		0.89	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Chlorobenzene	ND		0.89	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Chloroethane	ND		1.8	1.3	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Chloroform	ND		0.89	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Chloromethane	ND		18	0.27	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Dibromochloromethane	ND		1.8	0.51	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Dibromomethane	ND		0.89	0.69	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Dichlorodifluoromethane	ND		1.8	0.39	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Di-isopropyl ether (DIPE)	ND		0.89	0.43	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Ethanol	ND		440	74	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Ethylbenzene	ND		0.89	0.13	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.89	0.45	ug/Kg		08/14/19 11:22	08/16/19 18:21	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.89	0.48	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Methylene Chloride	ND		8.9	1.2	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Naphthalene	ND		8.9	0.72	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
n-Butylbenzene	ND		0.89	0.14	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
N-Propylbenzene	ND		1.8	0.44	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
o-Xylene	ND		0.89	0.49	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
m,p-Xylene	ND		1.8	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
p-Isopropyltoluene	ND		0.89	0.56	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
sec-Butylbenzene	ND		0.89	0.51	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Styrene	ND		0.89	0.54	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
trans-1,2-Dichloroethene	ND		0.89	0.45	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
trans-1,3-Dichloropropene	ND		1.8	0.54	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Tert-amyl-methyl ether (TAME)	ND		0.89	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
tert-Butyl alcohol (TBA)	ND		18	4.6	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
tert-Butylbenzene	ND		0.89	0.13	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Tetrachloroethene	ND		0.89	0.19	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Toluene	ND		0.89	0.46	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Trichloroethene	ND		1.8	0.27	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Trichlorofluoromethane	ND		8.9	0.33	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Vinyl acetate	ND		8.9	4.2	ug/Kg		08/14/19 11:22	08/16/19 18:21	1
Vinyl chloride	ND		0.89	0.45	ug/Kg		08/14/19 11:22	08/16/19 18:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	130		71 - 155	08/14/19 11:22	08/16/19 18:21	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120	08/14/19 11:22	08/16/19 18:21	1
<i>Dibromofluoromethane (Surr)</i>	111		79 - 133	08/14/19 11:22	08/16/19 18:21	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120	08/14/19 11:22	08/16/19 18:21	1

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.68	0.16	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1,1-Trichloroethane	ND		0.68	0.15	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.23	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	0.24	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1,2-Trichloroethane	ND		0.68	0.24	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1-Dichloroethane	ND		0.68	0.14	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1-Dichloroethene	ND		0.68	0.23	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,1-Dichloropropene	ND		1.4	0.22	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2,3-Trichlorobenzene	ND		1.4	0.62	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2,3-Trichloropropane	ND		1.4	0.56	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2,4-Trichlorobenzene	ND		1.4	0.21	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2,4-Trimethylbenzene	ND		1.4	0.40	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2-Dibromo-3-Chloropropane	ND		6.8	1.2	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2-Dibromoethane	ND		0.68	0.17	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2-Dichlorobenzene	ND		0.68	0.15	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2-Dichloroethane	ND		0.68	0.21	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,2-Dichloropropane	ND		0.68	0.30	ug/Kg		08/14/19 11:22	08/17/19 17:49	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.4	0.37	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,3-Dichlorobenzene	ND		0.68	0.12	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,3-Dichloropropane	ND		0.68	0.17	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
1,4-Dichlorobenzene	ND		0.68	0.15	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
2,2-Dichloropropane	ND		3.4	0.22	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
2-Butanone	ND		14	2.6	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
2-Chlorotoluene	ND		0.68	0.16	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
2-Hexanone	ND		14	1.2	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
4-Chlorotoluene	ND		0.68	0.14	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
4-Methyl-2-pentanone	ND		14	2.9	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Acetone	ND		34	4.2	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Benzene	ND		0.68	0.088	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Bromobenzene	ND		0.68	0.14	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Bromochloromethane	ND	*	1.4	0.47	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Bromodichloromethane	ND		0.68	0.16	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Bromoform	ND		3.4	0.54	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Bromomethane	ND		14	6.4	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
cis-1,2-Dichloroethene	ND		0.68	0.19	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
cis-1,3-Dichloropropene	ND		0.68	0.17	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Carbon disulfide	ND		6.8	0.21	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Carbon tetrachloride	ND		0.68	0.19	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Chlorobenzene	ND		0.68	0.15	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Chloroethane	ND		1.4	1.0	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Chloroform	ND		0.68	0.16	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Chloromethane	ND		14	0.21	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Dibromochloromethane	ND		1.4	0.39	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Dibromomethane	ND		0.68	0.52	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Dichlorodifluoromethane	ND		1.4	0.30	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Di-isopropyl ether (DIPE)	ND		0.68	0.33	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Ethanol	ND		340	57	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Ethylbenzene	ND		0.68	0.10	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.68	0.34	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Isopropylbenzene	ND		0.68	0.37	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Methylene Chloride	ND		6.8	0.91	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.20	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Naphthalene	ND		6.8	0.55	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
n-Butylbenzene	ND		0.68	0.11	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
N-Propylbenzene	ND		1.4	0.34	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
o-Xylene	ND		0.68	0.38	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
m,p-Xylene	ND		1.4	0.18	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
p-Isopropyltoluene	ND		0.68	0.43	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
sec-Butylbenzene	ND		0.68	0.39	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Styrene	ND		0.68	0.41	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
trans-1,2-Dichloroethene	ND		0.68	0.34	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
trans-1,3-Dichloropropene	ND		1.4	0.41	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Tert-amyl-methyl ether (TAME)	ND		0.68	0.24	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
tert-Butyl alcohol (TBA)	ND		14	3.5	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
tert-Butylbenzene	ND		0.68	0.10	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Tetrachloroethene	ND	*	0.68	0.14	ug/Kg		08/14/19 11:22	08/17/19 17:49	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.68	0.35	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Trichloroethene	ND		1.4	0.20	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Trichlorofluoromethane	ND		6.8	0.25	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Vinyl acetate	ND		6.8	3.2	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Vinyl chloride	ND		0.68	0.34	ug/Kg		08/14/19 11:22	08/17/19 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	133		71 - 155				08/14/19 11:22	08/17/19 17:49	1
4-Bromofluorobenzene (Surr)	93		80 - 120				08/14/19 11:22	08/17/19 17:49	1
Dibromofluoromethane (Surr)	119		79 - 133				08/14/19 11:22	08/17/19 17:49	1
Toluene-d8 (Surr)	101		80 - 120				08/14/19 11:22	08/17/19 17:49	1

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.82	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1,1-Trichloroethane	ND		0.82	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.2	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1,2-Trichloroethane	ND		0.82	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1-Dichloroethane	ND		0.82	0.17	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1-Dichloroethene	ND		0.82	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,1-Dichloropropene	ND		1.6	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2,3-Trichlorobenzene	ND		1.6	0.75	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2,3-Trichloropropane	ND		1.6	0.68	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2,4-Trichlorobenzene	ND		1.6	0.26	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2,4-Trimethylbenzene	ND		1.6	0.48	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2-Dibromoethane	ND		0.82	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2-Dichlorobenzene	ND		0.82	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2-Dichloroethane	ND		0.82	0.26	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,2-Dichloropropane	ND		0.82	0.36	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,3,5-Trimethylbenzene	ND		1.6	0.45	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,3-Dichlorobenzene	ND		0.82	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,3-Dichloropropane	ND		0.82	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
1,4-Dichlorobenzene	ND		0.82	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
2,2-Dichloropropane	ND		4.1	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
2-Butanone	ND		16	3.1	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
2-Chlorotoluene	ND		0.82	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
2-Hexanone	ND		16	1.5	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
4-Chlorotoluene	ND		0.82	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
4-Methyl-2-pentanone	ND		16	3.6	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Acetone	ND		41	5.1	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Benzene	ND		0.82	0.11	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Bromobenzene	ND		0.82	0.17	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Bromochloromethane	ND		1.6	0.57	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Bromodichloromethane	ND		0.82	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Bromoform	ND		4.1	0.66	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Bromomethane	ND		16	7.8	ug/Kg		08/14/19 11:22	08/16/19 19:13	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.82	0.23	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
cis-1,3-Dichloropropene	ND		0.82	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Carbon disulfide	ND		8.2	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Carbon tetrachloride	ND		0.82	0.23	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Chlorobenzene	ND		0.82	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Chloroform	ND		0.82	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Chloromethane	ND		16	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Dibromochloromethane	ND		1.6	0.47	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Dibromomethane	ND		0.82	0.64	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Dichlorodifluoromethane	ND		1.6	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Di-isopropyl ether (DIPE)	ND		0.82	0.40	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Ethanol	ND		410	69	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Ethylbenzene	ND		0.82	0.12	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Ethyl-t-butyl ether (ETBE)	ND		0.82	0.42	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Isopropylbenzene	ND		0.82	0.45	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Methylene Chloride	ND		8.2	1.1	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Naphthalene	ND		8.2	0.67	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
n-Butylbenzene	ND		0.82	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
N-Propylbenzene	ND		1.6	0.41	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
o-Xylene	ND		0.82	0.46	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
m,p-Xylene	ND		1.6	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
p-Isopropyltoluene	ND		0.82	0.52	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
sec-Butylbenzene	ND		0.82	0.48	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Styrene	ND		0.82	0.50	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
trans-1,2-Dichloroethene	ND		0.82	0.42	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
trans-1,3-Dichloropropene	ND		1.6	0.50	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Tert-amyl-methyl ether (TAME)	ND		0.82	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
tert-Butyl alcohol (TBA)	ND		16	4.3	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
tert-Butylbenzene	ND		0.82	0.12	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Tetrachloroethene	ND		0.82	0.17	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Toluene	ND		0.82	0.42	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Trichloroethene	ND		1.6	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Trichlorofluoromethane	ND		8.2	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Vinyl acetate	ND		8.2	3.9	ug/Kg		08/14/19 11:22	08/16/19 19:13	1
Vinyl chloride	ND		0.82	0.41	ug/Kg		08/14/19 11:22	08/16/19 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		71 - 155	08/14/19 11:22	08/16/19 19:13	1
4-Bromofluorobenzene (Surr)	100		80 - 120	08/14/19 11:22	08/16/19 19:13	1
Dibromofluoromethane (Surr)	105		79 - 133	08/14/19 11:22	08/16/19 19:13	1
Toluene-d8 (Surr)	100		80 - 120	08/14/19 11:22	08/16/19 19:13	1

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.88	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1,1-Trichloroethane	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.8	0.30	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.8	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1,2-Trichloroethane	ND		0.88	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1-Dichloroethane	ND		0.88	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1-Dichloroethene	ND		0.88	0.30	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,1-Dichloropropene	ND		1.8	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2,3-Trichlorobenzene	ND		1.8	0.80	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2,3-Trichloropropane	ND		1.8	0.73	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2,4-Trichlorobenzene	ND		1.8	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2,4-Trimethylbenzene	ND		1.8	0.52	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2-Dibromoethane	ND		0.88	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2-Dichlorobenzene	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2-Dichloroethane	ND		0.88	0.28	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,2-Dichloropropane	ND		0.88	0.39	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,3,5-Trimethylbenzene	ND		1.8	0.48	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,3-Dichlorobenzene	ND		0.88	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,3-Dichloropropane	ND		0.88	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
1,4-Dichlorobenzene	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
2-Butanone	ND		18	3.3	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
2-Chlorotoluene	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
2-Hexanone	ND		18	1.6	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
4-Chlorotoluene	ND		0.88	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
4-Methyl-2-pentanone	ND		18	3.8	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
<b>Acetone</b>	<b>63</b>		44	5.5	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Benzene	ND		0.88	0.11	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Bromobenzene	ND		0.88	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Bromochloromethane	ND		1.8	0.61	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Bromodichloromethane	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Bromoform	ND		4.4	0.70	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Bromomethane	ND		18	8.3	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
cis-1,2-Dichloroethene	ND		0.88	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
cis-1,3-Dichloropropene	ND		0.88	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Carbon disulfide	ND		8.8	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Carbon tetrachloride	ND		0.88	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Chlorobenzene	ND		0.88	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Chloroethane	ND		1.8	1.3	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Chloroform	ND		0.88	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Chloromethane	ND		18	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Dibromochloromethane	ND		1.8	0.50	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Dibromomethane	ND		0.88	0.68	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Dichlorodifluoromethane	ND		1.8	0.39	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Di-isopropyl ether (DIPE)	ND		0.88	0.42	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Ethanol	ND		440	74	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Ethylbenzene	ND		0.88	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Ethyl-t-butyl ether (ETBE)	ND		0.88	0.45	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Isopropylbenzene	ND		0.88	0.48	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Methylene Chloride	ND		8.8	1.2	ug/Kg		08/14/19 11:22	08/16/19 19:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Naphthalene	ND		8.8	0.72	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
n-Butylbenzene	ND		0.88	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
N-Propylbenzene	ND		1.8	0.44	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
o-Xylene	ND		0.88	0.49	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
m,p-Xylene	ND		1.8	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
p-Isopropyltoluene	ND		0.88	0.55	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
sec-Butylbenzene	ND		0.88	0.51	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Styrene	ND		0.88	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
trans-1,2-Dichloroethene	ND		0.88	0.45	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
trans-1,3-Dichloropropene	ND		1.8	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Tert-amyl-methyl ether (TAME)	ND		0.88	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
tert-Butyl alcohol (TBA)	ND		18	4.6	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
tert-Butylbenzene	ND		0.88	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Tetrachloroethene	ND		0.88	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Toluene	ND		0.88	0.45	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Trichloroethene	ND		1.8	0.26	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Trichlorofluoromethane	ND		8.8	0.33	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Vinyl acetate	ND		8.8	4.2	ug/Kg		08/14/19 11:22	08/16/19 19:39	1
Vinyl chloride	ND		0.88	0.44	ug/Kg		08/14/19 11:22	08/16/19 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		71 - 155	08/14/19 11:22	08/16/19 19:39	1
4-Bromofluorobenzene (Surr)	101		80 - 120	08/14/19 11:22	08/16/19 19:39	1
Dibromofluoromethane (Surr)	106		79 - 133	08/14/19 11:22	08/16/19 19:39	1
Toluene-d8 (Surr)	101		80 - 120	08/14/19 11:22	08/16/19 19:39	1

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1,1-Trichloroethane	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1,2-Trichloroethane	ND		0.94	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1-Dichloroethane	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1-Dichloroethene	ND		0.94	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,1-Dichloropropene	ND		1.9	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2,3-Trichlorobenzene	ND		1.9	0.86	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2,3-Trichloropropane	ND		1.9	0.78	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2,4-Trichlorobenzene	ND		1.9	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2,4-Trimethylbenzene	ND		1.9	0.55	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2-Dibromoethane	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2-Dichlorobenzene	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2-Dichloroethane	ND		0.94	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,2-Dichloropropane	ND		0.94	0.41	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,3,5-Trimethylbenzene	ND		1.9	0.52	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,3-Dichlorobenzene	ND		0.94	0.17	ug/Kg		08/14/19 11:22	08/16/19 20:04	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
1,4-Dichlorobenzene	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
2,2-Dichloropropane	ND		4.7	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
2-Butanone	ND		19	3.6	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
2-Chlorotoluene	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
2-Hexanone	ND		19	1.7	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
4-Chlorotoluene	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
4-Methyl-2-pentanone	ND		19	4.1	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Acetone	ND		47	5.9	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Benzene	ND		0.94	0.12	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Bromobenzene	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Bromochloromethane	ND		1.9	0.65	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Bromodichloromethane	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Bromoform	ND		4.7	0.75	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Bromomethane	ND		19	8.9	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
cis-1,2-Dichloroethene	ND		0.94	0.26	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
cis-1,3-Dichloropropene	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Carbon disulfide	ND		9.4	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Carbon tetrachloride	ND		0.94	0.27	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Chlorobenzene	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Chloroform	ND		0.94	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Chloromethane	ND		19	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Dibromochloromethane	ND		1.9	0.54	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Dibromomethane	ND		0.94	0.73	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Dichlorodifluoromethane	ND		1.9	0.42	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Ethanol	ND		470	79	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Ethylbenzene	ND		0.94	0.14	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.48	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Isopropylbenzene	ND		0.94	0.52	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Methylene Chloride	ND		9.4	1.3	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Naphthalene	ND		9.4	0.77	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
n-Butylbenzene	ND		0.94	0.15	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
N-Propylbenzene	ND		1.9	0.47	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
o-Xylene	ND		0.94	0.52	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
m,p-Xylene	ND		1.9	0.25	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
p-Isopropyltoluene	ND		0.94	0.59	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
sec-Butylbenzene	ND		0.94	0.54	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Styrene	ND		0.94	0.57	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
trans-1,2-Dichloroethene	ND		0.94	0.48	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
trans-1,3-Dichloropropene	ND		1.9	0.57	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
tert-Butyl alcohol (TBA)	ND		19	4.9	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
tert-Butylbenzene	ND		0.94	0.14	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Tetrachloroethene	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Toluene	ND		0.94	0.49	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Trichloroethene	ND		1.9	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:04	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		9.4	0.35	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Vinyl acetate	ND		9.4	4.5	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Vinyl chloride	ND		0.94	0.47	ug/Kg		08/14/19 11:22	08/16/19 20:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	126		71 - 155				08/14/19 11:22	08/16/19 20:04	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120				08/14/19 11:22	08/16/19 20:04	1
<i>Dibromofluoromethane (Surr)</i>	109		79 - 133				08/14/19 11:22	08/16/19 20:04	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120				08/14/19 11:22	08/16/19 20:04	1

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.99	0.24	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1,1-Trichloroethane	ND		0.99	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.34	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.9	0.35	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1,2-Trichloroethane	ND		0.99	0.35	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1-Dichloroethane	ND		0.99	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1-Dichloroethene	ND		0.99	0.34	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2,3-Trichloropropane	ND		2.0	0.82	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2,4-Trimethylbenzene	ND		2.0	0.58	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2-Dibromoethane	ND		0.99	0.25	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2-Dichlorobenzene	ND		0.99	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2-Dichloroethane	ND		0.99	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,2-Dichloropropane	ND		0.99	0.43	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,3-Dichlorobenzene	ND		0.99	0.17	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,3-Dichloropropane	ND		0.99	0.25	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
1,4-Dichlorobenzene	ND		0.99	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
2-Butanone	ND		20	3.7	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
2-Chlorotoluene	ND		0.99	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
2-Hexanone	ND		20	1.7	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
4-Chlorotoluene	ND		0.99	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Acetone	ND		50	6.2	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Benzene	ND		0.99	0.13	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Bromobenzene	ND		0.99	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Bromochloromethane	ND		2.0	0.68	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Bromodichloromethane	ND		0.99	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Bromoform	ND		5.0	0.79	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Bromomethane	ND		20	9.3	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
cis-1,2-Dichloroethene	ND		0.99	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
cis-1,3-Dichloropropene	ND		0.99	0.25	ug/Kg		08/14/19 11:22	08/16/19 20:31	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		9.9	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Carbon tetrachloride	ND		0.99	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Chlorobenzene	ND		0.99	0.22	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Chloroethane	ND		2.0	1.5	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Chloroform	ND		0.99	0.24	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Chloromethane	ND		20	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Dibromomethane	ND		0.99	0.77	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Di-isopropyl ether (DIPE)	ND		0.99	0.48	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Ethanol	ND		500	83	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Ethylbenzene	ND		0.99	0.15	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Ethyl-t-butyl ether (ETBE)	ND		0.99	0.50	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Isopropylbenzene	ND		0.99	0.54	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Methylene Chloride	ND		9.9	1.3	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Naphthalene	ND		9.9	0.81	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
n-Butylbenzene	ND		0.99	0.16	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
o-Xylene	ND		0.99	0.55	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
m,p-Xylene	ND		2.0	0.27	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
p-Isopropyltoluene	ND		0.99	0.62	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
sec-Butylbenzene	ND		0.99	0.57	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Styrene	ND		0.99	0.60	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
trans-1,2-Dichloroethene	ND		0.99	0.50	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
trans-1,3-Dichloropropene	ND		2.0	0.60	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Tert-amyl-methyl ether (TAME)	ND		0.99	0.35	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
tert-Butyl alcohol (TBA)	ND		20	5.1	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
tert-Butylbenzene	ND		0.99	0.15	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Tetrachloroethene	ND		0.99	0.21	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Toluene	ND		0.99	0.51	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Trichloroethene	ND		2.0	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Trichlorofluoromethane	ND		9.9	0.37	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Vinyl acetate	ND		9.9	4.7	ug/Kg		08/14/19 11:22	08/16/19 20:31	1
Vinyl chloride	ND		0.99	0.50	ug/Kg		08/14/19 11:22	08/16/19 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	119		71 - 155	08/14/19 11:22	08/16/19 20:31	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120	08/14/19 11:22	08/16/19 20:31	1
<i>Dibromofluoromethane (Surr)</i>	106		79 - 133	08/14/19 11:22	08/16/19 20:31	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120	08/14/19 11:22	08/16/19 20:31	1

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.3	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1,1-Trichloroethane	ND		1.3	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1,2,2-Tetrachloroethane	ND		2.6	0.45	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		13	0.46	ug/Kg		08/14/19 11:22	08/16/19 20:56	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.3	0.46	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1-Dichloroethane	ND		1.3	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1-Dichloroethene	ND		1.3	0.45	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,1-Dichloropropene	ND		2.6	0.43	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2,3-Trichlorobenzene	ND		2.6	1.2	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2,3-Trichloropropane	ND		2.6	1.1	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2,4-Trichlorobenzene	ND		2.6	0.41	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2,4-Trimethylbenzene	ND		2.6	0.77	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2-Dibromo-3-Chloropropane	ND		13	2.3	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2-Dibromoethane	ND		1.3	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2-Dichlorobenzene	ND		1.3	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2-Dichloroethane	ND		1.3	0.41	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,2-Dichloropropane	ND		1.3	0.57	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,3,5-Trimethylbenzene	ND		2.6	0.72	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,3-Dichlorobenzene	ND		1.3	0.23	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,3-Dichloropropane	ND		1.3	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
1,4-Dichlorobenzene	ND		1.3	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
2,2-Dichloropropane	ND		6.5	0.43	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
2-Butanone	ND		26	4.9	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
2-Chlorotoluene	ND		1.3	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
2-Hexanone	ND		26	2.3	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
4-Chlorotoluene	ND		1.3	0.28	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
4-Methyl-2-pentanone	ND		26	5.6	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Acetone	ND		65	8.2	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
<b>Benzene</b>	<b>1.8</b>		1.3	0.17	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Bromobenzene	ND		1.3	0.27	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Bromochloromethane	ND		2.6	0.90	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Bromodichloromethane	ND		1.3	0.30	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Bromoform	ND		6.5	1.0	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Bromomethane	ND		26	12	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
cis-1,2-Dichloroethene	ND		1.3	0.37	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
cis-1,3-Dichloropropane	ND		1.3	0.33	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Carbon disulfide	ND		13	0.40	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Carbon tetrachloride	ND		1.3	0.37	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Chlorobenzene	ND		1.3	0.29	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Chloroethane	ND		2.6	2.0	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Chloroform	ND		1.3	0.31	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Chloromethane	ND		26	0.40	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Dibromochloromethane	ND		2.6	0.75	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Dibromomethane	ND		1.3	1.0	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Dichlorodifluoromethane	ND		2.6	0.58	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Di-isopropyl ether (DIPE)	ND		1.3	0.63	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Ethanol	ND		650	110	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Ethylbenzene	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Ethyl-t-butyl ether (ETBE)	ND		1.3	0.66	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Isopropylbenzene	ND		1.3	0.71	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Methylene Chloride	ND		13	1.7	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Methyl-t-Butyl Ether (MTBE)	ND		2.6	0.39	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Naphthalene	ND		13	1.1	ug/Kg		08/14/19 11:22	08/16/19 20:56	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
N-Propylbenzene	ND		2.6	0.66	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
o-Xylene	ND		1.3	0.73	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
m,p-Xylene	ND		2.6	0.35	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
p-Isopropyltoluene	ND		1.3	0.82	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
sec-Butylbenzene	ND		1.3	0.76	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Styrene	ND		1.3	0.79	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
trans-1,2-Dichloroethene	ND		1.3	0.66	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
trans-1,3-Dichloropropene	ND		2.6	0.79	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Tert-amyl-methyl ether (TAME)	ND		1.3	0.46	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
tert-Butyl alcohol (TBA)	ND		26	6.8	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
tert-Butylbenzene	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Tetrachloroethene	ND		1.3	0.27	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Toluene	ND		1.3	0.67	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Trichloroethene	ND		2.6	0.39	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Trichlorofluoromethane	ND		13	0.49	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Vinyl acetate	ND		13	6.2	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Vinyl chloride	ND		1.3	0.66	ug/Kg		08/14/19 11:22	08/16/19 20:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	128		71 - 155				08/14/19 11:22	08/16/19 20:56	1
<i>4-Bromofluorobenzene (Surr)</i>	99		80 - 120				08/14/19 11:22	08/16/19 20:56	1
<i>Dibromofluoromethane (Surr)</i>	108		79 - 133				08/14/19 11:22	08/16/19 20:56	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120				08/14/19 11:22	08/16/19 20:56	1

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.67	0.16	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1,1-Trichloroethane	ND		0.67	0.15	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1,2,2-Tetrachloroethane	ND		1.3	0.23	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.7	0.24	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1,2-Trichloroethane	ND		0.67	0.24	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1-Dichloroethane	ND		0.67	0.14	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1-Dichloroethene	ND		0.67	0.23	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,1-Dichloropropene	ND		1.3	0.22	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2,3-Trichlorobenzene	ND		1.3	0.61	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2,3-Trichloropropane	ND		1.3	0.56	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2,4-Trichlorobenzene	ND		1.3	0.21	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2,4-Trimethylbenzene	ND		1.3	0.39	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2-Dibromo-3-Chloropropane	ND		6.7	1.2	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2-Dibromoethane	ND		0.67	0.17	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2-Dichlorobenzene	ND		0.67	0.15	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2-Dichloroethane	ND		0.67	0.21	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,2-Dichloropropane	ND		0.67	0.29	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,3,5-Trimethylbenzene	ND		1.3	0.37	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,3-Dichlorobenzene	ND		0.67	0.12	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,3-Dichloropropane	ND		0.67	0.17	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
1,4-Dichlorobenzene	ND		0.67	0.15	ug/Kg		08/14/19 11:22	08/16/19 17:55	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		3.4	0.22	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
2-Butanone	ND		13	2.5	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
2-Chlorotoluene	ND		0.67	0.16	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
2-Hexanone	ND		13	1.2	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
4-Chlorotoluene	ND		0.67	0.14	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
4-Methyl-2-pentanone	ND		13	2.9	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Acetone	ND		34	4.2	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Benzene	ND		0.67	0.087	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Bromobenzene	ND		0.67	0.14	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Bromochloromethane	ND		1.3	0.46	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Bromodichloromethane	ND		0.67	0.16	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Bromoform	ND		3.4	0.53	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Bromomethane	ND		13	6.3	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
cis-1,2-Dichloroethene	ND		0.67	0.19	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
cis-1,3-Dichloropropene	ND		0.67	0.17	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Carbon disulfide	ND		6.7	0.21	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Carbon tetrachloride	ND		0.67	0.19	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Chlorobenzene	ND		0.67	0.15	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Chloroethane	ND		1.3	1.0	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Chloroform	ND		0.67	0.16	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Chloromethane	ND		13	0.20	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Dibromochloromethane	ND		1.3	0.38	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Dibromomethane	ND		0.67	0.52	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Dichlorodifluoromethane	ND		1.3	0.30	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Di-isopropyl ether (DIPE)	ND		0.67	0.32	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Ethanol	ND		340	56	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Ethylbenzene	ND		0.67	0.10	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Ethyl-t-butyl ether (ETBE)	ND		0.67	0.34	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Isopropylbenzene	ND		0.67	0.37	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Methylene Chloride	ND		6.7	0.90	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Methyl-t-Butyl Ether (MTBE)	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Naphthalene	ND		6.7	0.55	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
n-Butylbenzene	ND		0.67	0.11	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
N-Propylbenzene	ND		1.3	0.34	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
o-Xylene	ND		0.67	0.37	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
m,p-Xylene	ND		1.3	0.18	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
p-Isopropyltoluene	ND		0.67	0.42	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
sec-Butylbenzene	ND		0.67	0.39	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Styrene	ND		0.67	0.41	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
trans-1,2-Dichloroethene	ND		0.67	0.34	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
trans-1,3-Dichloropropene	ND		1.3	0.41	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Tert-amyl-methyl ether (TAME)	ND		0.67	0.24	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
tert-Butyl alcohol (TBA)	ND		13	3.5	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
tert-Butylbenzene	ND		0.67	0.10	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Tetrachloroethene	ND	*	0.67	0.14	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Toluene	ND		0.67	0.35	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Trichloroethene	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Trichlorofluoromethane	ND		6.7	0.25	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Vinyl acetate	ND		6.7	3.2	ug/Kg		08/14/19 11:22	08/16/19 17:55	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.67	0.34	ug/Kg		08/14/19 11:22	08/16/19 17:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		71 - 155				08/14/19 11:22	08/16/19 17:55	1
4-Bromofluorobenzene (Surr)	97		80 - 120				08/14/19 11:22	08/16/19 17:55	1
Dibromofluoromethane (Surr)	108		79 - 133				08/14/19 11:22	08/16/19 17:55	1
Toluene-d8 (Surr)	100		80 - 120				08/14/19 11:22	08/16/19 17:55	1

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.72	0.17	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1,1-Trichloroethane	ND		0.72	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.2	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1,2-Trichloroethane	ND		0.72	0.26	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1-Dichloroethane	ND		0.72	0.15	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1-Dichloroethene	ND		0.72	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,1-Dichloropropene	ND		1.4	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2,3-Trichlorobenzene	ND		1.4	0.66	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2,3-Trichloropropane	ND		1.4	0.60	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2,4-Trichlorobenzene	ND		1.4	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2,4-Trimethylbenzene	ND		1.4	0.42	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.3	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2-Dibromoethane	ND		0.72	0.18	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2-Dichlorobenzene	ND		0.72	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2-Dichloroethane	ND		0.72	0.23	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,2-Dichloropropane	ND		0.72	0.32	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,3,5-Trimethylbenzene	ND		1.4	0.40	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,3-Dichlorobenzene	ND		0.72	0.13	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,3-Dichloropropane	ND		0.72	0.18	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
1,4-Dichlorobenzene	ND		0.72	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
2,2-Dichloropropane	ND		3.6	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
2-Butanone	ND		14	2.7	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
2-Chlorotoluene	ND		0.72	0.17	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
2-Hexanone	ND		14	1.3	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
4-Chlorotoluene	ND		0.72	0.15	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
4-Methyl-2-pentanone	ND		14	3.1	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Acetone	ND		36	4.5	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
<b>Benzene</b>	<b>1.1</b>		0.72	0.094	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Bromobenzene	ND		0.72	0.15	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Bromochloromethane	ND		1.4	0.50	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Bromodichloromethane	ND		0.72	0.17	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Bromoform	ND		3.6	0.57	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Bromomethane	ND		14	6.8	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
cis-1,2-Dichloroethene	ND		0.72	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
cis-1,3-Dichloropropene	ND		0.72	0.18	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Carbon disulfide	ND		7.2	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Carbon tetrachloride	ND		0.72	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:24	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.72	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Chloroethane	ND		1.4	1.1	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Chloroform	ND		0.72	0.17	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Chloromethane	ND		14	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Dibromochloromethane	ND		1.4	0.41	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Dibromomethane	ND		0.72	0.56	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Dichlorodifluoromethane	ND		1.4	0.32	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Di-isopropyl ether (DIPE)	ND		0.72	0.35	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Ethanol	ND		360	60	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Ethylbenzene	ND		0.72	0.11	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Ethyl-t-butyl ether (ETBE)	ND		0.72	0.37	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Isopropylbenzene	ND		0.72	0.39	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Methylene Chloride	ND		7.2	0.97	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Naphthalene	ND		7.2	0.59	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
n-Butylbenzene	ND		0.72	0.11	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
N-Propylbenzene	ND		1.4	0.36	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
o-Xylene	ND		0.72	0.40	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
m,p-Xylene	ND		1.4	0.19	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
p-Isopropyltoluene	ND		0.72	0.45	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
sec-Butylbenzene	ND		0.72	0.42	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Styrene	ND		0.72	0.44	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
trans-1,2-Dichloroethene	ND		0.72	0.37	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
trans-1,3-Dichloropropene	ND		1.4	0.44	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Tert-amyl-methyl ether (TAME)	ND		0.72	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
tert-Butyl alcohol (TBA)	ND		14	3.7	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
tert-Butylbenzene	ND		0.72	0.11	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Tetrachloroethene	ND	*	0.72	0.15	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Toluene	ND		0.72	0.37	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Trichloroethene	ND		1.4	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Trichlorofluoromethane	ND		7.2	0.27	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Vinyl acetate	ND		7.2	3.4	ug/Kg		08/14/19 11:22	08/16/19 18:24	1
Vinyl chloride	ND		0.72	0.36	ug/Kg		08/14/19 11:22	08/16/19 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		71 - 155	08/14/19 11:22	08/16/19 18:24	1
4-Bromofluorobenzene (Surr)	98		80 - 120	08/14/19 11:22	08/16/19 18:24	1
Dibromofluoromethane (Surr)	111		79 - 133	08/14/19 11:22	08/16/19 18:24	1
Toluene-d8 (Surr)	100		80 - 120	08/14/19 11:22	08/16/19 18:24	1

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1,1-Trichloroethane	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1,2-Trichloroethane	ND		0.94	0.33	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1-Dichloroethane	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:52	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.94	0.32	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,1-Dichloropropene	ND		1.9	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2,3-Trichlorobenzene	ND		1.9	0.85	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2,3-Trichloropropane	ND		1.9	0.78	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2,4-Trichlorobenzene	ND		1.9	0.29	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2,4-Trimethylbenzene	ND		1.9	0.55	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2-Dibromoethane	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2-Dichlorobenzene	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2-Dichloroethane	ND		0.94	0.29	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,2-Dichloropropane	ND		0.94	0.41	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,3,5-Trimethylbenzene	ND		1.9	0.51	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,3-Dichlorobenzene	ND		0.94	0.16	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,3-Dichloropropane	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
1,4-Dichlorobenzene	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
2,2-Dichloropropane	ND		4.7	0.31	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
2-Butanone	ND		19	3.5	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
2-Chlorotoluene	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
2-Hexanone	ND		19	1.6	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
4-Chlorotoluene	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
4-Methyl-2-pentanone	ND		19	4.0	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Acetone	ND		47	5.8	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Benzene	ND		0.94	0.12	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Bromobenzene	ND		0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Bromochloromethane	ND		1.9	0.65	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Bromodichloromethane	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Bromoform	ND		4.7	0.74	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Bromomethane	ND		19	8.8	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
cis-1,2-Dichloroethene	ND		0.94	0.26	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
cis-1,3-Dichloropropane	ND		0.94	0.24	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Carbon disulfide	ND		9.4	0.29	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Carbon tetrachloride	ND		0.94	0.26	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Chlorobenzene	ND		0.94	0.21	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Chloroform	ND		0.94	0.22	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Chloromethane	ND		19	0.28	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Dibromochloromethane	ND		1.9	0.53	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Dibromomethane	ND		0.94	0.72	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Dichlorodifluoromethane	ND		1.9	0.41	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Ethanol	ND		470	78	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Ethylbenzene	ND		0.94	0.14	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.47	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Isopropylbenzene	ND		0.94	0.51	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Methylene Chloride	ND		9.4	1.3	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Naphthalene	ND		9.4	0.76	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
n-Butylbenzene	ND		0.94	0.15	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
N-Propylbenzene	ND		1.9	0.47	ug/Kg		08/14/19 11:22	08/16/19 18:52	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.94	0.52	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
m,p-Xylene	ND		1.9	0.25	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
p-Isopropyltoluene	ND		0.94	0.59	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
sec-Butylbenzene	ND		0.94	0.54	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Styrene	ND		0.94	0.57	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
trans-1,2-Dichloroethene	ND		0.94	0.47	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
trans-1,3-Dichloropropene	ND		1.9	0.57	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
tert-Butyl alcohol (TBA)	ND		19	4.8	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
tert-Butylbenzene	ND		0.94	0.14	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Tetrachloroethene	ND	*	0.94	0.20	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Toluene	ND		0.94	0.48	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Trichloroethene	ND		1.9	0.28	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Trichlorofluoromethane	ND		9.4	0.35	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Vinyl acetate	ND		9.4	4.4	ug/Kg		08/14/19 11:22	08/16/19 18:52	1
Vinyl chloride	ND		0.94	0.47	ug/Kg		08/14/19 11:22	08/16/19 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	126		71 - 155	08/14/19 11:22	08/16/19 18:52	1
4-Bromofluorobenzene (Surr)	97		80 - 120	08/14/19 11:22	08/16/19 18:52	1
Dibromofluoromethane (Surr)	111		79 - 133	08/14/19 11:22	08/16/19 18:52	1
Toluene-d8 (Surr)	102		80 - 120	08/14/19 11:22	08/16/19 18:52	1

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.64	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1,1-Trichloroethane	ND		0.64	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1,2,2-Tetrachloroethane	ND		1.3	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.4	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1,2-Trichloroethane	ND		0.64	0.23	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1-Dichloroethane	ND		0.64	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1-Dichloroethene	ND		0.64	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,1-Dichloropropene	ND		1.3	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2,3-Trichlorobenzene	ND		1.3	0.58	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2,3-Trichloropropane	ND		1.3	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2,4-Trichlorobenzene	ND		1.3	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2,4-Trimethylbenzene	ND		1.3	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2-Dibromo-3-Chloropropane	ND		6.4	1.1	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2-Dibromoethane	ND		0.64	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2-Dichlorobenzene	ND		0.64	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2-Dichloroethane	ND		0.64	0.20	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,2-Dichloropropane	ND		0.64	0.28	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,3,5-Trimethylbenzene	ND		1.3	0.35	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,3-Dichlorobenzene	ND		0.64	0.11	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,3-Dichloropropane	ND		0.64	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
1,4-Dichlorobenzene	ND		0.64	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
2,2-Dichloropropane	ND		3.2	0.21	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
2-Butanone	ND		13	2.4	ug/Kg		08/14/19 11:22	08/16/19 19:21	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.64	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
2-Hexanone	ND		13	1.1	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
4-Chlorotoluene	ND		0.64	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
4-Methyl-2-pentanone	ND		13	2.7	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Acetone	ND		32	4.0	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Benzene	ND		0.64	0.083	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Bromobenzene	ND		0.64	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Bromochloromethane	ND		1.3	0.44	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Bromodichloromethane	ND		0.64	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Bromoform	ND		3.2	0.51	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Bromomethane	ND		13	6.0	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
cis-1,2-Dichloroethene	ND		0.64	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
cis-1,3-Dichloropropene	ND		0.64	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Carbon disulfide	ND		6.4	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Carbon tetrachloride	ND		0.64	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Chlorobenzene	ND		0.64	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Chloroethane	ND		1.3	0.95	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Chloroform	ND		0.64	0.15	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Chloromethane	ND		13	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Dibromochloromethane	ND		1.3	0.36	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Dibromomethane	ND		0.64	0.49	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Dichlorodifluoromethane	ND		1.3	0.28	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Di-isopropyl ether (DIPE)	ND		0.64	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Ethanol	ND		320	53	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Ethylbenzene	ND		0.64	0.096	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.64	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Isopropylbenzene	ND		0.64	0.35	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Methylene Chloride	ND		6.4	0.85	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.3	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Naphthalene	ND		6.4	0.52	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
n-Butylbenzene	ND		0.64	0.10	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
N-Propylbenzene	ND		1.3	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
o-Xylene	ND		0.64	0.35	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
m,p-Xylene	ND		1.3	0.17	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
p-Isopropyltoluene	ND		0.64	0.40	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
sec-Butylbenzene	ND		0.64	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Styrene	ND		0.64	0.38	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
trans-1,2-Dichloroethene	ND		0.64	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
trans-1,3-Dichloropropene	ND		1.3	0.39	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Tert-amyl-methyl ether (TAME)	ND		0.64	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
tert-Butyl alcohol (TBA)	ND		13	3.3	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
tert-Butylbenzene	ND		0.64	0.096	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Tetrachloroethene	ND	*	0.64	0.13	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Toluene	ND		0.64	0.33	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Trichloroethene	ND		1.3	0.19	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Trichlorofluoromethane	ND		6.4	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Vinyl acetate	ND		6.4	3.0	ug/Kg		08/14/19 11:22	08/16/19 19:21	1
Vinyl chloride	ND		0.64	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:21	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		71 - 155	08/14/19 11:22	08/16/19 19:21	1
4-Bromofluorobenzene (Surr)	97		80 - 120	08/14/19 11:22	08/16/19 19:21	1
Dibromofluoromethane (Surr)	108		79 - 133	08/14/19 11:22	08/16/19 19:21	1
Toluene-d8 (Surr)	101		80 - 120	08/14/19 11:22	08/16/19 19:21	1

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1,1-Trichloroethane	ND		1.0	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1,2,2-Tetrachloroethane	ND		2.1	0.36	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1,2-Trichloroethane	ND		1.0	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1-Dichloroethane	ND		1.0	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1-Dichloroethene	ND		1.0	0.36	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,1-Dichloropropene	ND		2.1	0.34	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2,3-Trichlorobenzene	ND		2.1	0.95	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2,3-Trichloropropane	ND		2.1	0.87	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2,4-Trichlorobenzene	ND		2.1	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2,4-Trimethylbenzene	ND		2.1	0.61	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2-Dibromoethane	ND		1.0	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2-Dichlorobenzene	ND		1.0	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2-Dichloroethane	ND		1.0	0.33	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,2-Dichloropropane	ND		1.0	0.46	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,3,5-Trimethylbenzene	ND		2.1	0.57	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,3-Dichloropropane	ND		1.0	0.26	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
1,4-Dichlorobenzene	ND		1.0	0.23	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
2,2-Dichloropropane	ND		5.2	0.35	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
2-Butanone	ND		21	3.9	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
2-Chlorotoluene	ND		1.0	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
2-Hexanone	ND		21	1.8	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
4-Chlorotoluene	ND		1.0	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
4-Methyl-2-pentanone	ND		21	4.5	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Acetone	ND		52	6.5	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
<b>Benzene</b>	<b>1.9</b>		1.0	0.14	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Bromobenzene	ND		1.0	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Bromochloromethane	ND		2.1	0.72	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Bromodichloromethane	ND		1.0	0.24	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Bromoform	ND		5.2	0.83	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Bromomethane	ND		21	9.8	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
cis-1,2-Dichloroethene	ND		1.0	0.29	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
cis-1,3-Dichloropropene	ND		1.0	0.27	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Carbon disulfide	ND		10	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Carbon tetrachloride	ND		1.0	0.30	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Chlorobenzene	ND		1.0	0.23	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Chloroethane	ND		2.1	1.6	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Chloroform	ND		1.0	0.25	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Chloromethane	ND		21	0.32	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Dibromochloromethane	ND		2.1	0.60	ug/Kg		08/14/19 11:22	08/16/19 19:49	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		1.0	0.81	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Dichlorodifluoromethane	ND		2.1	0.46	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Di-isopropyl ether (DIPE)	ND		1.0	0.50	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Ethanol	ND		520	87	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Ethylbenzene	ND		1.0	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Isopropylbenzene	ND		1.0	0.57	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Methylene Chloride	ND		10	1.4	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Methyl-t-Butyl Ether (MTBE)	ND		2.1	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Naphthalene	ND		10	0.85	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
N-Propylbenzene	ND		2.1	0.52	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
o-Xylene	ND		1.0	0.58	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
m,p-Xylene	ND		2.1	0.28	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
p-Isopropyltoluene	ND		1.0	0.66	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
sec-Butylbenzene	ND		1.0	0.60	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Styrene	ND		1.0	0.63	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
trans-1,2-Dichloroethene	ND		1.0	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
trans-1,3-Dichloropropene	ND		2.1	0.63	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.37	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
tert-Butyl alcohol (TBA)	ND		21	5.4	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
tert-Butylbenzene	ND		1.0	0.16	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Tetrachloroethene	ND *		1.0	0.22	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Toluene	ND		1.0	0.54	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Trichloroethene	ND		2.1	0.31	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Trichlorofluoromethane	ND		10	0.39	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Vinyl acetate	ND		10	5.0	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Vinyl chloride	ND		1.0	0.53	ug/Kg		08/14/19 11:22	08/16/19 19:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	124		71 - 155				08/14/19 11:22	08/16/19 19:49	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120				08/14/19 11:22	08/16/19 19:49	1
<i>Dibromofluoromethane (Surr)</i>	109		79 - 133				08/14/19 11:22	08/16/19 19:49	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120				08/14/19 11:22	08/16/19 19:49	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.092	0.046	mg/Kg		08/14/19 11:52	08/14/19 16:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 126				08/14/19 11:52	08/14/19 16:26	1

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.075	0.038	mg/Kg		08/14/19 11:52	08/14/19 16:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		60 - 126				08/14/19 11:52	08/14/19 16:59	1

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.11	0.055	mg/Kg		08/14/19 11:52	08/14/19 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 126				08/14/19 11:52	08/14/19 17:33	1

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.085	0.043	mg/Kg		08/14/19 11:52	08/14/19 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		60 - 126				08/14/19 11:52	08/14/19 18:07	1

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.071	0.036	mg/Kg		08/14/19 11:52	08/14/19 18:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		60 - 126				08/14/19 11:52	08/14/19 18:40	1

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.086	0.043	mg/Kg		08/14/19 11:52	08/14/19 19:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/14/19 11:52	08/14/19 19:14	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.13	0.066	mg/Kg		08/14/19 11:52	08/14/19 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		60 - 126				08/14/19 11:52	08/14/19 19:48	1

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.079	0.040	mg/Kg		08/14/19 11:52	08/14/19 20:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 126				08/14/19 11:52	08/14/19 20:55	1

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.070	0.035	mg/Kg		08/14/19 11:52	08/14/19 21:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		60 - 126				08/14/19 11:52	08/14/19 21:29	1

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.11	0.057	mg/Kg		08/14/19 11:52	08/14/19 22:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		60 - 126				08/14/19 11:52	08/14/19 22:03	1

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.073	0.036	mg/Kg		08/14/19 11:52	08/14/19 22:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 126				08/14/19 11:52	08/14/19 22:36	1

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.092	0.046	mg/Kg		08/14/19 11:52	08/14/19 23:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/14/19 11:52	08/14/19 23:10	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.1	3.6	mg/Kg	-	08/10/19 11:24	08/13/19 02:33	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 11:24	08/13/19 02:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	113		61 - 145				08/10/19 11:24	08/13/19 02:33	1

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 02:54	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 02:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	120		61 - 145				08/10/19 11:24	08/13/19 02:54	1

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.9		4.9	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 03:16	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 03:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	117		61 - 145				08/10/19 11:24	08/13/19 03:16	1

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 03:37	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 03:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	120		61 - 145				08/10/19 11:24	08/13/19 03:37	1

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 03:59	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 03:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	120		61 - 145				08/10/19 11:24	08/13/19 03:59	1

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 04:20	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 04:20	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	117		61 - 145	08/10/19 11:24	08/13/19 04:20	1

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg	-	08/10/19 11:24	08/13/19 04:42	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 11:24	08/13/19 04:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	107		61 - 145	08/10/19 11:24	08/13/19 04:42	1

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 05:03	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 05:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	114		61 - 145	08/10/19 11:24	08/13/19 05:03	1

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 05:25	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 05:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	109		61 - 145	08/10/19 11:24	08/13/19 05:25	1

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 05:47	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 11:24	08/13/19 05:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	121		61 - 145	08/10/19 11:24	08/13/19 05:47	1

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 06:08	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 11:24	08/13/19 06:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	115		61 - 145	08/10/19 11:24	08/13/19 06:08	1

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 11:24	08/13/19 06:29	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 11:24	08/13/19 06:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	110		61 - 145				08/10/19 11:24	08/13/19 06:29	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Arsenic</b>	<b>8.35</b>		0.750	0.259	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Barium</b>	<b>132</b>		0.500	0.154	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Beryllium</b>	<b>0.651</b>		0.250	0.137	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Cadmium</b>	<b>0.768</b>		0.500	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Cobalt</b>	<b>9.33</b>		0.250	0.148	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Chromium</b>	<b>14.3</b>		0.250	0.142	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Copper</b>	<b>18.5</b>		0.500	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Molybdenum</b>	<b>1.87</b>		0.250	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Nickel</b>	<b>10.9</b>		0.250	0.145	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
Antimony	ND	L	0.750	0.149	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
Selenium	ND	L	0.750	0.300	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Vanadium</b>	<b>36.0</b>		0.250	0.141	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Zinc</b>	<b>47.9</b>		1.00	0.178	mg/Kg		08/13/19 19:21	08/14/19 20:42	1
<b>Lead</b>	<b>0.600</b>		0.500	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:42	1

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.248	0.0849	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Arsenic</b>	<b>3.41</b>		0.743	0.256	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Barium</b>	<b>177</b>		0.495	0.152	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Beryllium</b>	<b>0.697</b>		0.248	0.136	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
Cadmium	ND		0.495	0.134	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Cobalt</b>	<b>9.08</b>		0.248	0.147	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Chromium</b>	<b>15.1</b>		0.248	0.141	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Copper</b>	<b>22.3</b>		0.495	0.134	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
Molybdenum	ND	L	0.248	0.131	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Nickel</b>	<b>13.1</b>		0.248	0.144	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
Antimony	ND	L	0.743	0.148	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
Selenium	ND	L	0.743	0.297	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
Thallium	ND		0.743	0.150	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Vanadium</b>	<b>27.3</b>		0.248	0.140	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Zinc</b>	<b>48.2</b>		0.990	0.176	mg/Kg		08/13/19 19:21	08/14/19 20:50	1
<b>Lead</b>	<b>1.68</b>		0.495	0.131	mg/Kg		08/13/19 19:21	08/14/19 20:50	1

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Arsenic</b>	<b>4.26</b>		0.735	0.254	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Barium</b>	<b>168</b>		0.490	0.151	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Beryllium</b>	<b>1.16</b>		0.245	0.134	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Cadmium</b>	<b>1.10</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Cobalt</b>	<b>14.2</b>		0.245	0.145	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Chromium</b>	<b>18.7</b>		0.245	0.139	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Copper</b>	<b>31.6</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:52	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.245	0.129	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Nickel</b>	<b>17.8</b>		0.245	0.142	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
Antimony	ND	L	0.735	0.146	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
Selenium	ND	L	0.735	0.294	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
Thallium	ND		0.735	0.149	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Vanadium</b>	<b>65.7</b>		0.245	0.138	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Zinc</b>	<b>70.2</b>		0.980	0.175	mg/Kg		08/13/19 19:21	08/14/19 20:52	1
<b>Lead</b>	<b>2.82</b>		0.490	0.129	mg/Kg		08/13/19 19:21	08/14/19 20:52	1

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Arsenic</b>	<b>10.5</b>		0.735	0.254	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Barium</b>	<b>183</b>		0.490	0.151	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Beryllium</b>	<b>1.01</b>		0.245	0.134	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Cadmium</b>	<b>1.19</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Cobalt</b>	<b>12.2</b>		0.245	0.145	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Chromium</b>	<b>20.1</b>		0.245	0.139	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Copper</b>	<b>31.6</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
Molybdenum	ND		0.245	0.129	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Nickel</b>	<b>15.5</b>		0.245	0.142	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
Antimony	ND	L	0.735	0.146	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
Selenium	ND	L	0.735	0.294	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
Thallium	ND		0.735	0.149	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Vanadium</b>	<b>49.8</b>		0.245	0.138	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Zinc</b>	<b>63.4</b>		0.980	0.175	mg/Kg		08/13/19 19:21	08/14/19 20:54	1
<b>Lead</b>	<b>1.52</b>		0.490	0.129	mg/Kg		08/13/19 19:21	08/14/19 20:54	1

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.255	0.0874	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Arsenic</b>	<b>4.39</b>		0.765	0.264	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Barium</b>	<b>129</b>		0.510	0.157	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Beryllium</b>	<b>0.870</b>		0.255	0.140	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Cadmium</b>	<b>0.638</b>		0.510	0.138	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Cobalt</b>	<b>10.5</b>		0.255	0.151	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Chromium</b>	<b>19.0</b>		0.255	0.145	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Copper</b>	<b>22.0</b>		0.510	0.138	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
Molybdenum	ND	L	0.255	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Nickel</b>	<b>14.1</b>		0.255	0.148	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
Antimony	ND	L	0.765	0.152	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
Selenium	ND	L	0.765	0.306	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
Thallium	ND		0.765	0.155	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Vanadium</b>	<b>46.2</b>		0.255	0.144	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Zinc</b>	<b>54.4</b>		1.02	0.182	mg/Kg		08/13/19 19:21	08/14/19 20:56	1
<b>Lead</b>	<b>1.90</b>		0.510	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:56	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Arsenic</b>	<b>1.80</b>		0.754	0.260	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Barium</b>	<b>144</b>		0.503	0.155	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Beryllium</b>	<b>0.852</b>		0.251	0.138	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Cadmium</b>	<b>0.780</b>		0.503	0.136	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Cobalt</b>	<b>11.1</b>		0.251	0.149	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Chromium</b>	<b>17.4</b>		0.251	0.143	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Copper</b>	<b>22.3</b>		0.503	0.136	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
Molybdenum	ND	L	0.251	0.133	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Nickel</b>	<b>14.0</b>		0.251	0.146	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
Selenium	ND	L	0.754	0.302	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Vanadium</b>	<b>44.3</b>		0.251	0.142	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Zinc</b>	<b>63.0</b>		1.01	0.179	mg/Kg		08/13/19 19:21	08/14/19 20:58	1
<b>Lead</b>	<b>0.748</b>		0.503	0.133	mg/Kg		08/13/19 19:21	08/14/19 20:58	1

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Arsenic</b>	<b>11.3</b>		0.739	0.255	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Barium</b>	<b>176</b>		0.493	0.152	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Beryllium</b>	<b>1.04</b>		0.246	0.135	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Cadmium</b>	<b>1.14</b>		0.493	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Cobalt</b>	<b>12.7</b>		0.246	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Chromium</b>	<b>19.8</b>		0.246	0.140	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Copper</b>	<b>31.6</b>		0.493	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Molybdenum</b>	<b>0.781</b>		0.246	0.130	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Nickel</b>	<b>15.4</b>		0.246	0.143	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
Antimony	ND	L	0.739	0.147	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
Selenium	ND	L	0.739	0.296	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
Thallium	ND		0.739	0.150	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Vanadium</b>	<b>50.7</b>		0.246	0.139	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Zinc</b>	<b>70.2</b>		0.985	0.175	mg/Kg		08/13/19 19:21	08/14/19 21:00	1
<b>Lead</b>	<b>7.45</b>		0.493	0.130	mg/Kg		08/13/19 19:21	08/14/19 21:00	1

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Arsenic</b>	<b>2.07</b>		0.769	0.266	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Barium</b>	<b>83.1</b>		0.513	0.158	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Beryllium</b>	<b>0.632</b>		0.256	0.141	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
Cadmium	ND		0.513	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Cobalt</b>	<b>7.22</b>		0.256	0.152	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Chromium</b>	<b>14.0</b>		0.256	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Copper</b>	<b>16.2</b>		0.513	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:01	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.256	0.135	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Nickel</b>	<b>10.8</b>		0.256	0.149	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
Antimony	ND	L	0.769	0.153	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
Selenium	ND		0.769	0.308	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
Thallium	ND		0.769	0.156	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Vanadium</b>	<b>28.7</b>		0.256	0.145	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Zinc</b>	<b>42.2</b>		1.03	0.183	mg/Kg		08/13/19 19:21	08/14/19 21:01	1
<b>Lead</b>	<b>1.70</b>		0.513	0.135	mg/Kg		08/13/19 19:21	08/14/19 21:01	1

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Arsenic</b>	<b>2.42</b>		0.769	0.266	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Barium</b>	<b>183</b>		0.513	0.158	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Beryllium</b>	<b>0.863</b>		0.256	0.141	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Cadmium</b>	<b>0.913</b>		0.513	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Cobalt</b>	<b>12.8</b>		0.256	0.152	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Chromium</b>	<b>17.4</b>		0.256	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Copper</b>	<b>22.6</b>		0.513	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
Molybdenum	ND	L	0.256	0.135	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Nickel</b>	<b>17.0</b>		0.256	0.149	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
Antimony	ND	L	0.769	0.153	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Selenium</b>	<b>1.85</b>		0.769	0.308	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
Thallium	ND		0.769	0.156	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Vanadium</b>	<b>42.8</b>		0.256	0.145	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Zinc</b>	<b>68.5</b>		1.03	0.183	mg/Kg		08/13/19 19:21	08/14/19 21:03	1
<b>Lead</b>	<b>1.81</b>		0.513	0.135	mg/Kg		08/13/19 19:21	08/14/19 21:03	1

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Arsenic</b>	<b>5.74</b>		0.754	0.260	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Barium</b>	<b>122</b>		0.503	0.155	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Beryllium</b>	<b>0.634</b>		0.251	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Cadmium</b>	<b>0.758</b>		0.503	0.136	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Cobalt</b>	<b>9.16</b>		0.251	0.149	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Chromium</b>	<b>15.2</b>		0.251	0.143	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Copper</b>	<b>15.6</b>		0.503	0.136	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Molybdenum</b>	<b>0.366</b>		0.251	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Nickel</b>	<b>11.2</b>		0.251	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
Selenium	ND	L	0.754	0.302	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Vanadium</b>	<b>35.5</b>		0.251	0.142	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Zinc</b>	<b>50.5</b>		1.01	0.179	mg/Kg		08/13/19 19:21	08/14/19 21:05	1
<b>Lead</b>	<b>2.14</b>		0.503	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:05	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Arsenic</b>	<b>2.00</b>		0.735	0.254	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Barium</b>	<b>107</b>		0.490	0.151	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Beryllium</b>	<b>0.686</b>		0.245	0.134	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Cadmium</b>	<b>0.537</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Cobalt</b>	<b>7.84</b>		0.245	0.145	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Chromium</b>	<b>15.4</b>		0.245	0.139	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Copper</b>	<b>17.9</b>		0.490	0.132	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
Molybdenum	ND	L	0.245	0.129	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Nickel</b>	<b>11.3</b>		0.245	0.142	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
Antimony	ND	L	0.735	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
Selenium	ND		0.735	0.294	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
Thallium	ND		0.735	0.149	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Vanadium</b>	<b>35.5</b>		0.245	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Zinc</b>	<b>42.7</b>		0.980	0.175	mg/Kg		08/13/19 19:21	08/14/19 21:07	1
<b>Lead</b>	<b>1.37</b>		0.490	0.129	mg/Kg		08/13/19 19:21	08/14/19 21:07	1

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.253	0.0866	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Arsenic</b>	<b>1.98</b>		0.758	0.262	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Barium</b>	<b>133</b>		0.505	0.156	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Beryllium</b>	<b>0.832</b>		0.253	0.138	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Cadmium</b>	<b>0.862</b>		0.505	0.136	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Cobalt</b>	<b>11.8</b>		0.253	0.149	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Chromium</b>	<b>16.9</b>		0.253	0.143	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Copper</b>	<b>21.9</b>		0.505	0.136	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
Molybdenum	ND	L	0.253	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Nickel</b>	<b>13.9</b>		0.253	0.146	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
Antimony	ND	L	0.758	0.151	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
Selenium	ND	L	0.758	0.303	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
Thallium	ND		0.758	0.154	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Vanadium</b>	<b>43.0</b>		0.253	0.142	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Zinc</b>	<b>63.9</b>		1.01	0.180	mg/Kg		08/13/19 19:21	08/14/19 21:14	1
<b>Lead</b>	<b>1.74</b>		0.505	0.133	mg/Kg		08/13/19 19:21	08/14/19 21:14	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB13-5**  
**Date Collected: 08/09/19 09:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg		08/14/19 10:00	08/14/19 17:20	1

**Client Sample ID: SB13-10**  
**Date Collected: 08/09/19 11:10**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 10:00	08/14/19 17:22	1

**Client Sample ID: SB13-25**  
**Date Collected: 08/09/19 11:25**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 10:00	08/14/19 17:25	1

**Client Sample ID: SB14-5**  
**Date Collected: 08/09/19 09:00**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0829		0.0820	0.00578	mg/Kg		08/14/19 10:00	08/14/19 17:27	1

**Client Sample ID: SB14-10**  
**Date Collected: 08/09/19 10:35**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 10:00	08/14/19 17:29	1

**Client Sample ID: SB14-25**  
**Date Collected: 08/09/19 10:50**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 10:00	08/14/19 17:36	1

**Client Sample ID: SB15-5**  
**Date Collected: 08/09/19 08:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0794	0.00559	mg/Kg		08/14/19 10:00	08/14/19 17:39	1

**Client Sample ID: SB15-10**  
**Date Collected: 08/09/19 10:05**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 10:00	08/14/19 17:41	1

**Client Sample ID: SB15-25**  
**Date Collected: 08/09/19 10:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 10:00	08/14/19 17:43	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB16-5**  
**Date Collected: 08/09/19 08:20**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg	-	08/14/19 10:00	08/14/19 17:46	1

**Client Sample ID: SB16-10**  
**Date Collected: 08/09/19 09:45**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg	-	08/14/19 10:00	08/14/19 17:48	1

**Client Sample ID: SB16-25**  
**Date Collected: 08/09/19 09:57**  
**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg	-	08/14/19 10:00	08/14/19 17:50	1

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-4324-3	SB13-5	130	101	111	101
570-4324-4	SB13-10	133	93	119	101
570-4324-7	SB13-25	121	100	105	100
570-4324-10	SB14-5	123	101	106	101
570-4324-11	SB14-10	126	100	109	100
570-4324-14	SB14-25	119	100	106	99
570-4324-17	SB15-5	128	99	108	101
570-4324-18	SB15-10	124	97	108	100
570-4324-21	SB15-25	128	98	111	100
570-4324-24	SB16-5	126	97	111	102
570-4324-25	SB16-10	124	97	108	101
570-4324-28	SB16-25	124	98	109	99
LCS 570-12922/4	Lab Control Sample	106	102	106	100
LCS 570-13010/3	Lab Control Sample	100	99	100	98
LCS 570-13205/3	Lab Control Sample	102	100	102	99
LCSD 570-12922/8	Lab Control Sample Dup	105	100	105	101
LCSD 570-13010/4	Lab Control Sample Dup	98	101	99	97
LCSD 570-13205/4	Lab Control Sample Dup	102	101	101	99
MB 570-12922/10	Method Blank	108	100	104	101
MB 570-13010/5	Method Blank	107	95	102	100
MB 570-13205/5	Method Blank	113	93	105	101

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(60-126)
570-4324-3	SB13-5	78
570-4324-4	SB13-10	79
570-4324-7	SB13-25	78
570-4324-10	SB14-5	81
570-4324-11	SB14-10	81
570-4324-14	SB14-25	84
570-4324-17	SB15-5	80
570-4324-18	SB15-10	78
570-4324-21	SB15-25	81
570-4324-24	SB16-5	77
570-4324-25	SB16-10	86
570-4324-28	SB16-25	82
LCS 570-12348/3	Lab Control Sample	90
LCSD 570-12348/4	Lab Control Sample Dup	92
MB 570-12348/5	Method Blank	82

#### Surrogate Legend

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# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046  
BFB = 4-Bromofluorobenzene (Surr)

Job ID: 570-4324-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-4324-3	SB13-5	113
570-4324-3 MS	SB13-5	129
570-4324-3 MSD	SB13-5	107
570-4324-4	SB13-10	120
570-4324-7	SB13-25	117
570-4324-10	SB14-5	120
570-4324-11	SB14-10	120
570-4324-14	SB14-25	117
570-4324-17	SB15-5	107
570-4324-18	SB15-10	114
570-4324-21	SB15-25	109
570-4324-24	SB16-5	121
570-4324-25	SB16-10	115
570-4324-28	SB16-25	110
LCS 570-11613/2-A	Lab Control Sample	120
MB 570-11613/1-A	Method Blank	119

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-12922/10**  
**Matrix: Solid**  
**Analysis Batch: 12922**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/Kg			08/16/19 13:36	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/16/19 13:36	1
1,1,2,2-Tetrachloroethane	ND		2.1	0.36	ug/Kg			08/16/19 13:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.37	ug/Kg			08/16/19 13:36	1
1,1,2-Trichloroethane	ND		1.0	0.37	ug/Kg			08/16/19 13:36	1
1,1-Dichloroethane	ND		1.0	0.22	ug/Kg			08/16/19 13:36	1
1,1-Dichloroethene	ND		1.0	0.36	ug/Kg			08/16/19 13:36	1
1,1-Dichloropropene	ND		2.1	0.34	ug/Kg			08/16/19 13:36	1
1,2,3-Trichlorobenzene	ND		2.1	0.95	ug/Kg			08/16/19 13:36	1
1,2,3-Trichloropropane	ND		2.1	0.86	ug/Kg			08/16/19 13:36	1
1,2,4-Trichlorobenzene	ND		2.1	0.32	ug/Kg			08/16/19 13:36	1
1,2,4-Trimethylbenzene	ND		2.1	0.61	ug/Kg			08/16/19 13:36	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg			08/16/19 13:36	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/16/19 13:36	1
1,2-Dichlorobenzene	ND		1.0	0.24	ug/Kg			08/16/19 13:36	1
1,2-Dichloroethane	ND		1.0	0.33	ug/Kg			08/16/19 13:36	1
1,2-Dichloropropane	ND		1.0	0.45	ug/Kg			08/16/19 13:36	1
1,3,5-Trimethylbenzene	ND		2.1	0.57	ug/Kg			08/16/19 13:36	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/16/19 13:36	1
1,3-Dichloropropane	ND		1.0	0.26	ug/Kg			08/16/19 13:36	1
1,4-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/16/19 13:36	1
2,2-Dichloropropane	ND		5.2	0.34	ug/Kg			08/16/19 13:36	1
2-Butanone	ND		21	3.9	ug/Kg			08/16/19 13:36	1
2-Chlorotoluene	ND		1.0	0.24	ug/Kg			08/16/19 13:36	1
2-Hexanone	ND		21	1.8	ug/Kg			08/16/19 13:36	1
4-Chlorotoluene	ND		1.0	0.22	ug/Kg			08/16/19 13:36	1
4-Methyl-2-pentanone	ND		21	4.5	ug/Kg			08/16/19 13:36	1
Acetone	ND		52	6.5	ug/Kg			08/16/19 13:36	1
Benzene	ND		1.0	0.13	ug/Kg			08/16/19 13:36	1
Bromobenzene	ND		1.0	0.22	ug/Kg			08/16/19 13:36	1
Bromochloromethane	ND		2.1	0.72	ug/Kg			08/16/19 13:36	1
Bromodichloromethane	ND		1.0	0.24	ug/Kg			08/16/19 13:36	1
Bromoform	ND		5.2	0.82	ug/Kg			08/16/19 13:36	1
Bromomethane	ND		21	9.8	ug/Kg			08/16/19 13:36	1
cis-1,2-Dichloroethene	ND		1.0	0.29	ug/Kg			08/16/19 13:36	1
cis-1,3-Dichloropropene	ND		1.0	0.26	ug/Kg			08/16/19 13:36	1
Carbon disulfide	ND		10	0.32	ug/Kg			08/16/19 13:36	1
Carbon tetrachloride	ND		1.0	0.29	ug/Kg			08/16/19 13:36	1
Chlorobenzene	ND		1.0	0.23	ug/Kg			08/16/19 13:36	1
Chloroethane	ND		2.1	1.5	ug/Kg			08/16/19 13:36	1
Chloroform	ND		1.0	0.25	ug/Kg			08/16/19 13:36	1
Chloromethane	ND		21	0.32	ug/Kg			08/16/19 13:36	1
Dibromochloromethane	ND		2.1	0.59	ug/Kg			08/16/19 13:36	1
Dibromomethane	ND		1.0	0.80	ug/Kg			08/16/19 13:36	1
Dichlorodifluoromethane	ND		2.1	0.46	ug/Kg			08/16/19 13:36	1
Di-isopropyl ether (DIPE)	ND		1.0	0.50	ug/Kg			08/16/19 13:36	1
Ethanol	ND		520	87	ug/Kg			08/16/19 13:36	1
Ethylbenzene	ND		1.0	0.16	ug/Kg			08/16/19 13:36	1

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-12922/10**  
**Matrix: Solid**  
**Analysis Batch: 12922**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.53	ug/Kg			08/16/19 13:36	1
Isopropylbenzene	ND		1.0	0.57	ug/Kg			08/16/19 13:36	1
Methylene Chloride	ND		10	1.4	ug/Kg			08/16/19 13:36	1
Methyl-t-Butyl Ether (MTBE)	ND		2.1	0.31	ug/Kg			08/16/19 13:36	1
Naphthalene	ND		10	0.84	ug/Kg			08/16/19 13:36	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/16/19 13:36	1
N-Propylbenzene	ND		2.1	0.52	ug/Kg			08/16/19 13:36	1
o-Xylene	ND		1.0	0.58	ug/Kg			08/16/19 13:36	1
m,p-Xylene	ND		2.1	0.28	ug/Kg			08/16/19 13:36	1
p-Isopropyltoluene	ND		1.0	0.65	ug/Kg			08/16/19 13:36	1
sec-Butylbenzene	ND		1.0	0.60	ug/Kg			08/16/19 13:36	1
Styrene	ND		1.0	0.63	ug/Kg			08/16/19 13:36	1
trans-1,2-Dichloroethene	ND		1.0	0.52	ug/Kg			08/16/19 13:36	1
trans-1,3-Dichloropropene	ND		2.1	0.63	ug/Kg			08/16/19 13:36	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.37	ug/Kg			08/16/19 13:36	1
tert-Butyl alcohol (TBA)	ND		21	5.4	ug/Kg			08/16/19 13:36	1
tert-Butylbenzene	ND		1.0	0.16	ug/Kg			08/16/19 13:36	1
Tetrachloroethene	ND		1.0	0.22	ug/Kg			08/16/19 13:36	1
Toluene	ND		1.0	0.53	ug/Kg			08/16/19 13:36	1
Trichloroethene	ND		2.1	0.31	ug/Kg			08/16/19 13:36	1
Trichlorofluoromethane	ND		10	0.39	ug/Kg			08/16/19 13:36	1
Vinyl acetate	ND		10	4.9	ug/Kg			08/16/19 13:36	1
Vinyl chloride	ND		1.0	0.52	ug/Kg			08/16/19 13:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		71 - 155		08/16/19 13:36	1
4-Bromofluorobenzene (Surr)	100		80 - 120		08/16/19 13:36	1
Dibromofluoromethane (Surr)	104		79 - 133		08/16/19 13:36	1
Toluene-d8 (Surr)	101		80 - 120		08/16/19 13:36	1

**Lab Sample ID: LCS 570-12922/4**  
**Matrix: Solid**  
**Analysis Batch: 12922**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	51.2	50.85		ug/Kg		99	71 - 125
1,2-Dibromoethane	51.2	55.20		ug/Kg		108	80 - 120
1,2-Dichlorobenzene	51.2	52.42		ug/Kg		102	80 - 120
1,2-Dichloroethane	51.2	53.07		ug/Kg		104	79 - 121
Benzene	51.2	51.64		ug/Kg		101	79 - 120
Carbon tetrachloride	51.2	55.12		ug/Kg		108	58 - 142
Chlorobenzene	51.2	50.78		ug/Kg		99	80 - 120
Di-isopropyl ether (DIPE)	51.2	51.08		ug/Kg		100	65 - 131
Ethanol	51.2	515.0		ug/Kg		101	32 - 158
Ethylbenzene	51.2	51.58		ug/Kg		101	57 - 153
Ethyl-t-butyl ether (ETBE)	51.2	53.54		ug/Kg		105	58 - 136
Methyl-t-Butyl Ether (MTBE)	51.2	53.50		ug/Kg		104	64 - 124
o-Xylene	51.2	52.22		ug/Kg		102	79 - 127

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-12922/4**  
**Matrix: Solid**  
**Analysis Batch: 12922**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	102	106.1		ug/Kg		104	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		71 - 155
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	106		79 - 133
Toluene-d8 (Surr)	100		80 - 120

**Lab Sample ID: LCSD 570-12922/8**  
**Matrix: Solid**  
**Analysis Batch: 12922**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	49.6	51.87		ug/Kg		105	71 - 125	2	20
1,2-Dibromoethane	49.6	52.92		ug/Kg		107	80 - 120	4	20
1,2-Dichlorobenzene	49.6	52.01		ug/Kg		105	80 - 120	1	20
1,2-Dichloroethane	49.6	52.94		ug/Kg		107	79 - 121	0	20
Benzene	49.6	52.73		ug/Kg		106	79 - 120	2	20
Carbon tetrachloride	49.6	57.10		ug/Kg		115	58 - 142	4	20
Chlorobenzene	49.6	52.31		ug/Kg		105	80 - 120	3	20
Di-isopropyl ether (DIPE)	49.6	50.94		ug/Kg		103	65 - 131	0	20
Ethanol	49.6	515.1		ug/Kg		104	32 - 158	0	27
Ethylbenzene	49.6	53.94		ug/Kg		109	57 - 153	4	20
Ethyl-t-butyl ether (ETBE)	49.6	53.64		ug/Kg		108	58 - 136	0	20
Methyl-t-Butyl Ether (MTBE)	49.6	51.93		ug/Kg		105	64 - 124	3	20
o-Xylene	49.6	54.28		ug/Kg		109	79 - 127	4	20
m,p-Xylene	99.2	112.9		ug/Kg		114	80 - 122	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		71 - 155
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	105		79 - 133
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: MB 570-13010/5**  
**Matrix: Solid**  
**Analysis Batch: 13010**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/16/19 16:59	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/16/19 16:59	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/16/19 16:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/16/19 16:59	1
1,1,2-Trichloroethane	ND		1.0	0.35	ug/Kg			08/16/19 16:59	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/16/19 16:59	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/16/19 16:59	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/16/19 16:59	1
1,2,3-Trichlorobenzene	ND		2.0	0.92	ug/Kg			08/16/19 16:59	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-13010/5**  
**Matrix: Solid**  
**Analysis Batch: 13010**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg			08/16/19 16:59	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/16/19 16:59	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/16/19 16:59	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/16/19 16:59	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/16/19 16:59	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/16/19 16:59	1
1,2-Dichloroethane	ND		1.0	0.31	ug/Kg			08/16/19 16:59	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/16/19 16:59	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/16/19 16:59	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/16/19 16:59	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/16/19 16:59	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/16/19 16:59	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/16/19 16:59	1
2-Butanone	ND		20	3.8	ug/Kg			08/16/19 16:59	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/16/19 16:59	1
2-Hexanone	ND		20	1.8	ug/Kg			08/16/19 16:59	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/16/19 16:59	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/16/19 16:59	1
Acetone	ND		50	6.3	ug/Kg			08/16/19 16:59	1
Benzene	ND		1.0	0.13	ug/Kg			08/16/19 16:59	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/16/19 16:59	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/16/19 16:59	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/16/19 16:59	1
Bromoform	ND		5.0	0.80	ug/Kg			08/16/19 16:59	1
Bromomethane	ND		20	9.4	ug/Kg			08/16/19 16:59	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/16/19 16:59	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/Kg			08/16/19 16:59	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/16/19 16:59	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/16/19 16:59	1
Chlorobenzene	ND		1.0	0.22	ug/Kg			08/16/19 16:59	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/16/19 16:59	1
Chloroform	ND		1.0	0.24	ug/Kg			08/16/19 16:59	1
Chloromethane	ND		20	0.30	ug/Kg			08/16/19 16:59	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/16/19 16:59	1
Dibromomethane	ND		1.0	0.78	ug/Kg			08/16/19 16:59	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg			08/16/19 16:59	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48	ug/Kg			08/16/19 16:59	1
Ethanol	ND		500	84	ug/Kg			08/16/19 16:59	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/16/19 16:59	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/16/19 16:59	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/16/19 16:59	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/16/19 16:59	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/16/19 16:59	1
Naphthalene	ND		10	0.82	ug/Kg			08/16/19 16:59	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/16/19 16:59	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/16/19 16:59	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/16/19 16:59	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/16/19 16:59	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/16/19 16:59	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-13010/5**  
**Matrix: Solid**  
**Analysis Batch: 13010**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/16/19 16:59	1
Styrene	ND		1.0	0.61	ug/Kg			08/16/19 16:59	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/16/19 16:59	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/16/19 16:59	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/16/19 16:59	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/16/19 16:59	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/16/19 16:59	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/16/19 16:59	1
Toluene	ND		1.0	0.52	ug/Kg			08/16/19 16:59	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/16/19 16:59	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/16/19 16:59	1
Vinyl acetate	ND		10	4.8	ug/Kg			08/16/19 16:59	1
Vinyl chloride	ND		1.0	0.50	ug/Kg			08/16/19 16:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		71 - 155		08/16/19 16:59	1
4-Bromofluorobenzene (Surr)	95		80 - 120		08/16/19 16:59	1
Dibromofluoromethane (Surr)	102		79 - 133		08/16/19 16:59	1
Toluene-d8 (Surr)	100		80 - 120		08/16/19 16:59	1

**Lab Sample ID: LCS 570-13010/3**  
**Matrix: Solid**  
**Analysis Batch: 13010**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	50.0	52.68		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	50.0	49.08		ug/Kg		98	80 - 120
1,2-Dichloroethane	50.0	53.83		ug/Kg		108	79 - 121
Benzene	50.0	53.88		ug/Kg		108	79 - 120
Carbon tetrachloride	50.0	54.69		ug/Kg		109	58 - 142
Chlorobenzene	50.0	51.57		ug/Kg		103	80 - 120
Di-isopropyl ether (DIPE)	50.0	54.71		ug/Kg		109	65 - 131
Ethanol	500	640.3		ug/Kg		128	32 - 158
Ethylbenzene	50.0	50.68		ug/Kg		101	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	49.18		ug/Kg		98	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	48.37		ug/Kg		97	64 - 124
o-Xylene	50.0	50.65		ug/Kg		101	79 - 127
m,p-Xylene	100	102.5		ug/Kg		102	80 - 122

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		79 - 133
Toluene-d8 (Surr)	98		80 - 120



# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-13010/4**  
**Matrix: Solid**  
**Analysis Batch: 13010**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	56.00		ug/Kg		112	71 - 125	2	20
1,2-Dibromoethane	50.0	54.67		ug/Kg		109	80 - 120	4	20
1,2-Dichlorobenzene	50.0	51.05		ug/Kg		102	80 - 120	4	20
1,2-Dichloroethane	50.0	55.32		ug/Kg		111	79 - 121	3	20
Benzene	50.0	55.16		ug/Kg		110	79 - 120	2	20
Carbon tetrachloride	50.0	57.02		ug/Kg		114	58 - 142	4	20
Chlorobenzene	50.0	54.15		ug/Kg		108	80 - 120	5	20
Di-isopropyl ether (DIPE)	50.0	56.20		ug/Kg		112	65 - 131	3	20
Ethanol	500	579.2		ug/Kg		116	32 - 158	10	27
Ethylbenzene	50.0	53.48		ug/Kg		107	57 - 153	5	20
Ethyl-t-butyl ether (ETBE)	50.0	50.43		ug/Kg		101	58 - 136	2	20
Methyl-t-Butyl Ether (MTBE)	50.0	49.88		ug/Kg		100	64 - 124	3	20
o-Xylene	50.0	53.48		ug/Kg		107	79 - 127	5	20
m,p-Xylene	100	107.3		ug/Kg		107	80 - 122	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	98		71 - 155
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		79 - 133
Toluene-d8 (Surr)	97		80 - 120

**Lab Sample ID: MB 570-13205/5**  
**Matrix: Solid**  
**Analysis Batch: 13205**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/17/19 16:52	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/17/19 16:52	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/17/19 16:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/17/19 16:52	1
1,1,2-Trichloroethane	ND		1.0	0.36	ug/Kg			08/17/19 16:52	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/17/19 16:52	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/17/19 16:52	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/17/19 16:52	1
1,2,3-Trichlorobenzene	ND		2.0	0.92	ug/Kg			08/17/19 16:52	1
1,2,3-Trichloropropane	ND		2.0	0.84	ug/Kg			08/17/19 16:52	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/17/19 16:52	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/17/19 16:52	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/17/19 16:52	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/17/19 16:52	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/17/19 16:52	1
1,2-Dichloroethane	ND		1.0	0.32	ug/Kg			08/17/19 16:52	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/17/19 16:52	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/17/19 16:52	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/17/19 16:52	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/17/19 16:52	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/17/19 16:52	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/17/19 16:52	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-13205/5**  
**Matrix: Solid**  
**Analysis Batch: 13205**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	3.8	ug/Kg			08/17/19 16:52	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/17/19 16:52	1
2-Hexanone	ND		20	1.8	ug/Kg			08/17/19 16:52	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/17/19 16:52	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/17/19 16:52	1
Acetone	ND		50	6.3	ug/Kg			08/17/19 16:52	1
Benzene	ND		1.0	0.13	ug/Kg			08/17/19 16:52	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/17/19 16:52	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/17/19 16:52	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/17/19 16:52	1
Bromoform	ND		5.0	0.80	ug/Kg			08/17/19 16:52	1
Bromomethane	ND		20	9.5	ug/Kg			08/17/19 16:52	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/17/19 16:52	1
cis-1,3-Dichloropropene	ND		1.0	0.26	ug/Kg			08/17/19 16:52	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/17/19 16:52	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/17/19 16:52	1
Chlorobenzene	ND		1.0	0.23	ug/Kg			08/17/19 16:52	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/17/19 16:52	1
Chloroform	ND		1.0	0.24	ug/Kg			08/17/19 16:52	1
Chloromethane	ND		20	0.31	ug/Kg			08/17/19 16:52	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/17/19 16:52	1
Dibromomethane	ND		1.0	0.78	ug/Kg			08/17/19 16:52	1
Dichlorodifluoromethane	ND		2.0	0.45	ug/Kg			08/17/19 16:52	1
Di-isopropyl ether (DIPE)	ND		1.0	0.49	ug/Kg			08/17/19 16:52	1
Ethanol	ND		500	84	ug/Kg			08/17/19 16:52	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/17/19 16:52	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/17/19 16:52	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/17/19 16:52	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/17/19 16:52	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/17/19 16:52	1
Naphthalene	ND		10	0.82	ug/Kg			08/17/19 16:52	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/17/19 16:52	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/17/19 16:52	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/17/19 16:52	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/17/19 16:52	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/17/19 16:52	1
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/17/19 16:52	1
Styrene	ND		1.0	0.61	ug/Kg			08/17/19 16:52	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/17/19 16:52	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/17/19 16:52	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/17/19 16:52	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/17/19 16:52	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/17/19 16:52	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/17/19 16:52	1
Toluene	ND		1.0	0.52	ug/Kg			08/17/19 16:52	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/17/19 16:52	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/17/19 16:52	1
Vinyl acetate	ND		10	4.8	ug/Kg			08/17/19 16:52	1
Vinyl chloride	ND		1.0	0.51	ug/Kg			08/17/19 16:52	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	113		71 - 155		08/17/19 16:52	1
4-Bromofluorobenzene (Surr)	93		80 - 120		08/17/19 16:52	1
Dibromofluoromethane (Surr)	105		79 - 133		08/17/19 16:52	1
Toluene-d8 (Surr)	101		80 - 120		08/17/19 16:52	1

Lab Sample ID: LCS 570-13205/3  
Matrix: Solid  
Analysis Batch: 13205

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
1,1-Dichloroethene	50.0	57.44		ug/Kg		115	71 - 125	
1,2-Dibromoethane	50.0	53.30		ug/Kg		107	80 - 120	
1,2-Dichlorobenzene	50.0	49.15		ug/Kg		98	80 - 120	
1,2-Dichloroethane	50.0	57.87		ug/Kg		116	79 - 121	
Benzene	50.0	55.67		ug/Kg		111	79 - 120	
Carbon tetrachloride	50.0	57.35		ug/Kg		115	58 - 142	
Chlorobenzene	50.0	51.54		ug/Kg		103	80 - 120	
Di-isopropyl ether (DIPE)	50.0	57.27		ug/Kg		115	65 - 131	
Ethanol	500	558.9		ug/Kg		112	32 - 158	
Ethylbenzene	50.0	50.82		ug/Kg		102	57 - 153	
Ethyl-t-butyl ether (ETBE)	50.0	49.72		ug/Kg		99	58 - 136	
Methyl-t-Butyl Ether (MTBE)	50.0	49.74		ug/Kg		99	64 - 124	
o-Xylene	50.0	50.93		ug/Kg		102	79 - 127	
m,p-Xylene	100	103.7		ug/Kg		104	80 - 122	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		71 - 155
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	102		79 - 133
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: LCSD 570-13205/4  
Matrix: Solid  
Analysis Batch: 13205

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
1,1-Dichloroethene	50.0	57.76		ug/Kg		116	71 - 125	1	20	
1,2-Dibromoethane	50.0	53.11		ug/Kg		106	80 - 120	0	20	
1,2-Dichlorobenzene	50.0	48.44		ug/Kg		97	80 - 120	1	20	
1,2-Dichloroethane	50.0	56.54		ug/Kg		113	79 - 121	2	20	
Benzene	50.0	55.29		ug/Kg		111	79 - 120	1	20	
Carbon tetrachloride	50.0	59.46		ug/Kg		119	58 - 142	4	20	
Chlorobenzene	50.0	51.90		ug/Kg		104	80 - 120	1	20	
Di-isopropyl ether (DIPE)	50.0	57.96		ug/Kg		116	65 - 131	1	20	
Ethanol	500	589.1		ug/Kg		118	32 - 158	5	27	
Ethylbenzene	50.0	50.56		ug/Kg		101	57 - 153	1	20	
Ethyl-t-butyl ether (ETBE)	50.0	50.63		ug/Kg		101	58 - 136	2	20	
Methyl-t-Butyl Ether (MTBE)	50.0	49.16		ug/Kg		98	64 - 124	1	20	
o-Xylene	50.0	50.64		ug/Kg		101	79 - 127	1	20	
m,p-Xylene	100	102.7		ug/Kg		103	80 - 122	1	20	

# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-13205/4**  
**Matrix: Solid**  
**Analysis Batch: 13205**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		71 - 155
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	101		79 - 133
Toluene-d8 (Surr)	99		80 - 120

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-12348/5**  
**Matrix: Solid**  
**Analysis Batch: 12348**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.050	mg/Kg			08/14/19 13:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126		08/14/19 13:03	1

**Lab Sample ID: LCS 570-12348/3**  
**Matrix: Solid**  
**Analysis Batch: 12348**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C4-C13)	2.00	1.913		mg/Kg		95	50 - 139

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		60 - 126

**Lab Sample ID: LCSD 570-12348/4**  
**Matrix: Solid**  
**Analysis Batch: 12348**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	1.99	1.887		mg/Kg		95	50 - 139	1	18

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		60 - 126

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-11613/1-A**  
**Matrix: Solid**  
**Analysis Batch: 11817**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 11613**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 11:24	08/13/19 01:07	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 11:24	08/13/19 01:07	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: MB 570-11613/1-A**  
**Matrix: Solid**  
**Analysis Batch: 11817**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 11613**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>n</i> -Octacosane (Surr)	119		61 - 145	08/10/19 11:24	08/13/19 01:07	1

**Lab Sample ID: LCS 570-11613/2-A**  
**Matrix: Solid**  
**Analysis Batch: 11817**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 11613**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Diesel Range Organics [C10-C28]	400	450.2		mg/Kg		113	67 - 121	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>n</i> -Octacosane (Surr)	120		61 - 145

**Lab Sample ID: 570-4324-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 11817**

**Client Sample ID: SB13-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11613**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits	%Rec.
				Result	Qualifier					
Diesel Range Organics [C10-C28]	ND		400	495.4		mg/Kg		123	33 - 153	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>n</i> -Octacosane (Surr)	129		61 - 145

**Lab Sample ID: 570-4324-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 11817**

**Client Sample ID: SB13-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11613**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	Limits	RPD	RPD Limit
				Result	Qualifier						
Diesel Range Organics [C10-C28]	ND		400	437.9		mg/Kg		108	33 - 153	12	32

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>n</i> -Octacosane (Surr)	107		61 - 145

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-12243/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Arsenic	ND		0.750	0.259	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Barium	ND		0.500	0.154	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Beryllium	ND		0.250	0.137	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Cadmium	ND		0.500	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Cobalt	ND		0.250	0.148	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Chromium	ND		0.250	0.142	mg/Kg		08/13/19 19:21	08/14/19 20:08	1

Eurofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-12243/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.500	0.135	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Molybdenum	ND		0.250	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Nickel	ND		0.250	0.145	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Antimony	ND		0.750	0.149	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Selenium	ND		0.750	0.300	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Vanadium	ND		0.250	0.141	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Zinc	ND		1.00	0.178	mg/Kg		08/13/19 19:21	08/14/19 20:08	1
Lead	ND		0.500	0.132	mg/Kg		08/13/19 19:21	08/14/19 20:08	1

**Lab Sample ID: LCS 570-12243/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.6	12.64		mg/Kg		101	80 - 120
Arsenic	25.1	23.41		mg/Kg		93	80 - 120
Barium	25.1	27.91		mg/Kg		111	80 - 120
Beryllium	25.1	24.11		mg/Kg		96	80 - 120
Cadmium	25.1	25.81		mg/Kg		103	80 - 120
Cobalt	25.1	25.68		mg/Kg		102	80 - 120
Chromium	25.1	25.60		mg/Kg		102	80 - 120
Copper	25.1	25.52		mg/Kg		102	80 - 120
Molybdenum	25.1	24.86		mg/Kg		99	80 - 120
Nickel	25.1	26.76		mg/Kg		106	80 - 120
Antimony	25.1	27.95		mg/Kg		111	80 - 120
Selenium	25.1	22.98		mg/Kg		91	80 - 120
Thallium	25.1	24.37		mg/Kg		97	80 - 120
Vanadium	25.1	24.90		mg/Kg		99	80 - 120
Zinc	25.1	25.08		mg/Kg		100	80 - 120
Lead	25.1	25.62		mg/Kg		102	80 - 120

**Lab Sample ID: LCSD 570-12243/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.7	12.99		mg/Kg		102	80 - 120	3	20
Arsenic	25.4	24.44		mg/Kg		96	80 - 120	4	20
Barium	25.4	28.59		mg/Kg		113	80 - 120	2	20
Beryllium	25.4	24.61		mg/Kg		97	80 - 120	2	20
Cadmium	25.4	26.36		mg/Kg		104	80 - 120	2	20
Cobalt	25.4	26.57		mg/Kg		105	80 - 120	3	20
Chromium	25.4	26.17		mg/Kg		103	80 - 120	2	20
Copper	25.4	25.97		mg/Kg		102	80 - 120	2	20
Molybdenum	25.4	25.70		mg/Kg		101	80 - 120	3	20
Nickel	25.4	27.30		mg/Kg		108	80 - 120	2	20
Antimony	25.4	28.32		mg/Kg		112	80 - 120	1	20
Selenium	25.4	24.12		mg/Kg		95	80 - 120	5	20

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-12243/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	25.4	25.61		mg/Kg		101	80 - 120	5	20
Vanadium	25.4	25.37		mg/Kg		100	80 - 120	2	20
Zinc	25.4	25.96		mg/Kg		102	80 - 120	3	20
Lead	25.4	26.85		mg/Kg		106	80 - 120	5	20

**Lab Sample ID: 570-4189-A-3-D MS**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.487		12.6	13.58		mg/Kg		104	75 - 125		
Arsenic	133		25.3	149.0	4	mg/Kg		65	75 - 125		
Barium	302		25.3	293.5	4	mg/Kg		-34	75 - 125		
Beryllium	0.823		25.3	25.48		mg/Kg		98	75 - 125		
Cadmium	4.62		25.3	27.87		mg/Kg		92	75 - 125		
Cobalt	35.3		25.3	55.33		mg/Kg		79	75 - 125		
Chromium	60.2	F1	25.3	79.22		mg/Kg		75	75 - 125		
Copper	1430		25.3	1329	4	mg/Kg		-416	75 - 125		
Molybdenum	26400	E	25.3	3216	E 4	mg/Kg		-9169	75 - 125		
Nickel	50.2	F1	25.3	69.43		mg/Kg		76	75 - 125		
Antimony	11.4		25.3	25.27		mg/Kg		55	50 - 115		
Selenium	ND	F1 L	25.3	189.3	F1	mg/Kg		750	75 - 125		
Thallium	ND		25.3	19.19		mg/Kg		76	75 - 125		
Vanadium	24.0		25.3	46.06		mg/Kg		87	75 - 125		
Zinc	2040		25.3	1838	4	mg/Kg		-782	75 - 125		
Lead	234		25.3	233.4	4	mg/Kg		-3	75 - 125		

**Lab Sample ID: 570-4189-A-3-E MSD**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 12243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.487		12.3	13.33		mg/Kg		104	75 - 125	2	20
Arsenic	133		24.6	146.3	4	mg/Kg		56	75 - 125	2	20
Barium	302		24.6	288.9	4	mg/Kg		-54	75 - 125	2	20
Beryllium	0.823		24.6	25.03		mg/Kg		98	75 - 125	2	20
Cadmium	4.62		24.6	27.13		mg/Kg		91	75 - 125	3	20
Cobalt	35.3		24.6	54.46		mg/Kg		78	75 - 125	2	20
Chromium	60.2	F1	24.6	78.13	F1	mg/Kg		73	75 - 125	1	20
Copper	1430		24.6	1304	4	mg/Kg		-528	75 - 125	2	20
Molybdenum	26400	E	24.6	3400	E 4	mg/Kg		-9325	75 - 125	6	20
Nickel	50.2	F1	24.6	67.85	F1	mg/Kg		72	75 - 125	2	20
Antimony	11.4		24.6	25.62		mg/Kg		58	50 - 115	1	20
Selenium	ND	F1 L	24.6	203.8	F1	mg/Kg		827	75 - 125	7	20
Thallium	ND		24.6	19.34		mg/Kg		79	75 - 125	1	20
Vanadium	24.0		24.6	45.48		mg/Kg		87	75 - 125	1	20
Zinc	2040		24.6	1809	4	mg/Kg		-920	75 - 125	2	20
Lead	234		24.6	227.9	4	mg/Kg		-25	75 - 125	2	20

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# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-12244/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12244**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 10:00	08/14/19 16:55	1

**Lab Sample ID: LCS 570-12244/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12244**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.806	0.7585		mg/Kg		94	85 - 121

**Lab Sample ID: LCSD 570-12244/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12244**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.820	0.7841		mg/Kg		96	85 - 121	3	10

**Lab Sample ID: 570-4189-A-3-G MS**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 12244**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.833	0.7673		mg/Kg		92	71 - 137

**Lab Sample ID: 570-4189-A-3-H MSD**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 12244**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.833	0.7528		mg/Kg		90	71 - 137	2	14



# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## GC/MS VOA

### Prep Batch: 12370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	5035	
570-4324-4	SB13-10	Total/NA	Solid	5035	
570-4324-7	SB13-25	Total/NA	Solid	5035	
570-4324-10	SB14-5	Total/NA	Solid	5035	
570-4324-11	SB14-10	Total/NA	Solid	5035	
570-4324-14	SB14-25	Total/NA	Solid	5035	
570-4324-17	SB15-5	Total/NA	Solid	5035	
570-4324-18	SB15-10	Total/NA	Solid	5035	
570-4324-21	SB15-25	Total/NA	Solid	5035	
570-4324-24	SB16-5	Total/NA	Solid	5035	
570-4324-25	SB16-10	Total/NA	Solid	5035	
570-4324-28	SB16-25	Total/NA	Solid	5035	

### Analysis Batch: 12922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	8260B	12370
570-4324-7	SB13-25	Total/NA	Solid	8260B	12370
570-4324-10	SB14-5	Total/NA	Solid	8260B	12370
570-4324-11	SB14-10	Total/NA	Solid	8260B	12370
570-4324-14	SB14-25	Total/NA	Solid	8260B	12370
570-4324-17	SB15-5	Total/NA	Solid	8260B	12370
MB 570-12922/10	Method Blank	Total/NA	Solid	8260B	
LCS 570-12922/4	Lab Control Sample	Total/NA	Solid	8260B	
LCS 570-12922/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 13010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-18	SB15-10	Total/NA	Solid	8260B	12370
570-4324-21	SB15-25	Total/NA	Solid	8260B	12370
570-4324-24	SB16-5	Total/NA	Solid	8260B	12370
570-4324-25	SB16-10	Total/NA	Solid	8260B	12370
570-4324-28	SB16-25	Total/NA	Solid	8260B	12370
MB 570-13010/5	Method Blank	Total/NA	Solid	8260B	
LCS 570-13010/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 570-13010/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 13205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-4	SB13-10	Total/NA	Solid	8260B	12370
MB 570-13205/5	Method Blank	Total/NA	Solid	8260B	
LCS 570-13205/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 570-13205/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC VOA

### Analysis Batch: 12348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	8015B	12386
570-4324-4	SB13-10	Total/NA	Solid	8015B	12386
570-4324-7	SB13-25	Total/NA	Solid	8015B	12386
570-4324-10	SB14-5	Total/NA	Solid	8015B	12386

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# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## GC VOA (Continued)

### Analysis Batch: 12348 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-11	SB14-10	Total/NA	Solid	8015B	12386
570-4324-14	SB14-25	Total/NA	Solid	8015B	12386
570-4324-17	SB15-5	Total/NA	Solid	8015B	12386
570-4324-18	SB15-10	Total/NA	Solid	8015B	12386
570-4324-21	SB15-25	Total/NA	Solid	8015B	12386
570-4324-24	SB16-5	Total/NA	Solid	8015B	12386
570-4324-25	SB16-10	Total/NA	Solid	8015B	12386
570-4324-28	SB16-25	Total/NA	Solid	8015B	12386
MB 570-12348/5	Method Blank	Total/NA	Solid	8015B	
LCS 570-12348/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 570-12348/4	Lab Control Sample Dup	Total/NA	Solid	8015B	

### Prep Batch: 12386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	5035	
570-4324-4	SB13-10	Total/NA	Solid	5035	
570-4324-7	SB13-25	Total/NA	Solid	5035	
570-4324-10	SB14-5	Total/NA	Solid	5035	
570-4324-11	SB14-10	Total/NA	Solid	5035	
570-4324-14	SB14-25	Total/NA	Solid	5035	
570-4324-17	SB15-5	Total/NA	Solid	5035	
570-4324-18	SB15-10	Total/NA	Solid	5035	
570-4324-21	SB15-25	Total/NA	Solid	5035	
570-4324-24	SB16-5	Total/NA	Solid	5035	
570-4324-25	SB16-10	Total/NA	Solid	5035	
570-4324-28	SB16-25	Total/NA	Solid	5035	

## GC Semi VOA

### Prep Batch: 11613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	3550C	
570-4324-4	SB13-10	Total/NA	Solid	3550C	
570-4324-7	SB13-25	Total/NA	Solid	3550C	
570-4324-10	SB14-5	Total/NA	Solid	3550C	
570-4324-11	SB14-10	Total/NA	Solid	3550C	
570-4324-14	SB14-25	Total/NA	Solid	3550C	
570-4324-17	SB15-5	Total/NA	Solid	3550C	
570-4324-18	SB15-10	Total/NA	Solid	3550C	
570-4324-21	SB15-25	Total/NA	Solid	3550C	
570-4324-24	SB16-5	Total/NA	Solid	3550C	
570-4324-25	SB16-10	Total/NA	Solid	3550C	
570-4324-28	SB16-25	Total/NA	Solid	3550C	
MB 570-11613/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 570-11613/2-A	Lab Control Sample	Total/NA	Solid	3550C	
570-4324-3 MS	SB13-5	Total/NA	Solid	3550C	
570-4324-3 MSD	SB13-5	Total/NA	Solid	3550C	

### Analysis Batch: 11817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	8015B	11613

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# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## GC Semi VOA (Continued)

### Analysis Batch: 11817 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-4	SB13-10	Total/NA	Solid	8015B	11613
570-4324-7	SB13-25	Total/NA	Solid	8015B	11613
570-4324-10	SB14-5	Total/NA	Solid	8015B	11613
570-4324-11	SB14-10	Total/NA	Solid	8015B	11613
570-4324-14	SB14-25	Total/NA	Solid	8015B	11613
570-4324-17	SB15-5	Total/NA	Solid	8015B	11613
570-4324-18	SB15-10	Total/NA	Solid	8015B	11613
570-4324-21	SB15-25	Total/NA	Solid	8015B	11613
570-4324-24	SB16-5	Total/NA	Solid	8015B	11613
570-4324-25	SB16-10	Total/NA	Solid	8015B	11613
570-4324-28	SB16-25	Total/NA	Solid	8015B	11613
MB 570-11613/1-A	Method Blank	Total/NA	Solid	8015B	11613
LCS 570-11613/2-A	Lab Control Sample	Total/NA	Solid	8015B	11613
570-4324-3 MS	SB13-5	Total/NA	Solid	8015B	11613
570-4324-3 MSD	SB13-5	Total/NA	Solid	8015B	11613

## Metals

### Prep Batch: 12243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	3050B	
570-4324-4	SB13-10	Total/NA	Solid	3050B	
570-4324-7	SB13-25	Total/NA	Solid	3050B	
570-4324-10	SB14-5	Total/NA	Solid	3050B	
570-4324-11	SB14-10	Total/NA	Solid	3050B	
570-4324-14	SB14-25	Total/NA	Solid	3050B	
570-4324-17	SB15-5	Total/NA	Solid	3050B	
570-4324-18	SB15-10	Total/NA	Solid	3050B	
570-4324-21	SB15-25	Total/NA	Solid	3050B	
570-4324-24	SB16-5	Total/NA	Solid	3050B	
570-4324-25	SB16-10	Total/NA	Solid	3050B	
570-4324-28	SB16-25	Total/NA	Solid	3050B	
MB 570-12243/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-12243/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-12243/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-4189-A-3-D MS	Matrix Spike	Total/NA	Solid	3050B	
570-4189-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

### Prep Batch: 12244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	7471A	
570-4324-4	SB13-10	Total/NA	Solid	7471A	
570-4324-7	SB13-25	Total/NA	Solid	7471A	
570-4324-10	SB14-5	Total/NA	Solid	7471A	
570-4324-11	SB14-10	Total/NA	Solid	7471A	
570-4324-14	SB14-25	Total/NA	Solid	7471A	
570-4324-17	SB15-5	Total/NA	Solid	7471A	
570-4324-18	SB15-10	Total/NA	Solid	7471A	
570-4324-21	SB15-25	Total/NA	Solid	7471A	
570-4324-24	SB16-5	Total/NA	Solid	7471A	
570-4324-25	SB16-10	Total/NA	Solid	7471A	

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Metals (Continued)

### Prep Batch: 12244 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-28	SB16-25	Total/NA	Solid	7471A	
MB 570-12244/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-12244/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-12244/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-4189-A-3-G MS	Matrix Spike	Total/NA	Solid	7471A	
570-4189-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	

### Analysis Batch: 12570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	7471A	12244
570-4324-4	SB13-10	Total/NA	Solid	7471A	12244
570-4324-7	SB13-25	Total/NA	Solid	7471A	12244
570-4324-10	SB14-5	Total/NA	Solid	7471A	12244
570-4324-11	SB14-10	Total/NA	Solid	7471A	12244
570-4324-14	SB14-25	Total/NA	Solid	7471A	12244
570-4324-17	SB15-5	Total/NA	Solid	7471A	12244
570-4324-18	SB15-10	Total/NA	Solid	7471A	12244
570-4324-21	SB15-25	Total/NA	Solid	7471A	12244
570-4324-24	SB16-5	Total/NA	Solid	7471A	12244
570-4324-25	SB16-10	Total/NA	Solid	7471A	12244
570-4324-28	SB16-25	Total/NA	Solid	7471A	12244
MB 570-12244/1-A	Method Blank	Total/NA	Solid	7471A	12244
LCS 570-12244/2-A	Lab Control Sample	Total/NA	Solid	7471A	12244
LCSD 570-12244/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	12244
570-4189-A-3-G MS	Matrix Spike	Total/NA	Solid	7471A	12244
570-4189-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	12244

### Analysis Batch: 12779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4324-3	SB13-5	Total/NA	Solid	6010B	12243
570-4324-4	SB13-10	Total/NA	Solid	6010B	12243
570-4324-7	SB13-25	Total/NA	Solid	6010B	12243
570-4324-10	SB14-5	Total/NA	Solid	6010B	12243
570-4324-11	SB14-10	Total/NA	Solid	6010B	12243
570-4324-14	SB14-25	Total/NA	Solid	6010B	12243
570-4324-17	SB15-5	Total/NA	Solid	6010B	12243
570-4324-18	SB15-10	Total/NA	Solid	6010B	12243
570-4324-21	SB15-25	Total/NA	Solid	6010B	12243
570-4324-24	SB16-5	Total/NA	Solid	6010B	12243
570-4324-25	SB16-10	Total/NA	Solid	6010B	12243
570-4324-28	SB16-25	Total/NA	Solid	6010B	12243
MB 570-12243/1-A	Method Blank	Total/NA	Solid	6010B	12243
LCS 570-12243/2-A	Lab Control Sample	Total/NA	Solid	6010B	12243
LCSD 570-12243/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	12243
570-4189-A-3-D MS	Matrix Spike	Total/NA	Solid	6010B	12243
570-4189-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	12243

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

**Client Sample ID: SB13-5**

**Date Collected: 08/09/19 09:25**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.64 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 18:21	BE5H	ECL 2
Instrument ID: GCMSLL										
Total/NA	Prep	5035			5.452 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 16:26	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			9.90 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 02:33	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			2.00 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:42	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:20	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB13-10**

**Date Collected: 08/09/19 11:10**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.392 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13205	08/17/19 17:49	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.671 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 16:59	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.50 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 02:54	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			2.02 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:50	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:22	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB13-25**

**Date Collected: 08/09/19 11:25**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.062 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 19:13	BE5H	ECL 2
Instrument ID: GCMSLL										

Eurofins Calscience LLC

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

**Client Sample ID: SB13-25**

**Date Collected: 08/09/19 11:25**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.59 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 17:33	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 03:16	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			2.04 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:52	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:25	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB14-5**

**Date Collected: 08/09/19 09:00**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-10**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.685 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 19:39	BE5H	ECL 2
Instrument ID: GCMSLL										
Total/NA	Prep	5035			5.889 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 18:07	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 03:37	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			2.04 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:54	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:27	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB14-10**

**Date Collected: 08/09/19 10:35**

**Date Received: 08/09/19 15:55**

**Lab Sample ID: 570-4324-11**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.302 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 20:04	BE5H	ECL 2
Instrument ID: GCMSLL										
Total/NA	Prep	5035			7.035 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 18:40	U1MC	ECL 2
Instrument ID: GC42										

Eurofins Calscience LLC

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB14-10

Date Collected: 08/09/19 10:35

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			10.40 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 03:59	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.96 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:56	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:29	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB14-25

Date Collected: 08/09/19 10:50

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 20:31	BE5H	ECL 2
Instrument ID: GCMSLL										
Total/NA	Prep	5035			5.792 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 19:14	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.40 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 04:20	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.99 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 20:58	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:36	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB15-5

Date Collected: 08/09/19 08:45

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.825 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12922	08/16/19 20:56	BE5H	ECL 2
Instrument ID: GCMSLL										
Total/NA	Prep	5035			3.784 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 19:48	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 04:42	I9H5	ECL 1
Instrument ID: GC48										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Client Sample ID: SB15-5

Date Collected: 08/09/19 08:45

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.03 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:00	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.63 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:39	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB15-10

Date Collected: 08/09/19 10:05

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.45 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13010	08/16/19 17:55	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.297 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 20:55	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.40 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 05:03	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.95 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:01	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:41	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB15-25

Date Collected: 08/09/19 10:20

Date Received: 08/09/19 15:55

## Lab Sample ID: 570-4324-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.931 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13010	08/16/19 18:24	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			7.139 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 21:29	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 05:25	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.95 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:03	FD74	ECL 1
Instrument ID: ICP8										



# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

**Client Sample ID: SB15-25**

**Lab Sample ID: 570-4324-21**

**Date Collected: 08/09/19 10:20**

**Matrix: Solid**

**Date Received: 08/09/19 15:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.60 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:43	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB16-5**

**Lab Sample ID: 570-4324-24**

**Date Collected: 08/09/19 08:20**

**Matrix: Solid**

**Date Received: 08/09/19 15:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.346 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13010	08/16/19 18:52	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			4.41 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 22:03	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 05:47	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.99 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:05	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:46	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB16-10**

**Lab Sample ID: 570-4324-25**

**Date Collected: 08/09/19 09:45**

**Matrix: Solid**

**Date Received: 08/09/19 15:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.858 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13010	08/16/19 19:21	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.889 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 22:36	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 06:08	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			2.04 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:07	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:48	I3IN	ECL 1
Instrument ID: HG8										

Eurofins Calscience LLC

# Lab Chronicle

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

**Client Sample ID: SB16-25**

**Lab Sample ID: 570-4324-28**

**Date Collected: 08/09/19 09:57**

**Matrix: Solid**

**Date Received: 08/09/19 15:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.788 g	5 g	12370	08/14/19 11:22	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	13010	08/16/19 19:49	UVS5	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.436 g	5 g	12386	08/14/19 11:52	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	12348	08/14/19 23:10	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11613	08/10/19 11:24	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11817	08/13/19 06:29	I9H5	ECL 1
Instrument ID: GC48										
Total/NA	Prep	3050B			1.98 g	100 mL	12243	08/13/19 19:21	OYW3	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:14	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12244	08/14/19 10:00	OYW3	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 17:50	I3IN	ECL 1
Instrument ID: HG8										

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19

# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5035	Closed System Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

#### Protocol References:

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

#### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4324-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-4324-3	SB13-5	Solid	08/09/19 09:25	08/09/19 15:55	
570-4324-4	SB13-10	Solid	08/09/19 11:10	08/09/19 15:55	
570-4324-7	SB13-25	Solid	08/09/19 11:25	08/09/19 15:55	
570-4324-10	SB14-5	Solid	08/09/19 09:00	08/09/19 15:55	
570-4324-11	SB14-10	Solid	08/09/19 10:35	08/09/19 15:55	
570-4324-14	SB14-25	Solid	08/09/19 10:50	08/09/19 15:55	
570-4324-17	SB15-5	Solid	08/09/19 08:45	08/09/19 15:55	
570-4324-18	SB15-10	Solid	08/09/19 10:05	08/09/19 15:55	
570-4324-21	SB15-25	Solid	08/09/19 10:20	08/09/19 15:55	
570-4324-24	SB16-5	Solid	08/09/19 08:20	08/09/19 15:55	
570-4324-25	SB16-10	Solid	08/09/19 09:45	08/09/19 15:55	
570-4324-28	SB16-25	Solid	08/09/19 09:57	08/09/19 15:55	

4324



570-4324 Chain of Custody

# STANTEC CHAIN-OF-CUSTODY

COC # \_\_\_\_\_ Page of 2

FIELD OFFICE INFORMATION		PROJECT INFORMATION		ANALYSES / METHOD REQUEST		REMARKS/ PRECAUTIONS	
OFFICE: Stantec - Thousands Oaks		Project No.: 185751046					
Send Report to: Stantec 290 Conejo Ridge Avenue Thousand Oaks, CA 91361		Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA					
Telephone : (805) 719-9343		Project Manager: Lewis Simons					
Fax/E-Mail: lewis.simons@stantec.com crystal.guan@stantec.com		Laboratory: Eurofins Calscience LLC 7440 Lincoln Way Garden Grove, CA 92841					
Sample No./ Identification	Date	SAMPLE Time	Matrix *	Container & Size **	Preservative	Number of Containers	
						TPH (8015M) 670 070	VOC and Fuel Oxygenates (820B)
SB13-1	8/9/19	907	Soil	5gms/100g	UAC10US	X	X
SB13-3		920				X	X
SB13-5		925				X	X
SB13-10		1110				X	X
SB13-15		1115				X	X
SB13-20		1120				X	X
SB13-25		1125				X	X
SB14-1		850				X	X
SB14-3		855				X	X
SB14-5		900				X	X
SB14-10		1035				X	X
SB14-15		1040				X	X
SB14-20		1045				X	X
SB14-25		1050				X	X
Possible Hazard Identification		Sample Disposal		Airbill Number:		Aqueous Samples for Metals Analysis:	
<input type="checkbox"/> Non-Haz <input type="checkbox"/> Flammable		<input type="checkbox"/> Return to Client <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Poison B <input type="checkbox"/> Skin		Disposal by Lab <input type="checkbox"/> Archive for _____ months		<input type="checkbox"/> Filtered <input checked="" type="checkbox"/> Lab to filter & preserve	
Sampled by:		Shipment Method:		Company		Date Time	
1(a) Relinquished by: <i>[Signature]</i>		Brand Gross		Stantec		8/9/19 1221	
1(b) Received by: <i>[Signature]</i>		ACTORIC CONCRETE		EC		8/9/19 1221	
2(a) Relinquished by: <i>[Signature]</i>		ACTORIC CONCRETE		EC		8/9/19 1555	
2(b) Received by: <i>[Signature]</i>		PRECY SORIANO		EC			
3(a) Relinquished by:							
3(b) Received by:							

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

3.11/3.3 SC 6





# STANTEC CHAIN-OF-CUSTODY RECORD

COC # 2 Page of 2

FIELD OFFICE INFORMATION		PROJECT INFORMATION		ANALYSES / METHOD REQUEST		REMARKS/ PRECAUTIONS		
OFFICE: Stantec - Thousands Oaks		Project No.: 185751046		TPH (8015M) <u>Prep</u>		Normal <input checked="" type="checkbox"/> MB & SURGS		
Send Report to: Stantec 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361		Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA		VOC and Fuel Oxygenates (620B)		Rush <input type="checkbox"/> Dup/MS/MSD		
Telephone: (805) 719-9343		Project Manager: Lewis Simons		CAM Metals (6010B)		Raw Data <input type="checkbox"/> EDD		
Fax/E-Mail: lewis.simons@stantec.com crystal.guan@stantec.com		Laboratory: Eurofins Calscience LLC 7440 Lincoln Way Garden Grove, CA 92841		X Hold		CLP Rpt <input type="checkbox"/> Other		
Sample No. / Identification	Date	SAMPLE Time	Matrix *	Container & Size **	Preservative	Number of Containers		NOTES:
						TPH (8015M) <u>Prep</u>	VOC and Fuel Oxygenates (620B)	
SB15-1	8/19/19	830	Soil	5AMS/50Ks	64-1045	X	X	3 trip blanks (Voa-HCL), 3 equipment blanks (Voa-HCL, Amber-Glass - unpreserved, Plastic-Nitric-Acid), and 3 duplicates, one set for each day.
SB15-3		835				X	X	
SB15-5		845				X	X	
SB15-10		1005				X	X	
SB15-15		1007				X	X	
SB15-20		1015				X	X	
SB15-25		1020				X	X	
SB16-1		810				X	X	
SB16-3		815				X	X	
SB16-5		820				X	X	
SB16-10		945				X	X	
SB16-15		950				X	X	
SB16-20		955				X	X	
SB16-25		957				X	X	
Possible Hazard Identification		Sample Disposal		Airbill Number:		Aqueous Samples for Metals Analysis:		
<input type="checkbox"/> Non-Haz <input type="checkbox"/> Flammable		<input type="checkbox"/> Return to Client <input type="checkbox"/> Unknown		Disposal by Lab <input type="checkbox"/> Archive for ___ months		<input type="checkbox"/> Filtered <input checked="" type="checkbox"/> Lab to filter & preserve		
Sampled by:		Shipment Method:		Company		Date		Time
1(a) Relinquished by: <u>Brian Gross</u>		Print Name		Shantec		8/9/19		1221
1(b) Received by: <u>Ariane Young</u>		Signature		BC		8/9/19		1221
2(a) Relinquished by: <u>Ariane Young</u>		Signature		R		8/9/19		1221
2(b) Received by: <u>PREGY SOPRANO</u>		Signature		R		8/9/19		1555
3(a) Relinquished by:		Signature						
3(b) Received by:		Signature						

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

3.2/3.4 - 2.9/3.1 SC6



## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-4324-1

**Login Number: 4324**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

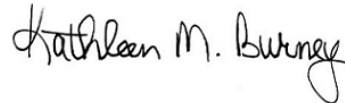
Laboratory Job ID: 570-4235-1

Client Project/Site: Phase II ESA / 185751046

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Mr. Lewis Simons



---

Authorized for release by:

8/21/2019 6:55:45 PM

Kathleen Burney, Project Mgmt. Assistant  
[kathleenburney@eurofinsus.com](mailto:kathleenburney@eurofinsus.com)

Designee for

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

**Job ID: 570-4235-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

### Job Narrative 570-4235-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/7/2019 6:06 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.6° C, 3.0° C, 3.3° C and 3.5° C.

#### GC/MS VOA

Method(s) 8260B: The initial calibration curve analyzed in batch 570-11858 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8015B: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was inconsistent with the typical diesel fuel pattern used by the laboratory for quantitative purposes: SB6-5 (570-4235-38).

Method(s) 8015B: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was inconsistent with the typical diesel fuel pattern used by the laboratory for quantitative purposes: SB1-5 (570-4235-3), SB3-1 (570-4235-15), SB3-5 (570-4235-17), SB4-3 (570-4235-23), SB4-5 (570-4235-24), SB4-25 (570-4235-28), SB5-10 (570-4235-32), SB5-25 (570-4235-35), SB6-10 (570-4235-39) and SB6-25 (570-4235-42).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010B: The absolute response for Antimony was greater than the method reporting limit (RL) in the following sample: SB1-5 (570-4235-3).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Antimony and Selenium was greater than the method reporting limit (RL) in the following sample: SB6-5 (570-4235-38).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Selenium was greater than the method reporting limit (RL) in the following sample: SB5-25 (570-4235-35).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Molybdenum, Antimony and Selenium was greater than the method reporting limit (RL) in the following samples: SB1-25 (570-4235-7), SB2-5 (570-4235-10), SB2-25 (570-4235-14), SB3-3 (570-4235-16), SB3-5 (570-4235-17), SB3-25 (570-4235-21), SB4-5 (570-4235-24), SB4-25 (570-4235-28), SB5-5 (570-4235-31), SB5-10 (570-4235-32) and SB6-25 (570-4235-42).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Molybdenum and Antimony was greater than the method reporting limit (RL) in the following samples: SB1-10 (570-4235-4), SB2-10 (570-4235-11), SB4-3 (570-4235-23) and SB6-10 (570-4235-39).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-12192 and analytical batch

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

---

## Job ID: 570-4235-1 (Continued)

---

### Laboratory: Eurofins Calscience LLC (Continued)

570-12779 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Analytes - Arsenic, Barium, Molybdenum, Antimony and Selenium

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB1-5

## Lab Sample ID: 570-4235-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	13		4.9	3.4	mg/Kg	1		8015B	Total/NA
Oil Range Organics (C18-C40)	31		24	3.4	mg/Kg	1		8015B	Total/NA
Arsenic	3.44	F1	0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	86.5	F1	0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.506		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.567		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	7.07		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	11.8		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	9.00		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	8.16		0.251	0.146	mg/Kg	1		6010B	Total/NA
Selenium	1.48	F1	0.754	0.302	mg/Kg	1		6010B	Total/NA
Vanadium	35.0		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	36.7		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	0.641		0.503	0.133	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB1-10

## Lab Sample ID: 570-4235-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.0		0.77	0.10	ug/Kg	1		8260B	Total/NA
Toluene	1.4		0.77	0.40	ug/Kg	1		8260B	Total/NA
Arsenic	3.43		0.735	0.254	mg/Kg	1		6010B	Total/NA
Barium	130		0.490	0.151	mg/Kg	1		6010B	Total/NA
Beryllium	0.714		0.245	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	0.726		0.490	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	9.27		0.245	0.145	mg/Kg	1		6010B	Total/NA
Chromium	16.3		0.245	0.139	mg/Kg	1		6010B	Total/NA
Copper	20.4		0.490	0.132	mg/Kg	1		6010B	Total/NA
Nickel	13.0		0.245	0.142	mg/Kg	1		6010B	Total/NA
Vanadium	34.8		0.245	0.138	mg/Kg	1		6010B	Total/NA
Zinc	44.2		0.980	0.175	mg/Kg	1		6010B	Total/NA
Lead	0.936		0.490	0.129	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB1-25

## Lab Sample ID: 570-4235-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.72		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	167		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.995		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	1.02		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	13.7		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	19.4		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	26.6		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	16.7		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	65.0		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	69.3		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	0.935		0.503	0.133	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB2-5

## Lab Sample ID: 570-4235-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		1.0	0.13	ug/Kg	1		8260B	Total/NA
Toluene	1.8		1.0	0.53	ug/Kg	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB2-5 (Continued)

## Lab Sample ID: 570-4235-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.81		0.725	0.250	mg/Kg	1		6010B	Total/NA
Barium	108		0.483	0.149	mg/Kg	1		6010B	Total/NA
Beryllium	0.591		0.242	0.132	mg/Kg	1		6010B	Total/NA
Cadmium	0.599		0.483	0.130	mg/Kg	1		6010B	Total/NA
Cobalt	7.88		0.242	0.143	mg/Kg	1		6010B	Total/NA
Chromium	12.6		0.242	0.137	mg/Kg	1		6010B	Total/NA
Copper	11.4		0.483	0.130	mg/Kg	1		6010B	Total/NA
Nickel	9.02		0.242	0.140	mg/Kg	1		6010B	Total/NA
Vanadium	37.7		0.242	0.136	mg/Kg	1		6010B	Total/NA
Zinc	40.2		0.966	0.172	mg/Kg	1		6010B	Total/NA
Lead	0.906		0.483	0.128	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB2-10

## Lab Sample ID: 570-4235-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.3		0.79	0.10	ug/Kg	1		8260B	Total/NA
Arsenic	1.81		0.761	0.263	mg/Kg	1		6010B	Total/NA
Barium	254		0.508	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.901		0.254	0.139	mg/Kg	1		6010B	Total/NA
Cadmium	0.688		0.508	0.137	mg/Kg	1		6010B	Total/NA
Cobalt	10.9		0.254	0.150	mg/Kg	1		6010B	Total/NA
Chromium	19.9		0.254	0.144	mg/Kg	1		6010B	Total/NA
Copper	26.2		0.508	0.137	mg/Kg	1		6010B	Total/NA
Nickel	15.7		0.254	0.147	mg/Kg	1		6010B	Total/NA
Vanadium	38.0		0.254	0.143	mg/Kg	1		6010B	Total/NA
Zinc	55.6		1.02	0.181	mg/Kg	1		6010B	Total/NA
Lead	1.78		0.508	0.134	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB2-25

## Lab Sample ID: 570-4235-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.66		0.773	0.267	mg/Kg	1		6010B	Total/NA
Barium	124		0.515	0.159	mg/Kg	1		6010B	Total/NA
Beryllium	0.680		0.258	0.141	mg/Kg	1		6010B	Total/NA
Cadmium	0.696		0.515	0.139	mg/Kg	1		6010B	Total/NA
Cobalt	9.12		0.258	0.153	mg/Kg	1		6010B	Total/NA
Chromium	12.0		0.258	0.146	mg/Kg	1		6010B	Total/NA
Copper	13.3		0.515	0.139	mg/Kg	1		6010B	Total/NA
Nickel	10.9		0.258	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	42.3		0.258	0.145	mg/Kg	1		6010B	Total/NA
Zinc	50.9		1.03	0.184	mg/Kg	1		6010B	Total/NA
Lead	0.538		0.515	0.136	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB3-1

## Lab Sample ID: 570-4235-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		0.73	0.095	ug/Kg	1		8260B	Total/NA
Tetrachloroethene	1.1		0.73	0.15	ug/Kg	1		8260B	Total/NA
Toluene	0.78		0.73	0.38	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	24		4.8	3.4	mg/Kg	1		8015B	Total/NA
Oil Range Organics (C18-C40)	87		24	3.4	mg/Kg	1		8015B	Total/NA
Arsenic	5.85		0.754	0.260	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB3-1 (Continued)

## Lab Sample ID: 570-4235-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	142		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.696		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	1.04		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	9.36		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	20.2		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	34.9		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	11.8		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	33.9		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	165		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	138		0.503	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.100		0.0820	0.00578	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB3-3

## Lab Sample ID: 570-4235-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.2		0.96	0.13	ug/Kg	1		8260B	Total/NA
Toluene	1.1		0.96	0.50	ug/Kg	1		8260B	Total/NA
Arsenic	6.58		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	142		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.821		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cadmium	0.904		0.493	0.133	mg/Kg	1		6010B	Total/NA
Cobalt	11.2		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	16.9		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	20.4		0.493	0.133	mg/Kg	1		6010B	Total/NA
Nickel	13.4		0.246	0.143	mg/Kg	1		6010B	Total/NA
Vanadium	44.1		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	58.0		0.985	0.175	mg/Kg	1		6010B	Total/NA
Lead	0.813		0.493	0.130	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB3-5

## Lab Sample ID: 570-4235-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.95	0.12	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	6.2		5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	3.25		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	96.2		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.550		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cadmium	0.528		0.493	0.133	mg/Kg	1		6010B	Total/NA
Cobalt	7.57		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	11.4		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	9.51		0.493	0.133	mg/Kg	1		6010B	Total/NA
Nickel	8.03		0.246	0.143	mg/Kg	1		6010B	Total/NA
Vanadium	32.6		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	37.7		0.985	0.175	mg/Kg	1		6010B	Total/NA
Lead	1.62		0.493	0.130	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB3-25

## Lab Sample ID: 570-4235-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.37		0.758	0.262	mg/Kg	1		6010B	Total/NA
Barium	150		0.505	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.888		0.253	0.138	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB3-25 (Continued)

## Lab Sample ID: 570-4235-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.798		0.505	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	12.1		0.253	0.149	mg/Kg	1		6010B	Total/NA
Chromium	16.2		0.253	0.143	mg/Kg	1		6010B	Total/NA
Copper	16.7		0.505	0.136	mg/Kg	1		6010B	Total/NA
Nickel	13.9		0.253	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	59.0		0.253	0.142	mg/Kg	1		6010B	Total/NA
Zinc	65.3		1.01	0.180	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB4-3

## Lab Sample ID: 570-4235-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.88		0.78	0.10	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	13		4.9	3.4	mg/Kg	1		8015B	Total/NA
Oil Range Organics (C18-C40)	50		24	3.4	mg/Kg	1		8015B	Total/NA
Arsenic	4.21		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	83.2		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.462		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	5.64		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	9.49		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	13.4		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	8.58		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	21.4		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	57.7		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	9.02		0.503	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.110		0.0833	0.00587	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB4-5

## Lab Sample ID: 570-4235-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	21		4.9	3.5	mg/Kg	1		8015B	Total/NA
Oil Range Organics (C18-C40)	80		25	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	4.74		0.750	0.259	mg/Kg	1		6010B	Total/NA
Barium	87.0		0.500	0.154	mg/Kg	1		6010B	Total/NA
Beryllium	0.464		0.250	0.137	mg/Kg	1		6010B	Total/NA
Cobalt	5.85		0.250	0.148	mg/Kg	1		6010B	Total/NA
Chromium	8.85		0.250	0.142	mg/Kg	1		6010B	Total/NA
Copper	13.9		0.500	0.135	mg/Kg	1		6010B	Total/NA
Nickel	7.55		0.250	0.145	mg/Kg	1		6010B	Total/NA
Vanadium	21.4		0.250	0.141	mg/Kg	1		6010B	Total/NA
Zinc	53.6		1.00	0.178	mg/Kg	1		6010B	Total/NA
Lead	9.44		0.500	0.132	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB4-25

## Lab Sample ID: 570-4235-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	7.7		4.8	3.4	mg/Kg	1		8015B	Total/NA
Barium	96.5		0.518	0.160	mg/Kg	1		6010B	Total/NA
Beryllium	0.580		0.259	0.142	mg/Kg	1		6010B	Total/NA
Cadmium	0.553		0.518	0.140	mg/Kg	1		6010B	Total/NA
Cobalt	6.70		0.259	0.153	mg/Kg	1		6010B	Total/NA
Chromium	10.3		0.259	0.147	mg/Kg	1		6010B	Total/NA
Copper	10.3		0.518	0.140	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB4-25 (Continued)

## Lab Sample ID: 570-4235-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	7.46		0.259	0.150	mg/Kg	1		6010B	Total/NA
Vanadium	32.7		0.259	0.146	mg/Kg	1		6010B	Total/NA
Zinc	35.8		1.04	0.184	mg/Kg	1		6010B	Total/NA
Lead	1.17		0.518	0.137	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB5-5

## Lab Sample ID: 570-4235-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.9		0.89	0.12	ug/Kg	1		8260B	Total/NA
Toluene	1.2		0.89	0.46	ug/Kg	1		8260B	Total/NA
Arsenic	6.45		0.750	0.259	mg/Kg	1		6010B	Total/NA
Barium	110		0.500	0.154	mg/Kg	1		6010B	Total/NA
Beryllium	0.700		0.250	0.137	mg/Kg	1		6010B	Total/NA
Cadmium	0.645		0.500	0.135	mg/Kg	1		6010B	Total/NA
Cobalt	7.70		0.250	0.148	mg/Kg	1		6010B	Total/NA
Chromium	14.4		0.250	0.142	mg/Kg	1		6010B	Total/NA
Copper	13.7		0.500	0.135	mg/Kg	1		6010B	Total/NA
Nickel	10.0		0.250	0.145	mg/Kg	1		6010B	Total/NA
Vanadium	41.9		0.250	0.141	mg/Kg	1		6010B	Total/NA
Zinc	44.0		1.00	0.178	mg/Kg	1		6010B	Total/NA
Lead	0.914		0.500	0.132	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB5-10

## Lab Sample ID: 570-4235-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.79	0.10	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	16		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	4.43		0.761	0.263	mg/Kg	1		6010B	Total/NA
Barium	245		0.508	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.992		0.254	0.139	mg/Kg	1		6010B	Total/NA
Cadmium	0.675		0.508	0.137	mg/Kg	1		6010B	Total/NA
Cobalt	13.0		0.254	0.150	mg/Kg	1		6010B	Total/NA
Chromium	20.9		0.254	0.144	mg/Kg	1		6010B	Total/NA
Copper	25.9		0.508	0.137	mg/Kg	1		6010B	Total/NA
Nickel	16.0		0.254	0.147	mg/Kg	1		6010B	Total/NA
Vanadium	43.0		0.254	0.143	mg/Kg	1		6010B	Total/NA
Zinc	58.3		1.02	0.181	mg/Kg	1		6010B	Total/NA
Lead	1.26		0.508	0.134	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB5-25

## Lab Sample ID: 570-4235-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	5.2		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	1.71		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	73.2		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.476		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	5.77		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	8.17		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	7.48		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	6.78		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	23.8		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	33.1		1.01	0.179	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB5-25 (Continued)

## Lab Sample ID: 570-4235-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.680		0.503	0.133	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB6-5

## Lab Sample ID: 570-4235-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.91	0.12	ug/Kg	1		8260B	Total/NA
Diesel Range Organics [C10-C28]	6.0		5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	1.65		0.746	0.258	mg/Kg	1		6010B	Total/NA
Barium	67.2		0.498	0.153	mg/Kg	1		6010B	Total/NA
Beryllium	0.604		0.249	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	7.42		0.249	0.147	mg/Kg	1		6010B	Total/NA
Chromium	12.8		0.249	0.141	mg/Kg	1		6010B	Total/NA
Copper	9.12		0.498	0.134	mg/Kg	1		6010B	Total/NA
Molybdenum	1.28		0.249	0.131	mg/Kg	1		6010B	Total/NA
Nickel	8.71		0.249	0.144	mg/Kg	1		6010B	Total/NA
Vanadium	36.0		0.249	0.140	mg/Kg	1		6010B	Total/NA
Zinc	41.0		0.995	0.177	mg/Kg	1		6010B	Total/NA
Lead	0.555		0.498	0.131	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB6-10

## Lab Sample ID: 570-4235-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	16		4.9	3.4	mg/Kg	1		8015B	Total/NA
Arsenic	6.65		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	104		0.513	0.158	mg/Kg	1		6010B	Total/NA
Beryllium	0.808		0.256	0.141	mg/Kg	1		6010B	Total/NA
Cadmium	0.525		0.513	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	9.41		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	14.3		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	9.50		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	11.7		0.256	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	40.0		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	35.5		1.03	0.183	mg/Kg	1		6010B	Total/NA
Lead	1.16		0.513	0.135	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB6-25

## Lab Sample ID: 570-4235-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	6.7		5.0	3.6	mg/Kg	1		8015B	Total/NA
Arsenic	1.45		0.732	0.253	mg/Kg	1		6010B	Total/NA
Barium	142		0.488	0.150	mg/Kg	1		6010B	Total/NA
Beryllium	0.669		0.244	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	0.536		0.488	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	7.78		0.244	0.144	mg/Kg	1		6010B	Total/NA
Chromium	12.1		0.244	0.139	mg/Kg	1		6010B	Total/NA
Copper	13.4		0.488	0.132	mg/Kg	1		6010B	Total/NA
Nickel	9.84		0.244	0.141	mg/Kg	1		6010B	Total/NA
Vanadium	35.1		0.244	0.138	mg/Kg	1		6010B	Total/NA
Zinc	48.0		0.976	0.174	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.96	0.23	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1,1-Trichloroethane	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.6	0.34	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1,2-Trichloroethane	ND		0.96	0.34	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1-Dichloroethane	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1-Dichloroethene	ND		0.96	0.33	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,1-Dichloropropene	ND		1.9	0.31	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2,3-Trichlorobenzene	ND		1.9	0.87	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2,3-Trichloropropane	ND		1.9	0.79	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2,4-Trichlorobenzene	ND		1.9	0.30	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2,4-Trimethylbenzene	ND		1.9	0.56	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.7	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2-Dibromoethane	ND		0.96	0.24	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2-Dichlorobenzene	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2-Dichloroethane	ND		0.96	0.30	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,2-Dichloropropane	ND		0.96	0.42	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,3,5-Trimethylbenzene	ND		1.9	0.52	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,3-Dichlorobenzene	ND		0.96	0.17	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,3-Dichloropropane	ND		0.96	0.24	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
1,4-Dichlorobenzene	ND		0.96	0.21	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
2,2-Dichloropropane	ND		4.8	0.32	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
2-Butanone	ND		19	3.6	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
2-Chlorotoluene	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
2-Hexanone	ND		19	1.7	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
4-Chlorotoluene	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
4-Methyl-2-pentanone	ND		19	4.1	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Acetone	ND		48	6.0	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Benzene	ND		0.96	0.12	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Bromobenzene	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Bromochloromethane	ND		1.9	0.66	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Bromodichloromethane	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Bromoform	ND		4.8	0.76	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Bromomethane	ND		19	9.0	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
cis-1,2-Dichloroethene	ND		0.96	0.27	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
cis-1,3-Dichloropropene	ND		0.96	0.24	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Carbon disulfide	ND		9.6	0.29	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Carbon tetrachloride	ND		0.96	0.27	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Chlorobenzene	ND		0.96	0.21	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Chloroform	ND		0.96	0.23	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Chloromethane	ND		19	0.29	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Dibromochloromethane	ND		1.9	0.54	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Dibromomethane	ND		0.96	0.74	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Dichlorodifluoromethane	ND		1.9	0.42	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Di-isopropyl ether (DIPE)	ND		0.96	0.46	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Ethanol	ND		480	80	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Ethylbenzene	ND		0.96	0.14	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Ethyl-t-butyl ether (ETBE)	ND		0.96	0.48	ug/Kg		08/12/19 13:50	08/12/19 14:56	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.96	0.52	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Methylene Chloride	ND		9.6	1.3	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Naphthalene	ND		9.6	0.78	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
n-Butylbenzene	ND		0.96	0.15	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
N-Propylbenzene	ND		1.9	0.48	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
o-Xylene	ND		0.96	0.53	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
m,p-Xylene	ND		1.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
p-Isopropyltoluene	ND		0.96	0.60	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
sec-Butylbenzene	ND		0.96	0.55	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Styrene	ND		0.96	0.58	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
trans-1,2-Dichloroethene	ND		0.96	0.48	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
trans-1,3-Dichloropropene	ND		1.9	0.58	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Tert-amyl-methyl ether (TAME)	ND		0.96	0.34	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
tert-Butyl alcohol (TBA)	ND		19	4.9	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
tert-Butylbenzene	ND		0.96	0.14	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Tetrachloroethene	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Toluene	ND		0.96	0.49	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Trichloroethene	ND		1.9	0.29	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Trichlorofluoromethane	ND		9.6	0.36	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Vinyl acetate	ND		9.6	4.5	ug/Kg		08/12/19 13:50	08/12/19 14:56	1
Vinyl chloride	ND		0.96	0.48	ug/Kg		08/12/19 13:50	08/12/19 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	119		71 - 155	08/12/19 13:50	08/12/19 14:56	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120	08/12/19 13:50	08/12/19 14:56	1
<i>Dibromofluoromethane (Surr)</i>	106		79 - 133	08/12/19 13:50	08/12/19 14:56	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120	08/12/19 13:50	08/12/19 14:56	1

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.77	0.19	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1,1-Trichloroethane	ND		0.77	0.17	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.7	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1,2-Trichloroethane	ND		0.77	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1-Dichloroethane	ND		0.77	0.16	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1-Dichloroethene	ND		0.77	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,1-Dichloropropene	ND		1.5	0.25	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2,3-Trichlorobenzene	ND		1.5	0.70	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2,3-Trichloropropane	ND		1.5	0.64	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2,4-Trichlorobenzene	ND		1.5	0.24	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2,4-Trimethylbenzene	ND		1.5	0.45	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2-Dibromo-3-Chloropropane	ND		7.7	1.3	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2-Dibromoethane	ND		0.77	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2-Dichlorobenzene	ND		0.77	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2-Dichloroethane	ND		0.77	0.24	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,2-Dichloropropane	ND		0.77	0.34	ug/Kg		08/12/19 13:50	08/12/19 15:24	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.5	0.42	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,3-Dichlorobenzene	ND		0.77	0.14	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,3-Dichloropropane	ND		0.77	0.19	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
1,4-Dichlorobenzene	ND		0.77	0.17	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
2,2-Dichloropropane	ND		3.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
2-Butanone	ND		15	2.9	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
2-Chlorotoluene	ND		0.77	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
2-Hexanone	ND		15	1.4	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
4-Chlorotoluene	ND		0.77	0.16	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
4-Methyl-2-pentanone	ND		15	3.3	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Acetone	ND		39	4.8	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
<b>Benzene</b>	<b>2.0</b>		0.77	0.10	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Bromobenzene	ND		0.77	0.16	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Bromochloromethane	ND		1.5	0.53	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Bromodichloromethane	ND		0.77	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Bromoform	ND		3.9	0.61	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Bromomethane	ND		15	7.3	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
cis-1,2-Dichloroethene	ND		0.77	0.22	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
cis-1,3-Dichloropropene	ND		0.77	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Carbon disulfide	ND		7.7	0.24	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Carbon tetrachloride	ND		0.77	0.22	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Chlorobenzene	ND		0.77	0.17	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Chloroethane	ND		1.5	1.2	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Chloroform	ND		0.77	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Chloromethane	ND		15	0.23	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Dibromochloromethane	ND		1.5	0.44	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Dibromomethane	ND		0.77	0.60	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Dichlorodifluoromethane	ND		1.5	0.34	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Di-isopropyl ether (DIPE)	ND		0.77	0.37	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Ethanol	ND		390	64	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Ethylbenzene	ND		0.77	0.12	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Ethyl-t-butyl ether (ETBE)	ND		0.77	0.39	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Isopropylbenzene	ND		0.77	0.42	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Methylene Chloride	ND		7.7	1.0	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.23	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Naphthalene	ND		7.7	0.63	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
n-Butylbenzene	ND		0.77	0.12	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
N-Propylbenzene	ND		1.5	0.39	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
o-Xylene	ND		0.77	0.43	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
m,p-Xylene	ND		1.5	0.21	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
p-Isopropyltoluene	ND		0.77	0.49	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
sec-Butylbenzene	ND		0.77	0.45	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Styrene	ND		0.77	0.47	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
trans-1,2-Dichloroethene	ND		0.77	0.39	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
trans-1,3-Dichloropropene	ND		1.5	0.47	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Tert-amyl-methyl ether (TAME)	ND		0.77	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
tert-Butyl alcohol (TBA)	ND		15	4.0	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
tert-Butylbenzene	ND		0.77	0.12	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Tetrachloroethene	ND		0.77	0.16	ug/Kg		08/12/19 13:50	08/12/19 15:24	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Toluene</b>	<b>1.4</b>		0.77	0.40	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Trichloroethene	ND		1.5	0.23	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Trichlorofluoromethane	ND		7.7	0.29	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Vinyl acetate	ND		7.7	3.7	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
Vinyl chloride	ND		0.77	0.39	ug/Kg		08/12/19 13:50	08/12/19 15:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,2-Dichloroethane-d4 (Surr)</i>	123		71 - 155				08/12/19 13:50	08/12/19 15:24	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120				08/12/19 13:50	08/12/19 15:24	1
<i>Dibromofluoromethane (Surr)</i>	109		79 - 133				08/12/19 13:50	08/12/19 15:24	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120				08/12/19 13:50	08/12/19 15:24	1

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.87	0.21	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1,1-Trichloroethane	ND		0.87	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.30	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.7	0.31	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1,2-Trichloroethane	ND		0.87	0.31	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1-Dichloroethane	ND		0.87	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1-Dichloroethene	ND		0.87	0.30	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,1-Dichloropropene	ND		1.7	0.29	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2,3-Trichlorobenzene	ND		1.7	0.79	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2,3-Trichloropropane	ND		1.7	0.72	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2,4-Trichlorobenzene	ND		1.7	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2,4-Trimethylbenzene	ND		1.7	0.51	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2-Dibromo-3-Chloropropane	ND		8.7	1.5	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2-Dibromoethane	ND		0.87	0.22	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2-Dichlorobenzene	ND		0.87	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2-Dichloroethane	ND		0.87	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,2-Dichloropropane	ND		0.87	0.38	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,3,5-Trimethylbenzene	ND		1.7	0.48	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,3-Dichlorobenzene	ND		0.87	0.15	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
1,4-Dichlorobenzene	ND		0.87	0.19	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
2,2-Dichloropropane	ND		4.3	0.29	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
2-Butanone	ND		17	3.3	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
2-Chlorotoluene	ND		0.87	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
2-Hexanone	ND		17	1.5	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
4-Chlorotoluene	ND		0.87	0.19	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
4-Methyl-2-pentanone	ND		17	3.8	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Acetone	ND		43	5.4	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Benzene	ND		0.87	0.11	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Bromobenzene	ND		0.87	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Bromochloromethane	ND		1.7	0.60	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Bromodichloromethane	ND		0.87	0.20	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Bromoform	ND		4.3	0.69	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Bromomethane	ND		17	8.2	ug/Kg		08/12/19 13:50	08/12/19 15:53	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.87	0.24	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
cis-1,3-Dichloropropene	ND		0.87	0.22	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Carbon disulfide	ND		8.7	0.27	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Carbon tetrachloride	ND		0.87	0.25	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Chlorobenzene	ND		0.87	0.19	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Chloroform	ND		0.87	0.21	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Chloromethane	ND		17	0.26	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Dibromochloromethane	ND		1.7	0.50	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Dibromomethane	ND		0.87	0.67	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Dichlorodifluoromethane	ND		1.7	0.39	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Di-isopropyl ether (DIPE)	ND		0.87	0.42	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Ethanol	ND		430	73	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Ethylbenzene	ND		0.87	0.13	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.87	0.44	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Isopropylbenzene	ND		0.87	0.48	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Methylene Chloride	ND		8.7	1.2	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.26	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Naphthalene	ND		8.7	0.71	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
n-Butylbenzene	ND		0.87	0.14	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
N-Propylbenzene	ND		1.7	0.44	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
o-Xylene	ND		0.87	0.48	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
m,p-Xylene	ND		1.7	0.23	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
p-Isopropyltoluene	ND		0.87	0.55	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
sec-Butylbenzene	ND		0.87	0.50	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Styrene	ND		0.87	0.53	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
trans-1,2-Dichloroethene	ND		0.87	0.44	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
trans-1,3-Dichloropropene	ND		1.7	0.53	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Tert-amyl-methyl ether (TAME)	ND		0.87	0.31	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
tert-Butyl alcohol (TBA)	ND		17	4.5	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
tert-Butylbenzene	ND		0.87	0.13	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Tetrachloroethene	ND		0.87	0.18	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Toluene	ND		0.87	0.45	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Trichloroethene	ND		1.7	0.26	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Trichlorofluoromethane	ND		8.7	0.33	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Vinyl acetate	ND		8.7	4.1	ug/Kg		08/12/19 13:50	08/12/19 15:53	1
Vinyl chloride	ND		0.87	0.44	ug/Kg		08/12/19 13:50	08/12/19 15:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	08/12/19 13:50	08/12/19 15:53	1
4-Bromofluorobenzene (Surr)	96		80 - 120	08/12/19 13:50	08/12/19 15:53	1
Dibromofluoromethane (Surr)	105		79 - 133	08/12/19 13:50	08/12/19 15:53	1
Toluene-d8 (Surr)	100		80 - 120	08/12/19 13:50	08/12/19 15:53	1

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg		08/12/19 13:50	08/12/19 16:21	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		2.1	0.36	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.36	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1,2-Trichloroethane	ND		1.0	0.36	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1-Dichloroethane	ND		1.0	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1-Dichloroethene	ND		1.0	0.36	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,1-Dichloropropene	ND		2.1	0.34	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2,3-Trichlorobenzene	ND		2.1	0.94	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2,3-Trichloropropane	ND		2.1	0.85	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2,4-Trichlorobenzene	ND		2.1	0.32	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2,4-Trimethylbenzene	ND		2.1	0.60	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2-Dichlorobenzene	ND		1.0	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2-Dichloroethane	ND		1.0	0.32	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,2-Dichloropropane	ND		1.0	0.45	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,3,5-Trimethylbenzene	ND		2.1	0.56	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,3-Dichloropropane	ND		1.0	0.26	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
1,4-Dichlorobenzene	ND		1.0	0.23	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
2,2-Dichloropropane	ND		5.1	0.34	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
2-Butanone	ND		21	3.9	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
2-Chlorotoluene	ND		1.0	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
2-Hexanone	ND		21	1.8	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
4-Chlorotoluene	ND		1.0	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
4-Methyl-2-pentanone	ND		21	4.4	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Acetone	ND		51	6.4	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
<b>Benzene</b>	<b>1.5</b>		1.0	0.13	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Bromobenzene	ND		1.0	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Bromochloromethane	ND		2.1	0.71	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Bromodichloromethane	ND		1.0	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Bromoform	ND		5.1	0.82	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Bromomethane	ND		21	9.7	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
cis-1,2-Dichloroethene	ND		1.0	0.29	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
cis-1,3-Dichloropropane	ND		1.0	0.26	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Carbon disulfide	ND		10	0.31	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Carbon tetrachloride	ND		1.0	0.29	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Chlorobenzene	ND		1.0	0.23	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Chloroethane	ND		2.1	1.5	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Chloroform	ND		1.0	0.25	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Chloromethane	ND		21	0.31	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Dibromochloromethane	ND		2.1	0.59	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Dibromomethane	ND		1.0	0.80	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Dichlorodifluoromethane	ND		2.1	0.46	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Di-isopropyl ether (DIPE)	ND		1.0	0.50	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Ethanol	ND		510	86	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Ethylbenzene	ND		1.0	0.16	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.52	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Isopropylbenzene	ND		1.0	0.56	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Methylene Chloride	ND		10	1.4	ug/Kg		08/12/19 13:50	08/12/19 16:21	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		2.1	0.30	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Naphthalene	ND		10	0.84	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
N-Propylbenzene	ND		2.1	0.52	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
o-Xylene	ND		1.0	0.57	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
m,p-Xylene	ND		2.1	0.28	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
p-Isopropyltoluene	ND		1.0	0.65	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
sec-Butylbenzene	ND		1.0	0.59	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Styrene	ND		1.0	0.62	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
trans-1,2-Dichloroethene	ND		1.0	0.52	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
trans-1,3-Dichloropropene	ND		2.1	0.62	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.36	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
tert-Butyl alcohol (TBA)	ND		21	5.3	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
tert-Butylbenzene	ND		1.0	0.16	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Tetrachloroethene	ND		1.0	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
<b>Toluene</b>	<b>1.8</b>		1.0	0.53	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Trichloroethene	ND		2.1	0.31	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Trichlorofluoromethane	ND		10	0.39	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Vinyl acetate	ND		10	4.9	ug/Kg		08/12/19 13:50	08/12/19 16:21	1
Vinyl chloride	ND		1.0	0.52	ug/Kg		08/12/19 13:50	08/12/19 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		71 - 155	08/12/19 13:50	08/12/19 16:21	1
4-Bromofluorobenzene (Surr)	97		80 - 120	08/12/19 13:50	08/12/19 16:21	1
Dibromofluoromethane (Surr)	105		79 - 133	08/12/19 13:50	08/12/19 16:21	1
Toluene-d8 (Surr)	100		80 - 120	08/12/19 13:50	08/12/19 16:21	1

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1,1-Trichloroethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1,2-Trichloroethane	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1-Dichloroethane	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1-Dichloroethene	ND		0.79	0.27	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,1-Dichloropropene	ND		1.6	0.26	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2,3-Trichlorobenzene	ND		1.6	0.72	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2,3-Trichloropropane	ND		1.6	0.66	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2,4-Trichlorobenzene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2-Dibromoethane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2-Dichloroethane	ND		0.79	0.25	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,2-Dichloropropane	ND		0.79	0.35	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,3-Dichlorobenzene	ND		0.79	0.14	ug/Kg		08/12/19 13:50	08/12/19 16:50	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
1,4-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
2,2-Dichloropropane	ND		3.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
2-Butanone	ND		16	3.0	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
2-Chlorotoluene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
2-Hexanone	ND		16	1.4	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
4-Chlorotoluene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Acetone	ND		39	4.9	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
<b>Benzene</b>	<b>1.3</b>		0.79	0.10	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Bromobenzene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Bromochloromethane	ND		1.6	0.55	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Bromodichloromethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Bromoform	ND		3.9	0.63	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Bromomethane	ND		16	7.4	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
cis-1,2-Dichloroethene	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
cis-1,3-Dichloropropene	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Carbon disulfide	ND		7.9	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Carbon tetrachloride	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Chlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Chloroform	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Chloromethane	ND		16	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Dibromochloromethane	ND		1.6	0.45	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Dibromomethane	ND		0.79	0.61	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Dichlorodifluoromethane	ND		1.6	0.35	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Di-isopropyl ether (DIPE)	ND		0.79	0.38	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Ethanol	ND		390	66	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Ethylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Ethyl-t-butyl ether (ETBE)	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Isopropylbenzene	ND		0.79	0.43	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Methylene Chloride	ND		7.9	1.1	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Naphthalene	ND		7.9	0.64	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
n-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
N-Propylbenzene	ND		1.6	0.40	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
o-Xylene	ND		0.79	0.44	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
p-Isopropyltoluene	ND		0.79	0.50	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
sec-Butylbenzene	ND		0.79	0.46	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Styrene	ND		0.79	0.48	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
trans-1,2-Dichloroethene	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
trans-1,3-Dichloropropene	ND		1.6	0.48	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Tert-amyl-methyl ether (TAME)	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
tert-Butyl alcohol (TBA)	ND		16	4.1	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
tert-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Tetrachloroethene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Toluene	ND		0.79	0.41	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Trichloroethene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 16:50	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		7.9	0.30	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Vinyl acetate	ND		7.9	3.7	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
Vinyl chloride	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 16:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,2-Dichloroethane-d4 (Surr)</i>	119		71 - 155				08/12/19 13:50	08/12/19 16:50	1
<i>4-Bromofluorobenzene (Surr)</i>	96		80 - 120				08/12/19 13:50	08/12/19 16:50	1
<i>Dibromofluoromethane (Surr)</i>	106		79 - 133				08/12/19 13:50	08/12/19 16:50	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120				08/12/19 13:50	08/12/19 16:50	1

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.23	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1,1-Trichloroethane	ND		0.94	0.21	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1,2-Trichloroethane	ND		0.94	0.33	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1-Dichloroethane	ND		0.94	0.20	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1-Dichloroethene	ND		0.94	0.33	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,1-Dichloropropene	ND		1.9	0.31	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2,3-Trichlorobenzene	ND		1.9	0.86	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2,3-Trichloropropane	ND		1.9	0.78	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2,4-Trichlorobenzene	ND		1.9	0.29	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2,4-Trimethylbenzene	ND		1.9	0.55	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2-Dibromoethane	ND		0.94	0.24	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2-Dichlorobenzene	ND		0.94	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2-Dichloroethane	ND		0.94	0.30	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,2-Dichloropropane	ND		0.94	0.41	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,3,5-Trimethylbenzene	ND		1.9	0.52	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,3-Dichlorobenzene	ND		0.94	0.17	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,3-Dichloropropane	ND		0.94	0.24	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
1,4-Dichlorobenzene	ND		0.94	0.21	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
2,2-Dichloropropane	ND		4.7	0.31	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
2-Butanone	ND		19	3.6	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
2-Chlorotoluene	ND		0.94	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
2-Hexanone	ND		19	1.7	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
4-Chlorotoluene	ND		0.94	0.20	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
4-Methyl-2-pentanone	ND		19	4.1	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Acetone	ND		47	5.9	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Benzene	ND		0.94	0.12	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Bromobenzene	ND		0.94	0.20	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Bromochloromethane	ND		1.9	0.65	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Bromodichloromethane	ND		0.94	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Bromoform	ND		4.7	0.75	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Bromomethane	ND		19	8.9	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
cis-1,2-Dichloroethene	ND		0.94	0.26	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
cis-1,3-Dichloropropene	ND		0.94	0.24	ug/Kg		08/12/19 13:50	08/12/19 17:18	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		9.4	0.29	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Carbon tetrachloride	ND		0.94	0.27	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Chlorobenzene	ND		0.94	0.21	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Chloroform	ND		0.94	0.23	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Chloromethane	ND		19	0.29	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Dibromochloromethane	ND		1.9	0.54	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Dibromomethane	ND		0.94	0.73	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Dichlorodifluoromethane	ND		1.9	0.42	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Ethanol	ND		470	79	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Ethylbenzene	ND		0.94	0.14	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.48	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Isopropylbenzene	ND		0.94	0.51	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Methylene Chloride	ND		9.4	1.3	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Naphthalene	ND		9.4	0.77	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
n-Butylbenzene	ND		0.94	0.15	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
N-Propylbenzene	ND		1.9	0.47	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
o-Xylene	ND		0.94	0.52	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
m,p-Xylene	ND		1.9	0.25	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
p-Isopropyltoluene	ND		0.94	0.59	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
sec-Butylbenzene	ND		0.94	0.54	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Styrene	ND		0.94	0.57	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
trans-1,2-Dichloroethene	ND		0.94	0.48	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
trans-1,3-Dichloropropene	ND		1.9	0.57	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
tert-Butyl alcohol (TBA)	ND		19	4.9	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
tert-Butylbenzene	ND		0.94	0.14	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Tetrachloroethene	ND		0.94	0.20	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Toluene	ND		0.94	0.49	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Trichloroethene	ND		1.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Trichlorofluoromethane	ND		9.4	0.35	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Vinyl acetate	ND		9.4	4.5	ug/Kg		08/12/19 13:50	08/12/19 17:18	1
Vinyl chloride	ND		0.94	0.47	ug/Kg		08/12/19 13:50	08/12/19 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	122		71 - 155	08/12/19 13:50	08/12/19 17:18	1
<i>4-Bromofluorobenzene (Surr)</i>	97		80 - 120	08/12/19 13:50	08/12/19 17:18	1
<i>Dibromofluoromethane (Surr)</i>	104		79 - 133	08/12/19 13:50	08/12/19 17:18	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120	08/12/19 13:50	08/12/19 17:18	1

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.73	0.18	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1,1-Trichloroethane	ND		0.73	0.16	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.25	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.3	0.26	ug/Kg		08/12/19 13:50	08/12/19 17:46	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.73	0.26	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1-Dichloroethane	ND		0.73	0.15	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1-Dichloroethene	ND		0.73	0.25	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,1-Dichloropropene	ND		1.5	0.24	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2,3-Trichlorobenzene	ND		1.5	0.67	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2,3-Trichloropropane	ND		1.5	0.61	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2,4-Trichlorobenzene	ND		1.5	0.23	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2,4-Trimethylbenzene	ND		1.5	0.43	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2-Dibromo-3-Chloropropane	ND		7.3	1.3	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2-Dibromoethane	ND		0.73	0.19	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2-Dichlorobenzene	ND		0.73	0.17	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2-Dichloroethane	ND		0.73	0.23	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,2-Dichloropropane	ND		0.73	0.32	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,3,5-Trimethylbenzene	ND		1.5	0.40	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,3-Dichlorobenzene	ND		0.73	0.13	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,3-Dichloropropane	ND		0.73	0.18	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
1,4-Dichlorobenzene	ND		0.73	0.16	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
2,2-Dichloropropane	ND		3.7	0.24	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
2-Butanone	ND		15	2.8	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
2-Chlorotoluene	ND		0.73	0.17	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
2-Hexanone	ND		15	1.3	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
4-Chlorotoluene	ND		0.73	0.16	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
4-Methyl-2-pentanone	ND		15	3.2	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Acetone	ND		37	4.6	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
<b>Benzene</b>	<b>1.7</b>		0.73	0.095	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Bromobenzene	ND		0.73	0.15	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Bromochloromethane	ND		1.5	0.51	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Bromodichloromethane	ND		0.73	0.17	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Bromoform	ND		3.7	0.58	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Bromomethane	ND		15	6.9	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
cis-1,2-Dichloroethene	ND		0.73	0.20	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
cis-1,3-Dichloropropane	ND		0.73	0.19	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Carbon disulfide	ND		7.3	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Carbon tetrachloride	ND		0.73	0.21	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Chlorobenzene	ND		0.73	0.16	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Chloroethane	ND		1.5	1.1	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Chloroform	ND		0.73	0.17	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Chloromethane	ND		15	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Dibromochloromethane	ND		1.5	0.42	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Dibromomethane	ND		0.73	0.57	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Dichlorodifluoromethane	ND		1.5	0.32	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Di-isopropyl ether (DIPE)	ND		0.73	0.35	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Ethanol	ND		370	61	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Ethylbenzene	ND		0.73	0.11	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Ethyl-t-butyl ether (ETBE)	ND		0.73	0.37	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Isopropylbenzene	ND		0.73	0.40	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Methylene Chloride	ND		7.3	0.98	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22	ug/Kg		08/12/19 13:50	08/12/19 17:46	1
Naphthalene	ND		7.3	0.60	ug/Kg		08/12/19 13:50	08/12/19 17:46	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.73	0.11	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
N-Propylbenzene	ND		1.5	0.37	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
o-Xylene	ND		0.73	0.41	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
m,p-Xylene	ND		1.5	0.20	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
p-Isopropyltoluene	ND		0.73	0.46	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
sec-Butylbenzene	ND		0.73	0.42	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Styrene	ND		0.73	0.44	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
trans-1,2-Dichloroethene	ND		0.73	0.37	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
trans-1,3-Dichloropropene	ND		1.5	0.44	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Tert-amyl-methyl ether (TAME)	ND		0.73	0.26	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
tert-Butyl alcohol (TBA)	ND		15	3.8	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
tert-Butylbenzene	ND		0.73	0.11	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
<b>Tetrachloroethene</b>	<b>1.1</b>		0.73	0.15	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
<b>Toluene</b>	<b>0.78</b>		0.73	0.38	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Trichloroethene	ND		1.5	0.22	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Trichlorofluoromethane	ND		7.3	0.27	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Vinyl acetate	ND		7.3	3.5	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1
Vinyl chloride	ND		0.73	0.37	ug/Kg	-	08/12/19 13:50	08/12/19 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	123		71 - 155	08/12/19 13:50	08/12/19 17:46	1
<i>4-Bromofluorobenzene (Surr)</i>	97		80 - 120	08/12/19 13:50	08/12/19 17:46	1
<i>Dibromofluoromethane (Surr)</i>	109		79 - 133	08/12/19 13:50	08/12/19 17:46	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120	08/12/19 13:50	08/12/19 17:46	1

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.96	0.23	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1,1-Trichloroethane	ND		0.96	0.22	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.6	0.34	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1,2-Trichloroethane	ND		0.96	0.34	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1-Dichloroethane	ND		0.96	0.20	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1-Dichloroethene	ND		0.96	0.33	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,1-Dichloropropene	ND		1.9	0.32	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2,3-Trichlorobenzene	ND		1.9	0.88	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2,3-Trichloropropane	ND		1.9	0.80	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2,4-Trichlorobenzene	ND		1.9	0.30	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2,4-Trimethylbenzene	ND		1.9	0.57	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.7	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2-Dibromoethane	ND		0.96	0.25	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2-Dichlorobenzene	ND		0.96	0.22	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2-Dichloroethane	ND		0.96	0.30	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,2-Dichloropropane	ND		0.96	0.42	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,3,5-Trimethylbenzene	ND		1.9	0.53	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,3-Dichlorobenzene	ND		0.96	0.17	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,3-Dichloropropane	ND		0.96	0.24	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1
1,4-Dichlorobenzene	ND		0.96	0.21	ug/Kg	-	08/12/19 13:50	08/12/19 18:15	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		4.8	0.32	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
2-Butanone	ND		19	3.6	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
2-Chlorotoluene	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
2-Hexanone	ND		19	1.7	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
4-Chlorotoluene	ND		0.96	0.21	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
4-Methyl-2-pentanone	ND		19	4.2	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Acetone	ND		48	6.0	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
<b>Benzene</b>	<b>2.2</b>		0.96	0.13	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Bromobenzene	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Bromochloromethane	ND		1.9	0.67	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Bromodichloromethane	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Bromoform	ND		4.8	0.77	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Bromomethane	ND		19	9.1	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
cis-1,2-Dichloroethene	ND		0.96	0.27	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
cis-1,3-Dichloropropene	ND		0.96	0.25	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Carbon disulfide	ND		9.6	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Carbon tetrachloride	ND		0.96	0.27	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Chlorobenzene	ND		0.96	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Chloroform	ND		0.96	0.23	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Chloromethane	ND		19	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Dibromochloromethane	ND		1.9	0.55	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Dibromomethane	ND		0.96	0.75	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Dichlorodifluoromethane	ND		1.9	0.43	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Di-isopropyl ether (DIPE)	ND		0.96	0.47	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Ethanol	ND		480	81	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Ethylbenzene	ND		0.96	0.15	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Ethyl-t-butyl ether (ETBE)	ND		0.96	0.49	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Isopropylbenzene	ND		0.96	0.53	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Methylene Chloride	ND		9.6	1.3	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Naphthalene	ND		9.6	0.78	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
n-Butylbenzene	ND		0.96	0.15	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
N-Propylbenzene	ND		1.9	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
o-Xylene	ND		0.96	0.54	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
m,p-Xylene	ND		1.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
p-Isopropyltoluene	ND		0.96	0.61	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
sec-Butylbenzene	ND		0.96	0.56	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Styrene	ND		0.96	0.58	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
trans-1,2-Dichloroethene	ND		0.96	0.49	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
trans-1,3-Dichloropropene	ND		1.9	0.58	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Tert-amyl-methyl ether (TAME)	ND		0.96	0.34	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
tert-Butyl alcohol (TBA)	ND		19	5.0	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
tert-Butylbenzene	ND		0.96	0.15	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Tetrachloroethene	ND		0.96	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
<b>Toluene</b>	<b>1.1</b>		0.96	0.50	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Trichloroethene	ND		1.9	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Trichlorofluoromethane	ND		9.6	0.36	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Vinyl acetate	ND		9.6	4.6	ug/Kg		08/12/19 13:50	08/12/19 18:15	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.96	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		71 - 155				08/12/19 13:50	08/12/19 18:15	1
4-Bromofluorobenzene (Surr)	97		80 - 120				08/12/19 13:50	08/12/19 18:15	1
Dibromofluoromethane (Surr)	108		79 - 133				08/12/19 13:50	08/12/19 18:15	1
Toluene-d8 (Surr)	100		80 - 120				08/12/19 13:50	08/12/19 18:15	1

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.95	0.23	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1,1-Trichloroethane	ND		0.95	0.21	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.5	0.33	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1,2-Trichloroethane	ND		0.95	0.34	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1-Dichloroethane	ND		0.95	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1-Dichloroethene	ND		0.95	0.33	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,1-Dichloropropene	ND		1.9	0.31	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2,3-Trichlorobenzene	ND		1.9	0.87	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2,3-Trichloropropane	ND		1.9	0.79	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2,4-Trichlorobenzene	ND		1.9	0.30	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2,4-Trimethylbenzene	ND		1.9	0.56	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.7	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2-Dibromoethane	ND		0.95	0.24	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2-Dichlorobenzene	ND		0.95	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2-Dichloroethane	ND		0.95	0.30	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,2-Dichloropropane	ND		0.95	0.42	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,3,5-Trimethylbenzene	ND		1.9	0.52	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,3-Dichlorobenzene	ND		0.95	0.17	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,3-Dichloropropane	ND		0.95	0.24	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
1,4-Dichlorobenzene	ND		0.95	0.21	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
2,2-Dichloropropane	ND		4.8	0.31	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
2-Butanone	ND		19	3.6	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
2-Chlorotoluene	ND		0.95	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
2-Hexanone	ND		19	1.7	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
4-Chlorotoluene	ND		0.95	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
4-Methyl-2-pentanone	ND		19	4.1	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Acetone	ND		48	5.9	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
<b>Benzene</b>	<b>1.1</b>		0.95	0.12	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Bromobenzene	ND		0.95	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Bromochloromethane	ND		1.9	0.66	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Bromodichloromethane	ND		0.95	0.22	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Bromoform	ND		4.8	0.76	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Bromomethane	ND		19	9.0	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
cis-1,2-Dichloroethene	ND		0.95	0.27	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
cis-1,3-Dichloropropene	ND		0.95	0.24	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Carbon disulfide	ND		9.5	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Carbon tetrachloride	ND		0.95	0.27	ug/Kg		08/12/19 13:50	08/12/19 18:43	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.95	0.21	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Chloroethane	ND		1.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Chloroform	ND		0.95	0.23	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Chloromethane	ND		19	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Dibromochloromethane	ND		1.9	0.54	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Dibromomethane	ND		0.95	0.74	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Dichlorodifluoromethane	ND		1.9	0.42	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Di-isopropyl ether (DIPE)	ND		0.95	0.46	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Ethanol	ND		480	79	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Ethylbenzene	ND		0.95	0.14	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Ethyl-t-butyl ether (ETBE)	ND		0.95	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Isopropylbenzene	ND		0.95	0.52	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Methylene Chloride	ND		9.5	1.3	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Naphthalene	ND		9.5	0.77	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
n-Butylbenzene	ND		0.95	0.15	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
N-Propylbenzene	ND		1.9	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
o-Xylene	ND		0.95	0.53	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
m,p-Xylene	ND		1.9	0.25	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
p-Isopropyltoluene	ND		0.95	0.60	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
sec-Butylbenzene	ND		0.95	0.55	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Styrene	ND		0.95	0.57	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
trans-1,2-Dichloroethene	ND		0.95	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
trans-1,3-Dichloropropene	ND		1.9	0.58	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Tert-amyl-methyl ether (TAME)	ND		0.95	0.34	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
tert-Butyl alcohol (TBA)	ND		19	4.9	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
tert-Butylbenzene	ND		0.95	0.14	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Tetrachloroethene	ND		0.95	0.20	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Toluene	ND		0.95	0.49	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Trichloroethene	ND		1.9	0.29	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Trichlorofluoromethane	ND		9.5	0.36	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Vinyl acetate	ND		9.5	4.5	ug/Kg		08/12/19 13:50	08/12/19 18:43	1
Vinyl chloride	ND		0.95	0.48	ug/Kg		08/12/19 13:50	08/12/19 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	122		71 - 155	08/12/19 13:50	08/12/19 18:43	1
4-Bromofluorobenzene (Surr)	95		80 - 120	08/12/19 13:50	08/12/19 18:43	1
Dibromofluoromethane (Surr)	106		79 - 133	08/12/19 13:50	08/12/19 18:43	1
Toluene-d8 (Surr)	102		80 - 120	08/12/19 13:50	08/12/19 18:43	1

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1,1-Trichloroethane	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	0.31	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1,2-Trichloroethane	ND		0.89	0.31	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1-Dichloroethane	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:11	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.89	0.31	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,1-Dichloropropene	ND		1.8	0.29	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2,3-Trichlorobenzene	ND		1.8	0.81	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2,3-Trichloropropane	ND		1.8	0.74	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2,4-Trichlorobenzene	ND		1.8	0.28	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2,4-Trimethylbenzene	ND		1.8	0.52	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.5	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2-Dibromoethane	ND		0.89	0.23	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2-Dichloroethane	ND		0.89	0.28	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,2-Dichloropropane	ND		0.89	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,3,5-Trimethylbenzene	ND		1.8	0.49	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,3-Dichlorobenzene	ND		0.89	0.16	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,3-Dichloropropane	ND		0.89	0.22	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
1,4-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
2-Butanone	ND		18	3.3	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
2-Chlorotoluene	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
2-Hexanone	ND		18	1.6	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
4-Chlorotoluene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
4-Methyl-2-pentanone	ND		18	3.8	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Acetone	ND		44	5.5	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Benzene	ND		0.89	0.12	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Bromobenzene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Bromochloromethane	ND		1.8	0.61	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Bromodichloromethane	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Bromoform	ND		4.4	0.70	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Bromomethane	ND		18	8.4	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
cis-1,2-Dichloroethene	ND		0.89	0.25	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
cis-1,3-Dichloropropane	ND		0.89	0.23	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Carbon disulfide	ND		8.9	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Carbon tetrachloride	ND		0.89	0.25	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Chlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Chloroethane	ND		1.8	1.3	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Chloroform	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Chloromethane	ND		18	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Dibromochloromethane	ND		1.8	0.51	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Dibromomethane	ND		0.89	0.69	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Dichlorodifluoromethane	ND		1.8	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Di-isopropyl ether (DIPE)	ND		0.89	0.43	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Ethanol	ND		440	74	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Ethylbenzene	ND		0.89	0.13	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Isopropylbenzene	ND		0.89	0.48	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Methylene Chloride	ND		8.9	1.2	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Naphthalene	ND		8.9	0.72	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
n-Butylbenzene	ND		0.89	0.14	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
N-Propylbenzene	ND		1.8	0.45	ug/Kg		08/12/19 13:50	08/12/19 19:11	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.89	0.49	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
m,p-Xylene	ND		1.8	0.24	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
p-Isopropyltoluene	ND		0.89	0.56	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
sec-Butylbenzene	ND		0.89	0.51	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Styrene	ND		0.89	0.54	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
trans-1,2-Dichloroethene	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
trans-1,3-Dichloropropene	ND		1.8	0.54	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Tert-amyl-methyl ether (TAME)	ND		0.89	0.31	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
tert-Butyl alcohol (TBA)	ND		18	4.6	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
tert-Butylbenzene	ND		0.89	0.13	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Tetrachloroethene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Toluene	ND		0.89	0.46	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Trichloroethene	ND		1.8	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Trichlorofluoromethane	ND		8.9	0.33	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Vinyl acetate	ND		8.9	4.2	ug/Kg		08/12/19 13:50	08/12/19 19:11	1
Vinyl chloride	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		71 - 155	08/12/19 13:50	08/12/19 19:11	1
4-Bromofluorobenzene (Surr)	95		80 - 120	08/12/19 13:50	08/12/19 19:11	1
Dibromofluoromethane (Surr)	99		79 - 133	08/12/19 13:50	08/12/19 19:11	1
Toluene-d8 (Surr)	99		80 - 120	08/12/19 13:50	08/12/19 19:11	1

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1,1-Trichloroethane	ND		0.78	0.17	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1,2-Trichloroethane	ND		0.78	0.28	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1-Dichloroethane	ND		0.78	0.16	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1-Dichloroethene	ND		0.78	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,1-Dichloropropene	ND		1.6	0.26	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2,3-Trichlorobenzene	ND		1.6	0.71	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2,3-Trichloropropane	ND		1.6	0.65	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2,4-Trichlorobenzene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.4	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2-Dibromoethane	ND		0.78	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2-Dichlorobenzene	ND		0.78	0.18	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2-Dichloroethane	ND		0.78	0.24	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,2-Dichloropropane	ND		0.78	0.34	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,3-Dichlorobenzene	ND		0.78	0.14	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,3-Dichloropropane	ND		0.78	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
1,4-Dichlorobenzene	ND		0.78	0.17	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
2,2-Dichloropropane	ND		3.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
2-Butanone	ND		16	2.9	ug/Kg		08/12/19 13:50	08/12/19 19:40	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.78	0.18	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
2-Hexanone	ND		16	1.4	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
4-Chlorotoluene	ND		0.78	0.17	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Acetone	ND		39	4.8	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
<b>Benzene</b>	<b>0.88</b>		0.78	0.10	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Bromobenzene	ND		0.78	0.16	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Bromochloromethane	ND		1.6	0.54	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Bromodichloromethane	ND		0.78	0.18	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Bromoform	ND		3.9	0.62	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Bromomethane	ND		16	7.3	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
cis-1,2-Dichloroethene	ND		0.78	0.22	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
cis-1,3-Dichloropropene	ND		0.78	0.20	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Carbon disulfide	ND		7.8	0.24	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Carbon tetrachloride	ND		0.78	0.22	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Chlorobenzene	ND		0.78	0.17	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Chloroform	ND		0.78	0.19	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Chloromethane	ND		16	0.24	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Dibromochloromethane	ND		1.6	0.44	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Dibromomethane	ND		0.78	0.60	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Dichlorodifluoromethane	ND		1.6	0.34	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Di-isopropyl ether (DIPE)	ND		0.78	0.37	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Ethanol	ND		390	65	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Ethylbenzene	ND		0.78	0.12	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Ethyl-t-butyl ether (ETBE)	ND		0.78	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Isopropylbenzene	ND		0.78	0.42	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Methylene Chloride	ND		7.8	1.0	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Naphthalene	ND		7.8	0.63	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
n-Butylbenzene	ND		0.78	0.12	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
N-Propylbenzene	ND		1.6	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
o-Xylene	ND		0.78	0.43	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
p-Isopropyltoluene	ND		0.78	0.49	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
sec-Butylbenzene	ND		0.78	0.45	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Styrene	ND		0.78	0.47	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
trans-1,2-Dichloroethene	ND		0.78	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
trans-1,3-Dichloropropene	ND		1.6	0.47	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Tert-amyl-methyl ether (TAME)	ND		0.78	0.27	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
tert-Butyl alcohol (TBA)	ND		16	4.0	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
tert-Butylbenzene	ND		0.78	0.12	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Tetrachloroethene	ND		0.78	0.16	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Toluene	ND		0.78	0.40	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Trichloroethene	ND		1.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Trichlorofluoromethane	ND		7.8	0.29	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Vinyl acetate	ND		7.8	3.7	ug/Kg		08/12/19 13:50	08/12/19 19:40	1
Vinyl chloride	ND		0.78	0.39	ug/Kg		08/12/19 13:50	08/12/19 19:40	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		71 - 155	08/12/19 13:50	08/12/19 19:40	1
4-Bromofluorobenzene (Surr)	97		80 - 120	08/12/19 13:50	08/12/19 19:40	1
Dibromofluoromethane (Surr)	105		79 - 133	08/12/19 13:50	08/12/19 19:40	1
Toluene-d8 (Surr)	101		80 - 120	08/12/19 13:50	08/12/19 19:40	1

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1,1-Trichloroethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1,2-Trichloroethane	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1-Dichloroethane	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1-Dichloroethene	ND		0.79	0.27	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,1-Dichloropropene	ND		1.6	0.26	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2,3-Trichlorobenzene	ND		1.6	0.72	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2,3-Trichloropropane	ND		1.6	0.65	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2,4-Trichlorobenzene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2-Dibromoethane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2-Dichloroethane	ND		0.79	0.25	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,2-Dichloropropane	ND		0.79	0.35	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,3-Dichlorobenzene	ND		0.79	0.14	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,3-Dichloropropane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
1,4-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
2,2-Dichloropropane	ND		3.9	0.26	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
2-Butanone	ND		16	3.0	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
2-Chlorotoluene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
2-Hexanone	ND		16	1.4	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
4-Chlorotoluene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Acetone	ND		39	4.9	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Benzene	ND		0.79	0.10	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Bromobenzene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Bromochloromethane	ND		1.6	0.54	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Bromodichloromethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Bromoform	ND		3.9	0.63	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Bromomethane	ND		16	7.4	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
cis-1,2-Dichloroethene	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
cis-1,3-Dichloropropene	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Carbon disulfide	ND		7.9	0.24	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Carbon tetrachloride	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Chlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Chloroform	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Chloromethane	ND		16	0.24	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Dibromochloromethane	ND		1.6	0.45	ug/Kg		08/12/19 13:50	08/12/19 20:08	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.79	0.61	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Dichlorodifluoromethane	ND		1.6	0.35	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Di-isopropyl ether (DIPE)	ND		0.79	0.38	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Ethanol	ND		390	66	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Ethylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Ethyl-t-butyl ether (ETBE)	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Isopropylbenzene	ND		0.79	0.43	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Methylene Chloride	ND		7.9	1.1	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Naphthalene	ND		7.9	0.64	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
n-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
N-Propylbenzene	ND		1.6	0.40	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
o-Xylene	ND		0.79	0.44	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
p-Isopropyltoluene	ND		0.79	0.50	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
sec-Butylbenzene	ND		0.79	0.46	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Styrene	ND		0.79	0.48	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
trans-1,2-Dichloroethene	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
trans-1,3-Dichloropropene	ND		1.6	0.48	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Tert-amyl-methyl ether (TAME)	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
tert-Butyl alcohol (TBA)	ND		16	4.1	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
tert-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Tetrachloroethene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Toluene	ND		0.79	0.41	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Trichloroethene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Trichlorofluoromethane	ND		7.9	0.30	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Vinyl acetate	ND		7.9	3.7	ug/Kg		08/12/19 13:50	08/12/19 20:08	1
Vinyl chloride	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	08/12/19 13:50	08/12/19 20:08	1
4-Bromofluorobenzene (Surr)	96		80 - 120	08/12/19 13:50	08/12/19 20:08	1
Dibromofluoromethane (Surr)	104		79 - 133	08/12/19 13:50	08/12/19 20:08	1
Toluene-d8 (Surr)	101		80 - 120	08/12/19 13:50	08/12/19 20:08	1

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1,1-Trichloroethane	ND		0.83	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1,2-Trichloroethane	ND		0.83	0.29	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1-Dichloroethane	ND		0.83	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1-Dichloroethene	ND		0.83	0.29	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,1-Dichloropropene	ND		1.7	0.27	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2,3-Trichlorobenzene	ND		1.7	0.75	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2,3-Trichloropropane	ND		1.7	0.69	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2,4-Trichlorobenzene	ND		1.7	0.26	ug/Kg		08/12/19 13:50	08/12/19 20:37	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.7	0.48	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2-Dibromoethane	ND		0.83	0.21	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2-Dichlorobenzene	ND		0.83	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2-Dichloroethane	ND		0.83	0.26	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,2-Dichloropropane	ND		0.83	0.36	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,3,5-Trimethylbenzene	ND		1.7	0.45	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,3-Dichlorobenzene	ND		0.83	0.15	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,3-Dichloropropane	ND		0.83	0.21	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
1,4-Dichlorobenzene	ND		0.83	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
2,2-Dichloropropane	ND		4.1	0.27	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
2-Butanone	ND		17	3.1	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
2-Chlorotoluene	ND		0.83	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
2-Hexanone	ND		17	1.5	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
4-Chlorotoluene	ND		0.83	0.18	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
4-Methyl-2-pentanone	ND		17	3.6	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Acetone	ND		41	5.2	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Benzene	ND		0.83	0.11	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Bromobenzene	ND		0.83	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Bromochloromethane	ND		1.7	0.57	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Bromodichloromethane	ND		0.83	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Bromoform	ND		4.1	0.66	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Bromomethane	ND		17	7.8	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
cis-1,2-Dichloroethene	ND		0.83	0.23	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
cis-1,3-Dichloropropene	ND		0.83	0.21	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Carbon disulfide	ND		8.3	0.25	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Carbon tetrachloride	ND		0.83	0.23	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Chlorobenzene	ND		0.83	0.19	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Chloroethane	ND		1.7	1.2	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Chloroform	ND		0.83	0.20	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Chloromethane	ND		17	0.25	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Dibromochloromethane	ND		1.7	0.47	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Dibromomethane	ND		0.83	0.64	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Dichlorodifluoromethane	ND		1.7	0.37	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Ethanol	ND		410	69	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Ethylbenzene	ND		0.83	0.13	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Isopropylbenzene	ND		0.83	0.45	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Methylene Chloride	ND		8.3	1.1	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Naphthalene	ND		8.3	0.67	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
n-Butylbenzene	ND		0.83	0.13	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
N-Propylbenzene	ND		1.7	0.41	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
o-Xylene	ND		0.83	0.46	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
m,p-Xylene	ND		1.7	0.22	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
p-Isopropyltoluene	ND		0.83	0.52	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
sec-Butylbenzene	ND		0.83	0.48	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Styrene	ND		0.83	0.50	ug/Kg		08/12/19 13:50	08/12/19 20:37	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.83	0.42	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
trans-1,3-Dichloropropene	ND		1.7	0.50	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
tert-Butyl alcohol (TBA)	ND		17	4.3	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
tert-Butylbenzene	ND		0.83	0.12	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Tetrachloroethene	ND		0.83	0.17	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Toluene	ND		0.83	0.43	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Trichloroethene	ND		1.7	0.25	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Trichlorofluoromethane	ND		8.3	0.31	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Vinyl acetate	ND		8.3	3.9	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Vinyl chloride	ND		0.83	0.42	ug/Kg		08/12/19 13:50	08/12/19 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		71 - 155				08/12/19 13:50	08/12/19 20:37	1
4-Bromofluorobenzene (Surr)	97		80 - 120				08/12/19 13:50	08/12/19 20:37	1
Dibromofluoromethane (Surr)	105		79 - 133				08/12/19 13:50	08/12/19 20:37	1
Toluene-d8 (Surr)	100		80 - 120				08/12/19 13:50	08/12/19 20:37	1

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1,1-Trichloroethane	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1,2-Trichloroethane	ND		0.89	0.32	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1-Dichloroethane	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1-Dichloroethene	ND		0.89	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,1-Dichloropropene	ND		1.8	0.29	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2,3-Trichlorobenzene	ND		1.8	0.82	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2,3-Trichloropropane	ND		1.8	0.74	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2,4-Trichlorobenzene	ND		1.8	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2,4-Trimethylbenzene	ND		1.8	0.52	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.6	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2-Dibromoethane	ND		0.89	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2-Dichloroethane	ND		0.89	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,2-Dichloropropane	ND		0.89	0.39	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,3,5-Trimethylbenzene	ND		1.8	0.49	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,3-Dichlorobenzene	ND		0.89	0.16	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,3-Dichloropropane	ND		0.89	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
1,4-Dichlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
2,2-Dichloropropane	ND		4.5	0.30	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
2-Butanone	ND		18	3.4	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
2-Chlorotoluene	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
2-Hexanone	ND		18	1.6	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
4-Chlorotoluene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
4-Methyl-2-pentanone	ND		18	3.9	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Acetone	ND		45	5.6	ug/Kg		08/12/19 13:50	08/12/19 21:05	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>1.9</b>		0.89	0.12	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Bromobenzene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Bromochloromethane	ND		1.8	0.62	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Bromodichloromethane	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Bromoform	ND		4.5	0.71	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Bromomethane	ND		18	8.4	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
cis-1,2-Dichloroethene	ND		0.89	0.25	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
cis-1,3-Dichloropropene	ND		0.89	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Carbon disulfide	ND		8.9	0.27	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Carbon tetrachloride	ND		0.89	0.25	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Chlorobenzene	ND		0.89	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Chloroethane	ND		1.8	1.3	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Chloroform	ND		0.89	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Chloromethane	ND		18	0.27	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Dibromochloromethane	ND		1.8	0.51	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Dibromomethane	ND		0.89	0.69	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Dichlorodifluoromethane	ND		1.8	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Di-isopropyl ether (DIPE)	ND		0.89	0.43	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Ethanol	ND		450	75	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Ethylbenzene	ND		0.89	0.14	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Ethyl-t-butyl ether (ETBE)	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Isopropylbenzene	ND		0.89	0.49	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Methylene Chloride	ND		8.9	1.2	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Naphthalene	ND		8.9	0.73	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
n-Butylbenzene	ND		0.89	0.14	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
N-Propylbenzene	ND		1.8	0.45	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
o-Xylene	ND		0.89	0.50	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
m,p-Xylene	ND		1.8	0.24	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
p-Isopropyltoluene	ND		0.89	0.56	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
sec-Butylbenzene	ND		0.89	0.52	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Styrene	ND		0.89	0.54	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
trans-1,2-Dichloroethene	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
trans-1,3-Dichloropropene	ND		1.8	0.54	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Tert-amyl-methyl ether (TAME)	ND		0.89	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
tert-Butyl alcohol (TBA)	ND		18	4.6	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
tert-Butylbenzene	ND		0.89	0.13	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Tetrachloroethene	ND		0.89	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
<b>Toluene</b>	<b>1.2</b>		0.89	0.46	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Trichloroethene	ND		1.8	0.27	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Trichlorofluoromethane	ND		8.9	0.33	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Vinyl acetate	ND		8.9	4.2	ug/Kg		08/12/19 13:50	08/12/19 21:05	1
Vinyl chloride	ND		0.89	0.45	ug/Kg		08/12/19 13:50	08/12/19 21:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	120		71 - 155	08/12/19 13:50	08/12/19 21:05	1
<i>4-Bromofluorobenzene (Surr)</i>	96		80 - 120	08/12/19 13:50	08/12/19 21:05	1
<i>Dibromofluoromethane (Surr)</i>	105		79 - 133	08/12/19 13:50	08/12/19 21:05	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120	08/12/19 13:50	08/12/19 21:05	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1,1-Trichloroethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1,2-Trichloroethane	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1-Dichloroethane	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1-Dichloroethene	ND		0.79	0.27	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,1-Dichloropropene	ND		1.6	0.26	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2,3-Trichlorobenzene	ND		1.6	0.72	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2,3-Trichloropropane	ND		1.6	0.66	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2,4-Trichlorobenzene	ND		1.6	0.25	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.4	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2-Dibromoethane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2-Dichloroethane	ND		0.79	0.25	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,2-Dichloropropane	ND		0.79	0.35	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,3-Dichlorobenzene	ND		0.79	0.14	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,3-Dichloropropane	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
1,4-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
2,2-Dichloropropane	ND		4.0	0.26	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
2-Butanone	ND		16	3.0	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
2-Chlorotoluene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
2-Hexanone	ND		16	1.4	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
4-Chlorotoluene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Acetone	ND		40	4.9	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
<b>Benzene</b>	<b>1.5</b>		0.79	0.10	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Bromobenzene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Bromochloromethane	ND		1.6	0.55	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Bromodichloromethane	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Bromoform	ND		4.0	0.63	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Bromomethane	ND		16	7.4	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
cis-1,2-Dichloroethene	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
cis-1,3-Dichloropropene	ND		0.79	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Carbon disulfide	ND		7.9	0.24	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Carbon tetrachloride	ND		0.79	0.22	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Chlorobenzene	ND		0.79	0.18	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Chloroform	ND		0.79	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Chloromethane	ND		16	0.24	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Dibromochloromethane	ND		1.6	0.45	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Dibromomethane	ND		0.79	0.61	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Dichlorodifluoromethane	ND		1.6	0.35	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Di-isopropyl ether (DIPE)	ND		0.79	0.38	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Ethanol	ND		400	66	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Ethylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:33	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.79	0.43	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Methylene Chloride	ND		7.9	1.1	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Naphthalene	ND		7.9	0.64	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
n-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
N-Propylbenzene	ND		1.6	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
o-Xylene	ND		0.79	0.44	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
p-Isopropyltoluene	ND		0.79	0.50	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
sec-Butylbenzene	ND		0.79	0.46	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Styrene	ND		0.79	0.48	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
trans-1,2-Dichloroethene	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
trans-1,3-Dichloropropene	ND		1.6	0.48	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Tert-amyl-methyl ether (TAME)	ND		0.79	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
tert-Butyl alcohol (TBA)	ND		16	4.1	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
tert-Butylbenzene	ND		0.79	0.12	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Tetrachloroethene	ND		0.79	0.17	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Toluene	ND		0.79	0.41	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Trichloroethene	ND		1.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Trichlorofluoromethane	ND		7.9	0.30	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Vinyl acetate	ND		7.9	3.7	ug/Kg		08/12/19 13:50	08/12/19 21:33	1
Vinyl chloride	ND		0.79	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		71 - 155	08/12/19 13:50	08/12/19 21:33	1
4-Bromofluorobenzene (Surr)	96		80 - 120	08/12/19 13:50	08/12/19 21:33	1
Dibromofluoromethane (Surr)	108		79 - 133	08/12/19 13:50	08/12/19 21:33	1
Toluene-d8 (Surr)	100		80 - 120	08/12/19 13:50	08/12/19 21:33	1

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.84	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1,1-Trichloroethane	ND		0.84	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.4	0.30	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1,2-Trichloroethane	ND		0.84	0.30	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1-Dichloroethane	ND		0.84	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1-Dichloroethene	ND		0.84	0.29	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,1-Dichloropropene	ND		1.7	0.28	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2,3-Trichlorobenzene	ND		1.7	0.77	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2,3-Trichloropropane	ND		1.7	0.70	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2,4-Trichlorobenzene	ND		1.7	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2,4-Trimethylbenzene	ND		1.7	0.49	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.5	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2-Dibromoethane	ND		0.84	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2-Dichlorobenzene	ND		0.84	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2-Dichloroethane	ND		0.84	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,2-Dichloropropane	ND		0.84	0.37	ug/Kg		08/12/19 13:50	08/12/19 22:58	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.7	0.46	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,3-Dichlorobenzene	ND		0.84	0.15	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,3-Dichloropropane	ND		0.84	0.21	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
1,4-Dichlorobenzene	ND		0.84	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
2,2-Dichloropropane	ND		4.2	0.28	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
2-Butanone	ND		17	3.2	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
2-Chlorotoluene	ND		0.84	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
2-Hexanone	ND		17	1.5	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
4-Chlorotoluene	ND		0.84	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
4-Methyl-2-pentanone	ND		17	3.6	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Acetone	ND		42	5.3	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Benzene	ND		0.84	0.11	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Bromobenzene	ND		0.84	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Bromochloromethane	ND		1.7	0.58	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Bromodichloromethane	ND		0.84	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Bromoform	ND		4.2	0.67	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Bromomethane	ND		17	8.0	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
cis-1,2-Dichloroethene	ND		0.84	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
cis-1,3-Dichloropropene	ND		0.84	0.21	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Carbon disulfide	ND		8.4	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Carbon tetrachloride	ND		0.84	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Chlorobenzene	ND		0.84	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Chloroform	ND		0.84	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Chloromethane	ND		17	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Dibromochloromethane	ND		1.7	0.48	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Dibromomethane	ND		0.84	0.65	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Dichlorodifluoromethane	ND		1.7	0.37	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Di-isopropyl ether (DIPE)	ND		0.84	0.41	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Ethanol	ND		420	71	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Ethylbenzene	ND		0.84	0.13	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Ethyl-t-butyl ether (ETBE)	ND		0.84	0.43	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Isopropylbenzene	ND		0.84	0.46	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Methylene Chloride	ND		8.4	1.1	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Naphthalene	ND		8.4	0.69	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
n-Butylbenzene	ND		0.84	0.13	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
N-Propylbenzene	ND		1.7	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
o-Xylene	ND		0.84	0.47	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
m,p-Xylene	ND		1.7	0.23	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
p-Isopropyltoluene	ND		0.84	0.53	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
sec-Butylbenzene	ND		0.84	0.49	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Styrene	ND		0.84	0.51	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
trans-1,2-Dichloroethene	ND		0.84	0.43	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
trans-1,3-Dichloropropene	ND		1.7	0.51	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Tert-amyl-methyl ether (TAME)	ND		0.84	0.30	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
tert-Butyl alcohol (TBA)	ND		17	4.4	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
tert-Butylbenzene	ND		0.84	0.13	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Tetrachloroethene	ND		0.84	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:58	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.84	0.43	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Trichloroethene	ND		1.7	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Trichlorofluoromethane	ND		8.4	0.32	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Vinyl acetate	ND		8.4	4.0	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
Vinyl chloride	ND		0.84	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	120		71 - 155				08/12/19 13:50	08/12/19 22:58	1
4-Bromofluorobenzene (Surr)	96		80 - 120				08/12/19 13:50	08/12/19 22:58	1
Dibromofluoromethane (Surr)	105		79 - 133				08/12/19 13:50	08/12/19 22:58	1
Toluene-d8 (Surr)	100		80 - 120				08/12/19 13:50	08/12/19 22:58	1

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1,1-Trichloroethane	ND		0.91	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1,2-Trichloroethane	ND		0.91	0.32	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1-Dichloroethane	ND		0.91	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1-Dichloroethene	ND		0.91	0.31	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,1-Dichloropropene	ND		1.8	0.30	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2,3-Trichlorobenzene	ND		1.8	0.83	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2,3-Trichloropropane	ND		1.8	0.75	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2,4-Trichlorobenzene	ND		1.8	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2,4-Trimethylbenzene	ND		1.8	0.53	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2-Dibromoethane	ND		0.91	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2-Dichlorobenzene	ND		0.91	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2-Dichloroethane	ND		0.91	0.28	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,2-Dichloropropane	ND		0.91	0.40	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,3,5-Trimethylbenzene	ND		1.8	0.50	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,3-Dichlorobenzene	ND		0.91	0.16	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,3-Dichloropropane	ND		0.91	0.23	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
1,4-Dichlorobenzene	ND		0.91	0.20	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
2,2-Dichloropropane	ND		4.5	0.30	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
2-Butanone	ND		18	3.4	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
2-Chlorotoluene	ND		0.91	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
2-Hexanone	ND		18	1.6	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
4-Chlorotoluene	ND		0.91	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
4-Methyl-2-pentanone	ND		18	3.9	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Acetone	ND		45	5.7	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
<b>Benzene</b>	<b>1.5</b>		0.91	0.12	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Bromobenzene	ND		0.91	0.19	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Bromochloromethane	ND		1.8	0.63	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Bromodichloromethane	ND		0.91	0.21	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Bromoform	ND		4.5	0.72	ug/Kg		08/12/19 13:50	08/12/19 21:50	1
Bromomethane	ND		18	8.5	ug/Kg		08/12/19 13:50	08/12/19 21:50	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.91	0.25	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
cis-1,3-Dichloropropene	ND		0.91	0.23	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Carbon disulfide	ND		9.1	0.28	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Carbon tetrachloride	ND		0.91	0.26	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Chlorobenzene	ND		0.91	0.20	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Chloroethane	ND		1.8	1.4	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Chloroform	ND		0.91	0.22	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Chloromethane	ND		18	0.28	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Dibromochloromethane	ND		1.8	0.52	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Dibromomethane	ND		0.91	0.70	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Dichlorodifluoromethane	ND		1.8	0.40	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Ethanol	ND		450	76	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Ethylbenzene	ND		0.91	0.14	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Isopropylbenzene	ND		0.91	0.50	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Methylene Chloride	ND		9.1	1.2	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Naphthalene	ND		9.1	0.74	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
n-Butylbenzene	ND		0.91	0.14	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
N-Propylbenzene	ND		1.8	0.46	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
o-Xylene	ND		0.91	0.50	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
m,p-Xylene	ND		1.8	0.24	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
p-Isopropyltoluene	ND		0.91	0.57	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
sec-Butylbenzene	ND		0.91	0.52	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Styrene	ND		0.91	0.55	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
trans-1,2-Dichloroethene	ND		0.91	0.46	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
trans-1,3-Dichloropropene	ND		1.8	0.55	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
tert-Butyl alcohol (TBA)	ND		18	4.7	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
tert-Butylbenzene	ND		0.91	0.14	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Tetrachloroethene	ND		0.91	0.19	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Toluene	ND		0.91	0.47	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Trichloroethene	ND		1.8	0.27	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Trichlorofluoromethane	ND		9.1	0.34	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Vinyl acetate	ND		9.1	4.3	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1
Vinyl chloride	ND		0.91	0.46	ug/Kg	-	08/12/19 13:50	08/12/19 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155	08/12/19 13:50	08/12/19 21:50	1
4-Bromofluorobenzene (Surr)	101		80 - 120	08/12/19 13:50	08/12/19 21:50	1
Dibromofluoromethane (Surr)	102		79 - 133	08/12/19 13:50	08/12/19 21:50	1
Toluene-d8 (Surr)	99		80 - 120	08/12/19 13:50	08/12/19 21:50	1

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.72	0.17	ug/Kg	-	08/12/19 13:50	08/12/19 22:16	1
1,1,1-Trichloroethane	ND		0.72	0.16	ug/Kg	-	08/12/19 13:50	08/12/19 22:16	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.4	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.2	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,1,2-Trichloroethane	ND		0.72	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,1-Dichloroethane	ND		0.72	0.15	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,1-Dichloroethene	ND		0.72	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,1-Dichloropropene	ND		1.4	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2,3-Trichlorobenzene	ND		1.4	0.66	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2,3-Trichloropropane	ND		1.4	0.60	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2,4-Trichlorobenzene	ND		1.4	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2,4-Trimethylbenzene	ND		1.4	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.2	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2-Dibromoethane	ND		0.72	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2-Dichlorobenzene	ND		0.72	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2-Dichloroethane	ND		0.72	0.23	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,2-Dichloropropane	ND		0.72	0.31	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,3,5-Trimethylbenzene	ND		1.4	0.39	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,3-Dichlorobenzene	ND		0.72	0.13	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,3-Dichloropropane	ND		0.72	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
1,4-Dichlorobenzene	ND		0.72	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
2,2-Dichloropropane	ND		3.6	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
2-Butanone	ND		14	2.7	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
2-Chlorotoluene	ND		0.72	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
2-Hexanone	ND		14	1.3	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
4-Chlorotoluene	ND		0.72	0.15	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
4-Methyl-2-pentanone	ND		14	3.1	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Acetone	ND		36	4.5	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Benzene	ND		0.72	0.093	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Bromobenzene	ND		0.72	0.15	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Bromochloromethane	ND		1.4	0.50	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Bromodichloromethane	ND		0.72	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Bromoform	ND		3.6	0.57	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Bromomethane	ND		14	6.8	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
cis-1,2-Dichloroethene	ND		0.72	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
cis-1,3-Dichloropropane	ND		0.72	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Carbon disulfide	ND		7.2	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Carbon tetrachloride	ND		0.72	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Chlorobenzene	ND		0.72	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Chloroethane	ND		1.4	1.1	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Chloroform	ND		0.72	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Chloromethane	ND		14	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Dibromochloromethane	ND		1.4	0.41	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Dibromomethane	ND		0.72	0.56	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Dichlorodifluoromethane	ND		1.4	0.32	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Di-isopropyl ether (DIPE)	ND		0.72	0.35	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Ethanol	ND		360	60	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Ethylbenzene	ND		0.72	0.11	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Ethyl-t-butyl ether (ETBE)	ND		0.72	0.36	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Isopropylbenzene	ND		0.72	0.39	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Methylene Chloride	ND		7.2	0.96	ug/Kg		08/12/19 13:50	08/12/19 22:16	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Naphthalene	ND		7.2	0.58	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
n-Butylbenzene	ND		0.72	0.11	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
N-Propylbenzene	ND		1.4	0.36	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
o-Xylene	ND		0.72	0.40	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
m,p-Xylene	ND		1.4	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
p-Isopropyltoluene	ND		0.72	0.45	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
sec-Butylbenzene	ND		0.72	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Styrene	ND		0.72	0.43	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
trans-1,2-Dichloroethene	ND		0.72	0.36	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
trans-1,3-Dichloropropene	ND		1.4	0.44	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Tert-amyl-methyl ether (TAME)	ND		0.72	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
tert-Butyl alcohol (TBA)	ND		14	3.7	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
tert-Butylbenzene	ND		0.72	0.11	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Tetrachloroethene	ND		0.72	0.15	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Toluene	ND		0.72	0.37	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Trichloroethene	ND		1.4	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Trichlorofluoromethane	ND		7.2	0.27	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Vinyl acetate	ND		7.2	3.4	ug/Kg		08/12/19 13:50	08/12/19 22:16	1
Vinyl chloride	ND		0.72	0.36	ug/Kg		08/12/19 13:50	08/12/19 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155	08/12/19 13:50	08/12/19 22:16	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/12/19 13:50	08/12/19 22:16	1
Dibromofluoromethane (Surr)	107		79 - 133	08/12/19 13:50	08/12/19 22:16	1
Toluene-d8 (Surr)	100		80 - 120	08/12/19 13:50	08/12/19 22:16	1

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.76	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1,1-Trichloroethane	ND		0.76	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.6	0.27	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1,2-Trichloroethane	ND		0.76	0.27	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1-Dichloroethane	ND		0.76	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1-Dichloroethene	ND		0.76	0.26	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,1-Dichloropropene	ND		1.5	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2,3-Trichlorobenzene	ND		1.5	0.69	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2,3-Trichloropropane	ND		1.5	0.63	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2,4-Trichlorobenzene	ND		1.5	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2,4-Trimethylbenzene	ND		1.5	0.45	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2-Dibromoethane	ND		0.76	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2-Dichlorobenzene	ND		0.76	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2-Dichloroethane	ND		0.76	0.24	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,2-Dichloropropane	ND		0.76	0.33	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,3,5-Trimethylbenzene	ND		1.5	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,3-Dichlorobenzene	ND		0.76	0.13	ug/Kg		08/12/19 13:50	08/12/19 22:43	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.76	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
1,4-Dichlorobenzene	ND		0.76	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
2,2-Dichloropropane	ND		3.8	0.25	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
2-Butanone	ND		15	2.9	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
2-Chlorotoluene	ND		0.76	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
2-Hexanone	ND		15	1.3	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
4-Chlorotoluene	ND		0.76	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
4-Methyl-2-pentanone	ND		15	3.3	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Acetone	ND		38	4.7	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Benzene	ND		0.76	0.099	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Bromobenzene	ND		0.76	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Bromochloromethane	ND		1.5	0.52	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Bromodichloromethane	ND		0.76	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Bromoform	ND		3.8	0.60	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Bromomethane	ND		15	7.2	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
cis-1,2-Dichloroethene	ND		0.76	0.21	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
cis-1,3-Dichloropropene	ND		0.76	0.19	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Carbon disulfide	ND		7.6	0.23	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Carbon tetrachloride	ND		0.76	0.21	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Chlorobenzene	ND		0.76	0.17	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Chloroethane	ND		1.5	1.1	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Chloroform	ND		0.76	0.18	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Chloromethane	ND		15	0.23	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Dibromochloromethane	ND		1.5	0.43	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Dibromomethane	ND		0.76	0.59	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Dichlorodifluoromethane	ND		1.5	0.34	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Di-isopropyl ether (DIPE)	ND		0.76	0.37	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Ethanol	ND		380	64	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Ethylbenzene	ND		0.76	0.12	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Ethyl-t-butyl ether (ETBE)	ND		0.76	0.39	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Isopropylbenzene	ND		0.76	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Methylene Chloride	ND		7.6	1.0	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Naphthalene	ND		7.6	0.62	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
n-Butylbenzene	ND		0.76	0.12	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
N-Propylbenzene	ND		1.5	0.38	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
o-Xylene	ND		0.76	0.42	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
m,p-Xylene	ND		1.5	0.20	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
p-Isopropyltoluene	ND		0.76	0.48	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
sec-Butylbenzene	ND		0.76	0.44	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Styrene	ND		0.76	0.46	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
trans-1,2-Dichloroethene	ND		0.76	0.38	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
trans-1,3-Dichloropropene	ND		1.5	0.46	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Tert-amyl-methyl ether (TAME)	ND		0.76	0.27	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
tert-Butyl alcohol (TBA)	ND		15	3.9	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
tert-Butylbenzene	ND		0.76	0.11	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Tetrachloroethene	ND		0.76	0.16	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Toluene	ND		0.76	0.39	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Trichloroethene	ND		1.5	0.23	ug/Kg		08/12/19 13:50	08/12/19 22:43	1

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		7.6	0.29	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Vinyl acetate	ND		7.6	3.6	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Vinyl chloride	ND		0.76	0.38	ug/Kg		08/12/19 13:50	08/12/19 22:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		71 - 155				08/12/19 13:50	08/12/19 22:43	1
4-Bromofluorobenzene (Surr)	99		80 - 120				08/12/19 13:50	08/12/19 22:43	1
Dibromofluoromethane (Surr)	107		79 - 133				08/12/19 13:50	08/12/19 22:43	1
Toluene-d8 (Surr)	99		80 - 120				08/12/19 13:50	08/12/19 22:43	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.091	0.046	mg/Kg		08/10/19 13:23	08/10/19 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 126				08/10/19 13:23	08/10/19 15:59	1

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.082	0.041	mg/Kg		08/10/19 13:23	08/10/19 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		60 - 126				08/10/19 13:23	08/10/19 16:33	1

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.091	0.046	mg/Kg		08/10/19 13:23	08/10/19 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/10/19 13:23	08/10/19 17:06	1

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.052	mg/Kg		08/10/19 13:23	08/10/19 17:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		60 - 126				08/10/19 13:23	08/10/19 17:40	1

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.076	0.038	mg/Kg		08/10/19 13:23	08/10/19 18:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66		60 - 126				08/10/19 13:23	08/10/19 18:14	1

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.096	0.048	mg/Kg		08/10/19 13:23	08/10/19 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		60 - 126				08/10/19 13:23	08/10/19 18:47	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.092	0.046	mg/Kg		08/10/19 13:23	08/10/19 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/10/19 13:23	08/10/19 19:21	1

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.082	0.041	mg/Kg		08/10/19 13:23	08/10/19 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/10/19 13:23	08/10/19 19:55	1

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.079	0.040	mg/Kg		08/10/19 13:23	08/10/19 20:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/10/19 13:23	08/10/19 20:29	1

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.082	0.041	mg/Kg		08/10/19 14:19	08/10/19 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 126				08/10/19 14:19	08/10/19 22:09	1

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.086	0.043	mg/Kg		08/10/19 14:19	08/10/19 22:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/10/19 14:19	08/10/19 22:43	1

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.091	0.045	mg/Kg		08/10/19 14:19	08/10/19 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 126				08/10/19 14:19	08/10/19 23:17	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.077	0.039	mg/Kg		08/10/19 14:19	08/10/19 23:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		60 - 126				08/10/19 14:19	08/10/19 23:50	1

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.087	0.044	mg/Kg		08/10/19 14:19	08/11/19 00:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		60 - 126				08/10/19 14:19	08/11/19 00:24	1

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.090	0.045	mg/Kg		08/10/19 14:19	08/11/19 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		60 - 126				08/10/19 14:19	08/11/19 00:57	1

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.072	0.036	mg/Kg		08/10/19 14:19	08/11/19 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67		60 - 126				08/10/19 14:19	08/11/19 01:31	1

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.077	0.038	mg/Kg		08/10/19 14:19	08/11/19 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		60 - 126				08/10/19 14:19	08/11/19 02:05	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		4.9	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 13:56	1
Oil Range Organics (C18-C40)	31		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 13:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	129		61 - 145				08/10/19 09:00	08/12/19 13:56	1

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 14:16	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 14:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	131		61 - 145				08/10/19 09:00	08/12/19 14:16	1

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 14:36	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 14:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	132		61 - 145				08/10/19 09:00	08/12/19 14:36	1

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 14:56	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 14:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	130		61 - 145				08/10/19 09:00	08/12/19 14:56	1

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 15:16	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 15:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	127		61 - 145				08/10/19 09:00	08/12/19 15:16	1

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 15:36	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 15:36	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	126		61 - 145	08/10/19 09:00	08/12/19 15:36	1

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		4.8	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 15:57	1
Oil Range Organics (C18-C40)	87		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	127		61 - 145	08/10/19 09:00	08/12/19 15:57	1

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 16:16	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	124		61 - 145	08/10/19 09:00	08/12/19 16:16	1

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.2		5.0	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 16:37	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	124		61 - 145	08/10/19 09:00	08/12/19 16:37	1

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 16:57	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	124		61 - 145	08/10/19 09:00	08/12/19 16:57	1

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		4.9	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 17:18	1
Oil Range Organics (C18-C40)	50		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	128		61 - 145	08/10/19 09:00	08/12/19 17:18	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21		4.9	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 17:38	1
Oil Range Organics (C18-C40)	80		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 17:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	138		61 - 145				08/10/19 09:00	08/12/19 17:38	1

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.7		4.8	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 17:58	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 17:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	135		61 - 145				08/10/19 09:00	08/12/19 17:58	1

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 18:58	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 18:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	141		61 - 145				08/10/19 09:00	08/12/19 18:58	1

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16		4.9	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 19:18	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 19:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	135		61 - 145				08/10/19 09:00	08/12/19 19:18	1

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.2		4.9	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 19:38	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/12/19 19:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Octacosane (Surr)	133		61 - 145				08/10/19 09:00	08/12/19 19:38	1

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.0		5.0	3.5	mg/Kg	-	08/10/19 09:00	08/13/19 11:39	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 09:00	08/13/19 11:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	111		61 - 145	08/10/19 09:00	08/13/19 11:39	1

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16		4.9	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 20:18	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 09:00	08/12/19 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	130		61 - 145	08/10/19 09:00	08/12/19 20:18	1

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.7		5.0	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 20:38	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 09:00	08/12/19 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	123		61 - 145	08/10/19 09:00	08/12/19 20:38	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Arsenic</b>	<b>3.44</b>	<b>F1</b>	0.754	0.260	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Barium</b>	<b>86.5</b>	<b>F1</b>	0.503	0.155	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Beryllium</b>	<b>0.506</b>		0.251	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Cadmium</b>	<b>0.567</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Cobalt</b>	<b>7.07</b>		0.251	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Chromium</b>	<b>11.8</b>		0.251	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Copper</b>	<b>9.00</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
Molybdenum	ND	F1	0.251	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Nickel</b>	<b>8.16</b>		0.251	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
Antimony	ND	F1 L	0.754	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Selenium</b>	<b>1.48</b>	<b>F1</b>	0.754	0.302	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Vanadium</b>	<b>35.0</b>		0.251	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Zinc</b>	<b>36.7</b>		1.01	0.179	mg/Kg		08/13/19 16:38	08/15/19 01:25	1
<b>Lead</b>	<b>0.641</b>		0.503	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:25	1

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.245	0.0840	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Arsenic</b>	<b>3.43</b>		0.735	0.254	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Barium</b>	<b>130</b>		0.490	0.151	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Beryllium</b>	<b>0.714</b>		0.245	0.134	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Cadmium</b>	<b>0.726</b>		0.490	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Cobalt</b>	<b>9.27</b>		0.245	0.145	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Chromium</b>	<b>16.3</b>		0.245	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Copper</b>	<b>20.4</b>		0.490	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
Molybdenum	ND	L	0.245	0.129	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Nickel</b>	<b>13.0</b>		0.245	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
Antimony	ND	L	0.735	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
Selenium	ND		0.735	0.294	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
Thallium	ND		0.735	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Vanadium</b>	<b>34.8</b>		0.245	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Zinc</b>	<b>44.2</b>		0.980	0.175	mg/Kg		08/13/19 16:38	08/15/19 01:31	1
<b>Lead</b>	<b>0.936</b>		0.490	0.129	mg/Kg		08/13/19 16:38	08/15/19 01:31	1

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Arsenic</b>	<b>2.72</b>		0.754	0.260	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Barium</b>	<b>167</b>		0.503	0.155	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Beryllium</b>	<b>0.995</b>		0.251	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Cadmium</b>	<b>1.02</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Cobalt</b>	<b>13.7</b>		0.251	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Chromium</b>	<b>19.4</b>		0.251	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Copper</b>	<b>26.6</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:33	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.251	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Nickel</b>	<b>16.7</b>		0.251	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
Selenium	ND	L	0.754	0.302	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Vanadium</b>	<b>65.0</b>		0.251	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Zinc</b>	<b>69.3</b>		1.01	0.179	mg/Kg		08/13/19 16:38	08/15/19 01:33	1
<b>Lead</b>	<b>0.935</b>		0.503	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:33	1

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.242	0.0828	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Arsenic</b>	<b>4.81</b>		0.725	0.250	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Barium</b>	<b>108</b>		0.483	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Beryllium</b>	<b>0.591</b>		0.242	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Cadmium</b>	<b>0.599</b>		0.483	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Cobalt</b>	<b>7.88</b>		0.242	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Chromium</b>	<b>12.6</b>		0.242	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Copper</b>	<b>11.4</b>		0.483	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
Molybdenum	ND	L	0.242	0.128	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Nickel</b>	<b>9.02</b>		0.242	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
Antimony	ND	L	0.725	0.144	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
Selenium	ND	L	0.725	0.290	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
Thallium	ND		0.725	0.147	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Vanadium</b>	<b>37.7</b>		0.242	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Zinc</b>	<b>40.2</b>		0.966	0.172	mg/Kg		08/13/19 16:38	08/15/19 01:35	1
<b>Lead</b>	<b>0.906</b>		0.483	0.128	mg/Kg		08/13/19 16:38	08/15/19 01:35	1

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.254	0.0870	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Arsenic</b>	<b>1.81</b>		0.761	0.263	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Barium</b>	<b>254</b>		0.508	0.156	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Beryllium</b>	<b>0.901</b>		0.254	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Cadmium</b>	<b>0.688</b>		0.508	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Cobalt</b>	<b>10.9</b>		0.254	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Chromium</b>	<b>19.9</b>		0.254	0.144	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Copper</b>	<b>26.2</b>		0.508	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
Molybdenum	ND	L	0.254	0.134	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Nickel</b>	<b>15.7</b>		0.254	0.147	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
Antimony	ND	L	0.761	0.151	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
Selenium	ND		0.761	0.305	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
Thallium	ND		0.761	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Vanadium</b>	<b>38.0</b>		0.254	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Zinc</b>	<b>55.6</b>		1.02	0.181	mg/Kg		08/13/19 16:38	08/15/19 01:36	1
<b>Lead</b>	<b>1.78</b>		0.508	0.134	mg/Kg		08/13/19 16:38	08/15/19 01:36	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.258	0.0884	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Arsenic</b>	<b>2.66</b>		0.773	0.267	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Barium</b>	<b>124</b>		0.515	0.159	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Beryllium</b>	<b>0.680</b>		0.258	0.141	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Cadmium</b>	<b>0.696</b>		0.515	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Cobalt</b>	<b>9.12</b>		0.258	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Chromium</b>	<b>12.0</b>		0.258	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Copper</b>	<b>13.3</b>		0.515	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
Molybdenum	ND	L	0.258	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Nickel</b>	<b>10.9</b>		0.258	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
Antimony	ND	L	0.773	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
Selenium	ND	L	0.773	0.309	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
Thallium	ND		0.773	0.157	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Vanadium</b>	<b>42.3</b>		0.258	0.145	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Zinc</b>	<b>50.9</b>		1.03	0.184	mg/Kg		08/13/19 16:38	08/15/19 01:43	1
<b>Lead</b>	<b>0.538</b>		0.515	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:43	1

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Arsenic</b>	<b>5.85</b>		0.754	0.260	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Barium</b>	<b>142</b>		0.503	0.155	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Beryllium</b>	<b>0.696</b>		0.251	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Cadmium</b>	<b>1.04</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Cobalt</b>	<b>9.36</b>		0.251	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Chromium</b>	<b>20.2</b>		0.251	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Copper</b>	<b>34.9</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
Molybdenum	ND		0.251	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Nickel</b>	<b>11.8</b>		0.251	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
Selenium	ND		0.754	0.302	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Vanadium</b>	<b>33.9</b>		0.251	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Zinc</b>	<b>165</b>		1.01	0.179	mg/Kg		08/13/19 16:38	08/15/19 01:45	1
<b>Lead</b>	<b>138</b>		0.503	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:45	1

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Arsenic</b>	<b>6.58</b>		0.739	0.255	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Barium</b>	<b>142</b>		0.493	0.152	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Beryllium</b>	<b>0.821</b>		0.246	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Cadmium</b>	<b>0.904</b>		0.493	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Cobalt</b>	<b>11.2</b>		0.246	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Chromium</b>	<b>16.9</b>		0.246	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Copper</b>	<b>20.4</b>		0.493	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:47	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.246	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Nickel</b>	<b>13.4</b>		0.246	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
Antimony	ND	L	0.739	0.147	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
Selenium	ND	L	0.739	0.296	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
Thallium	ND		0.739	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Vanadium</b>	<b>44.1</b>		0.246	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Zinc</b>	<b>58.0</b>		0.985	0.175	mg/Kg		08/13/19 16:38	08/15/19 01:47	1
<b>Lead</b>	<b>0.813</b>		0.493	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:47	1

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Arsenic</b>	<b>3.25</b>		0.739	0.255	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Barium</b>	<b>96.2</b>		0.493	0.152	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Beryllium</b>	<b>0.550</b>		0.246	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Cadmium</b>	<b>0.528</b>		0.493	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Cobalt</b>	<b>7.57</b>		0.246	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Chromium</b>	<b>11.4</b>		0.246	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Copper</b>	<b>9.51</b>		0.493	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
Molybdenum	ND	L	0.246	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Nickel</b>	<b>8.03</b>		0.246	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
Antimony	ND	L	0.739	0.147	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
Selenium	ND	L	0.739	0.296	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
Thallium	ND		0.739	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Vanadium</b>	<b>32.6</b>		0.246	0.139	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Zinc</b>	<b>37.7</b>		0.985	0.175	mg/Kg		08/13/19 16:38	08/15/19 01:49	1
<b>Lead</b>	<b>1.62</b>		0.493	0.130	mg/Kg		08/13/19 16:38	08/15/19 01:49	1

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.253	0.0866	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Arsenic</b>	<b>6.37</b>		0.758	0.262	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Barium</b>	<b>150</b>		0.505	0.156	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Beryllium</b>	<b>0.888</b>		0.253	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Cadmium</b>	<b>0.798</b>		0.505	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Cobalt</b>	<b>12.1</b>		0.253	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Chromium</b>	<b>16.2</b>		0.253	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Copper</b>	<b>16.7</b>		0.505	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
Molybdenum	ND	L	0.253	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Nickel</b>	<b>13.9</b>		0.253	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
Antimony	ND	L	0.758	0.151	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
Selenium	ND	L	0.758	0.303	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
Thallium	ND		0.758	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Vanadium</b>	<b>59.0</b>		0.253	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Zinc</b>	<b>65.3</b>		1.01	0.180	mg/Kg		08/13/19 16:38	08/15/19 01:51	1
<b>Lead</b>	<b>ND</b>		0.505	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:51	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Arsenic</b>	<b>4.21</b>		0.754	0.260	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Barium</b>	<b>83.2</b>		0.503	0.155	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Beryllium</b>	<b>0.462</b>		0.251	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
Cadmium	ND		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Cobalt</b>	<b>5.64</b>		0.251	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Chromium</b>	<b>9.49</b>		0.251	0.143	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Copper</b>	<b>13.4</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
Molybdenum	ND	L	0.251	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Nickel</b>	<b>8.58</b>		0.251	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
Selenium	ND		0.754	0.302	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Vanadium</b>	<b>21.4</b>		0.251	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Zinc</b>	<b>57.7</b>		1.01	0.179	mg/Kg		08/13/19 16:38	08/15/19 01:52	1
<b>Lead</b>	<b>9.02</b>		0.503	0.133	mg/Kg		08/13/19 16:38	08/15/19 01:52	1

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Arsenic</b>	<b>4.74</b>		0.750	0.259	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Barium</b>	<b>87.0</b>		0.500	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Beryllium</b>	<b>0.464</b>		0.250	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
Cadmium	ND		0.500	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Cobalt</b>	<b>5.85</b>		0.250	0.148	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Chromium</b>	<b>8.85</b>		0.250	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Copper</b>	<b>13.9</b>		0.500	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
Molybdenum	ND	L	0.250	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Nickel</b>	<b>7.55</b>		0.250	0.145	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
Antimony	ND	L	0.750	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
Selenium	ND	L	0.750	0.300	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Vanadium</b>	<b>21.4</b>		0.250	0.141	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Zinc</b>	<b>53.6</b>		1.00	0.178	mg/Kg		08/13/19 16:38	08/15/19 01:54	1
<b>Lead</b>	<b>9.44</b>		0.500	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:54	1

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.259	0.0888	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
Arsenic	ND		0.777	0.268	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Barium</b>	<b>96.5</b>		0.518	0.160	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Beryllium</b>	<b>0.580</b>		0.259	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Cadmium</b>	<b>0.553</b>		0.518	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Cobalt</b>	<b>6.70</b>		0.259	0.153	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Chromium</b>	<b>10.3</b>		0.259	0.147	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Copper</b>	<b>10.3</b>		0.518	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:56	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.259	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Nickel</b>	<b>7.46</b>		0.259	0.150	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
Antimony	ND	L	0.777	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
Selenium	ND	L	0.777	0.311	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
Thallium	ND		0.777	0.158	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Vanadium</b>	<b>32.7</b>		0.259	0.146	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Zinc</b>	<b>35.8</b>		1.04	0.184	mg/Kg		08/13/19 16:38	08/15/19 01:56	1
<b>Lead</b>	<b>1.17</b>		0.518	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:56	1

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Arsenic</b>	<b>6.45</b>		0.750	0.259	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Barium</b>	<b>110</b>		0.500	0.154	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Beryllium</b>	<b>0.700</b>		0.250	0.137	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Cadmium</b>	<b>0.645</b>		0.500	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Cobalt</b>	<b>7.70</b>		0.250	0.148	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Chromium</b>	<b>14.4</b>		0.250	0.142	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Copper</b>	<b>13.7</b>		0.500	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
Molybdenum	ND	L	0.250	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Nickel</b>	<b>10.0</b>		0.250	0.145	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
Antimony	ND	L	0.750	0.149	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
Selenium	ND	L	0.750	0.300	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Vanadium</b>	<b>41.9</b>		0.250	0.141	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Zinc</b>	<b>44.0</b>		1.00	0.178	mg/Kg		08/13/19 16:38	08/15/19 01:58	1
<b>Lead</b>	<b>0.914</b>		0.500	0.132	mg/Kg		08/13/19 16:38	08/15/19 01:58	1

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.254	0.0870	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Arsenic</b>	<b>4.43</b>		0.761	0.263	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Barium</b>	<b>245</b>		0.508	0.156	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Beryllium</b>	<b>0.992</b>		0.254	0.139	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Cadmium</b>	<b>0.675</b>		0.508	0.137	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Cobalt</b>	<b>13.0</b>		0.254	0.150	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Chromium</b>	<b>20.9</b>		0.254	0.144	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Copper</b>	<b>25.9</b>		0.508	0.137	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
Molybdenum	ND	L	0.254	0.134	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Nickel</b>	<b>16.0</b>		0.254	0.147	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
Antimony	ND	L	0.761	0.151	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
Selenium	ND	L	0.761	0.305	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
Thallium	ND		0.761	0.154	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Vanadium</b>	<b>43.0</b>		0.254	0.143	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Zinc</b>	<b>58.3</b>		1.02	0.181	mg/Kg		08/13/19 16:38	08/15/19 02:00	1
<b>Lead</b>	<b>1.26</b>		0.508	0.134	mg/Kg		08/13/19 16:38	08/15/19 02:00	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Arsenic</b>	<b>1.71</b>		0.754	0.260	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Barium</b>	<b>73.2</b>		0.503	0.155	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Beryllium</b>	<b>0.476</b>		0.251	0.138	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
Cadmium	ND		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Cobalt</b>	<b>5.77</b>		0.251	0.149	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Chromium</b>	<b>8.17</b>		0.251	0.143	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Copper</b>	<b>7.48</b>		0.503	0.136	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
Molybdenum	ND		0.251	0.133	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Nickel</b>	<b>6.78</b>		0.251	0.146	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
Antimony	ND		0.754	0.150	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
Selenium	ND	L	0.754	0.302	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Vanadium</b>	<b>23.8</b>		0.251	0.142	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Zinc</b>	<b>33.1</b>		1.01	0.179	mg/Kg		08/13/19 16:38	08/15/19 02:07	1
<b>Lead</b>	<b>0.680</b>		0.503	0.133	mg/Kg		08/13/19 16:38	08/15/19 02:07	1

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.249	0.0853	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Arsenic</b>	<b>1.65</b>		0.746	0.258	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Barium</b>	<b>67.2</b>		0.498	0.153	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Beryllium</b>	<b>0.604</b>		0.249	0.136	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
Cadmium	ND		0.498	0.134	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Cobalt</b>	<b>7.42</b>		0.249	0.147	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Chromium</b>	<b>12.8</b>		0.249	0.141	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Copper</b>	<b>9.12</b>		0.498	0.134	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Molybdenum</b>	<b>1.28</b>		0.249	0.131	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Nickel</b>	<b>8.71</b>		0.249	0.144	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
Antimony	ND	L	0.746	0.148	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
Selenium	ND	L	0.746	0.299	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
Thallium	ND		0.746	0.151	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Vanadium</b>	<b>36.0</b>		0.249	0.140	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Zinc</b>	<b>41.0</b>		0.995	0.177	mg/Kg		08/13/19 16:38	08/15/19 02:09	1
<b>Lead</b>	<b>0.555</b>		0.498	0.131	mg/Kg		08/13/19 16:38	08/15/19 02:09	1

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Arsenic</b>	<b>6.65</b>		0.769	0.266	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Barium</b>	<b>104</b>		0.513	0.158	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Beryllium</b>	<b>0.808</b>		0.256	0.141	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Cadmium</b>	<b>0.525</b>		0.513	0.138	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Cobalt</b>	<b>9.41</b>		0.256	0.152	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Chromium</b>	<b>14.3</b>		0.256	0.146	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Copper</b>	<b>9.50</b>		0.513	0.138	mg/Kg		08/13/19 16:38	08/15/19 02:11	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.256	0.135	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Nickel</b>	<b>11.7</b>		0.256	0.149	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
Antimony	ND	L	0.769	0.153	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
Selenium	ND		0.769	0.308	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
Thallium	ND		0.769	0.156	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Vanadium</b>	<b>40.0</b>		0.256	0.145	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Zinc</b>	<b>35.5</b>		1.03	0.183	mg/Kg		08/13/19 16:38	08/15/19 02:11	1
<b>Lead</b>	<b>1.16</b>		0.513	0.135	mg/Kg		08/13/19 16:38	08/15/19 02:11	1

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.244	0.0836	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Arsenic</b>	<b>1.45</b>		0.732	0.253	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Barium</b>	<b>142</b>		0.488	0.150	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Beryllium</b>	<b>0.669</b>		0.244	0.134	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Cadmium</b>	<b>0.536</b>		0.488	0.132	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Cobalt</b>	<b>7.78</b>		0.244	0.144	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Chromium</b>	<b>12.1</b>		0.244	0.139	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Copper</b>	<b>13.4</b>		0.488	0.132	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
Molybdenum	ND	L	0.244	0.129	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Nickel</b>	<b>9.84</b>		0.244	0.141	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
Antimony	ND	L	0.732	0.145	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
Selenium	ND	L	0.732	0.293	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
Thallium	ND		0.732	0.148	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Vanadium</b>	<b>35.1</b>		0.244	0.138	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
<b>Zinc</b>	<b>48.0</b>		0.976	0.174	mg/Kg		08/13/19 16:38	08/15/19 02:13	1
Lead	ND		0.488	0.129	mg/Kg		08/13/19 16:38	08/15/19 02:13	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg	-	08/14/19 09:30	08/14/19 15:57	1

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0794	0.00559	mg/Kg	-	08/14/19 09:30	08/14/19 16:04	1

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0862	0.00607	mg/Kg	-	08/14/19 09:30	08/14/19 16:06	1

**Client Sample ID: SB2-5**  
**Date Collected: 08/07/19 10:08**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg	-	08/14/19 09:30	08/14/19 16:13	1

**Client Sample ID: SB2-10**  
**Date Collected: 08/07/19 10:20**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg	-	08/14/19 09:30	08/14/19 16:16	1

**Client Sample ID: SB2-25**  
**Date Collected: 08/07/19 10:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg	-	08/14/19 09:30	08/14/19 16:18	1

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.100		0.0820	0.00578	mg/Kg	-	08/14/19 09:30	08/14/19 16:20	1

**Client Sample ID: SB3-3**  
**Date Collected: 08/07/19 11:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg	-	08/14/19 09:30	08/14/19 16:23	1

**Client Sample ID: SB3-5**  
**Date Collected: 08/07/19 12:04**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0862	0.00607	mg/Kg	-	08/14/19 09:30	08/14/19 16:25	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB3-25**  
**Date Collected: 08/07/19 12:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 09:30	08/14/19 16:27	1

**Client Sample ID: SB4-3**  
**Date Collected: 08/07/19 12:48**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.110		0.0833	0.00587	mg/Kg		08/14/19 09:30	08/14/19 16:29	1

**Client Sample ID: SB4-5**  
**Date Collected: 08/07/19 12:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		08/14/19 09:30	08/14/19 16:32	1

**Client Sample ID: SB4-25**  
**Date Collected: 08/07/19 13:10**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg		08/14/19 09:30	08/14/19 16:34	1

**Client Sample ID: SB5-5**  
**Date Collected: 08/07/19 13:57**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg		08/14/19 09:30	08/14/19 16:41	1

**Client Sample ID: SB5-10**  
**Date Collected: 08/07/19 14:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 09:30	08/14/19 16:43	1

**Client Sample ID: SB5-25**  
**Date Collected: 08/07/19 14:15**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0862	0.00607	mg/Kg		08/14/19 09:30	08/14/19 16:46	1

**Client Sample ID: SB6-5**  
**Date Collected: 08/07/19 15:18**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		08/14/19 09:30	08/14/19 16:48	1

**Client Sample ID: SB6-10**  
**Date Collected: 08/07/19 15:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-39**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 09:30	08/14/19 16:50	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB6-25**  
**Date Collected: 08/07/19 15:40**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg		08/14/19 09:30	08/14/19 16:52	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-4235-3	SB1-5	119	98	106	101
570-4235-4	SB1-10	123	98	109	100
570-4235-7	SB1-25	118	96	105	100
570-4235-10	SB2-5	120	97	105	100
570-4235-11	SB2-10	119	96	106	101
570-4235-14	SB2-25	122	97	104	100
570-4235-15	SB3-1	123	97	109	101
570-4235-16	SB3-3	123	97	108	100
570-4235-17	SB3-5	122	95	106	102
570-4235-21	SB3-25	116	95	99	99
570-4235-23	SB4-3	119	97	105	101
570-4235-24	SB4-5	118	96	104	101
570-4235-28	SB4-25	119	97	105	100
570-4235-31	SB5-5	120	96	105	101
570-4235-32	SB5-10	123	96	108	100
570-4235-35	SB5-25	120	96	105	100
570-4235-38	SB6-5	112	101	102	99
570-4235-39	SB6-10	114	99	107	100
570-4235-42	SB6-25	115	99	107	99
LCS 570-11799/3	Lab Control Sample	103	99	103	98
LCS 570-11858/6	Lab Control Sample	96	97	98	98
LCS 570-11799/4	Lab Control Sample Dup	101	97	101	97
LCS 570-11858/7	Lab Control Sample Dup	92	97	96	99
MB 570-11799/6	Method Blank	106	95	101	100
MB 570-11858/10	Method Blank	100	96	100	99

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (60-126)
570-4235-3	SB1-5	83
570-4235-4	SB1-10	76
570-4235-7	SB1-25	84
570-4235-10	SB2-5	80
570-4235-11	SB2-10	66
570-4235-14	SB2-25	81
570-4235-17	SB3-5	82
570-4235-21	SB3-25	82
570-4235-23	SB4-3	84
570-4235-24	SB4-5	83
570-4235-28	SB4-25	82
570-4235-31	SB5-5	83

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (60-126)
570-4235-32	SB5-10	80
570-4235-35	SB5-25	78
570-4235-38	SB6-5	81
570-4235-39	SB6-10	67
570-4235-42	SB6-25	85
LCS 570-11601/3	Lab Control Sample	88
LCSD 570-11601/4	Lab Control Sample Dup	94
MB 570-11601/5	Method Blank	77

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-4235-3	SB1-5	129
570-4235-3 MS	SB1-5	113
570-4235-3 MSD	SB1-5	117
570-4235-4	SB1-10	131
570-4235-7	SB1-25	132
570-4235-10	SB2-5	130
570-4235-11	SB2-10	127
570-4235-14	SB2-25	126
570-4235-15	SB3-1	127
570-4235-16	SB3-3	124
570-4235-17	SB3-5	124
570-4235-21	SB3-25	124
570-4235-23	SB4-3	128
570-4235-24	SB4-5	138
570-4235-28	SB4-25	135
570-4235-31	SB5-5	141
570-4235-32	SB5-10	135
570-4235-35	SB5-25	133
570-4235-38	SB6-5	111
570-4235-39	SB6-10	130
570-4235-42	SB6-25	123
LCS 570-11567/2-A	Lab Control Sample	125
MB 570-11567/1-A	Method Blank	126

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-11799/6**  
**Matrix: Solid**  
**Analysis Batch: 11799**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/12/19 13:59	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/12/19 13:59	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/12/19 13:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/12/19 13:59	1
1,1,2-Trichloroethane	ND		1.0	0.35	ug/Kg			08/12/19 13:59	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/12/19 13:59	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/12/19 13:59	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/12/19 13:59	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg			08/12/19 13:59	1
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg			08/12/19 13:59	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/12/19 13:59	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/12/19 13:59	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/12/19 13:59	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/12/19 13:59	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/12/19 13:59	1
1,2-Dichloroethane	ND		1.0	0.31	ug/Kg			08/12/19 13:59	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/12/19 13:59	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/12/19 13:59	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/12/19 13:59	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/12/19 13:59	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 13:59	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/12/19 13:59	1
2-Butanone	ND		20	3.8	ug/Kg			08/12/19 13:59	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/12/19 13:59	1
2-Hexanone	ND		20	1.8	ug/Kg			08/12/19 13:59	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/12/19 13:59	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/12/19 13:59	1
Acetone	ND		50	6.2	ug/Kg			08/12/19 13:59	1
Benzene	ND		1.0	0.13	ug/Kg			08/12/19 13:59	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/12/19 13:59	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/12/19 13:59	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/12/19 13:59	1
Bromoform	ND		5.0	0.79	ug/Kg			08/12/19 13:59	1
Bromomethane	ND		20	9.4	ug/Kg			08/12/19 13:59	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/12/19 13:59	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/Kg			08/12/19 13:59	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/12/19 13:59	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/12/19 13:59	1
Chlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 13:59	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/12/19 13:59	1
Chloroform	ND		1.0	0.24	ug/Kg			08/12/19 13:59	1
Chloromethane	ND		20	0.30	ug/Kg			08/12/19 13:59	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/12/19 13:59	1
Dibromomethane	ND		1.0	0.77	ug/Kg			08/12/19 13:59	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg			08/12/19 13:59	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48	ug/Kg			08/12/19 13:59	1
Ethanol	ND		500	84	ug/Kg			08/12/19 13:59	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 13:59	1



# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-11799/6**  
**Matrix: Solid**  
**Analysis Batch: 11799**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/12/19 13:59	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/12/19 13:59	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/12/19 13:59	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/12/19 13:59	1
Naphthalene	ND		10	0.81	ug/Kg			08/12/19 13:59	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/12/19 13:59	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/12/19 13:59	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/12/19 13:59	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/12/19 13:59	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/12/19 13:59	1
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/12/19 13:59	1
Styrene	ND		1.0	0.60	ug/Kg			08/12/19 13:59	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/12/19 13:59	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/12/19 13:59	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/12/19 13:59	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/12/19 13:59	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 13:59	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/12/19 13:59	1
Toluene	ND		1.0	0.52	ug/Kg			08/12/19 13:59	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/12/19 13:59	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/12/19 13:59	1
Vinyl acetate	ND		10	4.7	ug/Kg			08/12/19 13:59	1
Vinyl chloride	ND		1.0	0.50	ug/Kg			08/12/19 13:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		71 - 155		08/12/19 13:59	1
4-Bromofluorobenzene (Surr)	95		80 - 120		08/12/19 13:59	1
Dibromofluoromethane (Surr)	101		79 - 133		08/12/19 13:59	1
Toluene-d8 (Surr)	100		80 - 120		08/12/19 13:59	1

**Lab Sample ID: LCS 570-11799/3**  
**Matrix: Solid**  
**Analysis Batch: 11799**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	47.84		ug/Kg		96	71 - 125
1,2-Dibromoethane	50.0	50.77		ug/Kg		102	80 - 120
1,2-Dichlorobenzene	50.0	50.34		ug/Kg		101	80 - 120
1,2-Dichloroethane	50.0	52.34		ug/Kg		105	79 - 121
Benzene	50.0	51.28		ug/Kg		103	79 - 120
Carbon tetrachloride	50.0	51.98		ug/Kg		104	58 - 142
Chlorobenzene	50.0	50.28		ug/Kg		101	80 - 120
Di-isopropyl ether (DIPE)	50.0	50.81		ug/Kg		102	65 - 131
Ethanol	500	581.3		ug/Kg		116	32 - 158
Ethylbenzene	50.0	50.30		ug/Kg		101	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	43.41		ug/Kg		87	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	39.35		ug/Kg		79	64 - 124
o-Xylene	50.0	51.18		ug/Kg		102	79 - 127

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-11799/3**  
**Matrix: Solid**  
**Analysis Batch: 11799**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	100	101.7		ug/Kg		102	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	103		79 - 133
Toluene-d8 (Surr)	98		80 - 120

**Lab Sample ID: LCSD 570-11799/4**  
**Matrix: Solid**  
**Analysis Batch: 11799**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	47.30		ug/Kg		95	71 - 125	1	20
1,2-Dibromoethane	50.0	50.84		ug/Kg		102	80 - 120	0	20
1,2-Dichlorobenzene	50.0	49.82		ug/Kg		100	80 - 120	1	20
1,2-Dichloroethane	50.0	51.15		ug/Kg		102	79 - 121	2	20
Benzene	50.0	50.77		ug/Kg		102	79 - 120	1	20
Carbon tetrachloride	50.0	52.51		ug/Kg		105	58 - 142	1	20
Chlorobenzene	50.0	50.06		ug/Kg		100	80 - 120	0	20
Di-isopropyl ether (DIPE)	50.0	49.70		ug/Kg		99	65 - 131	2	20
Ethanol	500	566.6		ug/Kg		113	32 - 158	3	27
Ethylbenzene	50.0	50.38		ug/Kg		101	57 - 153	0	20
Ethyl-t-butyl ether (ETBE)	50.0	43.01		ug/Kg		86	58 - 136	1	20
Methyl-t-Butyl Ether (MTBE)	50.0	39.55		ug/Kg		79	64 - 124	0	20
o-Xylene	50.0	51.04		ug/Kg		102	79 - 127	0	20
m,p-Xylene	100	101.7		ug/Kg		102	80 - 122	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		79 - 133
Toluene-d8 (Surr)	97		80 - 120

**Lab Sample ID: MB 570-11858/10**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/12/19 18:46	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/12/19 18:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/12/19 18:46	1
1,1,2-Trichloroethane	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/12/19 18:46	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg			08/12/19 18:46	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-11858/10**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg			08/12/19 18:46	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/12/19 18:46	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/12/19 18:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/12/19 18:46	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/12/19 18:46	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
1,2-Dichloroethane	ND		1.0	0.31	ug/Kg			08/12/19 18:46	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/12/19 18:46	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/12/19 18:46	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/12/19 18:46	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/12/19 18:46	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 18:46	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/12/19 18:46	1
2-Butanone	ND		20	3.8	ug/Kg			08/12/19 18:46	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
2-Hexanone	ND		20	1.8	ug/Kg			08/12/19 18:46	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/12/19 18:46	1
Acetone	ND		50	6.2	ug/Kg			08/12/19 18:46	1
Benzene	ND		1.0	0.13	ug/Kg			08/12/19 18:46	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/12/19 18:46	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
Bromoform	ND		5.0	0.79	ug/Kg			08/12/19 18:46	1
Bromomethane	ND		20	9.4	ug/Kg			08/12/19 18:46	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/12/19 18:46	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/Kg			08/12/19 18:46	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/12/19 18:46	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/12/19 18:46	1
Chlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 18:46	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/12/19 18:46	1
Chloroform	ND		1.0	0.24	ug/Kg			08/12/19 18:46	1
Chloromethane	ND		20	0.30	ug/Kg			08/12/19 18:46	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/12/19 18:46	1
Dibromomethane	ND		1.0	0.77	ug/Kg			08/12/19 18:46	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg			08/12/19 18:46	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48	ug/Kg			08/12/19 18:46	1
Ethanol	ND		500	84	ug/Kg			08/12/19 18:46	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 18:46	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/12/19 18:46	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/12/19 18:46	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/12/19 18:46	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/12/19 18:46	1
Naphthalene	ND		10	0.81	ug/Kg			08/12/19 18:46	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/12/19 18:46	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/12/19 18:46	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/12/19 18:46	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/12/19 18:46	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/12/19 18:46	1

Eurofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-11858/10**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/12/19 18:46	1
Styrene	ND		1.0	0.60	ug/Kg			08/12/19 18:46	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/12/19 18:46	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/12/19 18:46	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/12/19 18:46	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 18:46	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
Toluene	ND		1.0	0.52	ug/Kg			08/12/19 18:46	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/12/19 18:46	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/12/19 18:46	1
Vinyl acetate	ND		10	4.7	ug/Kg			08/12/19 18:46	1
Vinyl chloride	ND		1.0	0.50	ug/Kg			08/12/19 18:46	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	100		71 - 155		08/12/19 18:46	1
4-Bromofluorobenzene (Surr)	96		80 - 120		08/12/19 18:46	1
Dibromofluoromethane (Surr)	100		79 - 133		08/12/19 18:46	1
Toluene-d8 (Surr)	99		80 - 120		08/12/19 18:46	1

**Lab Sample ID: LCS 570-11858/6**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	50.0	52.58		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	50.0	50.43		ug/Kg		101	80 - 120
1,2-Dichloroethane	50.0	46.14		ug/Kg		92	79 - 121
Benzene	50.0	47.75		ug/Kg		96	79 - 120
Carbon tetrachloride	50.0	53.53		ug/Kg		107	58 - 142
Chlorobenzene	50.0	50.31		ug/Kg		101	80 - 120
Di-isopropyl ether (DIPE)	50.0	43.62		ug/Kg		87	65 - 131
Ethanol	500	486.9	J	ug/Kg		97	32 - 158
Ethylbenzene	50.0	49.79		ug/Kg		100	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	45.52		ug/Kg		91	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	46.43		ug/Kg		93	64 - 124
o-Xylene	50.0	49.73		ug/Kg		99	79 - 127
m,p-Xylene	100	101.4		ug/Kg		101	80 - 122

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		79 - 133
Toluene-d8 (Surr)	98		80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-11858/7**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	42.71		ug/Kg		85	71 - 125	10	20
1,2-Dibromoethane	50.0	47.88		ug/Kg		96	80 - 120	9	20
1,2-Dichlorobenzene	50.0	47.45		ug/Kg		95	80 - 120	6	20
1,2-Dichloroethane	50.0	41.93		ug/Kg		84	79 - 121	10	20
Benzene	50.0	43.84		ug/Kg		88	79 - 120	9	20
Carbon tetrachloride	50.0	48.94		ug/Kg		98	58 - 142	9	20
Chlorobenzene	50.0	47.12		ug/Kg		94	80 - 120	7	20
Di-isopropyl ether (DIPE)	50.0	40.34		ug/Kg		81	65 - 131	8	20
Ethanol	500	427.9	J	ug/Kg		86	32 - 158	13	27
Ethylbenzene	50.0	46.67		ug/Kg		93	57 - 153	6	20
Ethyl-t-butyl ether (ETBE)	50.0	42.00		ug/Kg		84	58 - 136	8	20
Methyl-t-Butyl Ether (MTBE)	50.0	42.23		ug/Kg		84	64 - 124	9	20
o-Xylene	50.0	46.59		ug/Kg		93	79 - 127	7	20
m,p-Xylene	100	93.66		ug/Kg		94	80 - 122	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	92		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		79 - 133
Toluene-d8 (Surr)	99		80 - 120

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-11601/5**  
**Matrix: Solid**  
**Analysis Batch: 11601**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.050	mg/Kg			08/10/19 14:23	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		60 - 126		08/10/19 14:23	1

**Lab Sample ID: LCS 570-11601/3**  
**Matrix: Solid**  
**Analysis Batch: 11601**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C4-C13)	2.00	2.188		mg/Kg		109	50 - 139

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
4-Bromofluorobenzene (Surr)	88		60 - 126

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: LCSD 570-11601/4**  
**Matrix: Solid**  
**Analysis Batch: 11601**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	1.99	2.132		mg/Kg		107	50 - 139	3	18
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>						<b>Limits</b>
4-Bromofluorobenzene (Surr)		94							60 - 126

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-11567/1-A**  
**Matrix: Solid**  
**Analysis Batch: 11805**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 11567**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 09:00	08/12/19 12:35	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 09:00	08/12/19 12:35	1
<b>Surrogate</b>		<b>MB %Recovery</b>	<b>MB Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)		126					08/10/19 09:00	08/12/19 12:35	1

**Lab Sample ID: LCS 570-11567/2-A**  
**Matrix: Solid**  
**Analysis Batch: 11805**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 11567**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	400	459.8		mg/Kg		115	67 - 121
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>				<b>Limits</b>
n-Octacosane (Surr)		125					61 - 145

**Lab Sample ID: 570-4235-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 11805**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11567**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	13		400	460.9		mg/Kg		112	33 - 153
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>						<b>Limits</b>
n-Octacosane (Surr)		113							61 - 145

**Lab Sample ID: 570-4235-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 11805**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11567**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	13		400	437.5		mg/Kg		106	33 - 153	5	32

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 570-4235-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 11805**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11567**

Surrogate	%Recovery	MSD Qualifier	MSD Limits
<i>n</i> -Octacosane (Surr)	117		61 - 145

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-12192/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.255	0.0874	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Arsenic	ND		0.765	0.264	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Barium	ND		0.510	0.157	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Beryllium	ND		0.255	0.140	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Cadmium	ND		0.510	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Cobalt	ND		0.255	0.151	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Chromium	ND		0.255	0.145	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Copper	ND		0.510	0.138	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Molybdenum	ND		0.255	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Nickel	ND		0.255	0.148	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Antimony	ND		0.765	0.152	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Selenium	ND		0.765	0.306	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Thallium	ND		0.765	0.155	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Vanadium	ND		0.255	0.144	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Zinc	ND		1.02	0.182	mg/Kg		08/13/19 16:38	08/15/19 01:18	1
Lead	ND		0.510	0.135	mg/Kg		08/13/19 16:38	08/15/19 01:18	1

**Lab Sample ID: LCS 570-12192/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.3	13.00		mg/Kg		106	80 - 120
Arsenic	24.5	22.84		mg/Kg		93	80 - 120
Barium	24.5	28.29		mg/Kg		115	80 - 120
Beryllium	24.5	23.97		mg/Kg		98	80 - 120
Cadmium	24.5	25.51		mg/Kg		104	80 - 120
Cobalt	24.5	25.88		mg/Kg		106	80 - 120
Chromium	24.5	25.53		mg/Kg		104	80 - 120
Copper	24.5	25.57		mg/Kg		104	80 - 120
Molybdenum	24.5	24.24		mg/Kg		99	80 - 120
Nickel	24.5	26.44		mg/Kg		108	80 - 120
Antimony	24.5	27.33		mg/Kg		112	80 - 120
Selenium	24.5	22.72		mg/Kg		93	80 - 120
Thallium	24.5	24.70		mg/Kg		101	80 - 120
Vanadium	24.5	24.81		mg/Kg		101	80 - 120
Zinc	24.5	24.31		mg/Kg		99	80 - 120
Lead	24.5	25.45		mg/Kg		104	80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-12192/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Silver	12.1	12.74		mg/Kg		106	80 - 120	2	20	
Arsenic	24.2	22.95		mg/Kg		95	80 - 120	0	20	
Barium	24.2	27.55		mg/Kg		114	80 - 120	3	20	
Beryllium	24.2	23.37		mg/Kg		97	80 - 120	3	20	
Cadmium	24.2	24.77		mg/Kg		103	80 - 120	3	20	
Cobalt	24.2	25.44		mg/Kg		105	80 - 120	2	20	
Chromium	24.2	24.93		mg/Kg		103	80 - 120	2	20	
Copper	24.2	25.00		mg/Kg		103	80 - 120	2	20	
Molybdenum	24.2	24.09		mg/Kg		100	80 - 120	1	20	
Nickel	24.2	25.76		mg/Kg		107	80 - 120	3	20	
Antimony	24.2	26.80		mg/Kg		111	80 - 120	2	20	
Selenium	24.2	22.17		mg/Kg		92	80 - 120	2	20	
Thallium	24.2	24.09		mg/Kg		100	80 - 120	3	20	
Vanadium	24.2	24.18		mg/Kg		100	80 - 120	3	20	
Zinc	24.2	23.78		mg/Kg		98	80 - 120	2	20	
Lead	24.2	24.91		mg/Kg		103	80 - 120	2	20	

**Lab Sample ID: 570-4235-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Silver	ND		12.2	13.12		mg/Kg		108	75 - 125			
Arsenic	3.44	F1	24.4	46.99	F1	mg/Kg		179	75 - 125			
Barium	86.5	F1	24.4	119.2	F1	mg/Kg		134	75 - 125			
Beryllium	0.506		24.4	25.96		mg/Kg		104	75 - 125			
Cadmium	0.567		24.4	25.08		mg/Kg		101	75 - 125			
Cobalt	7.07		24.4	32.36		mg/Kg		104	75 - 125			
Chromium	11.8		24.4	36.87		mg/Kg		103	75 - 125			
Copper	9.00		24.4	37.22		mg/Kg		116	75 - 125			
Molybdenum	ND	F1	24.4	31.48	F1	mg/Kg		129	75 - 125			
Nickel	8.16		24.4	33.06		mg/Kg		102	75 - 125			
Antimony	ND	F1 L	24.4	11.34	F1	mg/Kg		47	50 - 115			
Selenium	1.48	F1	24.4	31.19		mg/Kg		122	75 - 125			
Thallium	ND		24.4	21.45		mg/Kg		88	75 - 125			
Vanadium	35.0		24.4	60.80		mg/Kg		106	75 - 125			
Zinc	36.7		24.4	58.81		mg/Kg		91	75 - 125			
Lead	0.641		24.4	24.74		mg/Kg		99	75 - 125			

**Lab Sample ID: 570-4235-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
									Limits	RPD		
Silver	ND		12.0	12.91		mg/Kg		107	75 - 125	2	20	
Arsenic	3.44	F1	24.0	45.52	F1	mg/Kg		175	75 - 125	3	20	
Barium	86.5	F1	24.0	118.0	F1	mg/Kg		131	75 - 125	1	20	
Beryllium	0.506		24.0	25.67		mg/Kg		105	75 - 125	1	20	
Cadmium	0.567		24.0	25.05		mg/Kg		102	75 - 125	0	20	

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 570-4235-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12192**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	7.07		24.0	32.24		mg/Kg		105	75 - 125	0	20
Chromium	11.8		24.0	36.77		mg/Kg		104	75 - 125	0	20
Copper	9.00		24.0	37.04		mg/Kg		117	75 - 125	0	20
Molybdenum	ND	F1	24.0	31.45	F1	mg/Kg		131	75 - 125	0	20
Nickel	8.16		24.0	33.20		mg/Kg		104	75 - 125	0	20
Antimony	ND	F1 L	24.0	12.35		mg/Kg		51	50 - 115	8	20
Selenium	1.48	F1	24.0	32.21	F1	mg/Kg		128	75 - 125	3	20
Thallium	ND		24.0	22.75		mg/Kg		95	75 - 125	6	20
Vanadium	35.0		24.0	60.21		mg/Kg		105	75 - 125	1	20
Zinc	36.7		24.0	59.07		mg/Kg		93	75 - 125	0	20
Lead	0.641		24.0	24.81		mg/Kg		101	75 - 125	0	20

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-12193/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12193**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 09:30	08/14/19 15:50	1

**Lab Sample ID: LCS 570-12193/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12193**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.7954		mg/Kg		95	85 - 121

**Lab Sample ID: LCSD 570-12193/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12193**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.820	0.7872		mg/Kg		96	85 - 121	1	10

**Lab Sample ID: 570-4235-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12193**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.862	0.7965		mg/Kg		90	71 - 137

**Lab Sample ID: 570-4235-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12570**

**Client Sample ID: SB1-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12193**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.806	0.8049		mg/Kg		97	71 - 137	1	14

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# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## GC/MS VOA

### Analysis Batch: 11799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	8260B	11860
570-4235-4	SB1-10	Total/NA	Solid	8260B	11860
570-4235-7	SB1-25	Total/NA	Solid	8260B	11860
570-4235-10	SB2-5	Total/NA	Solid	8260B	11860
570-4235-11	SB2-10	Total/NA	Solid	8260B	11860
570-4235-14	SB2-25	Total/NA	Solid	8260B	11860
570-4235-15	SB3-1	Total/NA	Solid	8260B	11860
570-4235-16	SB3-3	Total/NA	Solid	8260B	11860
570-4235-17	SB3-5	Total/NA	Solid	8260B	11860
570-4235-21	SB3-25	Total/NA	Solid	8260B	11860
570-4235-23	SB4-3	Total/NA	Solid	8260B	11860
570-4235-24	SB4-5	Total/NA	Solid	8260B	11860
570-4235-28	SB4-25	Total/NA	Solid	8260B	11860
570-4235-31	SB5-5	Total/NA	Solid	8260B	11860
570-4235-32	SB5-10	Total/NA	Solid	8260B	11860
570-4235-35	SB5-25	Total/NA	Solid	8260B	11860
MB 570-11799/6	Method Blank	Total/NA	Solid	8260B	
LCS 570-11799/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 570-11799/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 11858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-38	SB6-5	Total/NA	Solid	8260B	11860
570-4235-39	SB6-10	Total/NA	Solid	8260B	11860
570-4235-42	SB6-25	Total/NA	Solid	8260B	11860
MB 570-11858/10	Method Blank	Total/NA	Solid	8260B	
LCS 570-11858/6	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 570-11858/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Prep Batch: 11860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	5035	
570-4235-4	SB1-10	Total/NA	Solid	5035	
570-4235-7	SB1-25	Total/NA	Solid	5035	
570-4235-10	SB2-5	Total/NA	Solid	5035	
570-4235-11	SB2-10	Total/NA	Solid	5035	
570-4235-14	SB2-25	Total/NA	Solid	5035	
570-4235-15	SB3-1	Total/NA	Solid	5035	
570-4235-16	SB3-3	Total/NA	Solid	5035	
570-4235-17	SB3-5	Total/NA	Solid	5035	
570-4235-21	SB3-25	Total/NA	Solid	5035	
570-4235-23	SB4-3	Total/NA	Solid	5035	
570-4235-24	SB4-5	Total/NA	Solid	5035	
570-4235-28	SB4-25	Total/NA	Solid	5035	
570-4235-31	SB5-5	Total/NA	Solid	5035	
570-4235-32	SB5-10	Total/NA	Solid	5035	
570-4235-35	SB5-25	Total/NA	Solid	5035	
570-4235-38	SB6-5	Total/NA	Solid	5035	
570-4235-39	SB6-10	Total/NA	Solid	5035	
570-4235-42	SB6-25	Total/NA	Solid	5035	

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## GC VOA

### Analysis Batch: 11601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	8015B	11636
570-4235-4	SB1-10	Total/NA	Solid	8015B	11636
570-4235-7	SB1-25	Total/NA	Solid	8015B	11636
570-4235-10	SB2-5	Total/NA	Solid	8015B	11636
570-4235-11	SB2-10	Total/NA	Solid	8015B	11636
570-4235-14	SB2-25	Total/NA	Solid	8015B	11636
570-4235-17	SB3-5	Total/NA	Solid	8015B	11636
570-4235-21	SB3-25	Total/NA	Solid	8015B	11636
570-4235-23	SB4-3	Total/NA	Solid	8015B	11636
570-4235-24	SB4-5	Total/NA	Solid	8015B	11636
570-4235-28	SB4-25	Total/NA	Solid	8015B	11636
570-4235-31	SB5-5	Total/NA	Solid	8015B	11636
570-4235-32	SB5-10	Total/NA	Solid	8015B	11636
570-4235-35	SB5-25	Total/NA	Solid	8015B	11636
570-4235-38	SB6-5	Total/NA	Solid	8015B	11636
570-4235-39	SB6-10	Total/NA	Solid	8015B	11636
570-4235-42	SB6-25	Total/NA	Solid	8015B	11636
MB 570-11601/5	Method Blank	Total/NA	Solid	8015B	
LCS 570-11601/3	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 570-11601/4	Lab Control Sample Dup	Total/NA	Solid	8015B	

### Prep Batch: 11636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	5035	
570-4235-4	SB1-10	Total/NA	Solid	5035	
570-4235-7	SB1-25	Total/NA	Solid	5035	
570-4235-10	SB2-5	Total/NA	Solid	5035	
570-4235-11	SB2-10	Total/NA	Solid	5035	
570-4235-14	SB2-25	Total/NA	Solid	5035	
570-4235-17	SB3-5	Total/NA	Solid	5035	
570-4235-21	SB3-25	Total/NA	Solid	5035	
570-4235-23	SB4-3	Total/NA	Solid	5035	
570-4235-24	SB4-5	Total/NA	Solid	5035	
570-4235-28	SB4-25	Total/NA	Solid	5035	
570-4235-31	SB5-5	Total/NA	Solid	5035	
570-4235-32	SB5-10	Total/NA	Solid	5035	
570-4235-35	SB5-25	Total/NA	Solid	5035	
570-4235-38	SB6-5	Total/NA	Solid	5035	
570-4235-39	SB6-10	Total/NA	Solid	5035	
570-4235-42	SB6-25	Total/NA	Solid	5035	

## GC Semi VOA

### Prep Batch: 11567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	3550C	
570-4235-4	SB1-10	Total/NA	Solid	3550C	
570-4235-7	SB1-25	Total/NA	Solid	3550C	
570-4235-10	SB2-5	Total/NA	Solid	3550C	
570-4235-11	SB2-10	Total/NA	Solid	3550C	
570-4235-14	SB2-25	Total/NA	Solid	3550C	

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## GC Semi VOA (Continued)

### Prep Batch: 11567 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-15	SB3-1	Total/NA	Solid	3550C	
570-4235-16	SB3-3	Total/NA	Solid	3550C	
570-4235-17	SB3-5	Total/NA	Solid	3550C	
570-4235-21	SB3-25	Total/NA	Solid	3550C	
570-4235-23	SB4-3	Total/NA	Solid	3550C	
570-4235-24	SB4-5	Total/NA	Solid	3550C	
570-4235-28	SB4-25	Total/NA	Solid	3550C	
570-4235-31	SB5-5	Total/NA	Solid	3550C	
570-4235-32	SB5-10	Total/NA	Solid	3550C	
570-4235-35	SB5-25	Total/NA	Solid	3550C	
570-4235-38	SB6-5	Total/NA	Solid	3550C	
570-4235-39	SB6-10	Total/NA	Solid	3550C	
570-4235-42	SB6-25	Total/NA	Solid	3550C	
MB 570-11567/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 570-11567/2-A	Lab Control Sample	Total/NA	Solid	3550C	
570-4235-3 MS	SB1-5	Total/NA	Solid	3550C	
570-4235-3 MSD	SB1-5	Total/NA	Solid	3550C	

### Analysis Batch: 11805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	8015B	11567
570-4235-4	SB1-10	Total/NA	Solid	8015B	11567
570-4235-7	SB1-25	Total/NA	Solid	8015B	11567
570-4235-10	SB2-5	Total/NA	Solid	8015B	11567
570-4235-11	SB2-10	Total/NA	Solid	8015B	11567
570-4235-14	SB2-25	Total/NA	Solid	8015B	11567
570-4235-15	SB3-1	Total/NA	Solid	8015B	11567
570-4235-16	SB3-3	Total/NA	Solid	8015B	11567
570-4235-17	SB3-5	Total/NA	Solid	8015B	11567
570-4235-21	SB3-25	Total/NA	Solid	8015B	11567
570-4235-23	SB4-3	Total/NA	Solid	8015B	11567
570-4235-24	SB4-5	Total/NA	Solid	8015B	11567
570-4235-28	SB4-25	Total/NA	Solid	8015B	11567
570-4235-31	SB5-5	Total/NA	Solid	8015B	11567
570-4235-32	SB5-10	Total/NA	Solid	8015B	11567
570-4235-35	SB5-25	Total/NA	Solid	8015B	11567
570-4235-39	SB6-10	Total/NA	Solid	8015B	11567
570-4235-42	SB6-25	Total/NA	Solid	8015B	11567
MB 570-11567/1-A	Method Blank	Total/NA	Solid	8015B	11567
LCS 570-11567/2-A	Lab Control Sample	Total/NA	Solid	8015B	11567
570-4235-3 MS	SB1-5	Total/NA	Solid	8015B	11567
570-4235-3 MSD	SB1-5	Total/NA	Solid	8015B	11567

### Analysis Batch: 12020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-38	SB6-5	Total/NA	Solid	8015B	11567

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Metals

### Prep Batch: 12192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	3050B	
570-4235-4	SB1-10	Total/NA	Solid	3050B	
570-4235-7	SB1-25	Total/NA	Solid	3050B	
570-4235-10	SB2-5	Total/NA	Solid	3050B	
570-4235-11	SB2-10	Total/NA	Solid	3050B	
570-4235-14	SB2-25	Total/NA	Solid	3050B	
570-4235-15	SB3-1	Total/NA	Solid	3050B	
570-4235-16	SB3-3	Total/NA	Solid	3050B	
570-4235-17	SB3-5	Total/NA	Solid	3050B	
570-4235-21	SB3-25	Total/NA	Solid	3050B	
570-4235-23	SB4-3	Total/NA	Solid	3050B	
570-4235-24	SB4-5	Total/NA	Solid	3050B	
570-4235-28	SB4-25	Total/NA	Solid	3050B	
570-4235-31	SB5-5	Total/NA	Solid	3050B	
570-4235-32	SB5-10	Total/NA	Solid	3050B	
570-4235-35	SB5-25	Total/NA	Solid	3050B	
570-4235-38	SB6-5	Total/NA	Solid	3050B	
570-4235-39	SB6-10	Total/NA	Solid	3050B	
570-4235-42	SB6-25	Total/NA	Solid	3050B	
MB 570-12192/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-12192/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-12192/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-4235-3 MS	SB1-5	Total/NA	Solid	3050B	
570-4235-3 MSD	SB1-5	Total/NA	Solid	3050B	

### Prep Batch: 12193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	7471A	
570-4235-4	SB1-10	Total/NA	Solid	7471A	
570-4235-7	SB1-25	Total/NA	Solid	7471A	
570-4235-10	SB2-5	Total/NA	Solid	7471A	
570-4235-11	SB2-10	Total/NA	Solid	7471A	
570-4235-14	SB2-25	Total/NA	Solid	7471A	
570-4235-15	SB3-1	Total/NA	Solid	7471A	
570-4235-16	SB3-3	Total/NA	Solid	7471A	
570-4235-17	SB3-5	Total/NA	Solid	7471A	
570-4235-21	SB3-25	Total/NA	Solid	7471A	
570-4235-23	SB4-3	Total/NA	Solid	7471A	
570-4235-24	SB4-5	Total/NA	Solid	7471A	
570-4235-28	SB4-25	Total/NA	Solid	7471A	
570-4235-31	SB5-5	Total/NA	Solid	7471A	
570-4235-32	SB5-10	Total/NA	Solid	7471A	
570-4235-35	SB5-25	Total/NA	Solid	7471A	
570-4235-38	SB6-5	Total/NA	Solid	7471A	
570-4235-39	SB6-10	Total/NA	Solid	7471A	
570-4235-42	SB6-25	Total/NA	Solid	7471A	
MB 570-12193/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-12193/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-12193/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-4235-3 MS	SB1-5	Total/NA	Solid	7471A	
570-4235-3 MSD	SB1-5	Total/NA	Solid	7471A	

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Metals

### Analysis Batch: 12570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	7471A	12193
570-4235-4	SB1-10	Total/NA	Solid	7471A	12193
570-4235-7	SB1-25	Total/NA	Solid	7471A	12193
570-4235-10	SB2-5	Total/NA	Solid	7471A	12193
570-4235-11	SB2-10	Total/NA	Solid	7471A	12193
570-4235-14	SB2-25	Total/NA	Solid	7471A	12193
570-4235-15	SB3-1	Total/NA	Solid	7471A	12193
570-4235-16	SB3-3	Total/NA	Solid	7471A	12193
570-4235-17	SB3-5	Total/NA	Solid	7471A	12193
570-4235-21	SB3-25	Total/NA	Solid	7471A	12193
570-4235-23	SB4-3	Total/NA	Solid	7471A	12193
570-4235-24	SB4-5	Total/NA	Solid	7471A	12193
570-4235-28	SB4-25	Total/NA	Solid	7471A	12193
570-4235-31	SB5-5	Total/NA	Solid	7471A	12193
570-4235-32	SB5-10	Total/NA	Solid	7471A	12193
570-4235-35	SB5-25	Total/NA	Solid	7471A	12193
570-4235-38	SB6-5	Total/NA	Solid	7471A	12193
570-4235-39	SB6-10	Total/NA	Solid	7471A	12193
570-4235-42	SB6-25	Total/NA	Solid	7471A	12193
MB 570-12193/1-A	Method Blank	Total/NA	Solid	7471A	12193
LCS 570-12193/2-A	Lab Control Sample	Total/NA	Solid	7471A	12193
LCSD 570-12193/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	12193
570-4235-3 MS	SB1-5	Total/NA	Solid	7471A	12193
570-4235-3 MSD	SB1-5	Total/NA	Solid	7471A	12193

### Analysis Batch: 12779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-3	SB1-5	Total/NA	Solid	6010B	12192
570-4235-4	SB1-10	Total/NA	Solid	6010B	12192
570-4235-7	SB1-25	Total/NA	Solid	6010B	12192
570-4235-10	SB2-5	Total/NA	Solid	6010B	12192
570-4235-11	SB2-10	Total/NA	Solid	6010B	12192
570-4235-14	SB2-25	Total/NA	Solid	6010B	12192
570-4235-15	SB3-1	Total/NA	Solid	6010B	12192
570-4235-16	SB3-3	Total/NA	Solid	6010B	12192
570-4235-17	SB3-5	Total/NA	Solid	6010B	12192
570-4235-21	SB3-25	Total/NA	Solid	6010B	12192
570-4235-23	SB4-3	Total/NA	Solid	6010B	12192
570-4235-24	SB4-5	Total/NA	Solid	6010B	12192
570-4235-28	SB4-25	Total/NA	Solid	6010B	12192
570-4235-31	SB5-5	Total/NA	Solid	6010B	12192
570-4235-32	SB5-10	Total/NA	Solid	6010B	12192
570-4235-35	SB5-25	Total/NA	Solid	6010B	12192
570-4235-38	SB6-5	Total/NA	Solid	6010B	12192
570-4235-39	SB6-10	Total/NA	Solid	6010B	12192
570-4235-42	SB6-25	Total/NA	Solid	6010B	12192
MB 570-12192/1-A	Method Blank	Total/NA	Solid	6010B	12192
LCS 570-12192/2-A	Lab Control Sample	Total/NA	Solid	6010B	12192
LCSD 570-12192/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	12192
570-4235-3 MS	SB1-5	Total/NA	Solid	6010B	12192
570-4235-3 MSD	SB1-5	Total/NA	Solid	6010B	12192

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# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

**Client Sample ID: SB1-5**  
**Date Collected: 08/07/19 08:50**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-3**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.233 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 14:56	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.47 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 15:59	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 13:56	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.99 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:25	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 15:57	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB1-10**  
**Date Collected: 08/07/19 09:00**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.482 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 15:24	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.097 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 16:33	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.40 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 14:16	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.04 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:31	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.63 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:04	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB1-25**  
**Date Collected: 08/07/19 09:25**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.748 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 15:53	NET3	ECL 2
Instrument ID: GCMSOO										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

**Client Sample ID: SB1-25**

**Date Collected: 08/07/19 09:25**

**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.504 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 17:06	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 14:36	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.99 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:33	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.58 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:06	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB2-5**

**Date Collected: 08/07/19 10:08**

**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-10**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.863 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 16:21	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			4.869 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 17:40	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 14:56	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.07 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:35	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:13	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB2-10**

**Date Collected: 08/07/19 10:20**

**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-11**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.333 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 16:50	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.55 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 18:14	U1MC	ECL 2
Instrument ID: GC42										



# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB2-10

## Lab Sample ID: 570-4235-11

Date Collected: 08/07/19 10:20

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			10.40 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 15:16	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.97 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:36	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:16	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB2-25

## Lab Sample ID: 570-4235-14

Date Collected: 08/07/19 10:40

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.308 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 17:18	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.209 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 18:47	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 15:36	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.94 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:43	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:18	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB3-1

## Lab Sample ID: 570-4235-15

Date Collected: 08/07/19 11:52

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.832 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 17:46	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	3550C			10.50 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 15:57	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.99 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:45	FD74	ECL 1
Instrument ID: ICP8										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB3-1

Date Collected: 08/07/19 11:52

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.61 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:20	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB3-3

Date Collected: 08/07/19 11:50

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.186 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 18:15	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 16:16	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.03 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:47	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:23	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB3-5

Date Collected: 08/07/19 12:04

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.258 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 18:43	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.43 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 19:21	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 16:37	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.03 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:49	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.58 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:25	I3IN	ECL 1
Instrument ID: HG8										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

**Client Sample ID: SB3-25**

**Lab Sample ID: 570-4235-21**

**Date Collected: 08/07/19 12:25**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.636 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 19:11	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.076 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 19:55	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 16:57	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.98 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:51	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:27	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB4-3**

**Lab Sample ID: 570-4235-23**

**Date Collected: 08/07/19 12:48**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.435 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 19:40	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.295 g	5 g	11636	08/10/19 13:23	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 20:29	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 17:18	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.99 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:52	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:29	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB4-5**

**Lab Sample ID: 570-4235-24**

**Date Collected: 08/07/19 12:52**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.344 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 20:08	NET3	ECL 2
Instrument ID: GCMSOO										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB4-5

## Lab Sample ID: 570-4235-24

Date Collected: 08/07/19 12:52

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.122 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 22:09	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 17:38	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.00 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:54	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.57 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:32	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB4-25

## Lab Sample ID: 570-4235-28

Date Collected: 08/07/19 13:10

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.053 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 20:37	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.795 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 22:43	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.50 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 17:58	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.93 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:56	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:34	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB5-5

## Lab Sample ID: 570-4235-31

Date Collected: 08/07/19 13:57

Matrix: Solid

Date Received: 08/07/19 18:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.602 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 21:05	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.523 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 23:17	U1MC	ECL 2
Instrument ID: GC42										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB5-5

Date Collected: 08/07/19 13:57

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-31

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			10.00 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 18:58	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.00 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 01:58	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:41	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB5-10

Date Collected: 08/07/19 14:00

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-32

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.329 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 21:33	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			6.476 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/10/19 23:50	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 19:18	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.97 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:00	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:43	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB5-25

Date Collected: 08/07/19 14:15

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-35

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.924 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11799	08/12/19 22:58	NET3	ECL 2
Instrument ID: GCMSOO										
Total/NA	Prep	5035			5.719 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/11/19 00:24	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 19:38	N5Y3	ECL 1
Instrument ID: GC50										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Client Sample ID: SB5-25

Date Collected: 08/07/19 14:15

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-35

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.99 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:07	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.58 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:46	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB6-5

Date Collected: 08/07/19 15:18

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-38

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.513 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/12/19 21:50	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.56 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/11/19 00:57	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			12020	08/13/19 11:39	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.01 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:09	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.57 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:48	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB6-10

Date Collected: 08/07/19 15:25

Date Received: 08/07/19 18:06

## Lab Sample ID: 570-4235-39

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.96 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/12/19 22:16	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.909 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/11/19 01:31	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 20:18	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			1.95 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:11	FD74	ECL 1
Instrument ID: ICP8										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

**Client Sample ID: SB6-10**

**Lab Sample ID: 570-4235-39**

**Date Collected: 08/07/19 15:25**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.61 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:50	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB6-25**

**Lab Sample ID: 570-4235-42**

**Date Collected: 08/07/19 15:40**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.58 g	5 g	11860	08/12/19 13:50	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/12/19 22:43	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.527 g	5 g	11636	08/10/19 14:19	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11601	08/11/19 02:05	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11567	08/10/19 09:00	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			11805	08/12/19 20:38	N5Y3	ECL 1
Instrument ID: GC50										
Total/NA	Prep	3050B			2.05 g	100 mL	12192	08/13/19 16:38	MD3A	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:13	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12193	08/14/19 09:30	MD3A	ECL 1
Total/NA	Analysis	7471A		1			12570	08/14/19 16:52	I3IN	ECL 1
Instrument ID: HG8										

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19



# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5035	Closed System Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

#### Protocol References:

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

#### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-4235-3	SB1-5	Solid	08/07/19 08:50	08/07/19 18:06	
570-4235-4	SB1-10	Solid	08/07/19 09:00	08/07/19 18:06	
570-4235-7	SB1-25	Solid	08/07/19 09:25	08/07/19 18:06	
570-4235-10	SB2-5	Solid	08/07/19 10:08	08/07/19 18:06	
570-4235-11	SB2-10	Solid	08/07/19 10:20	08/07/19 18:06	
570-4235-14	SB2-25	Solid	08/07/19 10:40	08/07/19 18:06	
570-4235-15	SB3-1	Solid	08/07/19 11:52	08/07/19 18:06	
570-4235-16	SB3-3	Solid	08/07/19 11:50	08/07/19 18:06	
570-4235-17	SB3-5	Solid	08/07/19 12:04	08/07/19 18:06	
570-4235-21	SB3-25	Solid	08/07/19 12:25	08/07/19 18:06	
570-4235-23	SB4-3	Solid	08/07/19 12:48	08/07/19 18:06	
570-4235-24	SB4-5	Solid	08/07/19 12:52	08/07/19 18:06	
570-4235-28	SB4-25	Solid	08/07/19 13:10	08/07/19 18:06	
570-4235-31	SB5-5	Solid	08/07/19 13:57	08/07/19 18:06	
570-4235-32	SB5-10	Solid	08/07/19 14:00	08/07/19 18:06	
570-4235-35	SB5-25	Solid	08/07/19 14:15	08/07/19 18:06	
570-4235-38	SB6-5	Solid	08/07/19 15:18	08/07/19 18:06	
570-4235-39	SB6-10	Solid	08/07/19 15:25	08/07/19 18:06	
570-4235-42	SB6-25	Solid	08/07/19 15:40	08/07/19 18:06	

4235



570-4235 Chain of Custody

# STANTEC CHAIN-OF-CUSTODY



COC # \_\_\_\_\_

Page of 3

FIELD OFFICE INFORMATION		PROJECT INFORMATION		ANALYSES / METHOD REQUEST		REMARKS/ PRECAUTIONS	
OFFICE: Stantec - Thousands Oaks		Project No.: 185751046					
Send Report to: Stantec 290 Conejo Ridge Avenue Thousand Oaks, CA 91361		Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA					
Telephone: (805) 719-9343		Project Manager: Lewis Simons					
Fax/E-Mail: lewis.simons@stantec.com crystal.guan@stantec.com		Laboratory: Eurofins Calscience LLC 7440 Lincoln Way Garden Grove, CA 92841					
Sample No. / Identification	Date	Matrix *	Container & Size **	Preservative	Number of Containers		TAT
					TPH (8015M)	VOC and Fuel Oxygenates (8260B)	
SB1 - 1	07/19	Soil	100g, 500mL	VARIOUS	X	X	Normal
SB1 - 3	0840	Soil	100g, 500mL	VARIOUS	X	X	<input type="checkbox"/> MB & SURGS
SB1 - 5	0850	Soil	100g, 500mL	VARIOUS	X	X	<input type="checkbox"/> Dup/MS/MSD
SB1 - 10	0900	Soil	100g, 500mL	VARIOUS	X	X	<input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD
SB1 - 15	0910	Soil	100g, 500mL	VARIOUS	X	X	<input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other
SB1 - 20	0915	Soil	100g, 500mL	VARIOUS	X	X	5 day
SB1 - 25	0925	Soil	100g, 500mL	VARIOUS	X	X	NOTES:
SB2 - 1	1000	Soil	100g, 500mL	VARIOUS	X	X	3 trip blanks (Voa-HCL), 3 equipment
SB2 - 3	1005	Soil	100g, 500mL	VARIOUS	X	X	blanks (Voa-HCL, Amber Glass-
SB2 - 5	1008	Soil	100g, 500mL	VARIOUS	X	X	unpreserved, Plastic-Nitric Acid), and 3
SB2 - 10	1020	Soil	100g, 500mL	VARIOUS	X	X	duplicates, one set for each day.
SB2 - 15	1035	Soil	100g, 500mL	VARIOUS	X	X	
SB2 - 20	1040	Soil	100g, 500mL	VARIOUS	X	X	
SB2 - 25	1040	Soil	100g, 500mL	VARIOUS	X	X	
Possible Hazard Identification		Sample Disposal		Aqueous Samples for Metals Analysis:			
<input type="checkbox"/> Non-Haz <input type="checkbox"/> Flammable		<input type="checkbox"/> Return to Client <input type="checkbox"/> Unknown		<input type="checkbox"/> Filtered <input type="checkbox"/> Lab to filter & preserve			
Sampled by:		Shipment Method:		Airbill Number:			
Signature		Print Name		Company		Date Time	
Tony Aguilera		Tony Aguilera		STANTEC		07/19 16:47	
Santos, Vester		Santos, Vester		EC		08/07/19 16:47	
Mabel Ramos		Mabel Ramos		EC		08/07/19 18:00	
Mabel Ramos		Mabel Ramos		EC		07/19 18:00	

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

① 2.8°C/3.0°C; 500g ② 3.1°C/3.3°C; 500g ③ 2.4°C/2.6°C; 500g ④ 3.3°C/3.5°C; 500g



4235

# STANTEC CHAIN-OF-CUSTODY RECORD

**FIELD OFFICE INFORMATION**  
 OFFICE: Stantec - Thousands Oaks  
 PROJECT INFORMATION  
 Project No.: 185751046

Send Report to:  
 Stantec  
 290 Conejo Ridge Avenue  
 Thousand Oaks, CA 91361  
 Telephone: (805) 719-9343  
 Fax/E-Mail: lewis.simons@stantec.com  
 crystal.guan@stantec.com

Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA  
 Project Manager: Lewis Simons  
 Laboratory: Eurofins Calscience LLC  
 7440 Lincoln Way  
 Garden Grove, CA 92841

Sample No./ Identification	Date	Time	Matrix *	Container & Size **	Preservative	ANALYSES / METHOD REQUEST			REMARKS/ PRECAUTIONS
						TPH (8015M)	VOC and Fuel Oxygenates (8260B)	CAM Metals (6010B)	
S83-1	6-7-19	11:52	Soil	200g Vials	N/A	X	X	X	
-3		11:50				X	X	X	
-5		12:04				X	X	X	
-10		12:10				X	X	X	
-15		12:13				X	X	X	
-20		12:15				X	X	X	
S83-25		12:25				X	X	X	
S84-1		12:45				X	X	X	
-3		12:40				X	X	X	
-5		12:52				X	X	X	
-10		12:55				X	X	X	
-15		13:00				X	X	X	
-20		13:05				X	X	X	
S84-25		13:10				X	X	X	

**Possible Hazard Identification**  
 Non-Haz  Flammable  Skin  Poison B  Unknown  Return to Client  Disposal by Lab  Archive for \_\_\_ months

**Sample Disposal**  
 Aqueous Samples for Metals Analysis:  Filtered  Lab to filter & preserve

Signature	Print Name	Company	Date	Time
<i>[Signature]</i>	Tom Aguilera	STANTEC	6-7-19	16:47
<i>[Signature]</i>	Simons, Lewis	EC	08/07/19	16:47
<i>[Signature]</i>	Simons, Lewis	EC	08/07/19	18:06
<i>[Signature]</i>	Manuel Ramos	ec	8/7/19	18:06

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other



4235



# STANTEC CHAIN-OF-CUSTODY RECORD

COC # \_\_\_\_\_

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FIELD OFFICE INFORMATION		PROJECT INFORMATION		ANALYSES / METHOD REQUEST		REMARKS/ PRECAUTIONS			
OFFICE: Stantec - Thousands Oaks		Project No.: 185751046		TPH (8015M)		<input checked="" type="checkbox"/> MB & SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other			
Send Report to: Stantec 290 Conejo Ridge Avenue Thousand Oaks, CA 91361 Telephone : (805) 719-9343		Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA Project Manager: Lewis Simons		CAM Metals (6010B)		<b>TAT</b> <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Other:			
Fax/E-Mail: lewis.simons@stantec.com crystal.guan@stantec.com		Laboratory: Eurofins Calscience LLC 7440 Lincoln Way Garden Grove, CA 92841		VOC and Fuel Oxygenates (8260B)		<b>REPORTING REQUIREMENTS</b> <input type="checkbox"/> MB & SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other			
Sample No./ Identification	Date	SAMPLE Time	Matrix *	Container & Size **	Preservative	Number of Containers		NOTES:	
						TPH (8015M)	CAM Metals (6010B)		
585-1	8-7-19	1350	Soil	5 gal / cans	Various	X	X	3 trip blanks (Voa-HCL), 3 equipment blanks (Voa-HCL, Amber Glass-unpreserved, Plastic-Nitric Acid), and 3 duplicates, one set for each day.	
585-3		1353				X	X		
585-5		1357				X	X		
585-10		1400				X	X		
585-15		1405				X	X		
585-20		1410				X	X		
585-25		1415				X	X		
586-1		1505				X	X		
586-3		1510				X	X		
586-5		1518				X	X		
586-10		1525				X	X		
586-15		1530				X	X		
586-20		1535				X	X		
586-25		1540				X	X		
Possible Hazard Identification <input type="checkbox"/> Non-Haz <input type="checkbox"/> Flammable <input type="checkbox"/> Skin <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown		Sample Disposal <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for ___ months		Aqueous Samples for Metals Analysis: <input type="checkbox"/> Filtered <input checked="" type="checkbox"/> Lab to filter & preserve		<b>5 day</b> <input type="checkbox"/> MB & SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other			
Shipment Method:		Airbill Number:		Company		Date		Time	
Signature		Print Name		Company		Date		Time	
1(a) Relinquished by: <i>[Signature]</i>		Tony Aguilar		SDPATER		8-7-19		16:47	
1(b) Received by: <i>[Signature]</i>		Santos, Lester		EC		08/07/19		16:47	
2(a) Relinquished by: <i>[Signature]</i>		SANTOS, LESTER		EC		08/07/19		18:00	
2(b) Received by: <i>[Signature]</i>		Mabel Ramos		EC		8/7/19		18:06	
3(a) Relinquished by:									
3(b) Received by:									

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other



## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-4235-1

**Login Number: 4235**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

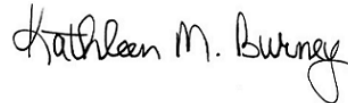
Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-4234-1  
Client Project/Site: Phase II ESA

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Mr. Lewis Simons



---

Authorized for release by:  
8/20/2019 12:11:25 PM  
Kathleen Burney, Project Mgmt. Assistant  
[kathleenburney@eurofinsus.com](mailto:kathleenburney@eurofinsus.com)

Designee for

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Job ID: 570-4234-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

### Job Narrative 570-4234-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/8/2019 5:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 2.8° C, 2.9° C, 3.2° C, 3.3° C and 3.4° C.

#### GC/MS VOA

Method(s) 8260B: The initial calibration curve analyzed in batch 570-11858 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260B: The initial calibration curve analyzed in batch 570-12000 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-12000.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8015B: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was inconsistent with the typical diesel fuel pattern used by the laboratory for quantitative purposes: SB7-15 (570-4234-5), SB7-25 (570-4234-7), SB8-15 (570-4234-12), SB9-5 (570-4234-17), SB9-15 (570-4234-19), SB10-25 (570-4234-28) and SB12-15 (570-4234-40).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010B: The absolute response for Antimony was greater than the method reporting limit (RL) in the following sample: SB8-25 (570-4234-14).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Antimony and Selenium was greater than the method reporting limit (RL) in the following samples: SB7-5 (570-4234-3), SB7-25 (570-4234-7), SB9-5 (570-4234-17) and SB11-5 (570-4234-31).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Selenium was greater than the method reporting limit (RL) in the following samples: SB8-5 (570-4234-10) and SB9-25 (570-4234-21).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Molybdenum, Antimony and Selenium was greater than the method reporting limit (RL) in the following samples: SB7-15 (570-4234-5), SB8-15 (570-4234-12), SB9-15 (570-4234-19), SB10-15 (570-4234-26), SB10-25 (570-4234-28), SB11-15 (570-4234-33), SB11-25 (570-4234-35), SB12-5 (570-4234-38) and SB12-25 (570-4234-42).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The absolute response for Molybdenum and Antimony was greater than the method reporting limit (RL) in the following sample: SB12-15 (570-4234-40).

The instrument raw data has been manually reviewed and the result can be reported as ND.

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

---

## Job ID: 570-4234-1 (Continued)

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### Laboratory: Eurofins Calscience LLC (Continued)

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-12268 and analytical batch 570-12779 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Analytes - Arsenic, Molybdenum and Selenium

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-12277 and analytical batch 570-12779 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Analytes - Barium and Antimony

Method(s) 6010B: The absolute response for Antimony and Thallium was greater than the method reporting limit (RL) in the following sample: SB10-5 (570-4234-24).  
The instrument raw data has been manually reviewed and the result can be reported as ND.

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-12379 and analytical batch 570-12779 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Analytes - Antimony and Lead

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB7-5

## Lab Sample ID: 570-4234-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.85	F1	0.765	0.264	mg/Kg	1		6010B	Total/NA
Barium	192		0.510	0.157	mg/Kg	1		6010B	Total/NA
Beryllium	0.914		0.255	0.140	mg/Kg	1		6010B	Total/NA
Cadmium	1.00		0.510	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	12.8		0.255	0.151	mg/Kg	1		6010B	Total/NA
Chromium	22.1		0.255	0.145	mg/Kg	1		6010B	Total/NA
Copper	22.2		0.510	0.138	mg/Kg	1		6010B	Total/NA
Molybdenum	2.32	F1	0.255	0.135	mg/Kg	1		6010B	Total/NA
Nickel	16.8		0.255	0.148	mg/Kg	1		6010B	Total/NA
Vanadium	53.4		0.255	0.144	mg/Kg	1		6010B	Total/NA
Zinc	68.7		1.02	0.182	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB7-15

## Lab Sample ID: 570-4234-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	15		5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	1.93		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	116		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.752		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cadmium	0.644		0.493	0.133	mg/Kg	1		6010B	Total/NA
Cobalt	9.89		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	20.7		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	13.9		0.493	0.133	mg/Kg	1		6010B	Total/NA
Nickel	13.4		0.246	0.143	mg/Kg	1		6010B	Total/NA
Vanadium	38.6		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	56.8		0.985	0.175	mg/Kg	1		6010B	Total/NA
Mercury	0.0852		0.0806	0.00568	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB7-25

## Lab Sample ID: 570-4234-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	4.9		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	3.49		0.732	0.253	mg/Kg	1		6010B	Total/NA
Barium	109		0.488	0.150	mg/Kg	1		6010B	Total/NA
Beryllium	0.507		0.244	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	0.548		0.488	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	7.18		0.244	0.144	mg/Kg	1		6010B	Total/NA
Chromium	10.7		0.244	0.139	mg/Kg	1		6010B	Total/NA
Copper	12.2		0.488	0.132	mg/Kg	1		6010B	Total/NA
Molybdenum	0.849		0.244	0.129	mg/Kg	1		6010B	Total/NA
Nickel	7.90		0.244	0.141	mg/Kg	1		6010B	Total/NA
Vanadium	39.0		0.244	0.138	mg/Kg	1		6010B	Total/NA
Zinc	41.5		0.976	0.174	mg/Kg	1		6010B	Total/NA
Lead	0.678		0.488	0.129	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB8-5

## Lab Sample ID: 570-4234-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.00		0.728	0.251	mg/Kg	1		6010B	Total/NA
Barium	159		0.485	0.150	mg/Kg	1		6010B	Total/NA
Beryllium	0.800		0.243	0.133	mg/Kg	1		6010B	Total/NA
Cadmium	0.816		0.485	0.131	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB8-5 (Continued)

Lab Sample ID: 570-4234-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	10.4		0.243	0.144	mg/Kg	1		6010B	Total/NA
Chromium	17.4		0.243	0.138	mg/Kg	1		6010B	Total/NA
Copper	16.2		0.485	0.131	mg/Kg	1		6010B	Total/NA
Molybdenum	1.63		0.243	0.128	mg/Kg	1		6010B	Total/NA
Nickel	14.4		0.243	0.141	mg/Kg	1		6010B	Total/NA
Vanadium	41.0		0.243	0.137	mg/Kg	1		6010B	Total/NA
Zinc	109		0.971	0.173	mg/Kg	1		6010B	Total/NA
Lead	1.10		0.485	0.128	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB8-15

Lab Sample ID: 570-4234-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	5.4		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	2.42		0.725	0.250	mg/Kg	1		6010B	Total/NA
Barium	76.2		0.483	0.149	mg/Kg	1		6010B	Total/NA
Beryllium	0.583		0.242	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	6.40		0.242	0.143	mg/Kg	1		6010B	Total/NA
Chromium	8.24		0.242	0.137	mg/Kg	1		6010B	Total/NA
Copper	10.5		0.483	0.130	mg/Kg	1		6010B	Total/NA
Nickel	7.57		0.242	0.140	mg/Kg	1		6010B	Total/NA
Vanadium	24.9		0.242	0.136	mg/Kg	1		6010B	Total/NA
Zinc	39.9		0.966	0.172	mg/Kg	1		6010B	Total/NA
Lead	0.701		0.483	0.128	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB8-25

Lab Sample ID: 570-4234-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.871		0.714	0.247	mg/Kg	1		6010B	Total/NA
Barium	26.2		0.476	0.147	mg/Kg	1		6010B	Total/NA
Cobalt	3.53		0.238	0.141	mg/Kg	1		6010B	Total/NA
Chromium	2.84		0.238	0.135	mg/Kg	1		6010B	Total/NA
Copper	3.90		0.476	0.129	mg/Kg	1		6010B	Total/NA
Nickel	2.76		0.238	0.138	mg/Kg	1		6010B	Total/NA
Vanadium	10.8		0.238	0.134	mg/Kg	1		6010B	Total/NA
Zinc	15.6		0.952	0.170	mg/Kg	1		6010B	Total/NA
Lead	0.824		0.476	0.126	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB9-5

Lab Sample ID: 570-4234-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	10		5.0	3.6	mg/Kg	1		8015B	Total/NA
Arsenic	2.27		0.761	0.263	mg/Kg	1		6010B	Total/NA
Barium	127		0.508	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.508		0.254	0.139	mg/Kg	1		6010B	Total/NA
Cadmium	0.661		0.508	0.137	mg/Kg	1		6010B	Total/NA
Cobalt	6.42		0.254	0.150	mg/Kg	1		6010B	Total/NA
Chromium	10.1		0.254	0.144	mg/Kg	1		6010B	Total/NA
Copper	14.5		0.508	0.137	mg/Kg	1		6010B	Total/NA
Nickel	8.74		0.254	0.147	mg/Kg	1		6010B	Total/NA
Vanadium	26.5		0.254	0.143	mg/Kg	1		6010B	Total/NA
Zinc	58.9		1.02	0.181	mg/Kg	1		6010B	Total/NA
Lead	14.0		0.508	0.134	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB9-15

## Lab Sample ID: 570-4234-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	5.7		4.9	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	1.19		0.773	0.267	mg/Kg	1		6010B	Total/NA
Barium	65.6		0.515	0.159	mg/Kg	1		6010B	Total/NA
Beryllium	0.615		0.258	0.141	mg/Kg	1		6010B	Total/NA
Cadmium	0.586		0.515	0.139	mg/Kg	1		6010B	Total/NA
Cobalt	8.34		0.258	0.153	mg/Kg	1		6010B	Total/NA
Chromium	12.8		0.258	0.146	mg/Kg	1		6010B	Total/NA
Copper	10.4		0.515	0.139	mg/Kg	1		6010B	Total/NA
Nickel	10.1		0.258	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	37.1		0.258	0.145	mg/Kg	1		6010B	Total/NA
Zinc	37.3		1.03	0.184	mg/Kg	1		6010B	Total/NA
Lead	1.50		0.515	0.136	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB9-25

## Lab Sample ID: 570-4234-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.12		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	37.8		0.513	0.158	mg/Kg	1		6010B	Total/NA
Cobalt	2.49		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	3.49		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	3.66		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	2.61		0.256	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	12.1		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	14.3		1.03	0.183	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB10-5

## Lab Sample ID: 570-4234-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.367		0.251	0.0861	mg/Kg	1		6010B	Total/NA
Arsenic	2.93		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	315		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.920		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.828		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	15.3		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	19.1		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	32.5		0.503	0.136	mg/Kg	1		6010B	Total/NA
Molybdenum	16.2		0.251	0.133	mg/Kg	1		6010B	Total/NA
Nickel	20.1		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	34.0		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	61.2		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	2.44		0.503	0.133	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB10-15

## Lab Sample ID: 570-4234-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.91		0.739	0.255	mg/Kg	1		6010B	Total/NA
Barium	133		0.493	0.152	mg/Kg	1		6010B	Total/NA
Beryllium	0.844		0.246	0.135	mg/Kg	1		6010B	Total/NA
Cobalt	10.3		0.246	0.146	mg/Kg	1		6010B	Total/NA
Chromium	16.4		0.246	0.140	mg/Kg	1		6010B	Total/NA
Copper	17.9		0.493	0.133	mg/Kg	1		6010B	Total/NA
Nickel	12.3		0.246	0.143	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB10-15 (Continued)

## Lab Sample ID: 570-4234-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	40.1		0.246	0.139	mg/Kg	1		6010B	Total/NA
Zinc	60.8		0.985	0.175	mg/Kg	1		6010B	Total/NA
Mercury	0.117		0.0847	0.00597	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB10-25

## Lab Sample ID: 570-4234-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	5.0		4.8	3.4	mg/Kg	1		8015B	Total/NA
Arsenic	1.61		0.732	0.253	mg/Kg	1		6010B	Total/NA
Barium	141		0.488	0.150	mg/Kg	1		6010B	Total/NA
Beryllium	0.753		0.244	0.134	mg/Kg	1		6010B	Total/NA
Cadmium	0.613		0.488	0.132	mg/Kg	1		6010B	Total/NA
Cobalt	10.7		0.244	0.144	mg/Kg	1		6010B	Total/NA
Chromium	14.5		0.244	0.139	mg/Kg	1		6010B	Total/NA
Copper	14.4		0.488	0.132	mg/Kg	1		6010B	Total/NA
Nickel	11.8		0.244	0.141	mg/Kg	1		6010B	Total/NA
Vanadium	37.8		0.244	0.138	mg/Kg	1		6010B	Total/NA
Zinc	59.2		0.976	0.174	mg/Kg	1		6010B	Total/NA
Lead	0.533		0.488	0.129	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB11-5

## Lab Sample ID: 570-4234-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.2		0.85	0.11	ug/Kg	1		8260B	Total/NA
Arsenic	3.16		0.725	0.250	mg/Kg	1		6010B	Total/NA
Barium	124		0.483	0.149	mg/Kg	1		6010B	Total/NA
Beryllium	0.630		0.242	0.132	mg/Kg	1		6010B	Total/NA
Cadmium	0.535		0.483	0.130	mg/Kg	1		6010B	Total/NA
Cobalt	8.86		0.242	0.143	mg/Kg	1		6010B	Total/NA
Chromium	14.9		0.242	0.137	mg/Kg	1		6010B	Total/NA
Copper	10.7		0.483	0.130	mg/Kg	1		6010B	Total/NA
Nickel	11.4		0.242	0.140	mg/Kg	1		6010B	Total/NA
Vanadium	38.3		0.242	0.136	mg/Kg	1		6010B	Total/NA
Zinc	49.0		0.966	0.172	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB11-15

## Lab Sample ID: 570-4234-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.78		0.714	0.247	mg/Kg	1		6010B	Total/NA
Barium	147		0.476	0.147	mg/Kg	1		6010B	Total/NA
Beryllium	0.859		0.238	0.130	mg/Kg	1		6010B	Total/NA
Cadmium	0.837		0.476	0.129	mg/Kg	1		6010B	Total/NA
Cobalt	8.37		0.238	0.141	mg/Kg	1		6010B	Total/NA
Chromium	15.1		0.238	0.135	mg/Kg	1		6010B	Total/NA
Copper	23.5		0.476	0.129	mg/Kg	1		6010B	Total/NA
Nickel	14.1		0.238	0.138	mg/Kg	1		6010B	Total/NA
Vanadium	41.5		0.238	0.134	mg/Kg	1		6010B	Total/NA
Zinc	50.2		0.952	0.170	mg/Kg	1		6010B	Total/NA
Lead	1.25		0.476	0.126	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB11-25

## Lab Sample ID: 570-4234-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.900		0.769	0.266	mg/Kg	1		6010B	Total/NA
Barium	128		0.513	0.158	mg/Kg	1		6010B	Total/NA
Beryllium	0.697		0.256	0.141	mg/Kg	1		6010B	Total/NA
Cadmium	0.614		0.513	0.138	mg/Kg	1		6010B	Total/NA
Cobalt	10.4		0.256	0.152	mg/Kg	1		6010B	Total/NA
Chromium	13.2		0.256	0.146	mg/Kg	1		6010B	Total/NA
Copper	13.0		0.513	0.138	mg/Kg	1		6010B	Total/NA
Nickel	11.5		0.256	0.149	mg/Kg	1		6010B	Total/NA
Vanadium	38.3		0.256	0.145	mg/Kg	1		6010B	Total/NA
Zinc	57.0		1.03	0.183	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB12-5

## Lab Sample ID: 570-4234-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		1.1	0.15	ug/Kg	1		8260B	Total/NA
Arsenic	7.66		0.754	0.260	mg/Kg	1		6010B	Total/NA
Barium	185		0.503	0.155	mg/Kg	1		6010B	Total/NA
Beryllium	0.937		0.251	0.138	mg/Kg	1		6010B	Total/NA
Cadmium	0.943		0.503	0.136	mg/Kg	1		6010B	Total/NA
Cobalt	11.9		0.251	0.149	mg/Kg	1		6010B	Total/NA
Chromium	19.2		0.251	0.143	mg/Kg	1		6010B	Total/NA
Copper	26.8		0.503	0.136	mg/Kg	1		6010B	Total/NA
Nickel	15.8		0.251	0.146	mg/Kg	1		6010B	Total/NA
Vanadium	42.5		0.251	0.142	mg/Kg	1		6010B	Total/NA
Zinc	71.2		1.01	0.179	mg/Kg	1		6010B	Total/NA
Lead	2.13		0.503	0.133	mg/Kg	1		6010B	Total/NA
Mercury	0.0839		0.0833	0.00587	mg/Kg	1		7471A	Total/NA

## Client Sample ID: SB12-15

## Lab Sample ID: 570-4234-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	7.8		5.0	3.5	mg/Kg	1		8015B	Total/NA
Arsenic	1.86		0.765	0.264	mg/Kg	1		6010B	Total/NA
Barium	85.2		0.510	0.157	mg/Kg	1		6010B	Total/NA
Beryllium	0.654		0.255	0.140	mg/Kg	1		6010B	Total/NA
Cobalt	8.91		0.255	0.151	mg/Kg	1		6010B	Total/NA
Chromium	13.0		0.255	0.145	mg/Kg	1		6010B	Total/NA
Copper	11.2		0.510	0.138	mg/Kg	1		6010B	Total/NA
Nickel	9.80		0.255	0.148	mg/Kg	1		6010B	Total/NA
Vanadium	31.3		0.255	0.144	mg/Kg	1		6010B	Total/NA
Zinc	35.5		1.02	0.182	mg/Kg	1		6010B	Total/NA
Lead	1.67		0.510	0.135	mg/Kg	1		6010B	Total/NA

## Client Sample ID: SB12-25

## Lab Sample ID: 570-4234-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.02		0.761	0.263	mg/Kg	1		6010B	Total/NA
Barium	111		0.508	0.156	mg/Kg	1		6010B	Total/NA
Beryllium	0.673		0.254	0.139	mg/Kg	1		6010B	Total/NA
Cobalt	8.50		0.254	0.150	mg/Kg	1		6010B	Total/NA
Chromium	11.9		0.254	0.144	mg/Kg	1		6010B	Total/NA
Copper	15.3		0.508	0.137	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB12-25 (Continued)**

**Lab Sample ID: 570-4234-42**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	10.4		0.254	0.147	mg/Kg	1		6010B	Total/NA
Vanadium	31.9		0.254	0.143	mg/Kg	1		6010B	Total/NA
Zinc	44.5		1.02	0.181	mg/Kg	1		6010B	Total/NA
Lead	0.625		0.508	0.134	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1,1-Trichloroethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.30	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.7	0.31	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1,2-Trichloroethane	ND		0.87	0.31	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1-Dichloroethane	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1-Dichloroethene	ND		0.87	0.30	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,1-Dichloropropene	ND		1.7	0.29	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2,3-Trichlorobenzene	ND		1.7	0.80	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2,3-Trichloropropane	ND		1.7	0.72	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2,4-Trichlorobenzene	ND		1.7	0.27	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2,4-Trimethylbenzene	ND		1.7	0.51	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2-Dibromo-3-Chloropropane	ND		8.7	1.5	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2-Dibromoethane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2-Dichlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2-Dichloroethane	ND		0.87	0.27	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,2-Dichloropropane	ND		0.87	0.38	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,3,5-Trimethylbenzene	ND		1.7	0.48	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,3-Dichlorobenzene	ND		0.87	0.15	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
1,4-Dichlorobenzene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
2-Butanone	ND		17	3.3	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
2-Chlorotoluene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
2-Hexanone	ND		17	1.5	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
4-Chlorotoluene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
4-Methyl-2-pentanone	ND		17	3.8	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Acetone	ND		44	5.4	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Benzene	ND		0.87	0.11	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Bromobenzene	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Bromochloromethane	ND		1.7	0.60	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Bromodichloromethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Bromoform	ND		4.4	0.69	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Bromomethane	ND		17	8.2	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
cis-1,2-Dichloroethene	ND		0.87	0.24	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
cis-1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Carbon disulfide	ND		8.7	0.27	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Carbon tetrachloride	ND		0.87	0.25	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Chlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Chloroform	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Chloromethane	ND		17	0.27	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Dibromochloromethane	ND		1.7	0.50	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Dibromomethane	ND		0.87	0.68	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Dichlorodifluoromethane	ND		1.7	0.39	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Di-isopropyl ether (DIPE)	ND		0.87	0.42	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Ethanol	ND		440	73	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Ethylbenzene	ND		0.87	0.13	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Ethyl-t-butyl ether (ETBE)	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/12/19 23:08	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.87	0.48	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Methylene Chloride	ND		8.7	1.2	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Naphthalene	ND		8.7	0.71	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
n-Butylbenzene	ND		0.87	0.14	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
N-Propylbenzene	ND		1.7	0.44	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
o-Xylene	ND		0.87	0.48	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
m,p-Xylene	ND		1.7	0.23	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
p-Isopropyltoluene	ND		0.87	0.55	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
sec-Butylbenzene	ND		0.87	0.50	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Styrene	ND		0.87	0.53	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
trans-1,2-Dichloroethene	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
trans-1,3-Dichloropropene	ND		1.7	0.53	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Tert-amyl-methyl ether (TAME)	ND		0.87	0.31	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
tert-Butyl alcohol (TBA)	ND		17	4.5	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
tert-Butylbenzene	ND		0.87	0.13	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Tetrachloroethene	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Toluene	ND		0.87	0.45	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Trichloroethene	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Trichlorofluoromethane	ND		8.7	0.33	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Vinyl acetate	ND		8.7	4.1	ug/Kg		08/09/19 18:30	08/12/19 23:08	1
Vinyl chloride	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/12/19 23:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155	08/09/19 18:30	08/12/19 23:08	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/09/19 18:30	08/12/19 23:08	1
Dibromofluoromethane (Surr)	105		79 - 133	08/09/19 18:30	08/12/19 23:08	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/12/19 23:08	1

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.68	0.16	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1,1-Trichloroethane	ND		0.68	0.15	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.23	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	0.24	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1,2-Trichloroethane	ND		0.68	0.24	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1-Dichloroethane	ND		0.68	0.14	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1-Dichloroethene	ND		0.68	0.23	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,1-Dichloropropene	ND		1.4	0.22	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2,3-Trichlorobenzene	ND		1.4	0.62	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2,3-Trichloropropane	ND		1.4	0.56	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2,4-Trichlorobenzene	ND		1.4	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2,4-Trimethylbenzene	ND		1.4	0.40	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2-Dibromo-3-Chloropropane	ND		6.8	1.2	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2-Dibromoethane	ND		0.68	0.17	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2-Dichlorobenzene	ND		0.68	0.16	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2-Dichloroethane	ND		0.68	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,2-Dichloropropane	ND		0.68	0.30	ug/Kg		08/09/19 18:30	08/12/19 23:35	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.4	0.37	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,3-Dichlorobenzene	ND		0.68	0.12	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,3-Dichloropropane	ND		0.68	0.17	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
1,4-Dichlorobenzene	ND		0.68	0.15	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
2,2-Dichloropropane	ND		3.4	0.22	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
2-Butanone	ND		14	2.6	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
2-Chlorotoluene	ND		0.68	0.16	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
2-Hexanone	ND		14	1.2	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
4-Chlorotoluene	ND		0.68	0.14	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
4-Methyl-2-pentanone	ND		14	2.9	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Acetone	ND		34	4.2	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Benzene	ND		0.68	0.088	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Bromobenzene	ND		0.68	0.14	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Bromochloromethane	ND		1.4	0.47	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Bromodichloromethane	ND		0.68	0.16	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Bromoform	ND		3.4	0.54	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Bromomethane	ND		14	6.4	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
cis-1,2-Dichloroethene	ND		0.68	0.19	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
cis-1,3-Dichloropropene	ND		0.68	0.17	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Carbon disulfide	ND		6.8	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Carbon tetrachloride	ND		0.68	0.19	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Chlorobenzene	ND		0.68	0.15	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Chloroethane	ND		1.4	1.0	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Chloroform	ND		0.68	0.16	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Chloromethane	ND		14	0.21	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Dibromochloromethane	ND		1.4	0.39	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Dibromomethane	ND		0.68	0.53	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Dichlorodifluoromethane	ND		1.4	0.30	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Di-isopropyl ether (DIPE)	ND		0.68	0.33	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Ethanol	ND		340	57	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Ethylbenzene	ND		0.68	0.10	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.68	0.34	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Isopropylbenzene	ND		0.68	0.37	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Methylene Chloride	ND		6.8	0.91	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Naphthalene	ND		6.8	0.55	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
n-Butylbenzene	ND		0.68	0.11	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
N-Propylbenzene	ND		1.4	0.34	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
o-Xylene	ND		0.68	0.38	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
m,p-Xylene	ND		1.4	0.18	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
p-Isopropyltoluene	ND		0.68	0.43	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
sec-Butylbenzene	ND		0.68	0.39	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Styrene	ND		0.68	0.41	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
trans-1,2-Dichloroethene	ND		0.68	0.34	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
trans-1,3-Dichloropropene	ND		1.4	0.41	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Tert-amyl-methyl ether (TAME)	ND		0.68	0.24	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
tert-Butyl alcohol (TBA)	ND		14	3.5	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
tert-Butylbenzene	ND		0.68	0.10	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Tetrachloroethene	ND		0.68	0.14	ug/Kg		08/09/19 18:30	08/12/19 23:35	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.68	0.35	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Trichloroethene	ND		1.4	0.20	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Trichlorofluoromethane	ND		6.8	0.25	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Vinyl acetate	ND		6.8	3.2	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
Vinyl chloride	ND		0.68	0.34	ug/Kg		08/09/19 18:30	08/12/19 23:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	111		71 - 155				08/09/19 18:30	08/12/19 23:35	1
4-Bromofluorobenzene (Surr)	100		80 - 120				08/09/19 18:30	08/12/19 23:35	1
Dibromofluoromethane (Surr)	106		79 - 133				08/09/19 18:30	08/12/19 23:35	1
Toluene-d8 (Surr)	98		80 - 120				08/09/19 18:30	08/12/19 23:35	1

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.99	0.24	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1,1-Trichloroethane	ND		0.99	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.34	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.9	0.35	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1,2-Trichloroethane	ND		0.99	0.35	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1-Dichloroethane	ND		0.99	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1-Dichloroethene	ND		0.99	0.34	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2,4-Trimethylbenzene	ND		2.0	0.58	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2-Dibromoethane	ND		0.99	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2-Dichlorobenzene	ND		0.99	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2-Dichloroethane	ND		0.99	0.31	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,2-Dichloropropane	ND		0.99	0.44	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,3-Dichlorobenzene	ND		0.99	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,3-Dichloropropane	ND		0.99	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
1,4-Dichlorobenzene	ND		0.99	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
2-Butanone	ND		20	3.7	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
2-Chlorotoluene	ND		0.99	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
2-Hexanone	ND		20	1.8	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
4-Chlorotoluene	ND		0.99	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Acetone	ND		50	6.2	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Benzene	ND		0.99	0.13	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Bromobenzene	ND		0.99	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Bromochloromethane	ND		2.0	0.69	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Bromodichloromethane	ND		0.99	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Bromoform	ND		5.0	0.79	ug/Kg		08/09/19 18:30	08/13/19 00:01	1
Bromomethane	ND		20	9.4	ug/Kg		08/09/19 18:30	08/13/19 00:01	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.99	0.28	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
cis-1,3-Dichloropropene	ND		0.99	0.25	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Carbon disulfide	ND		9.9	0.30	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Carbon tetrachloride	ND		0.99	0.28	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Chlorobenzene	ND		0.99	0.22	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Chloroethane	ND		2.0	1.5	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Chloroform	ND		0.99	0.24	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Chloromethane	ND		20	0.30	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Dibromomethane	ND		0.99	0.77	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Di-isopropyl ether (DIPE)	ND		0.99	0.48	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Ethanol	ND		500	83	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Ethylbenzene	ND		0.99	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Ethyl-t-butyl ether (ETBE)	ND		0.99	0.50	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Isopropylbenzene	ND		0.99	0.54	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Methylene Chloride	ND		9.9	1.3	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Naphthalene	ND		9.9	0.81	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
n-Butylbenzene	ND		0.99	0.16	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
o-Xylene	ND		0.99	0.55	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
m,p-Xylene	ND		2.0	0.27	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
p-Isopropyltoluene	ND		0.99	0.63	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
sec-Butylbenzene	ND		0.99	0.57	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Styrene	ND		0.99	0.60	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
trans-1,2-Dichloroethene	ND		0.99	0.50	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
trans-1,3-Dichloropropene	ND		2.0	0.60	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Tert-amyl-methyl ether (TAME)	ND		0.99	0.35	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
tert-Butyl alcohol (TBA)	ND		20	5.1	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
tert-Butylbenzene	ND		0.99	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Tetrachloroethene	ND		0.99	0.21	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Toluene	ND		0.99	0.51	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Trichloroethene	ND		2.0	0.30	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Trichlorofluoromethane	ND		9.9	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Vinyl acetate	ND		9.9	4.7	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1
Vinyl chloride	ND		0.99	0.50	ug/Kg	-	08/09/19 18:30	08/13/19 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		71 - 155	08/09/19 18:30	08/13/19 00:01	1
4-Bromofluorobenzene (Surr)	102		80 - 120	08/09/19 18:30	08/13/19 00:01	1
Dibromofluoromethane (Surr)	103		79 - 133	08/09/19 18:30	08/13/19 00:01	1
Toluene-d8 (Surr)	100		80 - 120	08/09/19 18:30	08/13/19 00:01	1

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20	ug/Kg	-	08/09/19 18:30	08/13/19 00:27	1
1,1,1-Trichloroethane	ND		0.83	0.19	ug/Kg	-	08/09/19 18:30	08/13/19 00:27	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.7	0.29	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,1,2-Trichloroethane	ND		0.83	0.29	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,1-Dichloroethane	ND		0.83	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,1-Dichloroethene	ND		0.83	0.29	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,1-Dichloropropene	ND		1.7	0.27	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2,3-Trichlorobenzene	ND		1.7	0.76	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2,3-Trichloropropane	ND		1.7	0.69	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2,4-Trichlorobenzene	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2,4-Trimethylbenzene	ND		1.7	0.49	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2-Dibromoethane	ND		0.83	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2-Dichlorobenzene	ND		0.83	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2-Dichloroethane	ND		0.83	0.26	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,2-Dichloropropane	ND		0.83	0.36	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,3,5-Trimethylbenzene	ND		1.7	0.45	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,3-Dichlorobenzene	ND		0.83	0.15	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,3-Dichloropropane	ND		0.83	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
1,4-Dichlorobenzene	ND		0.83	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
2,2-Dichloropropane	ND		4.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
2-Butanone	ND		17	3.1	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
2-Chlorotoluene	ND		0.83	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
2-Hexanone	ND		17	1.5	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
4-Chlorotoluene	ND		0.83	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
4-Methyl-2-pentanone	ND		17	3.6	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Acetone	ND		41	5.2	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Benzene	ND		0.83	0.11	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Bromobenzene	ND		0.83	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Bromochloromethane	ND		1.7	0.57	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Bromodichloromethane	ND		0.83	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Bromoform	ND		4.1	0.66	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Bromomethane	ND		17	7.8	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
cis-1,2-Dichloroethene	ND		0.83	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
cis-1,3-Dichloropropene	ND		0.83	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Carbon disulfide	ND		8.3	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Carbon tetrachloride	ND		0.83	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Chlorobenzene	ND		0.83	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Chloroethane	ND		1.7	1.2	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Chloroform	ND		0.83	0.20	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Chloromethane	ND		17	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Dibromochloromethane	ND		1.7	0.47	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Dibromomethane	ND		0.83	0.64	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Dichlorodifluoromethane	ND		1.7	0.37	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Ethanol	ND		410	69	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Ethylbenzene	ND		0.83	0.13	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Isopropylbenzene	ND		0.83	0.45	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Methylene Chloride	ND		8.3	1.1	ug/Kg		08/09/19 18:30	08/13/19 00:27	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Naphthalene	ND		8.3	0.67	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
n-Butylbenzene	ND		0.83	0.13	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
N-Propylbenzene	ND		1.7	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
o-Xylene	ND		0.83	0.46	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
m,p-Xylene	ND		1.7	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
p-Isopropyltoluene	ND		0.83	0.52	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
sec-Butylbenzene	ND		0.83	0.48	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Styrene	ND		0.83	0.50	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
trans-1,2-Dichloroethene	ND		0.83	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
trans-1,3-Dichloropropene	ND		1.7	0.50	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
tert-Butyl alcohol (TBA)	ND		17	4.3	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
tert-Butylbenzene	ND		0.83	0.13	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Tetrachloroethene	ND		0.83	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Toluene	ND		0.83	0.43	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Trichloroethene	ND		1.7	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Trichlorofluoromethane	ND		8.3	0.31	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Vinyl acetate	ND		8.3	3.9	ug/Kg		08/09/19 18:30	08/13/19 00:27	1
Vinyl chloride	ND		0.83	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		71 - 155	08/09/19 18:30	08/13/19 00:27	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 00:27	1
Dibromofluoromethane (Surr)	106		79 - 133	08/09/19 18:30	08/13/19 00:27	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 00:27	1

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.73	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1,1-Trichloroethane	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.3	0.26	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1,2-Trichloroethane	ND		0.73	0.26	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1-Dichloroethane	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1-Dichloroethene	ND		0.73	0.25	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,1-Dichloropropene	ND		1.5	0.24	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2,3-Trichlorobenzene	ND		1.5	0.67	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2,3-Trichloropropane	ND		1.5	0.61	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2,4-Trichlorobenzene	ND		1.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2,4-Trimethylbenzene	ND		1.5	0.43	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2-Dibromo-3-Chloropropane	ND		7.3	1.3	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2-Dibromoethane	ND		0.73	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2-Dichlorobenzene	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2-Dichloroethane	ND		0.73	0.23	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,2-Dichloropropane	ND		0.73	0.32	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,3,5-Trimethylbenzene	ND		1.5	0.40	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,3-Dichlorobenzene	ND		0.73	0.13	ug/Kg		08/09/19 18:30	08/13/19 00:53	1

Eurofins Calscience LLC



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.73	0.18	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
1,4-Dichlorobenzene	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
2,2-Dichloropropane	ND		3.7	0.24	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
2-Butanone	ND		15	2.8	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
2-Chlorotoluene	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
2-Hexanone	ND		15	1.3	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
4-Chlorotoluene	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
4-Methyl-2-pentanone	ND		15	3.2	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Acetone	ND		37	4.6	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Benzene	ND		0.73	0.095	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Bromobenzene	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Bromochloromethane	ND		1.5	0.50	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Bromodichloromethane	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Bromoform	ND		3.7	0.58	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Bromomethane	ND		15	6.9	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
cis-1,2-Dichloroethene	ND		0.73	0.20	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
cis-1,3-Dichloropropene	ND		0.73	0.19	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Carbon disulfide	ND		7.3	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Carbon tetrachloride	ND		0.73	0.21	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Chlorobenzene	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Chloroethane	ND		1.5	1.1	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Chloroform	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Chloromethane	ND		15	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Dibromochloromethane	ND		1.5	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Dibromomethane	ND		0.73	0.57	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Dichlorodifluoromethane	ND		1.5	0.32	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Di-isopropyl ether (DIPE)	ND		0.73	0.35	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Ethanol	ND		370	61	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Ethylbenzene	ND		0.73	0.11	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.73	0.37	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Isopropylbenzene	ND		0.73	0.40	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Methylene Chloride	ND		7.3	0.98	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Naphthalene	ND		7.3	0.59	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
n-Butylbenzene	ND		0.73	0.11	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
N-Propylbenzene	ND		1.5	0.37	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
o-Xylene	ND		0.73	0.41	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
m,p-Xylene	ND		1.5	0.20	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
p-Isopropyltoluene	ND		0.73	0.46	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
sec-Butylbenzene	ND		0.73	0.42	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Styrene	ND		0.73	0.44	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
trans-1,2-Dichloroethene	ND		0.73	0.37	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
trans-1,3-Dichloropropene	ND		1.5	0.44	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Tert-amyl-methyl ether (TAME)	ND		0.73	0.26	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
tert-Butyl alcohol (TBA)	ND		15	3.8	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
tert-Butylbenzene	ND		0.73	0.11	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Tetrachloroethene	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Toluene	ND		0.73	0.38	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Trichloroethene	ND		1.5	0.22	ug/Kg		08/09/19 18:30	08/13/19 00:53	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		7.3	0.27	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Vinyl acetate	ND		7.3	3.5	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Vinyl chloride	ND		0.73	0.37	ug/Kg		08/09/19 18:30	08/13/19 00:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155				08/09/19 18:30	08/13/19 00:53	1
4-Bromofluorobenzene (Surr)	100		80 - 120				08/09/19 18:30	08/13/19 00:53	1
Dibromofluoromethane (Surr)	104		79 - 133				08/09/19 18:30	08/13/19 00:53	1
Toluene-d8 (Surr)	101		80 - 120				08/09/19 18:30	08/13/19 00:53	1

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.82	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1,1-Trichloroethane	ND		0.82	0.18	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.28	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.2	0.29	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1,2-Trichloroethane	ND		0.82	0.29	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1-Dichloroethane	ND		0.82	0.17	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1-Dichloroethene	ND		0.82	0.28	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,1-Dichloropropene	ND		1.6	0.27	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2,3-Trichlorobenzene	ND		1.6	0.75	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2,3-Trichloropropane	ND		1.6	0.68	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2,4-Trichlorobenzene	ND		1.6	0.25	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2,4-Trimethylbenzene	ND		1.6	0.48	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2-Dibromoethane	ND		0.82	0.21	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2-Dichlorobenzene	ND		0.82	0.19	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2-Dichloroethane	ND		0.82	0.26	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,2-Dichloropropane	ND		0.82	0.36	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,3,5-Trimethylbenzene	ND		1.6	0.45	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,3-Dichlorobenzene	ND		0.82	0.14	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,3-Dichloropropane	ND		0.82	0.21	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
1,4-Dichlorobenzene	ND		0.82	0.18	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
2,2-Dichloropropane	ND		4.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
2-Butanone	ND		16	3.1	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
2-Chlorotoluene	ND		0.82	0.19	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
2-Hexanone	ND		16	1.4	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
4-Chlorotoluene	ND		0.82	0.17	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
4-Methyl-2-pentanone	ND		16	3.5	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Acetone	ND		41	5.1	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Benzene	ND		0.82	0.11	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Bromobenzene	ND		0.82	0.17	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Bromochloromethane	ND		1.6	0.57	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Bromodichloromethane	ND		0.82	0.19	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Bromoform	ND		4.1	0.65	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Bromomethane	ND		16	7.7	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
cis-1,2-Dichloroethene	ND		0.82	0.23	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
cis-1,3-Dichloropropene	ND		0.82	0.21	ug/Kg		08/09/19 18:30	08/13/19 01:19	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		8.2	0.25	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Carbon tetrachloride	ND		0.82	0.23	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Chlorobenzene	ND		0.82	0.18	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Chloroform	ND		0.82	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Chloromethane	ND		16	0.25	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Dibromochloromethane	ND		1.6	0.47	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Dibromomethane	ND		0.82	0.64	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Dichlorodifluoromethane	ND		1.6	0.36	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Di-isopropyl ether (DIPE)	ND		0.82	0.40	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Ethanol	ND		410	69	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Ethylbenzene	ND		0.82	0.12	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Ethyl-t-butyl ether (ETBE)	ND		0.82	0.42	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Isopropylbenzene	ND		0.82	0.45	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Methylene Chloride	ND		8.2	1.1	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.24	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Naphthalene	ND		8.2	0.67	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
n-Butylbenzene	ND		0.82	0.13	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
N-Propylbenzene	ND		1.6	0.41	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
o-Xylene	ND		0.82	0.46	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
m,p-Xylene	ND		1.6	0.22	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
p-Isopropyltoluene	ND		0.82	0.52	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
sec-Butylbenzene	ND		0.82	0.47	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Styrene	ND		0.82	0.50	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
trans-1,2-Dichloroethene	ND		0.82	0.42	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
trans-1,3-Dichloropropene	ND		1.6	0.50	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Tert-amyl-methyl ether (TAME)	ND		0.82	0.29	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
tert-Butyl alcohol (TBA)	ND		16	4.2	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
tert-Butylbenzene	ND		0.82	0.12	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Tetrachloroethene	ND		0.82	0.17	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Toluene	ND		0.82	0.42	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Trichloroethene	ND		1.6	0.25	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Trichlorofluoromethane	ND		8.2	0.31	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Vinyl acetate	ND		8.2	3.9	ug/Kg		08/09/19 18:30	08/13/19 01:19	1
Vinyl chloride	ND		0.82	0.41	ug/Kg		08/09/19 18:30	08/13/19 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		71 - 155	08/09/19 18:30	08/13/19 01:19	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120	08/09/19 18:30	08/13/19 01:19	1
<i>Dibromofluoromethane (Surr)</i>	103		79 - 133	08/09/19 18:30	08/13/19 01:19	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120	08/09/19 18:30	08/13/19 01:19	1

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1,1-Trichloroethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.30	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.7	0.31	ug/Kg		08/09/19 18:30	08/13/19 01:45	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.87	0.31	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1-Dichloroethane	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1-Dichloroethene	ND		0.87	0.30	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,1-Dichloropropene	ND		1.7	0.29	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2,3-Trichlorobenzene	ND		1.7	0.80	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2,3-Trichloropropane	ND		1.7	0.72	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2,4-Trichlorobenzene	ND		1.7	0.27	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2,4-Trimethylbenzene	ND		1.7	0.51	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2-Dibromo-3-Chloropropane	ND		8.7	1.5	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2-Dibromoethane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2-Dichlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2-Dichloroethane	ND		0.87	0.27	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,2-Dichloropropane	ND		0.87	0.38	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,3,5-Trimethylbenzene	ND		1.7	0.48	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,3-Dichlorobenzene	ND		0.87	0.15	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
1,4-Dichlorobenzene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
2-Butanone	ND		17	3.3	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
2-Chlorotoluene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
2-Hexanone	ND		17	1.5	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
4-Chlorotoluene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
4-Methyl-2-pentanone	ND		17	3.8	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Acetone	ND		44	5.4	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Benzene	ND		0.87	0.11	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Bromobenzene	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Bromochloromethane	ND		1.7	0.60	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Bromodichloromethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Bromoform	ND		4.4	0.69	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Bromomethane	ND		17	8.2	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
cis-1,2-Dichloroethene	ND		0.87	0.24	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
cis-1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Carbon disulfide	ND		8.7	0.27	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Carbon tetrachloride	ND		0.87	0.25	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Chlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Chloroform	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Chloromethane	ND		17	0.26	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Dibromochloromethane	ND		1.7	0.50	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Dibromomethane	ND		0.87	0.67	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Dichlorodifluoromethane	ND		1.7	0.39	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Di-isopropyl ether (DIPE)	ND		0.87	0.42	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Ethanol	ND		440	73	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Ethylbenzene	ND		0.87	0.13	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Ethyl-t-butyl ether (ETBE)	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Isopropylbenzene	ND		0.87	0.48	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Methylene Chloride	ND		8.7	1.2	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 01:45	1
Naphthalene	ND		8.7	0.71	ug/Kg		08/09/19 18:30	08/13/19 01:45	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.87	0.14	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
N-Propylbenzene	ND		1.7	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
o-Xylene	ND		0.87	0.48	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
m,p-Xylene	ND		1.7	0.23	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
p-Isopropyltoluene	ND		0.87	0.55	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
sec-Butylbenzene	ND		0.87	0.50	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Styrene	ND		0.87	0.53	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
trans-1,2-Dichloroethene	ND		0.87	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
trans-1,3-Dichloropropene	ND		1.7	0.53	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Tert-amyl-methyl ether (TAME)	ND		0.87	0.31	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
tert-Butyl alcohol (TBA)	ND		17	4.5	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
tert-Butylbenzene	ND		0.87	0.13	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Tetrachloroethene	ND		0.87	0.18	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Toluene	ND		0.87	0.45	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Trichloroethene	ND		1.7	0.26	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Trichlorofluoromethane	ND		8.7	0.33	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Vinyl acetate	ND		8.7	4.1	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Vinyl chloride	ND		0.87	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 01:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		71 - 155				08/09/19 18:30	08/13/19 01:45	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120				08/09/19 18:30	08/13/19 01:45	1
<i>Dibromofluoromethane (Surr)</i>	105		79 - 133				08/09/19 18:30	08/13/19 01:45	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120				08/09/19 18:30	08/13/19 01:45	1

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.67	0.16	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1,1-Trichloroethane	ND		0.67	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1,2,2-Tetrachloroethane	ND		1.3	0.23	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.7	0.23	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1,2-Trichloroethane	ND		0.67	0.24	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1-Dichloroethane	ND		0.67	0.14	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1-Dichloroethene	ND		0.67	0.23	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,1-Dichloropropene	ND		1.3	0.22	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2,3-Trichlorobenzene	ND		1.3	0.61	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2,3-Trichloropropane	ND		1.3	0.55	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2,4-Trichlorobenzene	ND		1.3	0.21	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2,4-Trimethylbenzene	ND		1.3	0.39	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2-Dibromo-3-Chloropropane	ND		6.7	1.2	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2-Dibromoethane	ND		0.67	0.17	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2-Dichlorobenzene	ND		0.67	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2-Dichloroethane	ND		0.67	0.21	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,2-Dichloropropane	ND		0.67	0.29	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,3,5-Trimethylbenzene	ND		1.3	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,3-Dichlorobenzene	ND		0.67	0.12	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,3-Dichloropropane	ND		0.67	0.17	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1
1,4-Dichlorobenzene	ND		0.67	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 15:29	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		3.3	0.22	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
2-Butanone	ND		13	2.5	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
2-Chlorotoluene	ND		0.67	0.15	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
2-Hexanone	ND		13	1.2	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
4-Chlorotoluene	ND		0.67	0.14	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
4-Methyl-2-pentanone	ND		13	2.9	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Acetone	ND		33	4.2	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Benzene	ND		0.67	0.087	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Bromobenzene	ND		0.67	0.14	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Bromochloromethane	ND		1.3	0.46	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Bromodichloromethane	ND		0.67	0.16	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Bromoform	ND		3.3	0.53	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Bromomethane	ND		13	6.3	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
cis-1,2-Dichloroethene	ND		0.67	0.19	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
cis-1,3-Dichloropropene	ND		0.67	0.17	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Carbon disulfide	ND		6.7	0.20	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Carbon tetrachloride	ND		0.67	0.19	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Chlorobenzene	ND		0.67	0.15	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Chloroethane	ND		1.3	1.0	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Chloroform	ND		0.67	0.16	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Chloromethane	ND		13	0.20	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Dibromochloromethane	ND		1.3	0.38	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Dibromomethane	ND		0.67	0.52	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Dichlorodifluoromethane	ND		1.3	0.30	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Di-isopropyl ether (DIPE)	ND		0.67	0.32	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Ethanol	ND		330	56	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Ethylbenzene	ND		0.67	0.10	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Ethyl-t-butyl ether (ETBE)	ND		0.67	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Isopropylbenzene	ND		0.67	0.36	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Methylene Chloride	ND		6.7	0.89	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Methyl-t-Butyl Ether (MTBE)	ND		1.3	0.20	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Naphthalene	ND		6.7	0.54	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
n-Butylbenzene	ND		0.67	0.10	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
N-Propylbenzene	ND		1.3	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
o-Xylene	ND		0.67	0.37	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
m,p-Xylene	ND		1.3	0.18	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
p-Isopropyltoluene	ND		0.67	0.42	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
sec-Butylbenzene	ND		0.67	0.39	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Styrene	ND		0.67	0.40	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
trans-1,2-Dichloroethene	ND		0.67	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
trans-1,3-Dichloropropene	ND		1.3	0.40	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Tert-amyl-methyl ether (TAME)	ND		0.67	0.24	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
tert-Butyl alcohol (TBA)	ND		13	3.5	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
tert-Butylbenzene	ND		0.67	0.10	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Tetrachloroethene	ND		0.67	0.14	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Toluene	ND		0.67	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Trichloroethene	ND		1.3	0.20	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Trichlorofluoromethane	ND		6.7	0.25	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Vinyl acetate	ND		6.7	3.2	ug/Kg		08/09/19 18:30	08/13/19 15:29	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.67	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		71 - 155				08/09/19 18:30	08/13/19 15:29	1
4-Bromofluorobenzene (Surr)	101		80 - 120				08/09/19 18:30	08/13/19 15:29	1
Dibromofluoromethane (Surr)	106		79 - 133				08/09/19 18:30	08/13/19 15:29	1
Toluene-d8 (Surr)	100		80 - 120				08/09/19 18:30	08/13/19 15:29	1

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1,2,2-Tetrachloroethane	ND		2.1	0.36	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.37	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1,2-Trichloroethane	ND		1.0	0.37	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1-Dichloroethene	ND		1.0	0.36	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,1-Dichloropropene	ND		2.1	0.34	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2,3-Trichlorobenzene	ND		2.1	0.95	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2,3-Trichloropropane	ND		2.1	0.87	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2,4-Trichlorobenzene	ND		2.1	0.32	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2,4-Trimethylbenzene	ND		2.1	0.61	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2-Dibromo-3-Chloropropane	ND		10	1.8	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2-Dibromoethane	ND		1.0	0.27	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2-Dichlorobenzene	ND		1.0	0.24	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2-Dichloroethane	ND		1.0	0.33	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,2-Dichloropropane	ND		1.0	0.46	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,3,5-Trimethylbenzene	ND		2.1	0.57	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,3-Dichloropropane	ND		1.0	0.26	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
1,4-Dichlorobenzene	ND		1.0	0.23	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
2,2-Dichloropropane	ND		5.2	0.35	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
2-Butanone	ND		21	3.9	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
2-Chlorotoluene	ND		1.0	0.24	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
2-Hexanone	ND		21	1.8	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
4-Chlorotoluene	ND		1.0	0.22	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
4-Methyl-2-pentanone	ND		21	4.5	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Acetone	ND		52	6.5	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Benzene	ND		1.0	0.14	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Bromobenzene	ND		1.0	0.22	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Bromochloromethane	ND		2.1	0.72	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Bromodichloromethane	ND		1.0	0.24	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Bromoform	ND		5.2	0.83	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Bromomethane	ND		21	9.8	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
cis-1,2-Dichloroethene	ND		1.0	0.29	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
cis-1,3-Dichloropropene	ND		1.0	0.27	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Carbon disulfide	ND		10	0.32	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Carbon tetrachloride	ND		1.0	0.30	ug/Kg		08/09/19 18:30	08/13/19 15:55	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.23	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Chloroethane	ND		2.1	1.6	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Chloroform	ND		1.0	0.25	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Chloromethane	ND		21	0.32	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Dibromochloromethane	ND		2.1	0.59	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Dibromomethane	ND		1.0	0.81	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Dichlorodifluoromethane	ND		2.1	0.46	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Di-isopropyl ether (DIPE)	ND		1.0	0.50	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Ethanol	ND		520	87	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Ethylbenzene	ND		1.0	0.16	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.53	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Isopropylbenzene	ND		1.0	0.57	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Methylene Chloride	ND		10	1.4	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Methyl-t-Butyl Ether (MTBE)	ND		2.1	0.31	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Naphthalene	ND		10	0.85	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
N-Propylbenzene	ND		2.1	0.52	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
o-Xylene	ND		1.0	0.58	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
m,p-Xylene	ND		2.1	0.28	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
p-Isopropyltoluene	ND		1.0	0.66	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
sec-Butylbenzene	ND		1.0	0.60	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Styrene	ND		1.0	0.63	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
trans-1,2-Dichloroethene	ND		1.0	0.53	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
trans-1,3-Dichloropropene	ND		2.1	0.63	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.37	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
tert-Butyl alcohol (TBA)	ND		21	5.4	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
tert-Butylbenzene	ND		1.0	0.16	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Tetrachloroethene	ND		1.0	0.22	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Toluene	ND		1.0	0.54	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Trichloroethene	ND		2.1	0.31	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Trichlorofluoromethane	ND		10	0.39	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Vinyl acetate	ND		10	5.0	ug/Kg		08/09/19 18:30	08/13/19 15:55	1
Vinyl chloride	ND		1.0	0.52	ug/Kg		08/09/19 18:30	08/13/19 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	08/09/19 18:30	08/13/19 15:55	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 15:55	1
Dibromofluoromethane (Surr)	107		79 - 133	08/09/19 18:30	08/13/19 15:55	1
Toluene-d8 (Surr)	98		80 - 120	08/09/19 18:30	08/13/19 15:55	1

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1,1-Trichloroethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.30	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.7	0.31	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1,2-Trichloroethane	ND		0.87	0.31	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1-Dichloroethane	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:22	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.87	0.30	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,1-Dichloropropene	ND		1.7	0.29	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2,3-Trichlorobenzene	ND		1.7	0.80	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2,3-Trichloropropane	ND		1.7	0.72	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2,4-Trichlorobenzene	ND		1.7	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2,4-Trimethylbenzene	ND		1.7	0.51	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2-Dibromo-3-Chloropropane	ND		8.7	1.5	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2-Dibromoethane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2-Dichlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2-Dichloroethane	ND		0.87	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,2-Dichloropropane	ND		0.87	0.38	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,3,5-Trimethylbenzene	ND		1.7	0.48	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,3-Dichlorobenzene	ND		0.87	0.15	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
1,4-Dichlorobenzene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
2,2-Dichloropropane	ND		4.4	0.29	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
2-Butanone	ND		17	3.3	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
2-Chlorotoluene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
2-Hexanone	ND		17	1.5	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
4-Chlorotoluene	ND		0.87	0.19	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
4-Methyl-2-pentanone	ND		17	3.8	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Acetone	ND		44	5.4	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Benzene	ND		0.87	0.11	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Bromobenzene	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Bromochloromethane	ND		1.7	0.60	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Bromodichloromethane	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Bromoform	ND		4.4	0.69	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Bromomethane	ND		17	8.2	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
cis-1,2-Dichloroethene	ND		0.87	0.24	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
cis-1,3-Dichloropropane	ND		0.87	0.22	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Carbon disulfide	ND		8.7	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Carbon tetrachloride	ND		0.87	0.25	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Chlorobenzene	ND		0.87	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Chloroform	ND		0.87	0.21	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Chloromethane	ND		17	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Dibromochloromethane	ND		1.7	0.50	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Dibromomethane	ND		0.87	0.68	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Dichlorodifluoromethane	ND		1.7	0.39	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Di-isopropyl ether (DIPE)	ND		0.87	0.42	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Ethanol	ND		440	73	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Ethylbenzene	ND		0.87	0.13	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Ethyl-t-butyl ether (ETBE)	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Isopropylbenzene	ND		0.87	0.48	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Methylene Chloride	ND		8.7	1.2	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Naphthalene	ND		8.7	0.71	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
n-Butylbenzene	ND		0.87	0.14	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
N-Propylbenzene	ND		1.7	0.44	ug/Kg		08/09/19 18:30	08/13/19 16:22	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.87	0.49	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
m,p-Xylene	ND		1.7	0.23	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
p-Isopropyltoluene	ND		0.87	0.55	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
sec-Butylbenzene	ND		0.87	0.50	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Styrene	ND		0.87	0.53	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
trans-1,2-Dichloroethene	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
trans-1,3-Dichloropropene	ND		1.7	0.53	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Tert-amyl-methyl ether (TAME)	ND		0.87	0.31	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
tert-Butyl alcohol (TBA)	ND		17	4.5	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
tert-Butylbenzene	ND		0.87	0.13	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Tetrachloroethene	ND		0.87	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Toluene	ND		0.87	0.45	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Trichloroethene	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Trichlorofluoromethane	ND		8.7	0.33	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Vinyl acetate	ND		8.7	4.1	ug/Kg		08/09/19 18:30	08/13/19 16:22	1
Vinyl chloride	ND		0.87	0.44	ug/Kg		08/09/19 18:30	08/13/19 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		71 - 155	08/09/19 18:30	08/13/19 16:22	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 16:22	1
Dibromofluoromethane (Surr)	108		79 - 133	08/09/19 18:30	08/13/19 16:22	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 16:22	1

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.19	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1,1-Trichloroethane	ND		0.78	0.17	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1,2-Trichloroethane	ND		0.78	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1-Dichloroethane	ND		0.78	0.16	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1-Dichloroethene	ND		0.78	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,1-Dichloropropene	ND		1.6	0.25	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2,3-Trichlorobenzene	ND		1.6	0.71	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2,3-Trichloropropane	ND		1.6	0.64	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2,4-Trichlorobenzene	ND		1.6	0.24	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.4	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2-Dibromoethane	ND		0.78	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2-Dichlorobenzene	ND		0.78	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2-Dichloroethane	ND		0.78	0.24	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,2-Dichloropropane	ND		0.78	0.34	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,3-Dichlorobenzene	ND		0.78	0.14	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,3-Dichloropropane	ND		0.78	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
1,4-Dichlorobenzene	ND		0.78	0.17	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
2,2-Dichloropropane	ND		3.9	0.26	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
2-Butanone	ND		16	2.9	ug/Kg		08/09/19 18:30	08/13/19 16:49	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.78	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
2-Hexanone	ND		16	1.4	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
4-Chlorotoluene	ND		0.78	0.17	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Acetone	ND		39	4.8	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Benzene	ND		0.78	0.10	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Bromobenzene	ND		0.78	0.16	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Bromochloromethane	ND		1.6	0.54	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Bromodichloromethane	ND		0.78	0.18	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Bromoform	ND		3.9	0.62	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Bromomethane	ND		16	7.3	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
cis-1,2-Dichloroethene	ND		0.78	0.22	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
cis-1,3-Dichloropropene	ND		0.78	0.20	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Carbon disulfide	ND		7.8	0.24	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Carbon tetrachloride	ND		0.78	0.22	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Chlorobenzene	ND		0.78	0.17	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Chloroform	ND		0.78	0.19	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Chloromethane	ND		16	0.24	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Dibromochloromethane	ND		1.6	0.44	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Dibromomethane	ND		0.78	0.60	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Dichlorodifluoromethane	ND		1.6	0.34	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Di-isopropyl ether (DIPE)	ND		0.78	0.37	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Ethanol	ND		390	65	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Ethylbenzene	ND		0.78	0.12	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.78	0.39	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Isopropylbenzene	ND		0.78	0.42	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Methylene Chloride	ND		7.8	1.0	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Naphthalene	ND		7.8	0.63	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
n-Butylbenzene	ND		0.78	0.12	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
N-Propylbenzene	ND		1.6	0.39	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
o-Xylene	ND		0.78	0.43	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
p-Isopropyltoluene	ND		0.78	0.49	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
sec-Butylbenzene	ND		0.78	0.45	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Styrene	ND		0.78	0.47	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
trans-1,2-Dichloroethene	ND		0.78	0.39	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
trans-1,3-Dichloropropene	ND		1.6	0.47	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Tert-amyl-methyl ether (TAME)	ND		0.78	0.27	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
tert-Butyl alcohol (TBA)	ND		16	4.0	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
tert-Butylbenzene	ND		0.78	0.12	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Tetrachloroethene	ND		0.78	0.16	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Toluene	ND		0.78	0.40	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Trichloroethene	ND		1.6	0.23	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Trichlorofluoromethane	ND		7.8	0.29	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Vinyl acetate	ND		7.8	3.7	ug/Kg		08/09/19 18:30	08/13/19 16:49	1
Vinyl chloride	ND		0.78	0.39	ug/Kg		08/09/19 18:30	08/13/19 16:49	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		71 - 155	08/09/19 18:30	08/13/19 16:49	1
4-Bromofluorobenzene (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 16:49	1
Dibromofluoromethane (Surr)	108		79 - 133	08/09/19 18:30	08/13/19 16:49	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 16:49	1

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.79	0.19	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1,1-Trichloroethane	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	0.28	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1,2-Trichloroethane	ND		0.79	0.28	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1-Dichloroethane	ND		0.79	0.17	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1-Dichloroethene	ND		0.79	0.27	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,1-Dichloropropene	ND		1.6	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2,3-Trichlorobenzene	ND		1.6	0.72	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2,3-Trichloropropane	ND		1.6	0.66	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2,4-Trichlorobenzene	ND		1.6	0.25	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2,4-Trimethylbenzene	ND		1.6	0.46	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.4	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2-Dibromoethane	ND		0.79	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2-Dichloroethane	ND		0.79	0.25	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,2-Dichloropropane	ND		0.79	0.35	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,3,5-Trimethylbenzene	ND		1.6	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,3-Dichlorobenzene	ND		0.79	0.14	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,3-Dichloropropane	ND		0.79	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
1,4-Dichlorobenzene	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
2,2-Dichloropropane	ND		4.0	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
2-Butanone	ND		16	3.0	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
2-Chlorotoluene	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
2-Hexanone	ND		16	1.4	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
4-Chlorotoluene	ND		0.79	0.17	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
4-Methyl-2-pentanone	ND		16	3.4	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Acetone	ND		40	4.9	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Benzene	ND		0.79	0.10	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Bromobenzene	ND		0.79	0.17	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Bromochloromethane	ND		1.6	0.55	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Bromodichloromethane	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Bromoform	ND		4.0	0.63	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Bromomethane	ND		16	7.5	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
cis-1,2-Dichloroethene	ND		0.79	0.22	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
cis-1,3-Dichloropropane	ND		0.79	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Carbon disulfide	ND		7.9	0.24	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Carbon tetrachloride	ND		0.79	0.22	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Chlorobenzene	ND		0.79	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Chloroethane	ND		1.6	1.2	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Chloroform	ND		0.79	0.19	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Chloromethane	ND		16	0.24	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Dibromochloromethane	ND		1.6	0.45	ug/Kg		08/09/19 18:30	08/13/19 17:15	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.79	0.61	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Dichlorodifluoromethane	ND		1.6	0.35	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Di-isopropyl ether (DIPE)	ND		0.79	0.38	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Ethanol	ND		400	66	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Ethylbenzene	ND		0.79	0.12	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Ethyl-t-butyl ether (ETBE)	ND		0.79	0.40	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Isopropylbenzene	ND		0.79	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Methylene Chloride	ND		7.9	1.1	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Naphthalene	ND		7.9	0.64	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
n-Butylbenzene	ND		0.79	0.12	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
N-Propylbenzene	ND		1.6	0.40	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
o-Xylene	ND		0.79	0.44	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
m,p-Xylene	ND		1.6	0.21	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
p-Isopropyltoluene	ND		0.79	0.50	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
sec-Butylbenzene	ND		0.79	0.46	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Styrene	ND		0.79	0.48	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
trans-1,2-Dichloroethene	ND		0.79	0.40	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
trans-1,3-Dichloropropene	ND		1.6	0.48	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Tert-amyl-methyl ether (TAME)	ND		0.79	0.28	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
tert-Butyl alcohol (TBA)	ND		16	4.1	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
tert-Butylbenzene	ND		0.79	0.12	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Tetrachloroethene	ND		0.79	0.17	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Toluene	ND		0.79	0.41	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Trichloroethene	ND		1.6	0.24	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Trichlorofluoromethane	ND		7.9	0.30	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Vinyl acetate	ND		7.9	3.8	ug/Kg		08/09/19 18:30	08/13/19 17:15	1
Vinyl chloride	ND		0.79	0.40	ug/Kg		08/09/19 18:30	08/13/19 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		71 - 155	08/09/19 18:30	08/13/19 17:15	1
4-Bromofluorobenzene (Surr)	100		80 - 120	08/09/19 18:30	08/13/19 17:15	1
Dibromofluoromethane (Surr)	105		79 - 133	08/09/19 18:30	08/13/19 17:15	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 17:15	1

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.85	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1,1-Trichloroethane	ND		0.85	0.19	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.5	0.30	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1,2-Trichloroethane	ND		0.85	0.30	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1-Dichloroethane	ND		0.85	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1-Dichloroethene	ND		0.85	0.30	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,1-Dichloropropene	ND		1.7	0.28	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2,3-Trichlorobenzene	ND		1.7	0.78	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2,3-Trichloropropane	ND		1.7	0.71	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2,4-Trichlorobenzene	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:41	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.7	0.50	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2-Dibromo-3-Chloropropane	ND		8.5	1.5	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2-Dibromoethane	ND		0.85	0.22	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2-Dichlorobenzene	ND		0.85	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2-Dichloroethane	ND		0.85	0.27	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,2-Dichloropropane	ND		0.85	0.37	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,3,5-Trimethylbenzene	ND		1.7	0.47	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,3-Dichlorobenzene	ND		0.85	0.15	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,3-Dichloropropane	ND		0.85	0.22	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
1,4-Dichlorobenzene	ND		0.85	0.19	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
2,2-Dichloropropane	ND		4.3	0.28	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
2-Butanone	ND		17	3.2	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
2-Chlorotoluene	ND		0.85	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
2-Hexanone	ND		17	1.5	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
4-Chlorotoluene	ND		0.85	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
4-Methyl-2-pentanone	ND		17	3.7	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Acetone	ND		43	5.3	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
<b>Benzene</b>	<b>1.2</b>		0.85	0.11	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Bromobenzene	ND		0.85	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Bromochloromethane	ND		1.7	0.59	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Bromodichloromethane	ND		0.85	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Bromoform	ND		4.3	0.68	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Bromomethane	ND		17	8.0	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
cis-1,2-Dichloroethene	ND		0.85	0.24	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
cis-1,3-Dichloropropene	ND		0.85	0.22	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Carbon disulfide	ND		8.5	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Carbon tetrachloride	ND		0.85	0.24	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Chlorobenzene	ND		0.85	0.19	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Chloroethane	ND		1.7	1.3	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Chloroform	ND		0.85	0.20	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Chloromethane	ND		17	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Dibromochloromethane	ND		1.7	0.49	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Dibromomethane	ND		0.85	0.66	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Dichlorodifluoromethane	ND		1.7	0.38	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Di-isopropyl ether (DIPE)	ND		0.85	0.41	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Ethanol	ND		430	71	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Ethylbenzene	ND		0.85	0.13	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Ethyl-t-butyl ether (ETBE)	ND		0.85	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Isopropylbenzene	ND		0.85	0.47	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Methylene Chloride	ND		8.5	1.1	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Naphthalene	ND		8.5	0.69	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
n-Butylbenzene	ND		0.85	0.13	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
N-Propylbenzene	ND		1.7	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
o-Xylene	ND		0.85	0.47	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
m,p-Xylene	ND		1.7	0.23	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
p-Isopropyltoluene	ND		0.85	0.54	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
sec-Butylbenzene	ND		0.85	0.49	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Styrene	ND		0.85	0.52	ug/Kg		08/09/19 18:30	08/13/19 17:41	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.85	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
trans-1,3-Dichloropropene	ND		1.7	0.52	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Tert-amyl-methyl ether (TAME)	ND		0.85	0.30	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
tert-Butyl alcohol (TBA)	ND		17	4.4	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
tert-Butylbenzene	ND		0.85	0.13	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Tetrachloroethene	ND		0.85	0.18	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Toluene	ND		0.85	0.44	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Trichloroethene	ND		1.7	0.26	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Trichlorofluoromethane	ND		8.5	0.32	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Vinyl acetate	ND		8.5	4.0	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Vinyl chloride	ND		0.85	0.43	ug/Kg		08/09/19 18:30	08/13/19 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155				08/09/19 18:30	08/13/19 17:41	1
4-Bromofluorobenzene (Surr)	101		80 - 120				08/09/19 18:30	08/13/19 17:41	1
Dibromofluoromethane (Surr)	109		79 - 133				08/09/19 18:30	08/13/19 17:41	1
Toluene-d8 (Surr)	99		80 - 120				08/09/19 18:30	08/13/19 17:41	1

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.71	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1,1-Trichloroethane	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.24	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.1	0.25	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1,2-Trichloroethane	ND		0.71	0.25	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1-Dichloroethane	ND		0.71	0.15	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1-Dichloroethene	ND		0.71	0.24	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,1-Dichloropropene	ND		1.4	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2,3-Trichlorobenzene	ND		1.4	0.65	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2,3-Trichloropropane	ND		1.4	0.59	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2,4-Trichlorobenzene	ND		1.4	0.22	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2,4-Trimethylbenzene	ND		1.4	0.41	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2-Dibromoethane	ND		0.71	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2-Dichlorobenzene	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2-Dichloroethane	ND		0.71	0.22	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,2-Dichloropropane	ND		0.71	0.31	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,3,5-Trimethylbenzene	ND		1.4	0.39	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,3-Dichlorobenzene	ND		0.71	0.12	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,3-Dichloropropane	ND		0.71	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
1,4-Dichlorobenzene	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
2,2-Dichloropropane	ND		3.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
2-Butanone	ND		14	2.7	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
2-Chlorotoluene	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
2-Hexanone	ND		14	1.2	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
4-Chlorotoluene	ND		0.71	0.15	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
4-Methyl-2-pentanone	ND		14	3.1	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Acetone	ND		35	4.4	ug/Kg		08/09/19 18:30	08/13/19 18:08	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.71	0.092	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Bromobenzene	ND		0.71	0.15	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Bromochloromethane	ND		1.4	0.49	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Bromodichloromethane	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Bromoform	ND		3.5	0.56	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Bromomethane	ND		14	6.7	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
cis-1,2-Dichloroethene	ND		0.71	0.20	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
cis-1,3-Dichloropropene	ND		0.71	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Carbon disulfide	ND		7.1	0.22	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Carbon tetrachloride	ND		0.71	0.20	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Chlorobenzene	ND		0.71	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Chloroethane	ND		1.4	1.1	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Chloroform	ND		0.71	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Chloromethane	ND		14	0.21	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Dibromochloromethane	ND		1.4	0.40	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Dibromomethane	ND		0.71	0.55	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Dichlorodifluoromethane	ND		1.4	0.31	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Di-isopropyl ether (DIPE)	ND		0.71	0.34	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Ethanol	ND		350	59	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Ethylbenzene	ND		0.71	0.11	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Ethyl-t-butyl ether (ETBE)	ND		0.71	0.36	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Isopropylbenzene	ND		0.71	0.39	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Methylene Chloride	ND		7.1	0.95	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Naphthalene	ND		7.1	0.58	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
n-Butylbenzene	ND		0.71	0.11	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
N-Propylbenzene	ND		1.4	0.35	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
o-Xylene	ND		0.71	0.39	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
m,p-Xylene	ND		1.4	0.19	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
p-Isopropyltoluene	ND		0.71	0.45	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
sec-Butylbenzene	ND		0.71	0.41	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Styrene	ND		0.71	0.43	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
trans-1,2-Dichloroethene	ND		0.71	0.36	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
trans-1,3-Dichloropropene	ND		1.4	0.43	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Tert-amyl-methyl ether (TAME)	ND		0.71	0.25	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
tert-Butyl alcohol (TBA)	ND		14	3.7	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
tert-Butylbenzene	ND		0.71	0.11	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Tetrachloroethene	ND		0.71	0.15	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Toluene	ND		0.71	0.36	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Trichloroethene	ND		1.4	0.21	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Trichlorofluoromethane	ND		7.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Vinyl acetate	ND		7.1	3.4	ug/Kg		08/09/19 18:30	08/13/19 18:08	1
Vinyl chloride	ND		0.71	0.36	ug/Kg		08/09/19 18:30	08/13/19 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	118		71 - 155	08/09/19 18:30	08/13/19 18:08	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120	08/09/19 18:30	08/13/19 18:08	1
<i>Dibromofluoromethane (Surr)</i>	108		79 - 133	08/09/19 18:30	08/13/19 18:08	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120	08/09/19 18:30	08/13/19 18:08	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.76	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1,1-Trichloroethane	ND		0.76	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.6	0.27	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1,2-Trichloroethane	ND		0.76	0.27	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1-Dichloroethane	ND		0.76	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1-Dichloroethene	ND		0.76	0.26	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,1-Dichloropropene	ND		1.5	0.25	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2,3-Trichlorobenzene	ND		1.5	0.69	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2,3-Trichloropropane	ND		1.5	0.63	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2,4-Trichlorobenzene	ND		1.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2,4-Trimethylbenzene	ND		1.5	0.44	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2-Dibromoethane	ND		0.76	0.19	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2-Dichlorobenzene	ND		0.76	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2-Dichloroethane	ND		0.76	0.24	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,2-Dichloropropane	ND		0.76	0.33	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,3,5-Trimethylbenzene	ND		1.5	0.41	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,3-Dichlorobenzene	ND		0.76	0.13	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,3-Dichloropropane	ND		0.76	0.19	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
1,4-Dichlorobenzene	ND		0.76	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
2,2-Dichloropropane	ND		3.8	0.25	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
2-Butanone	ND		15	2.8	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
2-Chlorotoluene	ND		0.76	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
2-Hexanone	ND		15	1.3	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
4-Chlorotoluene	ND		0.76	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
4-Methyl-2-pentanone	ND		15	3.3	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Acetone	ND		38	4.7	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Benzene	ND		0.76	0.098	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Bromobenzene	ND		0.76	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Bromochloromethane	ND		1.5	0.52	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Bromodichloromethane	ND		0.76	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Bromoform	ND		3.8	0.60	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Bromomethane	ND		15	7.1	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
cis-1,2-Dichloroethene	ND		0.76	0.21	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
cis-1,3-Dichloropropene	ND		0.76	0.19	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Carbon disulfide	ND		7.6	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Carbon tetrachloride	ND		0.76	0.21	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Chlorobenzene	ND		0.76	0.17	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Chloroethane	ND		1.5	1.1	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Chloroform	ND		0.76	0.18	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Chloromethane	ND		15	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Dibromochloromethane	ND		1.5	0.43	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Dibromomethane	ND		0.76	0.59	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Dichlorodifluoromethane	ND		1.5	0.33	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Di-isopropyl ether (DIPE)	ND		0.76	0.36	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Ethanol	ND		380	63	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Ethylbenzene	ND		0.76	0.11	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Ethyl-t-butyl ether (ETBE)	ND		0.76	0.38	ug/Kg		08/09/19 18:30	08/13/19 18:34	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.76	0.41	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Methylene Chloride	ND		7.6	1.0	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Naphthalene	ND		7.6	0.61	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
n-Butylbenzene	ND		0.76	0.12	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
N-Propylbenzene	ND		1.5	0.38	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
o-Xylene	ND		0.76	0.42	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
m,p-Xylene	ND		1.5	0.20	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
p-Isopropyltoluene	ND		0.76	0.48	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
sec-Butylbenzene	ND		0.76	0.44	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Styrene	ND		0.76	0.46	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
trans-1,2-Dichloroethene	ND		0.76	0.38	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
trans-1,3-Dichloropropene	ND		1.5	0.46	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Tert-amyl-methyl ether (TAME)	ND		0.76	0.27	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
tert-Butyl alcohol (TBA)	ND		15	3.9	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
tert-Butylbenzene	ND		0.76	0.11	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Tetrachloroethene	ND		0.76	0.16	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Toluene	ND		0.76	0.39	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Trichloroethene	ND		1.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Trichlorofluoromethane	ND		7.6	0.28	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Vinyl acetate	ND		7.6	3.6	ug/Kg		08/09/19 18:30	08/13/19 18:34	1
Vinyl chloride	ND		0.76	0.38	ug/Kg		08/09/19 18:30	08/13/19 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		71 - 155	08/09/19 18:30	08/13/19 18:34	1
4-Bromofluorobenzene (Surr)	101		80 - 120	08/09/19 18:30	08/13/19 18:34	1
Dibromofluoromethane (Surr)	106		79 - 133	08/09/19 18:30	08/13/19 18:34	1
Toluene-d8 (Surr)	99		80 - 120	08/09/19 18:30	08/13/19 18:34	1

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.1	0.28	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1,1-Trichloroethane	ND		1.1	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1,2,2-Tetrachloroethane	ND		2.3	0.40	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	0.40	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1,2-Trichloroethane	ND		1.1	0.41	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1-Dichloroethane	ND		1.1	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1-Dichloroethene	ND		1.1	0.40	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,1-Dichloropropene	ND		2.3	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2,3-Trichlorobenzene	ND		2.3	1.0	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2,3-Trichloropropane	ND		2.3	0.95	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2,4-Trichlorobenzene	ND		2.3	0.36	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2,4-Trimethylbenzene	ND		2.3	0.67	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2-Dibromo-3-Chloropropane	ND		11	2.0	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2-Dibromoethane	ND		1.1	0.29	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2-Dichlorobenzene	ND		1.1	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2-Dichloroethane	ND		1.1	0.36	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,2-Dichloropropane	ND		1.1	0.50	ug/Kg		08/09/19 18:30	08/13/19 19:00	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.3	0.63	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,3-Dichlorobenzene	ND		1.1	0.20	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,3-Dichloropropane	ND		1.1	0.29	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
1,4-Dichlorobenzene	ND		1.1	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
2,2-Dichloropropane	ND		5.7	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
2-Butanone	ND		23	4.3	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
2-Chlorotoluene	ND		1.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
2-Hexanone	ND		23	2.0	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
4-Chlorotoluene	ND		1.1	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
4-Methyl-2-pentanone	ND		23	5.0	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Acetone	ND		57	7.2	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
<b>Benzene</b>	<b>1.7</b>		1.1	0.15	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Bromobenzene	ND		1.1	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Bromochloromethane	ND		2.3	0.79	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Bromodichloromethane	ND		1.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Bromoform	ND		5.7	0.91	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Bromomethane	ND		23	11	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
cis-1,2-Dichloroethene	ND		1.1	0.32	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
cis-1,3-Dichloropropene	ND		1.1	0.29	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Carbon disulfide	ND		11	0.35	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Carbon tetrachloride	ND		1.1	0.32	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Chlorobenzene	ND		1.1	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Chloroethane	ND		2.3	1.7	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Chloroform	ND		1.1	0.27	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Chloromethane	ND		23	0.35	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Dibromochloromethane	ND		2.3	0.66	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Dibromomethane	ND		1.1	0.89	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Dichlorodifluoromethane	ND		2.3	0.51	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Di-isopropyl ether (DIPE)	ND		1.1	0.55	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Ethanol	ND		570	96	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Ethylbenzene	ND		1.1	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Ethyl-t-butyl ether (ETBE)	ND		1.1	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Isopropylbenzene	ND		1.1	0.63	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Methylene Chloride	ND		11	1.5	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Methyl-t-Butyl Ether (MTBE)	ND		2.3	0.34	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Naphthalene	ND		11	0.94	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
n-Butylbenzene	ND		1.1	0.18	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
N-Propylbenzene	ND		2.3	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
o-Xylene	ND		1.1	0.64	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
m,p-Xylene	ND		2.3	0.31	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
p-Isopropyltoluene	ND		1.1	0.72	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
sec-Butylbenzene	ND		1.1	0.66	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Styrene	ND		1.1	0.69	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
trans-1,2-Dichloroethene	ND		1.1	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
trans-1,3-Dichloropropene	ND		2.3	0.70	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Tert-amyl-methyl ether (TAME)	ND		1.1	0.40	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
tert-Butyl alcohol (TBA)	ND		23	5.9	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
tert-Butylbenzene	ND		1.1	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Tetrachloroethene	ND		1.1	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:00	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.1	0.59	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Trichloroethene	ND		2.3	0.35	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Trichlorofluoromethane	ND		11	0.43	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Vinyl acetate	ND		11	5.5	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
Vinyl chloride	ND		1.1	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,2-Dichloroethane-d4 (Surr)</i>	122		71 - 155				08/09/19 18:30	08/13/19 19:00	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120				08/09/19 18:30	08/13/19 19:00	1
<i>Dibromofluoromethane (Surr)</i>	108		79 - 133				08/09/19 18:30	08/13/19 19:00	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120				08/09/19 18:30	08/13/19 19:00	1

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1,1-Trichloroethane	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.25	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.3	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1,2-Trichloroethane	ND		0.73	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1-Dichloroethane	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1-Dichloroethene	ND		0.73	0.25	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,1-Dichloropropene	ND		1.5	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2,3-Trichlorobenzene	ND		1.5	0.66	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2,3-Trichloropropane	ND		1.5	0.60	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2,4-Trichlorobenzene	ND		1.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2,4-Trimethylbenzene	ND		1.5	0.43	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2-Dibromo-3-Chloropropane	ND		7.3	1.3	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2-Dibromoethane	ND		0.73	0.19	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2-Dichlorobenzene	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2-Dichloroethane	ND		0.73	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,2-Dichloropropane	ND		0.73	0.32	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,3,5-Trimethylbenzene	ND		1.5	0.40	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,3-Dichlorobenzene	ND		0.73	0.13	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,3-Dichloropropane	ND		0.73	0.18	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
1,4-Dichlorobenzene	ND		0.73	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
2,2-Dichloropropane	ND		3.6	0.24	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
2-Butanone	ND		15	2.7	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
2-Chlorotoluene	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
2-Hexanone	ND		15	1.3	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
4-Chlorotoluene	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
4-Methyl-2-pentanone	ND		15	3.1	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Acetone	ND		36	4.5	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Benzene	ND		0.73	0.094	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Bromobenzene	ND		0.73	0.15	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Bromochloromethane	ND		1.5	0.50	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Bromodichloromethane	ND		0.73	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Bromoform	ND		3.6	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:27	1
Bromomethane	ND		15	6.8	ug/Kg		08/09/19 18:30	08/13/19 19:27	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.73	0.20	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
cis-1,3-Dichloropropene	ND		0.73	0.18	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Carbon disulfide	ND		7.3	0.22	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Carbon tetrachloride	ND		0.73	0.21	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Chlorobenzene	ND		0.73	0.16	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Chloroethane	ND		1.5	1.1	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Chloroform	ND		0.73	0.17	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Chloromethane	ND		15	0.22	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Dibromochloromethane	ND		1.5	0.41	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Dibromomethane	ND		0.73	0.56	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Dichlorodifluoromethane	ND		1.5	0.32	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Di-isopropyl ether (DIPE)	ND		0.73	0.35	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Ethanol	ND		360	61	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Ethylbenzene	ND		0.73	0.11	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.73	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Isopropylbenzene	ND		0.73	0.40	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Methylene Chloride	ND		7.3	0.97	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.21	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Naphthalene	ND		7.3	0.59	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
n-Butylbenzene	ND		0.73	0.11	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
N-Propylbenzene	ND		1.5	0.36	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
o-Xylene	ND		0.73	0.40	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
m,p-Xylene	ND		1.5	0.19	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
p-Isopropyltoluene	ND		0.73	0.46	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
sec-Butylbenzene	ND		0.73	0.42	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Styrene	ND		0.73	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
trans-1,2-Dichloroethene	ND		0.73	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
trans-1,3-Dichloropropene	ND		1.5	0.44	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Tert-amyl-methyl ether (TAME)	ND		0.73	0.26	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
tert-Butyl alcohol (TBA)	ND		15	3.8	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
tert-Butylbenzene	ND		0.73	0.11	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Tetrachloroethene	ND		0.73	0.15	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Toluene	ND		0.73	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Trichloroethene	ND		1.5	0.22	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Trichlorofluoromethane	ND		7.3	0.27	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Vinyl acetate	ND		7.3	3.5	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1
Vinyl chloride	ND		0.73	0.37	ug/Kg	-	08/09/19 18:30	08/13/19 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	121		71 - 155	08/09/19 18:30	08/13/19 19:27	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120	08/09/19 18:30	08/13/19 19:27	1
<i>Dibromofluoromethane (Surr)</i>	110		79 - 133	08/09/19 18:30	08/13/19 19:27	1
<i>Toluene-d8 (Surr)</i>	98		80 - 120	08/09/19 18:30	08/13/19 19:27	1

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.75	0.18	ug/Kg	-	08/09/19 18:30	08/13/19 19:53	1
1,1,1-Trichloroethane	ND		0.75	0.17	ug/Kg	-	08/09/19 18:30	08/13/19 19:53	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.5	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.5	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,1,2-Trichloroethane	ND		0.75	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,1-Dichloroethane	ND		0.75	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,1-Dichloroethene	ND		0.75	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,1-Dichloropropene	ND		1.5	0.25	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2,3-Trichlorobenzene	ND		1.5	0.68	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2,3-Trichloropropane	ND		1.5	0.62	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2,4-Trichlorobenzene	ND		1.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2,4-Trimethylbenzene	ND		1.5	0.44	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2-Dibromo-3-Chloropropane	ND		7.5	1.3	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2-Dibromoethane	ND		0.75	0.19	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2-Dichlorobenzene	ND		0.75	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2-Dichloroethane	ND		0.75	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,2-Dichloropropane	ND		0.75	0.33	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,3,5-Trimethylbenzene	ND		1.5	0.41	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,3-Dichlorobenzene	ND		0.75	0.13	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,3-Dichloropropane	ND		0.75	0.19	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
1,4-Dichlorobenzene	ND		0.75	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
2,2-Dichloropropane	ND		3.7	0.25	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
2-Butanone	ND		15	2.8	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
2-Chlorotoluene	ND		0.75	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
2-Hexanone	ND		15	1.3	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
4-Chlorotoluene	ND		0.75	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
4-Methyl-2-pentanone	ND		15	3.2	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Acetone	ND		37	4.7	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Benzene	ND		0.75	0.097	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Bromobenzene	ND		0.75	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Bromochloromethane	ND		1.5	0.52	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Bromodichloromethane	ND		0.75	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Bromoform	ND		3.7	0.59	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Bromomethane	ND		15	7.0	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
cis-1,2-Dichloroethene	ND		0.75	0.21	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
cis-1,3-Dichloropropane	ND		0.75	0.19	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Carbon disulfide	ND		7.5	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Carbon tetrachloride	ND		0.75	0.21	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Chlorobenzene	ND		0.75	0.17	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Chloroethane	ND		1.5	1.1	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Chloroform	ND		0.75	0.18	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Chloromethane	ND		15	0.23	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Dibromochloromethane	ND		1.5	0.43	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Dibromomethane	ND		0.75	0.58	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Dichlorodifluoromethane	ND		1.5	0.33	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Di-isopropyl ether (DIPE)	ND		0.75	0.36	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Ethanol	ND		370	62	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Ethylbenzene	ND		0.75	0.11	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.75	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Isopropylbenzene	ND		0.75	0.41	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Methylene Chloride	ND		7.5	1.0	ug/Kg		08/09/19 18:30	08/13/19 19:53	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Naphthalene	ND		7.5	0.61	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
n-Butylbenzene	ND		0.75	0.12	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
N-Propylbenzene	ND		1.5	0.37	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
o-Xylene	ND		0.75	0.42	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
m,p-Xylene	ND		1.5	0.20	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
p-Isopropyltoluene	ND		0.75	0.47	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
sec-Butylbenzene	ND		0.75	0.43	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Styrene	ND		0.75	0.45	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
trans-1,2-Dichloroethene	ND		0.75	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
trans-1,3-Dichloropropene	ND		1.5	0.45	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Tert-amyl-methyl ether (TAME)	ND		0.75	0.26	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
tert-Butyl alcohol (TBA)	ND		15	3.9	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
tert-Butylbenzene	ND		0.75	0.11	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Tetrachloroethene	ND		0.75	0.16	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Toluene	ND		0.75	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Trichloroethene	ND		1.5	0.22	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Trichlorofluoromethane	ND		7.5	0.28	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Vinyl acetate	ND		7.5	3.5	ug/Kg		08/09/19 18:30	08/13/19 19:53	1
Vinyl chloride	ND		0.75	0.38	ug/Kg		08/09/19 18:30	08/13/19 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	117		71 - 155	08/09/19 18:30	08/13/19 19:53	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120	08/09/19 18:30	08/13/19 19:53	1
<i>Dibromofluoromethane (Surr)</i>	107		79 - 133	08/09/19 18:30	08/13/19 19:53	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120	08/09/19 18:30	08/13/19 19:53	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.085	0.043	mg/Kg		08/09/19 17:37	08/12/19 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		60 - 126				08/09/19 17:37	08/12/19 13:54	1

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.078	0.039	mg/Kg		08/09/19 17:37	08/12/19 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/09/19 17:37	08/12/19 14:28	1

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.097	0.049	mg/Kg		08/09/19 17:37	08/12/19 15:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/09/19 17:37	08/12/19 15:02	1

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.084	0.042	mg/Kg		08/09/19 17:37	08/12/19 15:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/09/19 17:37	08/12/19 15:36	1

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.072	0.036	mg/Kg		08/09/19 17:37	08/12/19 16:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		60 - 126				08/09/19 17:37	08/12/19 16:09	1

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.084	0.042	mg/Kg		08/09/19 17:37	08/12/19 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/09/19 17:37	08/12/19 16:43	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.090	0.045	mg/Kg		08/09/19 17:37	08/12/19 17:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 126				08/09/19 17:37	08/12/19 17:17	1

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.069	0.035	mg/Kg		08/09/19 17:37	08/12/19 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 126				08/09/19 17:37	08/12/19 17:50	1

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.097	0.049	mg/Kg		08/09/19 17:37	08/12/19 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 126				08/09/19 17:37	08/12/19 18:24	1

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.074	0.037	mg/Kg		08/09/19 17:37	08/12/19 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/09/19 17:37	08/12/19 18:58	1

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.070	0.035	mg/Kg		08/09/19 17:37	08/12/19 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/09/19 17:37	08/12/19 20:05	1

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.070	0.035	mg/Kg		08/09/19 17:37	08/12/19 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 126				08/09/19 17:37	08/12/19 20:38	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.084	0.042	mg/Kg		08/09/19 17:37	08/12/19 21:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		60 - 126				08/09/19 17:37	08/12/19 21:12	1

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.069	0.035	mg/Kg		08/09/19 17:37	08/12/19 21:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		60 - 126				08/09/19 17:37	08/12/19 21:46	1

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.086	0.043	mg/Kg		08/09/19 17:37	08/12/19 22:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 126				08/09/19 17:37	08/12/19 22:19	1

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.099	0.050	mg/Kg		08/09/19 17:37	08/12/19 22:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		60 - 126				08/09/19 17:37	08/12/19 22:53	1

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.074	0.037	mg/Kg		08/09/19 17:37	08/12/19 23:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 126				08/09/19 17:37	08/12/19 23:26	1

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.075	0.037	mg/Kg		08/09/19 17:37	08/13/19 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126				08/09/19 17:37	08/13/19 00:00	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.1	3.6	mg/Kg		08/10/19 12:25	08/12/19 14:28	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 12:25	08/12/19 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	115		61 - 145				08/10/19 12:25	08/12/19 14:28	1

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>15</b>		5.0	3.5	mg/Kg		08/10/19 12:25	08/12/19 14:49	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg		08/10/19 12:25	08/12/19 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	103		61 - 145				08/10/19 12:25	08/12/19 14:49	1

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>4.9</b>		4.9	3.5	mg/Kg		08/10/19 12:25	08/12/19 15:10	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg		08/10/19 12:25	08/12/19 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	104		61 - 145				08/10/19 12:25	08/12/19 15:10	1

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 12:25	08/12/19 15:31	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 12:25	08/12/19 15:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	104		61 - 145				08/10/19 12:25	08/12/19 15:31	1

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>5.4</b>		4.9	3.5	mg/Kg		08/10/19 12:25	08/12/19 15:52	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg		08/10/19 12:25	08/12/19 15:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	100		61 - 145				08/10/19 12:25	08/12/19 15:52	1

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg		08/10/19 12:25	08/12/19 16:13	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg		08/10/19 12:25	08/12/19 16:13	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	96		61 - 145	08/10/19 12:25	08/12/19 16:13	1

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>10</b>		5.0	3.6	mg/Kg	-	08/10/19 12:25	08/12/19 16:35	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 12:25	08/12/19 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	93		61 - 145	08/10/19 12:25	08/12/19 16:35	1

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>5.7</b>		4.9	3.5	mg/Kg	-	08/10/19 12:25	08/12/19 16:55	1
Oil Range Organics (C18-C40)	ND		24	3.5	mg/Kg	-	08/10/19 12:25	08/12/19 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	91		61 - 145	08/10/19 12:25	08/12/19 16:55	1

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.5	mg/Kg	-	08/10/19 12:25	08/12/19 17:17	1
Oil Range Organics (C18-C40)	ND		24	3.5	mg/Kg	-	08/10/19 12:25	08/12/19 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	84		61 - 145	08/10/19 12:25	08/12/19 17:17	1

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg	-	08/10/19 12:25	08/12/19 17:38	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg	-	08/10/19 12:25	08/12/19 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	96		61 - 145	08/10/19 12:25	08/12/19 17:38	1

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg	-	08/10/19 12:25	08/12/19 17:59	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg	-	08/10/19 12:25	08/12/19 17:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	87		61 - 145	08/10/19 12:25	08/12/19 17:59	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.0		4.8	3.4	mg/Kg		08/10/19 12:25	08/12/19 18:20	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg		08/10/19 12:25	08/12/19 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	82		61 - 145				08/10/19 12:25	08/12/19 18:20	1

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.8	3.4	mg/Kg		08/10/19 12:25	08/12/19 18:41	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg		08/10/19 12:25	08/12/19 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	76		61 - 145				08/10/19 12:25	08/12/19 18:41	1

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		4.9	3.4	mg/Kg		08/10/19 12:25	08/12/19 19:02	1
Oil Range Organics (C18-C40)	ND		24	3.4	mg/Kg		08/10/19 12:25	08/12/19 19:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	79		61 - 145				08/10/19 12:25	08/12/19 19:02	1

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 12:25	08/12/19 19:44	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 12:25	08/12/19 19:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	71		61 - 145				08/10/19 12:25	08/12/19 19:44	1

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.1	3.6	mg/Kg		08/10/19 12:25	08/12/19 20:05	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 12:25	08/12/19 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	75		61 - 145				08/10/19 12:25	08/12/19 20:05	1

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.8		5.0	3.5	mg/Kg		08/10/19 12:25	08/12/19 20:26	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg		08/10/19 12:25	08/12/19 20:26	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
<i>n</i> -Octacosane (Surr)	75		61 - 145	08/10/19 12:25	08/12/19 20:26	1

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>RL</u>	<u>MDL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Diesel Range Organics [C10-C28]	ND		4.9	3.5	mg/Kg	-	08/10/19 12:32	08/12/19 20:47	1
Oil Range Organics (C18-C40)	ND		25	3.5	mg/Kg	-	08/10/19 12:32	08/12/19 20:47	1

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
<i>n</i> -Octacosane (Surr)	70		61 - 145	08/10/19 12:32	08/12/19 20:47	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.255	0.0874	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Arsenic</b>	<b>4.85</b>	<b>F1</b>	0.765	0.264	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Barium</b>	<b>192</b>		0.510	0.157	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Beryllium</b>	<b>0.914</b>		0.255	0.140	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Cadmium</b>	<b>1.00</b>		0.510	0.138	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Cobalt</b>	<b>12.8</b>		0.255	0.151	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Chromium</b>	<b>22.1</b>		0.255	0.145	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Copper</b>	<b>22.2</b>		0.510	0.138	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Molybdenum</b>	<b>2.32</b>	<b>F1</b>	0.255	0.135	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Nickel</b>	<b>16.8</b>		0.255	0.148	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
Antimony	ND	L	0.765	0.152	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
Selenium	ND	F1 L	0.765	0.306	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
Thallium	ND		0.765	0.155	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Vanadium</b>	<b>53.4</b>		0.255	0.144	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
<b>Zinc</b>	<b>68.7</b>		1.02	0.182	mg/Kg		08/13/19 19:22	08/14/19 21:39	1
Lead	ND		0.510	0.135	mg/Kg		08/13/19 19:22	08/14/19 21:39	1

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Arsenic</b>	<b>1.93</b>		0.739	0.255	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Barium</b>	<b>116</b>		0.493	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Beryllium</b>	<b>0.752</b>		0.246	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Cadmium</b>	<b>0.644</b>		0.493	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Cobalt</b>	<b>9.89</b>		0.246	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Chromium</b>	<b>20.7</b>		0.246	0.140	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Copper</b>	<b>13.9</b>		0.493	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
Molybdenum	ND	L	0.246	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Nickel</b>	<b>13.4</b>		0.246	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
Antimony	ND	L	0.739	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
Selenium	ND	L	0.739	0.296	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
Thallium	ND		0.739	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Vanadium</b>	<b>38.6</b>		0.246	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
<b>Zinc</b>	<b>56.8</b>		0.985	0.175	mg/Kg		08/13/19 21:00	08/14/19 23:19	1
Lead	ND		0.493	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:19	1

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.244	0.0836	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Arsenic</b>	<b>3.49</b>		0.732	0.253	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Barium</b>	<b>109</b>		0.488	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Beryllium</b>	<b>0.507</b>		0.244	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Cadmium</b>	<b>0.548</b>		0.488	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Cobalt</b>	<b>7.18</b>		0.244	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Chromium</b>	<b>10.7</b>		0.244	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
<b>Copper</b>	<b>12.2</b>		0.488	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:21	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.849		0.244	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Nickel	7.90		0.244	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Antimony	ND	L	0.732	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Selenium	ND	L	0.732	0.293	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Thallium	ND		0.732	0.148	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Vanadium	39.0		0.244	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Zinc	41.5		0.976	0.174	mg/Kg		08/13/19 21:00	08/14/19 23:21	1
Lead	0.678		0.488	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:21	1

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.243	0.0832	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Arsenic	5.00		0.728	0.251	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Barium	159		0.485	0.150	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Beryllium	0.800		0.243	0.133	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Cadmium	0.816		0.485	0.131	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Cobalt	10.4		0.243	0.144	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Chromium	17.4		0.243	0.138	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Copper	16.2		0.485	0.131	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Molybdenum	1.63		0.243	0.128	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Nickel	14.4		0.243	0.141	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Antimony	ND		0.728	0.145	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Selenium	ND	L	0.728	0.291	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Thallium	ND		0.728	0.148	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Vanadium	41.0		0.243	0.137	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Zinc	109		0.971	0.173	mg/Kg		08/14/19 11:37	08/15/19 02:34	1
Lead	1.10		0.485	0.128	mg/Kg		08/14/19 11:37	08/15/19 02:34	1

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.242	0.0828	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Arsenic	2.42		0.725	0.250	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Barium	76.2		0.483	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Beryllium	0.583		0.242	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Cadmium	ND		0.483	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Cobalt	6.40		0.242	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Chromium	8.24		0.242	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Copper	10.5		0.483	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Molybdenum	ND	L	0.242	0.128	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Nickel	7.57		0.242	0.140	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Antimony	ND	L	0.725	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Selenium	ND	L	0.725	0.290	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Thallium	ND		0.725	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Vanadium	24.9		0.242	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Zinc	39.9		0.966	0.172	mg/Kg		08/13/19 21:00	08/14/19 23:23	1
Lead	0.701		0.483	0.128	mg/Kg		08/13/19 21:00	08/14/19 23:23	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.238	0.0816	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Arsenic</b>	<b>0.871</b>		0.714	0.247	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Barium</b>	<b>26.2</b>		0.476	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Beryllium	ND		0.238	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Cadmium	ND		0.476	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Cobalt</b>	<b>3.53</b>		0.238	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Chromium</b>	<b>2.84</b>		0.238	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Copper</b>	<b>3.90</b>		0.476	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Molybdenum	ND		0.238	0.126	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Nickel</b>	<b>2.76</b>		0.238	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Antimony	ND	L	0.714	0.142	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Selenium	ND		0.714	0.286	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
Thallium	ND		0.714	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Vanadium</b>	<b>10.8</b>		0.238	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Zinc</b>	<b>15.6</b>		0.952	0.170	mg/Kg		08/13/19 21:00	08/14/19 23:29	1
<b>Lead</b>	<b>0.824</b>		0.476	0.126	mg/Kg		08/13/19 21:00	08/14/19 23:29	1

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.254	0.0870	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Arsenic</b>	<b>2.27</b>		0.761	0.263	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Barium</b>	<b>127</b>		0.508	0.156	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Beryllium</b>	<b>0.508</b>		0.254	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Cadmium</b>	<b>0.661</b>		0.508	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Cobalt</b>	<b>6.42</b>		0.254	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Chromium</b>	<b>10.1</b>		0.254	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Copper</b>	<b>14.5</b>		0.508	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
Molybdenum	ND		0.254	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Nickel</b>	<b>8.74</b>		0.254	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
Antimony	ND	L	0.761	0.151	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
Selenium	ND	L	0.761	0.305	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
Thallium	ND		0.761	0.154	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Vanadium</b>	<b>26.5</b>		0.254	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Zinc</b>	<b>58.9</b>		1.02	0.181	mg/Kg		08/13/19 21:00	08/14/19 23:31	1
<b>Lead</b>	<b>14.0</b>		0.508	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:31	1

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.258	0.0884	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Arsenic</b>	<b>1.19</b>		0.773	0.267	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Barium</b>	<b>65.6</b>		0.515	0.159	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Beryllium</b>	<b>0.615</b>		0.258	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Cadmium</b>	<b>0.586</b>		0.515	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Cobalt</b>	<b>8.34</b>		0.258	0.153	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Chromium</b>	<b>12.8</b>		0.258	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Copper</b>	<b>10.4</b>		0.515	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:33	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.258	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Nickel</b>	<b>10.1</b>		0.258	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
Antimony	ND	L	0.773	0.154	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
Selenium	ND		0.773	0.309	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
Thallium	ND		0.773	0.157	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Vanadium</b>	<b>37.1</b>		0.258	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Zinc</b>	<b>37.3</b>		1.03	0.184	mg/Kg		08/13/19 21:00	08/14/19 23:33	1
<b>Lead</b>	<b>1.50</b>		0.515	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:33	1

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Arsenic</b>	<b>1.12</b>		0.769	0.266	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Barium</b>	<b>37.8</b>		0.513	0.158	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Beryllium	ND		0.256	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Cadmium	ND		0.513	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Cobalt</b>	<b>2.49</b>		0.256	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Chromium</b>	<b>3.49</b>		0.256	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Copper</b>	<b>3.66</b>		0.513	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Molybdenum	ND		0.256	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Nickel</b>	<b>2.61</b>		0.256	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Antimony	ND		0.769	0.153	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Selenium	ND	L	0.769	0.308	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Thallium	ND		0.769	0.156	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Vanadium</b>	<b>12.1</b>		0.256	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
<b>Zinc</b>	<b>14.3</b>		1.03	0.183	mg/Kg		08/13/19 21:00	08/14/19 23:35	1
Lead	ND		0.513	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:35	1

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Silver</b>	<b>0.367</b>		0.251	0.0861	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Arsenic</b>	<b>2.93</b>		0.754	0.260	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Barium</b>	<b>315</b>		0.503	0.155	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Beryllium</b>	<b>0.920</b>		0.251	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Cadmium</b>	<b>0.828</b>		0.503	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Cobalt</b>	<b>15.3</b>		0.251	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Chromium</b>	<b>19.1</b>		0.251	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Copper</b>	<b>32.5</b>		0.503	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Molybdenum</b>	<b>16.2</b>		0.251	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Nickel</b>	<b>20.1</b>		0.251	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
Selenium	ND		0.754	0.302	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
Thallium	ND	L	0.754	0.153	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Vanadium</b>	<b>34.0</b>		0.251	0.142	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Zinc</b>	<b>61.2</b>		1.01	0.179	mg/Kg		08/13/19 21:00	08/14/19 23:37	1
<b>Lead</b>	<b>2.44</b>		0.503	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:37	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.246	0.0844	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Arsenic</b>	<b>2.91</b>		0.739	0.255	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Barium</b>	<b>133</b>		0.493	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Beryllium</b>	<b>0.844</b>		0.246	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Cadmium	ND		0.493	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Cobalt</b>	<b>10.3</b>		0.246	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Chromium</b>	<b>16.4</b>		0.246	0.140	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Copper</b>	<b>17.9</b>		0.493	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Molybdenum	ND	L	0.246	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Nickel</b>	<b>12.3</b>		0.246	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Antimony	ND	L	0.739	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Selenium	ND	L	0.739	0.296	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Thallium	ND		0.739	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Vanadium</b>	<b>40.1</b>		0.246	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
<b>Zinc</b>	<b>60.8</b>		0.985	0.175	mg/Kg		08/13/19 21:00	08/14/19 23:39	1
Lead	ND		0.493	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:39	1

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.244	0.0836	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Arsenic</b>	<b>1.61</b>		0.732	0.253	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Barium</b>	<b>141</b>		0.488	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Beryllium</b>	<b>0.753</b>		0.244	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Cadmium</b>	<b>0.613</b>		0.488	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Cobalt</b>	<b>10.7</b>		0.244	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Chromium</b>	<b>14.5</b>		0.244	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Copper</b>	<b>14.4</b>		0.488	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
Molybdenum	ND	L	0.244	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Nickel</b>	<b>11.8</b>		0.244	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
Antimony	ND	L	0.732	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
Selenium	ND	L	0.732	0.293	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
Thallium	ND		0.732	0.148	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Vanadium</b>	<b>37.8</b>		0.244	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Zinc</b>	<b>59.2</b>		0.976	0.174	mg/Kg		08/13/19 21:00	08/14/19 23:41	1
<b>Lead</b>	<b>0.533</b>		0.488	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:41	1

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.242	0.0828	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Arsenic</b>	<b>3.16</b>		0.725	0.250	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Barium</b>	<b>124</b>		0.483	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Beryllium</b>	<b>0.630</b>		0.242	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Cadmium</b>	<b>0.535</b>		0.483	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Cobalt</b>	<b>8.86</b>		0.242	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Chromium</b>	<b>14.9</b>		0.242	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Copper</b>	<b>10.7</b>		0.483	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:43	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.242	0.128	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Nickel</b>	<b>11.4</b>		0.242	0.140	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
Antimony	ND	L	0.725	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
Selenium	ND	L	0.725	0.290	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
Thallium	ND		0.725	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Vanadium</b>	<b>38.3</b>		0.242	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
<b>Zinc</b>	<b>49.0</b>		0.966	0.172	mg/Kg		08/13/19 21:00	08/14/19 23:43	1
Lead	ND		0.483	0.128	mg/Kg		08/13/19 21:00	08/14/19 23:43	1

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.238	0.0816	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Arsenic</b>	<b>1.78</b>		0.714	0.247	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Barium</b>	<b>147</b>		0.476	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Beryllium</b>	<b>0.859</b>		0.238	0.130	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Cadmium</b>	<b>0.837</b>		0.476	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Cobalt</b>	<b>8.37</b>		0.238	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Chromium</b>	<b>15.1</b>		0.238	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Copper</b>	<b>23.5</b>		0.476	0.129	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
Molybdenum	ND	L	0.238	0.126	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Nickel</b>	<b>14.1</b>		0.238	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
Antimony	ND	L	0.714	0.142	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
Selenium	ND	L	0.714	0.286	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
Thallium	ND		0.714	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Vanadium</b>	<b>41.5</b>		0.238	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Zinc</b>	<b>50.2</b>		0.952	0.170	mg/Kg		08/13/19 21:00	08/14/19 23:45	1
<b>Lead</b>	<b>1.25</b>		0.476	0.126	mg/Kg		08/13/19 21:00	08/14/19 23:45	1

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.256	0.0879	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Arsenic</b>	<b>0.900</b>		0.769	0.266	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Barium</b>	<b>128</b>		0.513	0.158	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Beryllium</b>	<b>0.697</b>		0.256	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Cadmium</b>	<b>0.614</b>		0.513	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Cobalt</b>	<b>10.4</b>		0.256	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Chromium</b>	<b>13.2</b>		0.256	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Copper</b>	<b>13.0</b>		0.513	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
Molybdenum	ND	L	0.256	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Nickel</b>	<b>11.5</b>		0.256	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
Antimony	ND	L	0.769	0.153	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
Selenium	ND	L	0.769	0.308	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
Thallium	ND		0.769	0.156	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Vanadium</b>	<b>38.3</b>		0.256	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
<b>Zinc</b>	<b>57.0</b>		1.03	0.183	mg/Kg		08/13/19 21:00	08/14/19 23:47	1
Lead	ND		0.513	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:47	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Arsenic</b>	<b>7.66</b>		0.754	0.260	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Barium</b>	<b>185</b>		0.503	0.155	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Beryllium</b>	<b>0.937</b>		0.251	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Cadmium</b>	<b>0.943</b>		0.503	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Cobalt</b>	<b>11.9</b>		0.251	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Chromium</b>	<b>19.2</b>		0.251	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Copper</b>	<b>26.8</b>		0.503	0.136	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
Molybdenum	ND	L	0.251	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Nickel</b>	<b>15.8</b>		0.251	0.146	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
Antimony	ND	L	0.754	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
Selenium	ND	L	0.754	0.302	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
Thallium	ND		0.754	0.153	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Vanadium</b>	<b>42.5</b>		0.251	0.142	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Zinc</b>	<b>71.2</b>		1.01	0.179	mg/Kg		08/13/19 21:00	08/14/19 23:53	1
<b>Lead</b>	<b>2.13</b>		0.503	0.133	mg/Kg		08/13/19 21:00	08/14/19 23:53	1

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.255	0.0874	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Arsenic</b>	<b>1.86</b>		0.765	0.264	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Barium</b>	<b>85.2</b>		0.510	0.157	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Beryllium</b>	<b>0.654</b>		0.255	0.140	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
Cadmium	ND		0.510	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Cobalt</b>	<b>8.91</b>		0.255	0.151	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Chromium</b>	<b>13.0</b>		0.255	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Copper</b>	<b>11.2</b>		0.510	0.138	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
Molybdenum	ND	L	0.255	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Nickel</b>	<b>9.80</b>		0.255	0.148	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
Antimony	ND	L	0.765	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
Selenium	ND		0.765	0.306	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
Thallium	ND		0.765	0.155	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Vanadium</b>	<b>31.3</b>		0.255	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Zinc</b>	<b>35.5</b>		1.02	0.182	mg/Kg		08/13/19 21:00	08/14/19 23:55	1
<b>Lead</b>	<b>1.67</b>		0.510	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:55	1

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.254	0.0870	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Arsenic</b>	<b>2.02</b>		0.761	0.263	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Barium</b>	<b>111</b>		0.508	0.156	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Beryllium</b>	<b>0.673</b>		0.254	0.139	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
Cadmium	ND		0.508	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Cobalt</b>	<b>8.50</b>		0.254	0.150	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Chromium</b>	<b>11.9</b>		0.254	0.144	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Copper</b>	<b>15.3</b>		0.508	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:57	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND	L	0.254	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Nickel</b>	<b>10.4</b>		0.254	0.147	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
Antimony	ND	L	0.761	0.151	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
Selenium	ND	L	0.761	0.305	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
Thallium	ND		0.761	0.154	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Vanadium</b>	<b>31.9</b>		0.254	0.143	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Zinc</b>	<b>44.5</b>		1.02	0.181	mg/Kg		08/13/19 21:00	08/14/19 23:57	1
<b>Lead</b>	<b>0.625</b>		0.508	0.134	mg/Kg		08/13/19 21:00	08/14/19 23:57	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB7-5**  
**Date Collected: 08/08/19 08:23**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg		08/14/19 14:00	08/15/19 12:24	1

**Client Sample ID: SB7-15**  
**Date Collected: 08/08/19 08:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0852		0.0806	0.00568	mg/Kg		08/14/19 14:00	08/15/19 12:20	1

**Client Sample ID: SB7-25**  
**Date Collected: 08/08/19 08:45**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0794	0.00559	mg/Kg		08/14/19 14:00	08/15/19 12:22	1

**Client Sample ID: SB8-5**  
**Date Collected: 08/08/19 09:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 14:00	08/15/19 12:08	1

**Client Sample ID: SB8-15**  
**Date Collected: 08/08/19 09:40**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0794	0.00559	mg/Kg		08/14/19 14:00	08/15/19 12:27	1

**Client Sample ID: SB8-25**  
**Date Collected: 08/08/19 09:50**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 14:00	08/15/19 12:29	1

**Client Sample ID: SB9-5**  
**Date Collected: 08/08/19 10:43**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg		08/14/19 14:00	08/15/19 12:31	1

**Client Sample ID: SB9-15**  
**Date Collected: 08/08/19 11:00**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg		08/14/19 14:00	08/15/19 12:34	1

**Client Sample ID: SB9-25**  
**Date Collected: 08/08/19 11:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 14:00	08/15/19 12:36	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: SB10-5**  
**Date Collected: 08/08/19 12:15**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0847	0.00597	mg/Kg		08/14/19 14:00	08/15/19 12:38	1

**Client Sample ID: SB10-15**  
**Date Collected: 08/08/19 12:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.117		0.0847	0.00597	mg/Kg		08/14/19 14:00	08/15/19 12:41	1

**Client Sample ID: SB10-25**  
**Date Collected: 08/08/19 12:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		08/14/19 14:00	08/15/19 12:47	1

**Client Sample ID: SB11-5**  
**Date Collected: 08/08/19 13:10**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-31**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 14:00	08/15/19 12:50	1

**Client Sample ID: SB11-15**  
**Date Collected: 08/08/19 13:20**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		08/14/19 14:00	08/15/19 12:52	1

**Client Sample ID: SB11-25**  
**Date Collected: 08/08/19 13:30**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-35**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		08/14/19 14:00	08/15/19 12:54	1

**Client Sample ID: SB12-5**  
**Date Collected: 08/08/19 14:13**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-38**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0839		0.0833	0.00587	mg/Kg		08/14/19 14:00	08/15/19 12:57	1

**Client Sample ID: SB12-15**  
**Date Collected: 08/08/19 14:25**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-40**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		08/14/19 14:00	08/15/19 12:59	1

**Client Sample ID: SB12-25**  
**Date Collected: 08/08/19 14:35**  
**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-42**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618	mg/Kg		08/14/19 14:00	08/15/19 13:01	1

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# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-4234-3	SB7-5	112	99	105	99
570-4234-5	SB7-15	111	100	106	98
570-4234-7	SB7-25	111	102	103	100
570-4234-10	SB8-5	111	99	106	99
570-4234-12	SB8-15	114	100	104	101
570-4234-14	SB8-25	112	100	103	100
570-4234-17	SB9-5	113	98	105	99
570-4234-19	SB9-15	117	101	106	100
570-4234-21	SB9-25	118	99	107	98
570-4234-24	SB10-5	117	99	108	99
570-4234-26	SB10-15	120	99	108	99
570-4234-28	SB10-25	116	100	105	99
570-4234-31	SB11-5	118	101	109	99
570-4234-33	SB11-15	118	100	108	99
570-4234-35	SB11-25	119	101	106	99
570-4234-38	SB12-5	122	100	108	100
570-4234-40	SB12-15	121	98	110	98
570-4234-42	SB12-25	117	98	107	100
LCS 570-11858/6	Lab Control Sample	96	97	98	98
LCS 570-12000/3	Lab Control Sample	95	97	96	99
LCS 570-11858/7	Lab Control Sample Dup	92	97	96	99
LCS 570-12000/4	Lab Control Sample Dup	99	99	100	97
MB 570-11858/10	Method Blank	100	96	100	99
MB 570-12000/7	Method Blank	102	96	100	99

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (60-126)
570-4234-3	SB7-5	88
570-4234-5	SB7-15	84
570-4234-7	SB7-25	84
570-4234-10	SB8-5	84
570-4234-12	SB8-15	87
570-4234-14	SB8-25	82
570-4234-17	SB9-5	83
570-4234-19	SB9-15	86
570-4234-21	SB9-25	84
570-4234-24	SB10-5	82
570-4234-26	SB10-15	82
570-4234-28	SB10-25	83
570-4234-31	SB11-5	85

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (60-126)
570-4234-33	SB11-15	87
570-4234-35	SB11-25	86
570-4234-38	SB12-5	74
570-4234-40	SB12-15	86
570-4234-42	SB12-25	82
LCS 570-11793/4	Lab Control Sample	93
LCSD 570-11793/5	Lab Control Sample Dup	95
MB 570-11793/3	Method Blank	82

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-4234-3	SB7-5	115
570-4234-3 MS	SB7-5	106
570-4234-3 MSD	SB7-5	108
570-4234-5	SB7-15	103
570-4234-7	SB7-25	104
570-4234-10	SB8-5	104
570-4234-12	SB8-15	100
570-4234-14	SB8-25	96
570-4234-17	SB9-5	93
570-4234-19	SB9-15	91
570-4234-21	SB9-25	84
570-4234-24	SB10-5	96
570-4234-26	SB10-15	87
570-4234-28	SB10-25	82
570-4234-31	SB11-5	76
570-4234-33	SB11-15	79
570-4234-35	SB11-25	71
570-4234-38	SB12-5	75
570-4234-40	SB12-15	75
570-4234-42	SB12-25	70
LCS 570-11627/2-A	Lab Control Sample	110
MB 570-11627/1-A	Method Blank	113

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-11858/10**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/12/19 18:46	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/12/19 18:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/12/19 18:46	1
1,1,2-Trichloroethane	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/12/19 18:46	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg			08/12/19 18:46	1
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg			08/12/19 18:46	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/12/19 18:46	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/12/19 18:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/12/19 18:46	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/12/19 18:46	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
1,2-Dichloroethane	ND		1.0	0.31	ug/Kg			08/12/19 18:46	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/12/19 18:46	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/12/19 18:46	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/12/19 18:46	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/12/19 18:46	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 18:46	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/12/19 18:46	1
2-Butanone	ND		20	3.8	ug/Kg			08/12/19 18:46	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
2-Hexanone	ND		20	1.8	ug/Kg			08/12/19 18:46	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/12/19 18:46	1
Acetone	ND		50	6.2	ug/Kg			08/12/19 18:46	1
Benzene	ND		1.0	0.13	ug/Kg			08/12/19 18:46	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/12/19 18:46	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/12/19 18:46	1
Bromoform	ND		5.0	0.79	ug/Kg			08/12/19 18:46	1
Bromomethane	ND		20	9.4	ug/Kg			08/12/19 18:46	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/12/19 18:46	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/Kg			08/12/19 18:46	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/12/19 18:46	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/12/19 18:46	1
Chlorobenzene	ND		1.0	0.22	ug/Kg			08/12/19 18:46	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/12/19 18:46	1
Chloroform	ND		1.0	0.24	ug/Kg			08/12/19 18:46	1
Chloromethane	ND		20	0.30	ug/Kg			08/12/19 18:46	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/12/19 18:46	1
Dibromomethane	ND		1.0	0.77	ug/Kg			08/12/19 18:46	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg			08/12/19 18:46	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48	ug/Kg			08/12/19 18:46	1
Ethanol	ND		500	84	ug/Kg			08/12/19 18:46	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 18:46	1

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-11858/10**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/12/19 18:46	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/12/19 18:46	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/12/19 18:46	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/12/19 18:46	1
Naphthalene	ND		10	0.81	ug/Kg			08/12/19 18:46	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/12/19 18:46	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/12/19 18:46	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/12/19 18:46	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/12/19 18:46	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/12/19 18:46	1
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/12/19 18:46	1
Styrene	ND		1.0	0.60	ug/Kg			08/12/19 18:46	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/12/19 18:46	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/12/19 18:46	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/12/19 18:46	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/12/19 18:46	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/12/19 18:46	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/12/19 18:46	1
Toluene	ND		1.0	0.52	ug/Kg			08/12/19 18:46	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/12/19 18:46	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/12/19 18:46	1
Vinyl acetate	ND		10	4.7	ug/Kg			08/12/19 18:46	1
Vinyl chloride	ND		1.0	0.50	ug/Kg			08/12/19 18:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		71 - 155		08/12/19 18:46	1
4-Bromofluorobenzene (Surr)	96		80 - 120		08/12/19 18:46	1
Dibromofluoromethane (Surr)	100		79 - 133		08/12/19 18:46	1
Toluene-d8 (Surr)	99		80 - 120		08/12/19 18:46	1

**Lab Sample ID: LCS 570-11858/6**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	47.28		ug/Kg		95	71 - 125
1,2-Dibromoethane	50.0	52.58		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	50.0	50.43		ug/Kg		101	80 - 120
1,2-Dichloroethane	50.0	46.14		ug/Kg		92	79 - 121
Benzene	50.0	47.75		ug/Kg		96	79 - 120
Carbon tetrachloride	50.0	53.53		ug/Kg		107	58 - 142
Chlorobenzene	50.0	50.31		ug/Kg		101	80 - 120
Di-isopropyl ether (DIPE)	50.0	43.62		ug/Kg		87	65 - 131
Ethanol	500	486.9	J	ug/Kg		97	32 - 158
Ethylbenzene	50.0	49.79		ug/Kg		100	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	45.52		ug/Kg		91	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	46.43		ug/Kg		93	64 - 124
o-Xylene	50.0	49.73		ug/Kg		99	79 - 127

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-11858/6**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	100	101.4		ug/Kg		101	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		79 - 133
Toluene-d8 (Surr)	98		80 - 120

**Lab Sample ID: LCSD 570-11858/7**  
**Matrix: Solid**  
**Analysis Batch: 11858**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	42.71		ug/Kg		85	71 - 125	10	20
1,2-Dibromoethane	50.0	47.88		ug/Kg		96	80 - 120	9	20
1,2-Dichlorobenzene	50.0	47.45		ug/Kg		95	80 - 120	6	20
1,2-Dichloroethane	50.0	41.93		ug/Kg		84	79 - 121	10	20
Benzene	50.0	43.84		ug/Kg		88	79 - 120	9	20
Carbon tetrachloride	50.0	48.94		ug/Kg		98	58 - 142	9	20
Chlorobenzene	50.0	47.12		ug/Kg		94	80 - 120	7	20
Di-isopropyl ether (DIPE)	50.0	40.34		ug/Kg		81	65 - 131	8	20
Ethanol	500	427.9	J	ug/Kg		86	32 - 158	13	27
Ethylbenzene	50.0	46.67		ug/Kg		93	57 - 153	6	20
Ethyl-t-butyl ether (ETBE)	50.0	42.00		ug/Kg		84	58 - 136	8	20
Methyl-t-Butyl Ether (MTBE)	50.0	42.23		ug/Kg		84	64 - 124	9	20
o-Xylene	50.0	46.59		ug/Kg		93	79 - 127	7	20
m,p-Xylene	100	93.66		ug/Kg		94	80 - 122	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		79 - 133
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: MB 570-12000/7**  
**Matrix: Solid**  
**Analysis Batch: 12000**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24	ug/Kg			08/13/19 12:44	1
1,1,1-Trichloroethane	ND		1.0	0.23	ug/Kg			08/13/19 12:44	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35	ug/Kg			08/13/19 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35	ug/Kg			08/13/19 12:44	1
1,1,2-Trichloroethane	ND		1.0	0.35	ug/Kg			08/13/19 12:44	1
1,1-Dichloroethane	ND		1.0	0.21	ug/Kg			08/13/19 12:44	1
1,1-Dichloroethene	ND		1.0	0.35	ug/Kg			08/13/19 12:44	1
1,1-Dichloropropene	ND		2.0	0.33	ug/Kg			08/13/19 12:44	1
1,2,3-Trichlorobenzene	ND		2.0	0.91	ug/Kg			08/13/19 12:44	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-12000/7**  
**Matrix: Solid**  
**Analysis Batch: 12000**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.0	0.83	ug/Kg			08/13/19 12:44	1
1,2,4-Trichlorobenzene	ND		2.0	0.31	ug/Kg			08/13/19 12:44	1
1,2,4-Trimethylbenzene	ND		2.0	0.59	ug/Kg			08/13/19 12:44	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			08/13/19 12:44	1
1,2-Dibromoethane	ND		1.0	0.26	ug/Kg			08/13/19 12:44	1
1,2-Dichlorobenzene	ND		1.0	0.23	ug/Kg			08/13/19 12:44	1
1,2-Dichloroethane	ND		1.0	0.31	ug/Kg			08/13/19 12:44	1
1,2-Dichloropropane	ND		1.0	0.44	ug/Kg			08/13/19 12:44	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ug/Kg			08/13/19 12:44	1
1,3-Dichlorobenzene	ND		1.0	0.18	ug/Kg			08/13/19 12:44	1
1,3-Dichloropropane	ND		1.0	0.25	ug/Kg			08/13/19 12:44	1
1,4-Dichlorobenzene	ND		1.0	0.22	ug/Kg			08/13/19 12:44	1
2,2-Dichloropropane	ND		5.0	0.33	ug/Kg			08/13/19 12:44	1
2-Butanone	ND		20	3.8	ug/Kg			08/13/19 12:44	1
2-Chlorotoluene	ND		1.0	0.23	ug/Kg			08/13/19 12:44	1
2-Hexanone	ND		20	1.8	ug/Kg			08/13/19 12:44	1
4-Chlorotoluene	ND		1.0	0.21	ug/Kg			08/13/19 12:44	1
4-Methyl-2-pentanone	ND		20	4.3	ug/Kg			08/13/19 12:44	1
Acetone	ND		50	6.2	ug/Kg			08/13/19 12:44	1
Benzene	ND		1.0	0.13	ug/Kg			08/13/19 12:44	1
Bromobenzene	ND		1.0	0.21	ug/Kg			08/13/19 12:44	1
Bromochloromethane	ND		2.0	0.69	ug/Kg			08/13/19 12:44	1
Bromodichloromethane	ND		1.0	0.23	ug/Kg			08/13/19 12:44	1
Bromoform	ND		5.0	0.79	ug/Kg			08/13/19 12:44	1
Bromomethane	ND		20	9.4	ug/Kg			08/13/19 12:44	1
cis-1,2-Dichloroethene	ND		1.0	0.28	ug/Kg			08/13/19 12:44	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/Kg			08/13/19 12:44	1
Carbon disulfide	ND		10	0.31	ug/Kg			08/13/19 12:44	1
Carbon tetrachloride	ND		1.0	0.28	ug/Kg			08/13/19 12:44	1
Chlorobenzene	ND		1.0	0.22	ug/Kg			08/13/19 12:44	1
Chloroethane	ND		2.0	1.5	ug/Kg			08/13/19 12:44	1
Chloroform	ND		1.0	0.24	ug/Kg			08/13/19 12:44	1
Chloromethane	ND		20	0.30	ug/Kg			08/13/19 12:44	1
Dibromochloromethane	ND		2.0	0.57	ug/Kg			08/13/19 12:44	1
Dibromomethane	ND		1.0	0.77	ug/Kg			08/13/19 12:44	1
Dichlorodifluoromethane	ND		2.0	0.44	ug/Kg			08/13/19 12:44	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48	ug/Kg			08/13/19 12:44	1
Ethanol	ND		500	84	ug/Kg			08/13/19 12:44	1
Ethylbenzene	ND		1.0	0.15	ug/Kg			08/13/19 12:44	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51	ug/Kg			08/13/19 12:44	1
Isopropylbenzene	ND		1.0	0.55	ug/Kg			08/13/19 12:44	1
Methylene Chloride	ND		10	1.3	ug/Kg			08/13/19 12:44	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30	ug/Kg			08/13/19 12:44	1
Naphthalene	ND		10	0.81	ug/Kg			08/13/19 12:44	1
n-Butylbenzene	ND		1.0	0.16	ug/Kg			08/13/19 12:44	1
N-Propylbenzene	ND		2.0	0.50	ug/Kg			08/13/19 12:44	1
o-Xylene	ND		1.0	0.56	ug/Kg			08/13/19 12:44	1
m,p-Xylene	ND		2.0	0.27	ug/Kg			08/13/19 12:44	1
p-Isopropyltoluene	ND		1.0	0.63	ug/Kg			08/13/19 12:44	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-12000/7**  
**Matrix: Solid**  
**Analysis Batch: 12000**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
sec-Butylbenzene	ND		1.0	0.58	ug/Kg			08/13/19 12:44	1
Styrene	ND		1.0	0.60	ug/Kg			08/13/19 12:44	1
trans-1,2-Dichloroethene	ND		1.0	0.51	ug/Kg			08/13/19 12:44	1
trans-1,3-Dichloropropene	ND		2.0	0.61	ug/Kg			08/13/19 12:44	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35	ug/Kg			08/13/19 12:44	1
tert-Butyl alcohol (TBA)	ND		20	5.2	ug/Kg			08/13/19 12:44	1
tert-Butylbenzene	ND		1.0	0.15	ug/Kg			08/13/19 12:44	1
Tetrachloroethene	ND		1.0	0.21	ug/Kg			08/13/19 12:44	1
Toluene	ND		1.0	0.52	ug/Kg			08/13/19 12:44	1
Trichloroethene	ND		2.0	0.30	ug/Kg			08/13/19 12:44	1
Trichlorofluoromethane	ND		10	0.38	ug/Kg			08/13/19 12:44	1
Vinyl acetate	ND		10	4.7	ug/Kg			08/13/19 12:44	1
Vinyl chloride	ND		1.0	0.50	ug/Kg			08/13/19 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		71 - 155		08/13/19 12:44	1
4-Bromofluorobenzene (Surr)	96		80 - 120		08/13/19 12:44	1
Dibromofluoromethane (Surr)	100		79 - 133		08/13/19 12:44	1
Toluene-d8 (Surr)	99		80 - 120		08/13/19 12:44	1

**Lab Sample ID: LCS 570-12000/3**  
**Matrix: Solid**  
**Analysis Batch: 12000**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	50.0	54.01		ug/Kg		108	80 - 120
1,2-Dichlorobenzene	50.0	54.12		ug/Kg		108	80 - 120
1,2-Dichloroethane	50.0	48.20		ug/Kg		96	79 - 121
Benzene	50.0	50.02		ug/Kg		100	79 - 120
Carbon tetrachloride	50.0	55.90		ug/Kg		112	58 - 142
Chlorobenzene	50.0	53.41		ug/Kg		107	80 - 120
Di-isopropyl ether (DIPE)	50.0	44.95		ug/Kg		90	65 - 131
Ethanol	500	517.9		ug/Kg		104	32 - 158
Ethylbenzene	50.0	53.39		ug/Kg		107	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	46.66		ug/Kg		93	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	46.14		ug/Kg		92	64 - 124
o-Xylene	50.0	53.02		ug/Kg		106	79 - 127
m,p-Xylene	100	108.8		ug/Kg		109	80 - 122

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	95		71 - 155
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	96		79 - 133
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-12000/4**  
**Matrix: Solid**  
**Analysis Batch: 12000**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	48.80		ug/Kg		98	71 - 125	2	20
1,2-Dibromoethane	50.0	54.87		ug/Kg		110	80 - 120	2	20
1,2-Dichlorobenzene	50.0	54.81		ug/Kg		110	80 - 120	1	20
1,2-Dichloroethane	50.0	48.81		ug/Kg		98	79 - 121	1	20
Benzene	50.0	49.89		ug/Kg		100	79 - 120	0	20
Carbon tetrachloride	50.0	56.90		ug/Kg		114	58 - 142	2	20
Chlorobenzene	50.0	53.18		ug/Kg		106	80 - 120	0	20
Di-isopropyl ether (DIPE)	50.0	45.71		ug/Kg		91	65 - 131	2	20
Ethanol	500	515.8		ug/Kg		103	32 - 158	0	27
Ethylbenzene	50.0	53.43		ug/Kg		107	57 - 153	0	20
Ethyl-t-butyl ether (ETBE)	50.0	47.10		ug/Kg		94	58 - 136	1	20
Methyl-t-Butyl Ether (MTBE)	50.0	47.55		ug/Kg		95	64 - 124	3	20
o-Xylene	50.0	53.50		ug/Kg		107	79 - 127	1	20
m,p-Xylene	100	108.0		ug/Kg		108	80 - 122	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		79 - 133
Toluene-d8 (Surr)	97		80 - 120

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-11793/3**  
**Matrix: Solid**  
**Analysis Batch: 11793**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.050	mg/Kg			08/12/19 11:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		60 - 126		08/12/19 11:39	1

**Lab Sample ID: LCS 570-11793/4**  
**Matrix: Solid**  
**Analysis Batch: 11793**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C4-C13)	1.99	2.052		mg/Kg		103	50 - 139

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		60 - 126



# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: LCSD 570-11793/5**  
**Matrix: Solid**  
**Analysis Batch: 11793**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	2.00	2.069		mg/Kg		104	50 - 139	1	18
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
4-Bromofluorobenzene (Surr)		95					60 - 126		

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-11627/1-A**  
**Matrix: Solid**  
**Analysis Batch: 11814**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 11627**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6	mg/Kg		08/10/19 12:25	08/12/19 13:25	1
Oil Range Organics (C18-C40)	ND		25	3.6	mg/Kg		08/10/19 12:25	08/12/19 13:25	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)		113					08/10/19 12:25	08/12/19 13:25	1

**Lab Sample ID: LCS 570-11627/2-A**  
**Matrix: Solid**  
**Analysis Batch: 11814**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 11627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	400	452.3		mg/Kg		113	67 - 121
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>				
n-Octacosane (Surr)		110					61 - 145

**Lab Sample ID: 570-4234-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 11814**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	ND		400	428.2		mg/Kg		107	33 - 153
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>						
n-Octacosane (Surr)		106							61 - 145

**Lab Sample ID: 570-4234-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 11814**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		400	429.8		mg/Kg		107	33 - 153	0	32

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 570-4234-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 11814**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 11627**

Surrogate	%Recovery	MSD Qualifier	MSD Limits
<i>n</i> -Octacosane (Surr)	108		61 - 145

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-12268/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Arsenic	ND		0.750	0.259	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Barium	ND		0.500	0.154	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Beryllium	ND		0.250	0.137	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Cadmium	ND		0.500	0.135	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Cobalt	ND		0.250	0.148	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Chromium	ND		0.250	0.142	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Copper	ND		0.500	0.135	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Molybdenum	ND		0.250	0.132	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Nickel	ND		0.250	0.145	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Antimony	ND		0.750	0.149	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Selenium	ND		0.750	0.300	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Vanadium	ND		0.250	0.141	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Zinc	ND		1.00	0.178	mg/Kg		08/13/19 19:22	08/14/19 21:32	1
Lead	ND		0.500	0.132	mg/Kg		08/13/19 19:22	08/14/19 21:32	1

**Lab Sample ID: LCS 570-12268/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.4	12.55		mg/Kg		101	80 - 120
Arsenic	24.8	20.33		mg/Kg		82	80 - 120
Barium	24.8	29.10		mg/Kg		118	80 - 120
Beryllium	24.8	24.96		mg/Kg		101	80 - 120
Cadmium	24.8	26.57		mg/Kg		107	80 - 120
Cobalt	24.8	27.58		mg/Kg		111	80 - 120
Chromium	24.8	26.14		mg/Kg		106	80 - 120
Copper	24.8	26.84		mg/Kg		108	80 - 120
Molybdenum	24.8	25.16		mg/Kg		102	80 - 120
Nickel	24.8	27.14		mg/Kg		110	80 - 120
Antimony	24.8	23.04		mg/Kg		93	80 - 120
Selenium	24.8	24.47		mg/Kg		99	80 - 120
Thallium	24.8	26.24		mg/Kg		106	80 - 120
Vanadium	24.8	25.44		mg/Kg		103	80 - 120
Zinc	24.8	26.69		mg/Kg		108	80 - 120
Lead	24.8	27.13		mg/Kg		110	80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSD 570-12268/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Silver	12.0	12.18		mg/Kg		101	80 - 120	3	20	
Arsenic	24.0	19.57		mg/Kg		81	80 - 120	4	20	
Barium	24.0	28.03		mg/Kg		117	80 - 120	4	20	
Beryllium	24.0	24.36		mg/Kg		101	80 - 120	2	20	
Cadmium	24.0	25.68		mg/Kg		107	80 - 120	3	20	
Cobalt	24.0	27.06		mg/Kg		113	80 - 120	2	20	
Chromium	24.0	25.22		mg/Kg		105	80 - 120	4	20	
Copper	24.0	25.78		mg/Kg		107	80 - 120	4	20	
Molybdenum	24.0	24.49		mg/Kg		102	80 - 120	3	20	
Nickel	24.0	26.18		mg/Kg		109	80 - 120	4	20	
Antimony	24.0	22.87		mg/Kg		95	80 - 120	1	20	
Selenium	24.0	23.62		mg/Kg		98	80 - 120	4	20	
Thallium	24.0	25.02		mg/Kg		104	80 - 120	5	20	
Vanadium	24.0	24.59		mg/Kg		102	80 - 120	3	20	
Zinc	24.0	25.30		mg/Kg		105	80 - 120	5	20	
Lead	24.0	26.13		mg/Kg		109	80 - 120	4	20	

**Lab Sample ID: 570-4234-3 MS**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Silver	ND		12.4	14.45		mg/Kg		117	75 - 125			
Arsenic	4.85	F1	24.8	88.00	F1	mg/Kg		336	75 - 125			
Barium	192		24.8	228.9	4	mg/Kg		147	75 - 125			
Beryllium	0.914		24.8	29.48		mg/Kg		115	75 - 125			
Cadmium	1.00		24.8	28.73		mg/Kg		112	75 - 125			
Cobalt	12.8		24.8	40.78		mg/Kg		113	75 - 125			
Chromium	22.1		24.8	50.80		mg/Kg		116	75 - 125			
Copper	22.2		24.8	52.65		mg/Kg		123	75 - 125			
Molybdenum	2.32	F1	24.8	46.18	F1	mg/Kg		177	75 - 125			
Nickel	16.8		24.8	45.15		mg/Kg		115	75 - 125			
Antimony	ND	L	24.8	15.93		mg/Kg		64	50 - 115			
Selenium	ND	F1 L	24.8	42.13	F1	mg/Kg		170	75 - 125			
Thallium	ND		24.8	24.49		mg/Kg		99	75 - 125			
Vanadium	53.4		24.8	81.94		mg/Kg		115	75 - 125			
Zinc	68.7		24.8	97.42		mg/Kg		116	75 - 125			
Lead	ND		24.8	26.93		mg/Kg		108	75 - 125			

**Lab Sample ID: 570-4234-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Silver	ND		12.4	14.64		mg/Kg		118	75 - 125	1	20	
Arsenic	4.85	F1	24.9	89.62	F1	mg/Kg		341	75 - 125	2	20	
Barium	192		24.9	230.1	4	mg/Kg		151	75 - 125	1	20	
Beryllium	0.914		24.9	29.95		mg/Kg		117	75 - 125	2	20	
Cadmium	1.00		24.9	28.89		mg/Kg		112	75 - 125	1	20	

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 570-4234-3 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: SB7-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12268**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Cobalt	12.8		24.9	41.83		mg/Kg		117	75 - 125	3	20
Chromium	22.1		24.9	51.43		mg/Kg		118	75 - 125	1	20
Copper	22.2		24.9	53.04		mg/Kg		124	75 - 125	1	20
Molybdenum	2.32	F1	24.9	46.43	F1	mg/Kg		177	75 - 125	1	20
Nickel	16.8		24.9	45.50		mg/Kg		115	75 - 125	1	20
Antimony	ND	L	24.9	14.63		mg/Kg		59	50 - 115	8	20
Selenium	ND	F1 L	24.9	44.36	F1	mg/Kg		178	75 - 125	5	20
Thallium	ND		24.9	25.46		mg/Kg		102	75 - 125	4	20
Vanadium	53.4		24.9	82.71		mg/Kg		118	75 - 125	1	20
Zinc	68.7		24.9	97.19		mg/Kg		115	75 - 125	0	20
Lead	ND		24.9	27.49		mg/Kg		110	75 - 125	2	20

**Lab Sample ID: MB 570-12277/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12277**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Silver	ND		0.250	0.0857	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Arsenic	ND		0.750	0.259	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Barium	ND		0.500	0.154	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Beryllium	ND		0.250	0.137	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Cadmium	ND		0.500	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Cobalt	ND		0.250	0.148	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Chromium	ND		0.250	0.142	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Copper	ND		0.500	0.135	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Molybdenum	ND		0.250	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Nickel	ND		0.250	0.145	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Antimony	ND		0.750	0.149	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Selenium	ND		0.750	0.300	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Thallium	ND		0.750	0.152	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Vanadium	ND		0.250	0.141	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Zinc	ND		1.00	0.178	mg/Kg		08/13/19 21:00	08/14/19 23:07	1
Lead	ND		0.500	0.132	mg/Kg		08/13/19 21:00	08/14/19 23:07	1

**Lab Sample ID: LCS 570-12277/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12277**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Silver	12.6	11.99		mg/Kg		95	80 - 120
Arsenic	25.1	22.38		mg/Kg		89	80 - 120
Barium	25.1	26.84		mg/Kg		107	80 - 120
Beryllium	25.1	23.46		mg/Kg		93	80 - 120
Cadmium	25.1	25.10		mg/Kg		100	80 - 120
Cobalt	25.1	25.48		mg/Kg		101	80 - 120
Chromium	25.1	24.95		mg/Kg		99	80 - 120
Copper	25.1	25.00		mg/Kg		99	80 - 120
Molybdenum	25.1	24.16		mg/Kg		96	80 - 120
Nickel	25.1	25.52		mg/Kg		102	80 - 120

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 570-12277/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12277**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	25.1	26.75		mg/Kg		106	80 - 120
Selenium	25.1	22.45		mg/Kg		89	80 - 120
Thallium	25.1	23.57		mg/Kg		94	80 - 120
Vanadium	25.1	24.21		mg/Kg		96	80 - 120
Zinc	25.1	24.24		mg/Kg		96	80 - 120
Lead	25.1	25.05		mg/Kg		100	80 - 120

**Lab Sample ID: LCSD 570-12277/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12277**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	12.7	12.05		mg/Kg		95	80 - 120	0	20
Arsenic	25.4	23.13		mg/Kg		91	80 - 120	3	20
Barium	25.4	26.71		mg/Kg		105	80 - 120	0	20
Beryllium	25.4	23.43		mg/Kg		92	80 - 120	0	20
Cadmium	25.4	24.92		mg/Kg		98	80 - 120	1	20
Cobalt	25.4	25.91		mg/Kg		102	80 - 120	2	20
Chromium	25.4	24.94		mg/Kg		98	80 - 120	0	20
Copper	25.4	25.13		mg/Kg		99	80 - 120	1	20
Molybdenum	25.4	24.54		mg/Kg		97	80 - 120	2	20
Nickel	25.4	25.97		mg/Kg		102	80 - 120	2	20
Antimony	25.4	26.95		mg/Kg		106	80 - 120	1	20
Selenium	25.4	22.66		mg/Kg		89	80 - 120	1	20
Thallium	25.4	24.29		mg/Kg		96	80 - 120	3	20
Vanadium	25.4	24.09		mg/Kg		95	80 - 120	0	20
Zinc	25.4	24.55		mg/Kg		97	80 - 120	1	20
Lead	25.4	25.33		mg/Kg		100	80 - 120	1	20

**Lab Sample ID: MB 570-12379/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12379**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.244	0.0836	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Arsenic	ND		0.732	0.253	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Barium	ND		0.488	0.150	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Beryllium	ND		0.244	0.134	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Cadmium	ND		0.488	0.132	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Cobalt	ND		0.244	0.144	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Chromium	ND		0.244	0.139	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Copper	ND		0.488	0.132	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Molybdenum	ND		0.244	0.129	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Nickel	ND		0.244	0.141	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Antimony	ND		0.732	0.145	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Selenium	ND		0.732	0.293	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Thallium	ND		0.732	0.148	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Vanadium	ND		0.244	0.138	mg/Kg		08/14/19 11:37	08/15/19 02:21	1
Zinc	ND		0.976	0.174	mg/Kg		08/14/19 11:37	08/15/19 02:21	1

Eurofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: MB 570-12379/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12379**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.488	0.129	mg/Kg		08/14/19 11:37	08/15/19 02:21	1

**Lab Sample ID: LCS 570-12379/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12379**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	12.4	13.08		mg/Kg		105	80 - 120
Arsenic	24.9	23.82		mg/Kg		96	80 - 120
Barium	24.9	28.51		mg/Kg		115	80 - 120
Beryllium	24.9	24.50		mg/Kg		98	80 - 120
Cadmium	24.9	26.17		mg/Kg		105	80 - 120
Cobalt	24.9	25.23		mg/Kg		101	80 - 120
Chromium	24.9	25.81		mg/Kg		104	80 - 120
Copper	24.9	24.88		mg/Kg		100	80 - 120
Molybdenum	24.9	24.80		mg/Kg		100	80 - 120
Nickel	24.9	26.38		mg/Kg		106	80 - 120
Antimony	24.9	28.16		mg/Kg		113	80 - 120
Selenium	24.9	23.90		mg/Kg		96	80 - 120
Thallium	24.9	26.26		mg/Kg		106	80 - 120
Vanadium	24.9	24.88		mg/Kg		100	80 - 120
Zinc	24.9	25.17		mg/Kg		101	80 - 120
Lead	24.9	26.15		mg/Kg		105	80 - 120

**Lab Sample ID: LCSD 570-12379/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12779**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12379**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Silver	12.1	12.84		mg/Kg		106	80 - 120	2	20
Arsenic	24.3	23.06		mg/Kg		95	80 - 120	3	20
Barium	24.3	28.04		mg/Kg		116	80 - 120	2	20
Beryllium	24.3	24.07		mg/Kg		99	80 - 120	2	20
Cadmium	24.3	25.72		mg/Kg		106	80 - 120	2	20
Cobalt	24.3	24.47		mg/Kg		101	80 - 120	3	20
Chromium	24.3	25.33		mg/Kg		104	80 - 120	2	20
Copper	24.3	24.49		mg/Kg		101	80 - 120	2	20
Molybdenum	24.3	24.27		mg/Kg		100	80 - 120	2	20
Nickel	24.3	26.05		mg/Kg		107	80 - 120	1	20
Antimony	24.3	27.34		mg/Kg		113	80 - 120	3	20
Selenium	24.3	23.12		mg/Kg		95	80 - 120	3	20
Thallium	24.3	25.25		mg/Kg		104	80 - 120	4	20
Vanadium	24.3	24.45		mg/Kg		101	80 - 120	2	20
Zinc	24.3	24.33		mg/Kg		100	80 - 120	3	20
Lead	24.3	25.18		mg/Kg		104	80 - 120	4	20

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 570-12364/1-A**  
**Matrix: Solid**  
**Analysis Batch: 12776**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 12364**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0806	0.00568	mg/Kg		08/14/19 14:00	08/15/19 12:02	1

**Lab Sample ID: LCS 570-12364/2-A**  
**Matrix: Solid**  
**Analysis Batch: 12776**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 12364**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.7812		mg/Kg		94	85 - 121

**Lab Sample ID: LCSD 570-12364/3-A**  
**Matrix: Solid**  
**Analysis Batch: 12776**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 12364**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.794	0.7461		mg/Kg		94	85 - 121	5	10

**Lab Sample ID: 570-4234-10 MS**  
**Matrix: Solid**  
**Analysis Batch: 12776**

**Client Sample ID: SB8-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.833	0.7964		mg/Kg		92	71 - 137

**Lab Sample ID: 570-4234-10 MSD**  
**Matrix: Solid**  
**Analysis Batch: 12776**

**Client Sample ID: SB8-5**  
**Prep Type: Total/NA**  
**Prep Batch: 12364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.820	0.7527		mg/Kg		88	71 - 137	6	14

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## GC/MS VOA

### Prep Batch: 11507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	5035	
570-4234-5	SB7-15	Total/NA	Solid	5035	
570-4234-7	SB7-25	Total/NA	Solid	5035	
570-4234-10	SB8-5	Total/NA	Solid	5035	
570-4234-12	SB8-15	Total/NA	Solid	5035	
570-4234-14	SB8-25	Total/NA	Solid	5035	
570-4234-17	SB9-5	Total/NA	Solid	5035	
570-4234-19	SB9-15	Total/NA	Solid	5035	
570-4234-21	SB9-25	Total/NA	Solid	5035	
570-4234-24	SB10-5	Total/NA	Solid	5035	
570-4234-26	SB10-15	Total/NA	Solid	5035	
570-4234-28	SB10-25	Total/NA	Solid	5035	
570-4234-31	SB11-5	Total/NA	Solid	5035	
570-4234-33	SB11-15	Total/NA	Solid	5035	
570-4234-35	SB11-25	Total/NA	Solid	5035	
570-4234-38	SB12-5	Total/NA	Solid	5035	
570-4234-40	SB12-15	Total/NA	Solid	5035	
570-4234-42	SB12-25	Total/NA	Solid	5035	

### Analysis Batch: 11858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	8260B	11507
570-4234-5	SB7-15	Total/NA	Solid	8260B	11507
570-4234-7	SB7-25	Total/NA	Solid	8260B	11507
570-4234-10	SB8-5	Total/NA	Solid	8260B	11507
570-4234-12	SB8-15	Total/NA	Solid	8260B	11507
570-4234-14	SB8-25	Total/NA	Solid	8260B	11507
570-4234-17	SB9-5	Total/NA	Solid	8260B	11507
MB 570-11858/10	Method Blank	Total/NA	Solid	8260B	
LCS 570-11858/6	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 570-11858/7	Lab Control Sample Dup	Total/NA	Solid	8260B	

### Analysis Batch: 12000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-19	SB9-15	Total/NA	Solid	8260B	11507
570-4234-21	SB9-25	Total/NA	Solid	8260B	11507
570-4234-24	SB10-5	Total/NA	Solid	8260B	11507
570-4234-26	SB10-15	Total/NA	Solid	8260B	11507
570-4234-28	SB10-25	Total/NA	Solid	8260B	11507
570-4234-31	SB11-5	Total/NA	Solid	8260B	11507
570-4234-33	SB11-15	Total/NA	Solid	8260B	11507
570-4234-35	SB11-25	Total/NA	Solid	8260B	11507
570-4234-38	SB12-5	Total/NA	Solid	8260B	11507
570-4234-40	SB12-15	Total/NA	Solid	8260B	11507
570-4234-42	SB12-25	Total/NA	Solid	8260B	11507
MB 570-12000/7	Method Blank	Total/NA	Solid	8260B	
LCS 570-12000/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 570-12000/4	Lab Control Sample Dup	Total/NA	Solid	8260B	



# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## GC VOA

### Prep Batch: 11497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	5035	
570-4234-5	SB7-15	Total/NA	Solid	5035	
570-4234-7	SB7-25	Total/NA	Solid	5035	
570-4234-10	SB8-5	Total/NA	Solid	5035	
570-4234-12	SB8-15	Total/NA	Solid	5035	
570-4234-14	SB8-25	Total/NA	Solid	5035	
570-4234-17	SB9-5	Total/NA	Solid	5035	
570-4234-19	SB9-15	Total/NA	Solid	5035	
570-4234-21	SB9-25	Total/NA	Solid	5035	
570-4234-24	SB10-5	Total/NA	Solid	5035	
570-4234-26	SB10-15	Total/NA	Solid	5035	
570-4234-28	SB10-25	Total/NA	Solid	5035	
570-4234-31	SB11-5	Total/NA	Solid	5035	
570-4234-33	SB11-15	Total/NA	Solid	5035	
570-4234-35	SB11-25	Total/NA	Solid	5035	
570-4234-38	SB12-5	Total/NA	Solid	5035	
570-4234-40	SB12-15	Total/NA	Solid	5035	
570-4234-42	SB12-25	Total/NA	Solid	5035	

### Analysis Batch: 11793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	8015B	11497
570-4234-5	SB7-15	Total/NA	Solid	8015B	11497
570-4234-7	SB7-25	Total/NA	Solid	8015B	11497
570-4234-10	SB8-5	Total/NA	Solid	8015B	11497
570-4234-12	SB8-15	Total/NA	Solid	8015B	11497
570-4234-14	SB8-25	Total/NA	Solid	8015B	11497
570-4234-17	SB9-5	Total/NA	Solid	8015B	11497
570-4234-19	SB9-15	Total/NA	Solid	8015B	11497
570-4234-21	SB9-25	Total/NA	Solid	8015B	11497
570-4234-24	SB10-5	Total/NA	Solid	8015B	11497
570-4234-26	SB10-15	Total/NA	Solid	8015B	11497
570-4234-28	SB10-25	Total/NA	Solid	8015B	11497
570-4234-31	SB11-5	Total/NA	Solid	8015B	11497
570-4234-33	SB11-15	Total/NA	Solid	8015B	11497
570-4234-35	SB11-25	Total/NA	Solid	8015B	11497
570-4234-38	SB12-5	Total/NA	Solid	8015B	11497
570-4234-40	SB12-15	Total/NA	Solid	8015B	11497
570-4234-42	SB12-25	Total/NA	Solid	8015B	11497
MB 570-11793/3	Method Blank	Total/NA	Solid	8015B	
LCS 570-11793/4	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 570-11793/5	Lab Control Sample Dup	Total/NA	Solid	8015B	

## GC Semi VOA

### Prep Batch: 11627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	3550C	
570-4234-5	SB7-15	Total/NA	Solid	3550C	
570-4234-7	SB7-25	Total/NA	Solid	3550C	
570-4234-10	SB8-5	Total/NA	Solid	3550C	

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## GC Semi VOA (Continued)

### Prep Batch: 11627 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-12	SB8-15	Total/NA	Solid	3550C	
570-4234-14	SB8-25	Total/NA	Solid	3550C	
570-4234-17	SB9-5	Total/NA	Solid	3550C	
570-4234-19	SB9-15	Total/NA	Solid	3550C	
570-4234-21	SB9-25	Total/NA	Solid	3550C	
570-4234-24	SB10-5	Total/NA	Solid	3550C	
570-4234-26	SB10-15	Total/NA	Solid	3550C	
570-4234-28	SB10-25	Total/NA	Solid	3550C	
570-4234-31	SB11-5	Total/NA	Solid	3550C	
570-4234-33	SB11-15	Total/NA	Solid	3550C	
570-4234-35	SB11-25	Total/NA	Solid	3550C	
570-4234-38	SB12-5	Total/NA	Solid	3550C	
570-4234-40	SB12-15	Total/NA	Solid	3550C	
570-4234-42	SB12-25	Total/NA	Solid	3550C	
MB 570-11627/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 570-11627/2-A	Lab Control Sample	Total/NA	Solid	3550C	
570-4234-3 MS	SB7-5	Total/NA	Solid	3550C	
570-4234-3 MSD	SB7-5	Total/NA	Solid	3550C	

### Analysis Batch: 11814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	8015B	11627
570-4234-5	SB7-15	Total/NA	Solid	8015B	11627
570-4234-7	SB7-25	Total/NA	Solid	8015B	11627
570-4234-10	SB8-5	Total/NA	Solid	8015B	11627
570-4234-12	SB8-15	Total/NA	Solid	8015B	11627
570-4234-14	SB8-25	Total/NA	Solid	8015B	11627
570-4234-17	SB9-5	Total/NA	Solid	8015B	11627
570-4234-19	SB9-15	Total/NA	Solid	8015B	11627
570-4234-21	SB9-25	Total/NA	Solid	8015B	11627
570-4234-24	SB10-5	Total/NA	Solid	8015B	11627
570-4234-26	SB10-15	Total/NA	Solid	8015B	11627
570-4234-28	SB10-25	Total/NA	Solid	8015B	11627
570-4234-31	SB11-5	Total/NA	Solid	8015B	11627
570-4234-33	SB11-15	Total/NA	Solid	8015B	11627
570-4234-35	SB11-25	Total/NA	Solid	8015B	11627
570-4234-38	SB12-5	Total/NA	Solid	8015B	11627
570-4234-40	SB12-15	Total/NA	Solid	8015B	11627
570-4234-42	SB12-25	Total/NA	Solid	8015B	11627
MB 570-11627/1-A	Method Blank	Total/NA	Solid	8015B	11627
LCS 570-11627/2-A	Lab Control Sample	Total/NA	Solid	8015B	11627
570-4234-3 MS	SB7-5	Total/NA	Solid	8015B	11627
570-4234-3 MSD	SB7-5	Total/NA	Solid	8015B	11627

## Metals

### Prep Batch: 12268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	3050B	
MB 570-12268/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-12268/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Metals (Continued)

### Prep Batch: 12268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-12268/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
570-4234-3 MS	SB7-5	Total/NA	Solid	3050B	
570-4234-3 MSD	SB7-5	Total/NA	Solid	3050B	

### Prep Batch: 12277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-5	SB7-15	Total/NA	Solid	3050B	
570-4234-7	SB7-25	Total/NA	Solid	3050B	
570-4234-12	SB8-15	Total/NA	Solid	3050B	
570-4234-14	SB8-25	Total/NA	Solid	3050B	
570-4234-17	SB9-5	Total/NA	Solid	3050B	
570-4234-19	SB9-15	Total/NA	Solid	3050B	
570-4234-21	SB9-25	Total/NA	Solid	3050B	
570-4234-24	SB10-5	Total/NA	Solid	3050B	
570-4234-26	SB10-15	Total/NA	Solid	3050B	
570-4234-28	SB10-25	Total/NA	Solid	3050B	
570-4234-31	SB11-5	Total/NA	Solid	3050B	
570-4234-33	SB11-15	Total/NA	Solid	3050B	
570-4234-35	SB11-25	Total/NA	Solid	3050B	
570-4234-38	SB12-5	Total/NA	Solid	3050B	
570-4234-40	SB12-15	Total/NA	Solid	3050B	
570-4234-42	SB12-25	Total/NA	Solid	3050B	
MB 570-12277/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-12277/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-12277/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	

### Prep Batch: 12364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	7471A	
570-4234-5	SB7-15	Total/NA	Solid	7471A	
570-4234-7	SB7-25	Total/NA	Solid	7471A	
570-4234-10	SB8-5	Total/NA	Solid	7471A	
570-4234-12	SB8-15	Total/NA	Solid	7471A	
570-4234-14	SB8-25	Total/NA	Solid	7471A	
570-4234-17	SB9-5	Total/NA	Solid	7471A	
570-4234-19	SB9-15	Total/NA	Solid	7471A	
570-4234-21	SB9-25	Total/NA	Solid	7471A	
570-4234-24	SB10-5	Total/NA	Solid	7471A	
570-4234-26	SB10-15	Total/NA	Solid	7471A	
570-4234-28	SB10-25	Total/NA	Solid	7471A	
570-4234-31	SB11-5	Total/NA	Solid	7471A	
570-4234-33	SB11-15	Total/NA	Solid	7471A	
570-4234-35	SB11-25	Total/NA	Solid	7471A	
570-4234-38	SB12-5	Total/NA	Solid	7471A	
570-4234-40	SB12-15	Total/NA	Solid	7471A	
570-4234-42	SB12-25	Total/NA	Solid	7471A	
MB 570-12364/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 570-12364/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 570-12364/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
570-4234-10 MS	SB8-5	Total/NA	Solid	7471A	
570-4234-10 MSD	SB8-5	Total/NA	Solid	7471A	

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Metals

### Prep Batch: 12379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-10	SB8-5	Total/NA	Solid	3050B	
MB 570-12379/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 570-12379/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 570-12379/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	

### Analysis Batch: 12776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	7471A	12364
570-4234-5	SB7-15	Total/NA	Solid	7471A	12364
570-4234-7	SB7-25	Total/NA	Solid	7471A	12364
570-4234-10	SB8-5	Total/NA	Solid	7471A	12364
570-4234-12	SB8-15	Total/NA	Solid	7471A	12364
570-4234-14	SB8-25	Total/NA	Solid	7471A	12364
570-4234-17	SB9-5	Total/NA	Solid	7471A	12364
570-4234-19	SB9-15	Total/NA	Solid	7471A	12364
570-4234-21	SB9-25	Total/NA	Solid	7471A	12364
570-4234-24	SB10-5	Total/NA	Solid	7471A	12364
570-4234-26	SB10-15	Total/NA	Solid	7471A	12364
570-4234-28	SB10-25	Total/NA	Solid	7471A	12364
570-4234-31	SB11-5	Total/NA	Solid	7471A	12364
570-4234-33	SB11-15	Total/NA	Solid	7471A	12364
570-4234-35	SB11-25	Total/NA	Solid	7471A	12364
570-4234-38	SB12-5	Total/NA	Solid	7471A	12364
570-4234-40	SB12-15	Total/NA	Solid	7471A	12364
570-4234-42	SB12-25	Total/NA	Solid	7471A	12364
MB 570-12364/1-A	Method Blank	Total/NA	Solid	7471A	12364
LCS 570-12364/2-A	Lab Control Sample	Total/NA	Solid	7471A	12364
LCSD 570-12364/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	12364
570-4234-10 MS	SB8-5	Total/NA	Solid	7471A	12364
570-4234-10 MSD	SB8-5	Total/NA	Solid	7471A	12364

### Analysis Batch: 12779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4234-3	SB7-5	Total/NA	Solid	6010B	12268
570-4234-5	SB7-15	Total/NA	Solid	6010B	12277
570-4234-7	SB7-25	Total/NA	Solid	6010B	12277
570-4234-10	SB8-5	Total/NA	Solid	6010B	12379
570-4234-12	SB8-15	Total/NA	Solid	6010B	12277
570-4234-14	SB8-25	Total/NA	Solid	6010B	12277
570-4234-17	SB9-5	Total/NA	Solid	6010B	12277
570-4234-19	SB9-15	Total/NA	Solid	6010B	12277
570-4234-21	SB9-25	Total/NA	Solid	6010B	12277
570-4234-24	SB10-5	Total/NA	Solid	6010B	12277
570-4234-26	SB10-15	Total/NA	Solid	6010B	12277
570-4234-28	SB10-25	Total/NA	Solid	6010B	12277
570-4234-31	SB11-5	Total/NA	Solid	6010B	12277
570-4234-33	SB11-15	Total/NA	Solid	6010B	12277
570-4234-35	SB11-25	Total/NA	Solid	6010B	12277
570-4234-38	SB12-5	Total/NA	Solid	6010B	12277
570-4234-40	SB12-15	Total/NA	Solid	6010B	12277
570-4234-42	SB12-25	Total/NA	Solid	6010B	12277

Eurofins Calscience LLC

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Metals (Continued)

### Analysis Batch: 12779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-12268/1-A	Method Blank	Total/NA	Solid	6010B	12268
MB 570-12277/1-A	Method Blank	Total/NA	Solid	6010B	12277
MB 570-12379/1-A	Method Blank	Total/NA	Solid	6010B	12379
LCS 570-12268/2-A	Lab Control Sample	Total/NA	Solid	6010B	12268
LCS 570-12277/2-A	Lab Control Sample	Total/NA	Solid	6010B	12277
LCS 570-12379/2-A	Lab Control Sample	Total/NA	Solid	6010B	12379
LCSD 570-12268/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	12268
LCSD 570-12277/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	12277
LCSD 570-12379/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	12379
570-4234-3 MS	SB7-5	Total/NA	Solid	6010B	12268
570-4234-3 MSD	SB7-5	Total/NA	Solid	6010B	12268

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB7-5

Date Collected: 08/08/19 08:23

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.738 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/12/19 23:08	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.872 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 13:54	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			9.90 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 14:28	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.96 g	100 mL	12268	08/13/19 19:22	JG	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 21:39	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:24	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB7-15

Date Collected: 08/08/19 08:35

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.367 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/12/19 23:35	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.418 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 14:28	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 14:49	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.03 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:19	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.62 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:20	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB7-25

Date Collected: 08/08/19 08:45

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.029 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/13/19 00:01	MGX6	ECL 2
Instrument ID: GCMSQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB7-25**

**Date Collected: 08/08/19 08:45**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.143 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 15:02	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 15:10	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.05 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:21	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.63 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:22	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB8-5**

**Date Collected: 08/08/19 09:25**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-10**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.035 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/13/19 00:27	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.947 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 15:36	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 15:31	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.06 g	100 mL	12379	08/14/19 11:37	JG	ECL 1
Total/NA	Analysis	6010B		1			12779	08/15/19 02:34	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:08	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB8-15**

**Date Collected: 08/08/19 09:40**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-12**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.843 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/13/19 00:53	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.97 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 16:09	U1MC	ECL 2
Instrument ID: GC42										

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# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB8-15**

**Lab Sample ID: 570-4234-12**

**Date Collected: 08/08/19 09:40**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			10.20 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 15:52	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.07 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:23	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.63 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:27	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB8-25**

**Lab Sample ID: 570-4234-14**

**Date Collected: 08/08/19 09:50**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.094 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/13/19 01:19	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.944 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 16:43	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 16:13	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.10 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:29	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:29	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB9-5**

**Lab Sample ID: 570-4234-17**

**Date Collected: 08/08/19 10:43**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.742 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	11858	08/13/19 01:45	MGX6	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.57 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 17:17	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 16:35	I9H5	ECL 1
Instrument ID: GC47										



# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Client Sample ID: SB9-5

Date Collected: 08/08/19 10:43

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.97 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:31	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:31	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB9-15

Date Collected: 08/08/19 11:00

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.489 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 15:29	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			7.208 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 17:50	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.24 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 16:55	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.94 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:33	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:34	I3IN	ECL 1
Instrument ID: HG8										

## Client Sample ID: SB9-25

Date Collected: 08/08/19 11:10

Date Received: 08/08/19 17:30

## Lab Sample ID: 570-4234-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.792 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 15:55	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.139 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 18:24	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.28 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 17:17	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.95 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:35	FD74	ECL 1
Instrument ID: ICP8										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB9-25**

**Date Collected: 08/08/19 11:10**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-21**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.61 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:36	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB10-5**

**Date Collected: 08/08/19 12:15**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-24**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.727 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 16:22	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.752 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 18:58	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 17:38	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.99 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:37	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:38	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB10-15**

**Date Collected: 08/08/19 12:25**

**Date Received: 08/08/19 17:30**

**Lab Sample ID: 570-4234-26**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.438 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 16:49	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			7.133 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 20:05	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 17:59	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.03 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:39	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.59 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:41	I3IN	ECL 1
Instrument ID: HG8										

Eurofins Calscience LLC

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB10-25**

**Lab Sample ID: 570-4234-28**

**Date Collected: 08/08/19 12:35**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.317 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 17:15	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			7.115 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 20:38	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.40 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 18:20	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.05 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:41	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:47	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB11-5**

**Lab Sample ID: 570-4234-31**

**Date Collected: 08/08/19 13:10**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.861 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 17:41	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.969 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 21:12	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.50 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 18:41	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.07 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:43	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:50	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB11-15**

**Lab Sample ID: 570-4234-33**

**Date Collected: 08/08/19 13:20**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.075 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 18:08	NET3	ECL 2
Instrument ID: GCMSQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB11-15**

**Lab Sample ID: 570-4234-33**

**Date Collected: 08/08/19 13:20**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.205 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 21:46	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.30 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 19:02	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			2.10 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:45	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:52	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB11-25**

**Lab Sample ID: 570-4234-35**

**Date Collected: 08/08/19 13:30**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.621 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 18:34	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.787 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 22:19	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.00 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 19:44	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.95 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:47	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.57 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:54	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB12-5**

**Lab Sample ID: 570-4234-38**

**Date Collected: 08/08/19 14:13**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.351 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 19:00	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			5.03 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 22:53	U1MC	ECL 2
Instrument ID: GC42										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB12-5**

**Lab Sample ID: 570-4234-38**

**Date Collected: 08/08/19 14:13**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			9.90 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 20:05	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.99 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:53	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:57	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB12-15**

**Lab Sample ID: 570-4234-40**

**Date Collected: 08/08/19 14:25**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.879 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 19:27	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.787 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/12/19 23:26	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.10 g	10.00 mL	11627	08/10/19 12:25	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 20:26	I9H5	ECL 1
Instrument ID: GC47										
Total/NA	Prep	3050B			1.96 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:55	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.57 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 12:59	I3IN	ECL 1
Instrument ID: HG8										

**Client Sample ID: SB12-25**

**Lab Sample ID: 570-4234-42**

**Date Collected: 08/08/19 14:35**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.697 g	5 g	11507	08/09/19 18:30	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	12000	08/13/19 19:53	NET3	ECL 2
Instrument ID: GCMSQ										
Total/NA	Prep	5035			6.697 g	5 g	11497	08/09/19 17:37	P4DI	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	11793	08/13/19 00:00	U1MC	ECL 2
Instrument ID: GC42										
Total/NA	Prep	3550C			10.20 g	10.00 mL	11627	08/10/19 12:32	CL	ECL 1
Total/NA	Analysis	8015B		1			11814	08/12/19 20:47	I9H5	ECL 1
Instrument ID: GC47										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

**Client Sample ID: SB12-25**

**Lab Sample ID: 570-4234-42**

**Date Collected: 08/08/19 14:35**

**Matrix: Solid**

**Date Received: 08/08/19 17:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.97 g	100 mL	12277	08/13/19 21:00	AP	ECL 1
Total/NA	Analysis	6010B		1			12779	08/14/19 23:57	FD74	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.57 g	100 mL	12364	08/14/19 14:00	JG	ECL 1
Total/NA	Analysis	7471A		1			12776	08/15/19 13:01	I3IN	ECL 1
Instrument ID: HG8										

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19

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# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5035	Closed System Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

#### Protocol References:

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

#### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494




# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA

Job ID: 570-4234-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-4234-3	SB7-5	Solid	08/08/19 08:23	08/08/19 17:30	
570-4234-5	SB7-15	Solid	08/08/19 08:35	08/08/19 17:30	
570-4234-7	SB7-25	Solid	08/08/19 08:45	08/08/19 17:30	
570-4234-10	SB8-5	Solid	08/08/19 09:25	08/08/19 17:30	
570-4234-12	SB8-15	Solid	08/08/19 09:40	08/08/19 17:30	
570-4234-14	SB8-25	Solid	08/08/19 09:50	08/08/19 17:30	
570-4234-17	SB9-5	Solid	08/08/19 10:43	08/08/19 17:30	
570-4234-19	SB9-15	Solid	08/08/19 11:00	08/08/19 17:30	
570-4234-21	SB9-25	Solid	08/08/19 11:10	08/08/19 17:30	
570-4234-24	SB10-5	Solid	08/08/19 12:15	08/08/19 17:30	
570-4234-26	SB10-15	Solid	08/08/19 12:25	08/08/19 17:30	
570-4234-28	SB10-25	Solid	08/08/19 12:35	08/08/19 17:30	
570-4234-31	SB11-5	Solid	08/08/19 13:10	08/08/19 17:30	
570-4234-33	SB11-15	Solid	08/08/19 13:20	08/08/19 17:30	
570-4234-35	SB11-25	Solid	08/08/19 13:30	08/08/19 17:30	
570-4234-38	SB12-5	Solid	08/08/19 14:13	08/08/19 17:30	
570-4234-40	SB12-15	Solid	08/08/19 14:25	08/08/19 17:30	
570-4234-42	SB12-25	Solid	08/08/19 14:35	08/08/19 17:30	



**STANTEC CHAIN-OF-CUSTODY RECORD**

COC # \_\_\_\_\_

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**FIELD OFFICE INFORMATION**

OFFICE: Stantec - Thousands Oaks

Send Report to:  
Stantec  
290 Conejo Ridge Avenue  
Thousand Oaks, CA 91361  
Telephone: (805) 719-9343  
Fax/E-Mail: lewis.simons@stantec.com  
crystal.guan@stantec.com

**PROJECT INFORMATION**

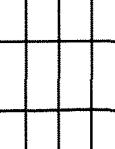
Project No.: 185751046

Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA

Project Manager: Lewis Simons

Laboratory: Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841

---

Sample No./ Identification	Date	SAMPLE Time	Matrix *	Container & Size **	Preservative	ANALYSES / METHOD REQUEST				REMARKS/ PRECAUTIONS
						TPH (8015M) <i>20-520</i>	VC and Fuel Oxygenates (8260B)	CAM Metals (6010B)	Number of Containers	
SBB-1	8-8-19	0815	Soil	407M 1000s	Various	X	X	X	X	<p><b>REPORTING REQUIREMENTS</b></p> <input type="checkbox"/> MB & SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other <p><b>5 day</b></p> <p><b>NOTES:</b> 3 trip blanks (Voa-HCL), 3 equipment blanks (Voa-HCL, Amber Glass-unpreserved, Plastic-Nitric Acid), and 3 duplicates, one set for each day.</p> <div style="text-align: center;">                       570-4234 Chain of Custody                 </div>
1-3		0800				X	X	X	X	
5		0803				X	X	X	X	
10		0830				X	X	X	X	
15		0835				X	X	X	X	
20		0840				X	X	X	X	
25		0845				X	X	X	X	
SBB-1		0915				X	X	X	X	
1-3		0920				X	X	X	X	
5		0925				X	X	X	X	
10		0935				X	X	X	X	
15		0940				X	X	X	X	
20		0945				X	X	X	X	
SBB-25		0950				X	X	X	X	

---

**Possible Hazard Identification**

 Non-Haz  Flammable  Skin  Poison B  Unknown  Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ months

**Aqueous Samples for Metals Analysis:**

 Filtered  Lab to filter & preserve

---

**Signature**

1(a) Relinquished by: *Tom Aguilera*

1(b) Received by: *Sam Simons, Lester*

2(a) Relinquished by: *Sam Simons*

2(b) Received by: *Manibel Ramos*

3(a) Relinquished by:

3(b) Received by:

**Print Name**

Tom Aguilera

Sam Simons, Lester

Manibel Ramos

---

**Company**

SPATEC

EE

EE

EE

**Date**

8-8-19

08/08/19

08/08/19

08/08/19

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**Time**

16:15

16:15

17:30

17:30

---

**Shipment Method:**

Disposal by Lab  Archive for \_\_\_\_\_ months

**Airbill Number:**

---

**Matrix Key:** AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other

\*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

① 3-1°C / 3.5°C ; 5cc ② 2.7°C / 2.9°C ; 5cc ③ 3-2°C / 3.1°C ; 5cc ④ 2.6°C / 2.5°C ; 5cc ⑤ 3.0°C / 3.2°C ; 5cc

8/20/2019

## STANTEC CHAIN-OF-CUSTODY RECORD

**FIELD OFFICE INFORMATION**

OFFICE: Stantec - Thousands Oaks

Send Report to:  
Stantec  
290 Conejo Ridge Avenue  
Thousand Oaks, CA 91361

Telephone : (805) 719-9343  
Fax/E-Mail: lewis.simons@stantec.com  
crystal.guan@stantec.com

**PROJECT INFORMATION**

Project No.: 185751046

Project Name: Phase II ESA, 740 E. & 800 E. 111th Place, Los Angeles, CA

Project Manager: Lewis Simons

Laboratory: Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841

COC # \_\_\_\_\_

Page 3 of 3

Sample No./ Identification	Date	Time	Matrix *	Container & Size **	Preservative	ANALYSES / METHOD REQUEST				REMARKS/ PRECAUTIONS
						TPH (8015M) <i>Dist, 4 Ro</i>	VOC and Fuel Oxygenates (826B)	CAM Metals (6010B)	Number of Containers	
SB9-1	8-19-19	1025	Soil	JAC 4oz	VARIOUS	X	X	X	X	<p><b>TAT</b></p> <p><input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Other: _____</p> <p><b>5 day</b></p> <p><b>REPORTING REQUIREMENTS</b></p> <p><input type="checkbox"/> MB &amp; SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other</p> <p><b>NOTES:</b></p> <p>3 trip blanks (Voa-HCL), 3 equipment blanks (Voa-HCL, Amber Glass-unpreserved, Plastic-Nitric Acid), and 3 duplicates, one set for each day.</p> <p><i>60% Run 25</i></p>
-3		1030				X	X	X	X	
-5		1043				X	X	X	X	
-10		1055				X	X	X	X	
-15		1100				X	X	X	X	
-20		1105				X	X	X	X	
SB9-25		1110				X	X	X	X	
SB10-1		1200				X	X	X	X	
-3		1210				X	X	X	X	
-5		1215				X	X	X	X	
-10		1220				X	X	X	X	
-15		1225				X	X	X	X	
-20		1230				X	X	X	X	
SB10-25		1235				X	X	X	X	

**Possible Hazard Identification**

Non-Haz  Flammable  Skin  Poison B  Unknown

**Sample Disposal**

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ months

**Shipment Method:** \_\_\_\_\_


**Aqueous Samples for Metals Analysis:**

Filtered  Lab to filter & preserve

Signature	Print Name	Company	Date	Time
<i>Tom Aguilar</i>	Tom Aguilar	STANTEC	8-8-19	16:15
<i>Samuel Ramon</i>	Samuel Ramon	EC	08/08/19	16:15
<i>Maribel Ramon</i>	Maribel Ramon	EC	08/08/19	17:30
<i>Maribel Ramon</i>	Maribel Ramon	EC	08/09/19	17:30

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other





**STANTEC CHAIN-OF-CUSTODY RECORD**

COC # \_\_\_\_\_ Page **3** of **3**

FIELD OFFICE INFORMATION		PROJECT INFORMATION		ANALYSES / METHOD REQUEST		REMARKS / PRECAUTIONS							
OFFICE: Stantec - Thousands Oaks		Project No.: 185751046		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">TPH (8015M) <i>OK-MO</i></td> <td style="width: 25%; text-align: center;">VOC and Fuel Oxygenates <i>SR</i></td> <td style="width: 25%; text-align: center;">CAM Metals (6010B)</td> <td style="width: 25%; text-align: center;"><i>Hold</i></td> </tr> </table>		TPH (8015M) <i>OK-MO</i>	VOC and Fuel Oxygenates <i>SR</i>	CAM Metals (6010B)	<i>Hold</i>	<p><b>REPORTING REQUIREMENTS</b></p> <input type="checkbox"/> MB & SURGS <input type="checkbox"/> Dup/MS/MSD <input type="checkbox"/> Raw Data <input checked="" type="checkbox"/> EDD <input type="checkbox"/> CLP Rpt <input type="checkbox"/> Other		<p><b>TAT</b></p> <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Other: <u>5 day</u>	
TPH (8015M) <i>OK-MO</i>	VOC and Fuel Oxygenates <i>SR</i>	CAM Metals (6010B)	<i>Hold</i>										
<p>Send Report to:</p> <p>Stantec            290 Conejo Ridge Avenue            Thousand Oaks, CA 91361</p> <p>Telephone : (805) 719-9343</p> <p>Fax/E-Mail: lewis.simons@stantec.com            crystal.guan@stantec.com</p>		<p>Project Name: Phase II ESA, 740 E. &amp; 800 E. 111th Place, Los Angeles, CA</p> <p>Project Manager: Lewis Simons</p> <p>Laboratory: Eurofins Calscience LLC            7440 Lincoln Way            Garden Grove, CA 92841</p>											
Sample No./ Identification	Date	SAMPLE Time	Matrix *	Container & Size **	Preservative	Number of Containers							
SB11-1	8-8-19	1300	Soil	JAGS	VARS	X	X						
-3		1305				X	X						
-5		1310				X	X						
-10		1315				X	X						
-15		1320				X	X						
-20		1325				X	X						
SB11-25		1330				X	X						
SB12-1		1400				X	X						
-3		1410				X	X						
-5		1413				X	X						
-10		1420				X	X						
-15		1425				X	X						
-20		1430				X	X						
SB12-25		1435				X	X						

**Notes:**  
 3 trip blanks (Voa-HCL), 3 equipment blanks (Voa-HCL, Amber Glass-unpreserved, Plastic-Nitric Acid), and 3 duplicates, one set for each day.

**Possible Hazard Identification**

 Non-Haz  Flammable  Skin  Poison B  Unknown

**Sample Disposal**

 Return to Client  Archive for \_\_\_\_\_ months  Disposal by Lab  Lab to filter & preserve

**Shipment Method:** \_\_\_\_\_ **Airbill Number:** \_\_\_\_\_

Signature	Print Name	Company	Date	Time
1(a) Relinquished by: <i>Tom Aguilera</i>	TOM AGUILERA	STANTEC	8-8-19	16:15
1(b) Received by: <i>Samos, Lester</i>	SAMOS, LESTER	EC	08/08/19	16:15
2(a) Relinquished by: <i>Samos, Lester</i>	SAMOS, LESTER	EC	08/08/19	17:30
2(b) Received by: <i>Maribel Ramos</i>	Maribel Ramos	EC	08/08/19	17:30
3(a) Relinquished by:				
3(b) Received by:				

\*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other \*\*Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other



## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-4234-1

**Login Number: 4234**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Chang, Wen-Shiang**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

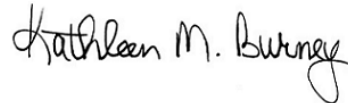
Laboratory Job ID: 570-4235-2

Client Project/Site: Phase II ESA / 185751046

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Mr. Lewis Simons



---

*Authorized for release by:*

*8/29/2019 12:21:27 PM*

Kathleen Burney, Project Mgmt. Assistant  
[kathleenburney@eurofinsus.com](mailto:kathleenburney@eurofinsus.com)

Designee for

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

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**Job ID: 570-4235-2**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative**  
**570-4235-2**

**Comments**

No additional comments.

**Receipt**

The samples were received on 8/7/2019 6:06 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.6° C, 3.0° C, 3.3° C and 3.5° C.

**Metals**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

- 1
- 2
- 3
- 4
- 5
- 6
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- 10
- 11
- 12
- 13

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

**Client Sample ID: SB3-1**

**Lab Sample ID: 570-4235-15**

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

## Method: 6010B - Metals (ICP) - TCLP

**Client Sample ID: SB3-1**  
**Date Collected: 08/07/19 11:52**  
**Date Received: 08/07/19 18:06**

**Lab Sample ID: 570-4235-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.500	0.0821	mg/L		08/23/19 13:30	08/28/19 02:12	1

- 1
- 2
- 3
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- 11
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# QC Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LB 570-14390/1-B**  
**Matrix: Solid**  
**Analysis Batch: 15506**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**  
**Prep Batch: 14614**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.500	0.0821	mg/L		08/23/19 13:30	08/28/19 01:28	1

**Lab Sample ID: LCS 570-14390/2-B**  
**Matrix: Solid**  
**Analysis Batch: 15506**

**Client Sample ID: Lab Control Sample**  
**Prep Type: TCLP**  
**Prep Batch: 14614**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	5.00	5.469		mg/L		109	80 - 120

**Lab Sample ID: LCSD 570-14390/3-B**  
**Matrix: Solid**  
**Analysis Batch: 15506**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: TCLP**  
**Prep Batch: 14614**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	5.00	5.107		mg/L		102	80 - 120	7	20

# QC Association Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

## Metals

### Leach Batch: 14390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-15	SB3-1	TCLP	Solid	1311	
LB 570-14390/1-B	Method Blank	TCLP	Solid	1311	
LCS 570-14390/2-B	Lab Control Sample	TCLP	Solid	1311	
LCSD 570-14390/3-B	Lab Control Sample Dup	TCLP	Solid	1311	

### Prep Batch: 14614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-15	SB3-1	TCLP	Solid	3010A	14390
LB 570-14390/1-B	Method Blank	TCLP	Solid	3010A	14390
LCS 570-14390/2-B	Lab Control Sample	TCLP	Solid	3010A	14390
LCSD 570-14390/3-B	Lab Control Sample Dup	TCLP	Solid	3010A	14390

### Analysis Batch: 15506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-4235-15	SB3-1	TCLP	Solid	6010B	14614
LB 570-14390/1-B	Method Blank	TCLP	Solid	6010B	14614
LCS 570-14390/2-B	Lab Control Sample	TCLP	Solid	6010B	14614
LCSD 570-14390/3-B	Lab Control Sample Dup	TCLP	Solid	6010B	14614

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

**Client Sample ID: SB3-1**

**Lab Sample ID: 570-4235-15**

**Date Collected: 08/07/19 11:52**

**Matrix: Solid**

**Date Received: 08/07/19 18:06**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.01 g	2000 mL	14390	08/22/19 19:00	UY73	ECL 3
TCLP	Prep	3010A			5 mL	50 mL	14614	08/23/19 13:30	UY73	ECL 1
TCLP	Analysis	6010B		1			15506	08/28/19 02:12	OYW3	ECL 1

Instrument ID: ICP9

## Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State Program	AZ0781	03-13-20
California	SCAQMD LAP	N/A	11-30-19
California	State Program	2944	09-30-19
Guam	State Program	19-004R	10-31-19
Hawaii	State Program	N/A	01-29-20
Oregon	NELAP Primary AB	CA300001	01-20-20
Washington	State Program	C916	10-11-19

# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	ECL 1
1311	TCLP Extraction	SW846	ECL 3
3010A	Preparation, Total Metals	SW846	ECL 1

**Protocol References:**

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

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494





# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: Phase II ESA / 185751046

Job ID: 570-4235-2

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-4235-15	SB3-1	Solid	08/07/19 11:52	08/07/19 18:06	

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## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-4235-2

**Login Number: 4235**  
**List Number: 1**  
**Creator: Patel, Jayesh**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-9135-1  
Client Project/Site: 185804578.200.0003

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Brian Goss



---

*Authorized for release by:*  
10/9/2019 9:14:57 PM

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

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## Job ID: 570-9135-1

---

### Laboratory: Eurofins Calscience LLC

#### Narrative

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#### Job Narrative 570-9135-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/3/2019 5:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.2° C, 3.4° C and 3.5° C.

#### GC/MS VOA

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-24064.

Method(s) 8260B: The method blank for analytical batch 570-24064 contained Acetone and 2-Hexanone above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-analysis of samples was not performed.

Method(s) 8260B: The initial calibration curve analyzed in batch 570-24064 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260B: The initial calibration curve analyzed in batch 570-23882 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 570-24036.

Method(s) 8260B: The initial calibration curve analyzed in batch 570-24419 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV5-1

Lab Sample ID: 570-9135-1

No Detections.

## Client Sample ID: SV5-3

Lab Sample ID: 570-9135-2

No Detections.

## Client Sample ID: SV5-5

Lab Sample ID: 570-9135-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.3		0.88	0.11 ug/Kg	1		8260B	Total/NA
Toluene	3.1		0.88	0.46 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV5-10

Lab Sample ID: 570-9135-4

No Detections.

## Client Sample ID: SV5-15

Lab Sample ID: 570-9135-5

No Detections.

## Client Sample ID: SV6-1

Lab Sample ID: 570-9135-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		0.97	0.13 ug/Kg	1		8260B	Total/NA
Toluene	1.4		0.97	0.50 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV6-3

Lab Sample ID: 570-9135-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.95		0.95	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV6-5

Lab Sample ID: 570-9135-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.94	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV6-10

Lab Sample ID: 570-9135-9

No Detections.

## Client Sample ID: SV6-15

Lab Sample ID: 570-9135-10

No Detections.

## Client Sample ID: SV3-1

Lab Sample ID: 570-9135-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		0.85	0.11 ug/Kg	1		8260B	Total/NA
Tetrachloroethene	1.1		0.85	0.18 ug/Kg	1		8260B	Total/NA
Toluene	1.5		0.85	0.44 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV3-3

Lab Sample ID: 570-9135-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.0		0.91	0.12 ug/Kg	1		8260B	Total/NA
Tetrachloroethene	2.6		0.91	0.19 ug/Kg	1		8260B	Total/NA
Toluene	1.8		0.91	0.47 ug/Kg	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV3-5

Lab Sample ID: 570-9135-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.89	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV3-10

Lab Sample ID: 570-9135-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.94		0.83	0.11 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV3-15

Lab Sample ID: 570-9135-15

No Detections.

## Client Sample ID: SV2-1

Lab Sample ID: 570-9135-16

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.5		0.98	0.21 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV2-3

Lab Sample ID: 570-9135-17

No Detections.

## Client Sample ID: SV2-5

Lab Sample ID: 570-9135-18

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.6		0.83	0.11 ug/Kg	1		8260B	Total/NA
Toluene	0.86		0.83	0.43 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV2-10

Lab Sample ID: 570-9135-19

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.8		0.85	0.11 ug/Kg	1		8260B	Total/NA
Toluene	2.1		0.85	0.44 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV2-15

Lab Sample ID: 570-9135-20

No Detections.

## Client Sample ID: SV8-1

Lab Sample ID: 570-9135-21

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		45	5.6 ug/Kg	1		8260B	Total/NA
Benzene	4.0		0.89	0.12 ug/Kg	1		8260B	Total/NA
Toluene	3.4		0.89	0.46 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV8-3

Lab Sample ID: 570-9135-22

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.91	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV8-5

Lab Sample ID: 570-9135-23

No Detections.

## Client Sample ID: SV8-10

Lab Sample ID: 570-9135-24

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC



# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV8-15

Lab Sample ID: 570-9135-25

No Detections.

## Client Sample ID: SV8-20

Lab Sample ID: 570-9135-26

No Detections.

## Client Sample ID: SV8-25

Lab Sample ID: 570-9135-27

No Detections.

## Client Sample ID: SV8-30

Lab Sample ID: 570-9135-28

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.79		0.78	0.10 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV1-1

Lab Sample ID: 570-9135-29

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.71	0.093 ug/Kg	1		8260B	Total/NA
Toluene	0.99		0.71	0.37 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV1-3

Lab Sample ID: 570-9135-30

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.91		0.83	0.11 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV1-5

Lab Sample ID: 570-9135-31

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0		0.91	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV1-10

Lab Sample ID: 570-9135-32

No Detections.

## Client Sample ID: SV1-15

Lab Sample ID: 570-9135-33

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SV5-1**  
**Date Collected: 10/03/19 08:30**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-1**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.95	0.23 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1,1-Trichloroethane	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.5	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1,2-Trichloroethane	ND		0.95	0.34 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1-Dichloroethane	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1-Dichloroethene	ND		0.95	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2,3-Trichlorobenzene	ND	*	1.9	0.87 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2,3-Trichloropropane	ND		1.9	0.79 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2,4-Trichlorobenzene	ND	*	1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2,4-Trimethylbenzene	ND		1.9	0.56 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2-Dibromoethane	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2-Dichlorobenzene	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2-Dichloroethane	ND		0.95	0.30 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,2-Dichloropropane	ND		0.95	0.42 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,3,5-Trimethylbenzene	ND		1.9	0.52 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,3-Dichlorobenzene	ND		0.95	0.17 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,3-Dichloropropane	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
1,4-Dichlorobenzene	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
2-Butanone	ND		19	3.6 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
2-Chlorotoluene	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
2-Hexanone	ND		19	1.7 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
4-Chlorotoluene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Acetone	ND		47	5.9 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Benzene	ND		0.95	0.12 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Bromobenzene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Bromodichloromethane	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Bromoform	ND		4.7	0.75 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Bromomethane	ND		19	8.9 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
cis-1,2-Dichloroethene	ND		0.95	0.27 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
cis-1,3-Dichloropropene	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Carbon disulfide	ND		9.5	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Carbon tetrachloride	ND		0.95	0.27 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Chlorobenzene	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Chloroform	ND		0.95	0.23 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Chloromethane	ND		19	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Dibromochloromethane	ND		1.9	0.54 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Dibromomethane	ND		0.95	0.73 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Dichlorodifluoromethane	ND		1.9	0.42 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Di-isopropyl ether (DIPE)	ND		0.95	0.46 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Ethanol	ND		470	79 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Ethylbenzene	ND		0.95	0.14 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Ethyl-t-butyl ether (ETBE)	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 19:12	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-1**

**Date Collected: 10/03/19 08:30**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-1**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.95	0.52 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Methylene Chloride	ND		9.5	1.3 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Naphthalene	ND	*	9.5	0.77 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
n-Butylbenzene	ND		0.95	0.15 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
N-Propylbenzene	ND		1.9	0.48 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
o-Xylene	ND		0.95	0.53 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
p-Isopropyltoluene	ND		0.95	0.60 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
sec-Butylbenzene	ND		0.95	0.55 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Styrene	ND		0.95	0.57 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
trans-1,2-Dichloroethene	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
trans-1,3-Dichloropropene	ND	*	1.9	0.57 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Tert-amyl-methyl ether (TAME)	ND		0.95	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
tert-Butyl alcohol (TBA)	ND		19	4.9 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
tert-Butylbenzene	ND		0.95	0.14 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Tetrachloroethene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Toluene	ND		0.95	0.49 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Trichloroethene	ND		1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Trichlorofluoromethane	ND		9.5	0.36 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Vinyl acetate	ND		9.5	4.5 ug/Kg		10/04/19 14:40	10/04/19 19:12	1
Vinyl chloride	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155	10/04/19 14:40	10/04/19 19:12	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/04/19 14:40	10/04/19 19:12	1
Dibromofluoromethane (Surr)	101		79 - 133	10/04/19 14:40	10/04/19 19:12	1
Toluene-d8 (Surr)	100		80 - 120	10/04/19 14:40	10/04/19 19:12	1

**Client Sample ID: SV5-3**

**Date Collected: 10/03/19 00:35**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-2**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.93	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1,1-Trichloroethane	ND		0.93	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.3	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1,2-Trichloroethane	ND		0.93	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1-Dichloroethane	ND		0.93	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1-Dichloroethene	ND		0.93	0.32 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2,3-Trichlorobenzene	ND	*	1.9	0.85 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2,4-Trichlorobenzene	ND	*	1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2-Dibromoethane	ND		0.93	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2-Dichloroethane	ND		0.93	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,2-Dichloropropane	ND		0.93	0.41 ug/Kg		10/04/19 14:40	10/04/19 19:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-3**

**Date Collected: 10/03/19 00:35**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-2**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,3-Dichlorobenzene	ND		0.93	0.16 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,3-Dichloropropane	ND		0.93	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
1,4-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
2-Butanone	ND		19	3.5 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
2-Chlorotoluene	ND		0.93	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
2-Hexanone	ND		19	1.6 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
4-Chlorotoluene	ND		0.93	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
4-Methyl-2-pentanone	ND		19	4.0 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Acetone	ND		47	5.8 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Benzene	ND		0.93	0.12 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Bromobenzene	ND		0.93	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Bromodichloromethane	ND		0.93	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Bromoform	ND		4.7	0.74 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Bromomethane	ND		19	8.8 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
cis-1,2-Dichloroethene	ND		0.93	0.26 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
cis-1,3-Dichloropropene	ND		0.93	0.24 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Carbon disulfide	ND		9.3	0.29 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Carbon tetrachloride	ND		0.93	0.26 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Chlorobenzene	ND		0.93	0.21 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Chloroform	ND		0.93	0.22 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Chloromethane	ND		19	0.28 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Dibromomethane	ND		0.93	0.72 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Dichlorodifluoromethane	ND		1.9	0.41 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Di-isopropyl ether (DIPE)	ND		0.93	0.45 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Ethanol	ND		470	78 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Ethylbenzene	ND		0.93	0.14 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Ethyl-t-butyl ether (ETBE)	ND		0.93	0.47 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Isopropylbenzene	ND		0.93	0.51 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Methylene Chloride	ND		9.3	1.3 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Naphthalene	ND	*	9.3	0.76 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
n-Butylbenzene	ND		0.93	0.15 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
o-Xylene	ND		0.93	0.52 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
p-Isopropyltoluene	ND		0.93	0.59 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
sec-Butylbenzene	ND		0.93	0.54 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Styrene	ND		0.93	0.57 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
trans-1,2-Dichloroethene	ND		0.93	0.47 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
trans-1,3-Dichloropropene	ND	*	1.9	0.57 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Tert-amyl-methyl ether (TAME)	ND		0.93	0.33 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
tert-Butyl alcohol (TBA)	ND		19	4.8 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
tert-Butylbenzene	ND		0.93	0.14 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Tetrachloroethene	ND		0.93	0.20 ug/Kg		10/04/19 14:40	10/04/19 19:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-3**  
**Date Collected: 10/03/19 00:35**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-2**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.93	0.48 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Trichlorofluoromethane	ND		9.3	0.35 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Vinyl acetate	ND		9.3	4.4 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Vinyl chloride	ND		0.93	0.47 ug/Kg		10/04/19 14:40	10/04/19 19:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 155			10/04/19 14:40	10/04/19 19:39	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/04/19 14:40	10/04/19 19:39	1
Dibromofluoromethane (Surr)	101		79 - 133			10/04/19 14:40	10/04/19 19:39	1
Toluene-d8 (Surr)	100		80 - 120			10/04/19 14:40	10/04/19 19:39	1

**Client Sample ID: SV5-5**  
**Date Collected: 10/03/19 08:38**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1,1-Trichloroethane	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.8	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1,2-Trichloroethane	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1-Dichloroethane	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1-Dichloroethene	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2,3-Trichlorobenzene	ND *		1.8	0.81 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2,3-Trichloropropane	ND		1.8	0.73 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2,4-Trichlorobenzene	ND *		1.8	0.27 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2,4-Trimethylbenzene	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2-Dibromoethane	ND		0.88	0.23 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2-Dichloroethane	ND		0.88	0.28 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,2-Dichloropropane	ND		0.88	0.39 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,3-Dichlorobenzene	ND		0.88	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,3-Dichloropropane	ND		0.88	0.22 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
1,4-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
2,2-Dichloropropane	ND		4.4	0.29 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
2-Butanone	ND		18	3.3 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
2-Chlorotoluene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
4-Chlorotoluene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
4-Methyl-2-pentanone	ND		18	3.8 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Acetone	ND		44	5.5 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
<b>Benzene</b>	<b>3.3</b>		0.88	0.11 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Bromobenzene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Bromochloromethane	ND		1.8	0.61 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Bromodichloromethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Bromoform	ND		4.4	0.70 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Bromomethane	ND		18	8.3 ug/Kg		10/04/19 14:40	10/04/19 20:06	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-5**  
**Date Collected: 10/03/19 08:38**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
cis-1,3-Dichloropropene	ND		0.88	0.23 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Carbon disulfide	ND		8.8	0.27 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Carbon tetrachloride	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Chlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Chloroform	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Dibromochloromethane	ND		1.8	0.50 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Dibromomethane	ND		0.88	0.69 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Dichlorodifluoromethane	ND		1.8	0.39 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Di-isopropyl ether (DIPE)	ND		0.88	0.43 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Ethanol	ND		440	74 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Ethylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Ethyl-t-butyl ether (ETBE)	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Isopropylbenzene	ND		0.88	0.48 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Methylene Chloride	ND		8.8	1.2 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Naphthalene	ND	*	8.8	0.72 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
n-Butylbenzene	ND		0.88	0.14 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
N-Propylbenzene	ND		1.8	0.44 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
o-Xylene	ND		0.88	0.49 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
p-Isopropyltoluene	ND		0.88	0.56 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
sec-Butylbenzene	ND		0.88	0.51 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Styrene	ND		0.88	0.53 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
trans-1,2-Dichloroethene	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
trans-1,3-Dichloropropene	ND	*	1.8	0.54 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Tert-amyl-methyl ether (TAME)	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
tert-Butylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Tetrachloroethene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
<b>Toluene</b>	<b>3.1</b>		0.88	0.46 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Trichlorofluoromethane	ND		8.8	0.33 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Vinyl acetate	ND		8.8	4.2 ug/Kg		10/04/19 14:40	10/04/19 20:06	1
Vinyl chloride	ND		0.88	0.44 ug/Kg		10/04/19 14:40	10/04/19 20:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155	10/04/19 14:40	10/04/19 20:06	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/04/19 14:40	10/04/19 20:06	1
Dibromofluoromethane (Surr)	99		79 - 133	10/04/19 14:40	10/04/19 20:06	1
Toluene-d8 (Surr)	103		80 - 120	10/04/19 14:40	10/04/19 20:06	1

**Client Sample ID: SV5-10**  
**Date Collected: 10/03/19 08:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.71	0.17 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1,1-Trichloroethane	ND		0.71	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:33	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-10**  
**Date Collected: 10/03/19 08:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.4	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.1	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1,2-Trichloroethane	ND		0.71	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1-Dichloroethane	ND		0.71	0.15 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1-Dichloroethene	ND		0.71	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2,3-Trichlorobenzene	ND	*	1.4	0.65 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2,3-Trichloropropane	ND		1.4	0.59 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2,4-Trichlorobenzene	ND	*	1.4	0.22 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2,4-Trimethylbenzene	ND		1.4	0.42 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2-Dibromoethane	ND		0.71	0.18 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2-Dichloroethane	ND		0.71	0.22 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,2-Dichloropropane	ND		0.71	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,3,5-Trimethylbenzene	ND		1.4	0.39 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,3-Dichlorobenzene	ND		0.71	0.12 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,3-Dichloropropane	ND		0.71	0.18 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
1,4-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
2,2-Dichloropropane	ND		3.5	0.23 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
2-Butanone	ND		14	2.7 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
2-Chlorotoluene	ND		0.71	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
2-Hexanone	ND		14	1.2 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
4-Chlorotoluene	ND		0.71	0.15 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
4-Methyl-2-pentanone	ND		14	3.1 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Acetone	ND		35	4.4 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Benzene	ND		0.71	0.092 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Bromobenzene	ND		0.71	0.15 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Bromochloromethane	ND		1.4	0.49 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Bromodichloromethane	ND		0.71	0.17 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Bromoform	ND		3.5	0.56 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Bromomethane	ND		14	6.7 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
cis-1,2-Dichloroethene	ND		0.71	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
cis-1,3-Dichloropropene	ND		0.71	0.18 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Carbon disulfide	ND		7.1	0.22 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Carbon tetrachloride	ND		0.71	0.20 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Chlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Chloroethane	ND		1.4	1.1 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Chloroform	ND		0.71	0.17 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Chloromethane	ND		14	0.22 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Dibromochloromethane	ND		1.4	0.40 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Dibromomethane	ND		0.71	0.55 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Dichlorodifluoromethane	ND		1.4	0.31 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Di-isopropyl ether (DIPE)	ND		0.71	0.34 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Ethanol	ND		350	59 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Ethylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Ethyl-t-butyl ether (ETBE)	ND		0.71	0.36 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Isopropylbenzene	ND		0.71	0.39 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Methylene Chloride	ND		7.1	0.95 ug/Kg		10/04/19 14:40	10/04/19 20:33	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-10**  
**Date Collected: 10/03/19 08:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Naphthalene	ND	*	7.1	0.58 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
n-Butylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
N-Propylbenzene	ND		1.4	0.36 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
o-Xylene	ND		0.71	0.39 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
p-Isopropyltoluene	ND		0.71	0.45 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
sec-Butylbenzene	ND		0.71	0.41 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Styrene	ND		0.71	0.43 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
trans-1,2-Dichloroethene	ND		0.71	0.36 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
trans-1,3-Dichloropropene	ND	*	1.4	0.43 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Tert-amyl-methyl ether (TAME)	ND		0.71	0.25 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
tert-Butyl alcohol (TBA)	ND		14	3.7 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
tert-Butylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Tetrachloroethene	ND		0.71	0.15 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Toluene	ND		0.71	0.37 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Trichlorofluoromethane	ND		7.1	0.27 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Vinyl acetate	ND		7.1	3.4 ug/Kg		10/04/19 14:40	10/04/19 20:33	1
Vinyl chloride	ND		0.71	0.36 ug/Kg		10/04/19 14:40	10/04/19 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 155	10/04/19 14:40	10/04/19 20:33	1
4-Bromofluorobenzene (Surr)	105		80 - 120	10/04/19 14:40	10/04/19 20:33	1
Dibromofluoromethane (Surr)	97		79 - 133	10/04/19 14:40	10/04/19 20:33	1
Toluene-d8 (Surr)	103		80 - 120	10/04/19 14:40	10/04/19 20:33	1

**Client Sample ID: SV5-15**  
**Date Collected: 10/03/19 08:50**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.72	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1,1-Trichloroethane	ND		0.72	0.16 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.2	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1,2-Trichloroethane	ND		0.72	0.26 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1-Dichloroethane	ND		0.72	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1-Dichloroethene	ND		0.72	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,1-Dichloropropene	ND		1.4	0.24 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2,3-Trichlorobenzene	ND	*	1.4	0.66 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2,3-Trichloropropane	ND		1.4	0.60 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2,4-Trichlorobenzene	ND	*	1.4	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2,4-Trimethylbenzene	ND		1.4	0.42 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.3 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2-Dibromoethane	ND		0.72	0.18 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2-Dichlorobenzene	ND		0.72	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2-Dichloroethane	ND		0.72	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,2-Dichloropropane	ND		0.72	0.32 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,3,5-Trimethylbenzene	ND		1.4	0.40 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,3-Dichlorobenzene	ND		0.72	0.13 ug/Kg		10/04/19 14:40	10/04/19 21:00	1

Eurofins Calscience LLC



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: SV5-15

Date Collected: 10/03/19 08:50

Date Received: 10/03/19 17:35

Lab Sample ID: 570-9135-5

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.72	0.18 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
1,4-Dichlorobenzene	ND		0.72	0.16 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
2,2-Dichloropropane	ND		3.6	0.24 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
2-Butanone	ND		14	2.7 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
2-Chlorotoluene	ND		0.72	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
2-Hexanone	ND		14	1.3 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
4-Chlorotoluene	ND		0.72	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
4-Methyl-2-pentanone	ND		14	3.1 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Acetone	ND		36	4.5 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Benzene	ND		0.72	0.094 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Bromobenzene	ND		0.72	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Bromochloromethane	ND		1.4	0.50 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Bromodichloromethane	ND		0.72	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Bromoform	ND		3.6	0.58 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Bromomethane	ND		14	6.8 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
cis-1,2-Dichloroethene	ND		0.72	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
cis-1,3-Dichloropropene	ND		0.72	0.18 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Carbon disulfide	ND		7.2	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Carbon tetrachloride	ND		0.72	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Chlorobenzene	ND		0.72	0.16 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Chloroethane	ND		1.4	1.1 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Chloroform	ND		0.72	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Chloromethane	ND		14	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Dibromochloromethane	ND		1.4	0.41 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Dibromomethane	ND		0.72	0.56 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Dichlorodifluoromethane	ND		1.4	0.32 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Di-isopropyl ether (DIPE)	ND		0.72	0.35 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Ethanol	ND		360	61 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Ethylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Ethyl-t-butyl ether (ETBE)	ND		0.72	0.37 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Isopropylbenzene	ND		0.72	0.40 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Methylene Chloride	ND		7.2	0.97 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Naphthalene	ND *		7.2	0.59 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
n-Butylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
N-Propylbenzene	ND		1.4	0.36 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
o-Xylene	ND		0.72	0.40 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
p-Isopropyltoluene	ND		0.72	0.46 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
sec-Butylbenzene	ND		0.72	0.42 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Styrene	ND		0.72	0.44 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
trans-1,2-Dichloroethene	ND		0.72	0.37 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
trans-1,3-Dichloropropene	ND *		1.4	0.44 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Tert-amyl-methyl ether (TAME)	ND		0.72	0.26 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
tert-Butyl alcohol (TBA)	ND		14	3.7 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
tert-Butylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Tetrachloroethene	ND		0.72	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Toluene	ND		0.72	0.37 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Trichloroethene	ND		1.4	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:00	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV5-15**

**Date Collected: 10/03/19 08:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-5**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		7.2	0.27 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Vinyl acetate	ND		7.2	3.4 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Vinyl chloride	ND		0.72	0.36 ug/Kg		10/04/19 14:40	10/04/19 21:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155			10/04/19 14:40	10/04/19 21:00	1
4-Bromofluorobenzene (Surr)	106		80 - 120			10/04/19 14:40	10/04/19 21:00	1
Dibromofluoromethane (Surr)	96		79 - 133			10/04/19 14:40	10/04/19 21:00	1
Toluene-d8 (Surr)	103		80 - 120			10/04/19 14:40	10/04/19 21:00	1

**Client Sample ID: SV6-1**

**Date Collected: 10/03/19 09:25**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-6**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.97	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1,1-Trichloroethane	ND		0.97	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.7	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1,2-Trichloroethane	ND		0.97	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1-Dichloroethane	ND		0.97	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1-Dichloroethene	ND		0.97	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,1-Dichloropropene	ND		1.9	0.32 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2,3-Trichlorobenzene	ND *		1.9	0.89 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2,3-Trichloropropane	ND		1.9	0.81 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2,4-Trichlorobenzene	ND *		1.9	0.30 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2,4-Trimethylbenzene	ND		1.9	0.57 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2-Dibromo-3-Chloropropane	ND		9.7	1.7 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2-Dibromoethane	ND		0.97	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2-Dichlorobenzene	ND		0.97	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2-Dichloroethane	ND		0.97	0.30 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,2-Dichloropropane	ND		0.97	0.43 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,3,5-Trimethylbenzene	ND		1.9	0.53 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,3-Dichlorobenzene	ND		0.97	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,3-Dichloropropane	ND		0.97	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
1,4-Dichlorobenzene	ND		0.97	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
2,2-Dichloropropane	ND		4.9	0.32 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
2-Butanone	ND		19	3.7 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
2-Chlorotoluene	ND		0.97	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
2-Hexanone	ND		19	1.7 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
4-Chlorotoluene	ND		0.97	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
4-Methyl-2-pentanone	ND		19	4.2 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Acetone	ND		49	6.1 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
<b>Benzene</b>	<b>2.3</b>		0.97	0.13 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Bromobenzene	ND		0.97	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Bromochloromethane	ND		1.9	0.67 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Bromodichloromethane	ND		0.97	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Bromoform	ND		4.9	0.77 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Bromomethane	ND		19	9.1 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
cis-1,2-Dichloroethene	ND		0.97	0.27 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
cis-1,3-Dichloropropene	ND		0.97	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:27	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-1**

**Date Collected: 10/03/19 09:25**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-6**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		9.7	0.30 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Carbon tetrachloride	ND		0.97	0.27 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Chlorobenzene	ND		0.97	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Chloroform	ND		0.97	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Chloromethane	ND		19	0.30 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Dibromochloromethane	ND		1.9	0.55 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Dibromomethane	ND		0.97	0.75 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Dichlorodifluoromethane	ND		1.9	0.43 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Di-isopropyl ether (DIPE)	ND		0.97	0.47 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Ethanol	ND		490	81 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Ethylbenzene	ND		0.97	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.97	0.49 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Isopropylbenzene	ND		0.97	0.53 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Methylene Chloride	ND		9.7	1.3 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Naphthalene	ND *		9.7	0.79 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
n-Butylbenzene	ND		0.97	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
N-Propylbenzene	ND		1.9	0.49 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
o-Xylene	ND		0.97	0.54 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
m,p-Xylene	ND		1.9	0.26 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
p-Isopropyltoluene	ND		0.97	0.61 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
sec-Butylbenzene	ND		0.97	0.56 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Styrene	ND		0.97	0.59 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
trans-1,2-Dichloroethene	ND		0.97	0.49 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
trans-1,3-Dichloropropene	ND *		1.9	0.59 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Tert-amyl-methyl ether (TAME)	ND		0.97	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
tert-Butyl alcohol (TBA)	ND		19	5.0 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
tert-Butylbenzene	ND		0.97	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Tetrachloroethene	ND		0.97	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
<b>Toluene</b>	<b>1.4</b>		0.97	0.50 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Trichloroethene	ND		1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Trichlorofluoromethane	ND		9.7	0.36 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Vinyl acetate	ND		9.7	4.6 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Vinyl chloride	ND		0.97	0.49 ug/Kg		10/04/19 14:40	10/04/19 21:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155			10/04/19 14:40	10/04/19 21:27	1
4-Bromofluorobenzene (Surr)	105		80 - 120			10/04/19 14:40	10/04/19 21:27	1
Dibromofluoromethane (Surr)	103		79 - 133			10/04/19 14:40	10/04/19 21:27	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:40	10/04/19 21:27	1

**Client Sample ID: SV6-3**

**Date Collected: 10/03/19 09:30**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-7**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.95	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1,1-Trichloroethane	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.5	0.33 ug/Kg		10/04/19 14:40	10/04/19 21:54	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-3**  
**Date Collected: 10/03/19 09:30**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.95	0.34 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1-Dichloroethane	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1-Dichloroethene	ND		0.95	0.33 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2,3-Trichlorobenzene	ND	*	1.9	0.87 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2,3-Trichloropropane	ND		1.9	0.79 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2,4-Trichlorobenzene	ND	*	1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2,4-Trimethylbenzene	ND		1.9	0.56 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2-Dibromoethane	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2-Dichlorobenzene	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2-Dichloroethane	ND		0.95	0.30 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,2-Dichloropropane	ND		0.95	0.42 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,3,5-Trimethylbenzene	ND		1.9	0.52 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,3-Dichlorobenzene	ND		0.95	0.17 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,3-Dichloropropane	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
1,4-Dichlorobenzene	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
2-Butanone	ND		19	3.6 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
2-Chlorotoluene	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
2-Hexanone	ND		19	1.7 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
4-Chlorotoluene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Acetone	ND		47	5.9 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
<b>Benzene</b>	<b>0.95</b>		0.95	0.12 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Bromobenzene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Bromodichloromethane	ND		0.95	0.22 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Bromoform	ND		4.7	0.75 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Bromomethane	ND		19	8.9 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
cis-1,2-Dichloroethene	ND		0.95	0.27 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
cis-1,3-Dichloropropene	ND		0.95	0.24 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Carbon disulfide	ND		9.5	0.29 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Carbon tetrachloride	ND		0.95	0.27 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Chlorobenzene	ND		0.95	0.21 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Chloroform	ND		0.95	0.23 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Chloromethane	ND		19	0.29 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Dibromochloromethane	ND		1.9	0.54 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Dibromomethane	ND		0.95	0.73 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Dichlorodifluoromethane	ND		1.9	0.42 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Di-isopropyl ether (DIPE)	ND		0.95	0.46 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Ethanol	ND		470	79 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Ethylbenzene	ND		0.95	0.14 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Ethyl-t-butyl ether (ETBE)	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Isopropylbenzene	ND		0.95	0.52 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Methylene Chloride	ND		9.5	1.3 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Naphthalene	ND	*	9.5	0.77 ug/Kg		10/04/19 14:40	10/04/19 21:54	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-3**  
**Date Collected: 10/03/19 09:30**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.95	0.15 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
N-Propylbenzene	ND		1.9	0.48 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
o-Xylene	ND		0.95	0.53 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
p-Isopropyltoluene	ND		0.95	0.60 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
sec-Butylbenzene	ND		0.95	0.55 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Styrene	ND		0.95	0.57 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
trans-1,2-Dichloroethene	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
trans-1,3-Dichloropropene	ND	*	1.9	0.57 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Tert-amyl-methyl ether (TAME)	ND		0.95	0.33 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
tert-Butyl alcohol (TBA)	ND		19	4.9 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
tert-Butylbenzene	ND		0.95	0.14 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Tetrachloroethene	ND		0.95	0.20 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Toluene	ND		0.95	0.49 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Trichlorofluoromethane	ND		9.5	0.36 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Vinyl acetate	ND		9.5	4.5 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Vinyl chloride	ND		0.95	0.48 ug/Kg		10/04/19 14:40	10/04/19 21:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	113		71 - 155			10/04/19 14:40	10/04/19 21:54	1
<i>4-Bromofluorobenzene (Surr)</i>	103		80 - 120			10/04/19 14:40	10/04/19 21:54	1
<i>Dibromofluoromethane (Surr)</i>	98		79 - 133			10/04/19 14:40	10/04/19 21:54	1
<i>Toluene-d8 (Surr)</i>	102		80 - 120			10/04/19 14:40	10/04/19 21:54	1

**Client Sample ID: SV6-5**  
**Date Collected: 10/03/19 09:35**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1,1-Trichloroethane	ND		0.94	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1,2-Trichloroethane	ND		0.94	0.33 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1-Dichloroethane	ND		0.94	0.20 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1-Dichloroethene	ND		0.94	0.32 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2,3-Trichlorobenzene	ND	*	1.9	0.86 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2,4-Trichlorobenzene	ND	*	1.9	0.29 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2-Dibromoethane	ND		0.94	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2-Dichlorobenzene	ND		0.94	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2-Dichloroethane	ND		0.94	0.29 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,2-Dichloropropane	ND		0.94	0.41 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,3-Dichlorobenzene	ND		0.94	0.17 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,3-Dichloropropane	ND		0.94	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
1,4-Dichlorobenzene	ND		0.94	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:21	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-5**

**Date Collected: 10/03/19 09:35**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-8**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
2-Butanone	ND		19	3.5 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
2-Chlorotoluene	ND		0.94	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
2-Hexanone	ND		19	1.7 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
4-Chlorotoluene	ND		0.94	0.20 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Acetone	ND		47	5.9 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
<b>Benzene</b>	<b>1.1</b>		0.94	0.12 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Bromobenzene	ND		0.94	0.20 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Bromodichloromethane	ND		0.94	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Bromoform	ND		4.7	0.74 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Bromomethane	ND		19	8.8 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
cis-1,2-Dichloroethene	ND		0.94	0.26 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
cis-1,3-Dichloropropene	ND		0.94	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Carbon disulfide	ND		9.4	0.29 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Carbon tetrachloride	ND		0.94	0.27 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Chlorobenzene	ND		0.94	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Chloroform	ND		0.94	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Chloromethane	ND		19	0.29 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Dibromomethane	ND		0.94	0.73 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Dichlorodifluoromethane	ND		1.9	0.42 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Ethanol	ND		470	78 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Ethylbenzene	ND		0.94	0.14 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.48 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Isopropylbenzene	ND		0.94	0.51 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Methylene Chloride	ND		9.4	1.3 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Naphthalene	ND *		9.4	0.76 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
n-Butylbenzene	ND		0.94	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
o-Xylene	ND		0.94	0.52 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
p-Isopropyltoluene	ND		0.94	0.59 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
sec-Butylbenzene	ND		0.94	0.54 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Styrene	ND		0.94	0.57 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
trans-1,2-Dichloroethene	ND		0.94	0.47 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
trans-1,3-Dichloropropene	ND *		1.9	0.57 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
tert-Butyl alcohol (TBA)	ND		19	4.9 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
tert-Butylbenzene	ND		0.94	0.14 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Tetrachloroethene	ND		0.94	0.20 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Toluene	ND		0.94	0.48 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Trichlorofluoromethane	ND		9.4	0.35 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Vinyl acetate	ND		9.4	4.5 ug/Kg		10/04/19 14:40	10/04/19 22:21	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-5**

**Date Collected: 10/03/19 09:35**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-8**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.94	0.47 ug/Kg		10/04/19 14:40	10/04/19 22:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		71 - 155			10/04/19 14:40	10/04/19 22:21	1
4-Bromofluorobenzene (Surr)	104		80 - 120			10/04/19 14:40	10/04/19 22:21	1
Dibromofluoromethane (Surr)	96		79 - 133			10/04/19 14:40	10/04/19 22:21	1
Toluene-d8 (Surr)	103		80 - 120			10/04/19 14:40	10/04/19 22:21	1

**Client Sample ID: SV6-10**

**Date Collected: 10/03/19 09:45**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-9**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.70	0.17 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1,1-Trichloroethane	ND		0.70	0.16 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.0	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1,2-Trichloroethane	ND		0.70	0.25 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1-Dichloroethane	ND		0.70	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1-Dichloroethene	ND		0.70	0.24 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2,3-Trichlorobenzene	ND *		1.4	0.64 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2,3-Trichloropropane	ND		1.4	0.58 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2,4-Trichlorobenzene	ND *		1.4	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2,4-Trimethylbenzene	ND		1.4	0.41 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2-Dibromo-3-Chloropropane	ND		7.0	1.2 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2-Dibromoethane	ND		0.70	0.18 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2-Dichlorobenzene	ND		0.70	0.16 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2-Dichloroethane	ND		0.70	0.22 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,2-Dichloropropane	ND		0.70	0.31 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,3,5-Trimethylbenzene	ND		1.4	0.38 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,3-Dichlorobenzene	ND		0.70	0.12 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,3-Dichloropropane	ND		0.70	0.18 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
1,4-Dichlorobenzene	ND		0.70	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
2,2-Dichloropropane	ND		3.5	0.23 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
2-Butanone	ND		14	2.6 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
2-Chlorotoluene	ND		0.70	0.16 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
2-Hexanone	ND		14	1.2 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
4-Chlorotoluene	ND		0.70	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
4-Methyl-2-pentanone	ND		14	3.0 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Acetone	ND		35	4.3 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Benzene	ND		0.70	0.090 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Bromobenzene	ND		0.70	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Bromochloromethane	ND		1.4	0.48 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Bromodichloromethane	ND		0.70	0.16 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Bromoform	ND		3.5	0.55 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Bromomethane	ND		14	6.6 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
cis-1,2-Dichloroethene	ND		0.70	0.19 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
cis-1,3-Dichloropropene	ND		0.70	0.18 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Carbon disulfide	ND		7.0	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Carbon tetrachloride	ND		0.70	0.20 ug/Kg		10/04/19 14:40	10/04/19 22:49	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-10**  
**Date Collected: 10/03/19 09:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.70	0.16 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Chloroethane	ND		1.4	1.0 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Chloroform	ND		0.70	0.17 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Chloromethane	ND		14	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Dibromochloromethane	ND		1.4	0.40 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Dibromomethane	ND		0.70	0.54 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Dichlorodifluoromethane	ND		1.4	0.31 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Di-isopropyl ether (DIPE)	ND		0.70	0.34 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Ethanol	ND		350	58 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Ethylbenzene	ND		0.70	0.11 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.70	0.35 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Isopropylbenzene	ND		0.70	0.38 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Methylene Chloride	ND		7.0	0.93 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Naphthalene	ND *		7.0	0.57 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
n-Butylbenzene	ND		0.70	0.11 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
N-Propylbenzene	ND		1.4	0.35 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
o-Xylene	ND		0.70	0.39 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
p-Isopropyltoluene	ND		0.70	0.44 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
sec-Butylbenzene	ND		0.70	0.40 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Styrene	ND		0.70	0.42 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
trans-1,2-Dichloroethene	ND		0.70	0.35 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
trans-1,3-Dichloropropene	ND *		1.4	0.42 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Tert-amyl-methyl ether (TAME)	ND		0.70	0.25 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
tert-Butyl alcohol (TBA)	ND		14	3.6 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
tert-Butylbenzene	ND		0.70	0.11 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Tetrachloroethene	ND		0.70	0.15 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Toluene	ND		0.70	0.36 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Trichlorofluoromethane	ND		7.0	0.26 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Vinyl acetate	ND		7.0	3.3 ug/Kg		10/04/19 14:40	10/04/19 22:49	1
Vinyl chloride	ND		0.70	0.35 ug/Kg		10/04/19 14:40	10/04/19 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155	10/04/19 14:40	10/04/19 22:49	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/04/19 14:40	10/04/19 22:49	1
Dibromofluoromethane (Surr)	101		79 - 133	10/04/19 14:40	10/04/19 22:49	1
Toluene-d8 (Surr)	105		80 - 120	10/04/19 14:40	10/04/19 22:49	1

**Client Sample ID: SV6-15**  
**Date Collected: 10/03/19 09:50**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.76	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1,1-Trichloroethane	ND		0.76	0.17 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.6	0.27 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1,2-Trichloroethane	ND		0.76	0.27 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1-Dichloroethane	ND		0.76	0.16 ug/Kg		10/04/19 14:40	10/04/19 23:16	1

Eurofins Calscience LLC



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-15**

**Date Collected: 10/03/19 09:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-10**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.76	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,1-Dichloropropene	ND		1.5	0.25 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2,3-Trichlorobenzene	ND	*	1.5	0.69 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2,3-Trichloropropane	ND		1.5	0.63 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2,4-Trichlorobenzene	ND	*	1.5	0.24 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2,4-Trimethylbenzene	ND		1.5	0.45 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2-Dibromoethane	ND		0.76	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2-Dichlorobenzene	ND		0.76	0.17 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2-Dichloroethane	ND		0.76	0.24 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,2-Dichloropropane	ND		0.76	0.33 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,3,5-Trimethylbenzene	ND		1.5	0.42 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,3-Dichlorobenzene	ND		0.76	0.13 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,3-Dichloropropane	ND		0.76	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
1,4-Dichlorobenzene	ND		0.76	0.17 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
2,2-Dichloropropane	ND		3.8	0.25 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
2-Butanone	ND		15	2.9 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
2-Chlorotoluene	ND		0.76	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
2-Hexanone	ND		15	1.3 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
4-Chlorotoluene	ND		0.76	0.16 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
4-Methyl-2-pentanone	ND		15	3.3 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Acetone	ND		38	4.7 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Benzene	ND		0.76	0.099 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Bromobenzene	ND		0.76	0.16 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Bromochloromethane	ND		1.5	0.53 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Bromodichloromethane	ND		0.76	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Bromoform	ND		3.8	0.60 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Bromomethane	ND		15	7.2 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
cis-1,2-Dichloroethene	ND		0.76	0.21 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
cis-1,3-Dichloropropene	ND		0.76	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Carbon disulfide	ND		7.6	0.23 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Carbon tetrachloride	ND		0.76	0.22 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Chlorobenzene	ND		0.76	0.17 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Chloroethane	ND		1.5	1.1 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Chloroform	ND		0.76	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Chloromethane	ND		15	0.23 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Dibromochloromethane	ND		1.5	0.43 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Dibromomethane	ND		0.76	0.59 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Dichlorodifluoromethane	ND		1.5	0.34 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Di-isopropyl ether (DIPE)	ND		0.76	0.37 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Ethanol	ND		380	64 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Ethylbenzene	ND		0.76	0.12 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Ethyl-t-butyl ether (ETBE)	ND		0.76	0.39 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Isopropylbenzene	ND		0.76	0.42 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Methylene Chloride	ND		7.6	1.0 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Naphthalene	ND	*	7.6	0.62 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
n-Butylbenzene	ND		0.76	0.12 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
N-Propylbenzene	ND		1.5	0.38 ug/Kg		10/04/19 14:40	10/04/19 23:16	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV6-15**  
**Date Collected: 10/03/19 09:50**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.76	0.42 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
m,p-Xylene	ND		1.5	0.20 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
p-Isopropyltoluene	ND		0.76	0.48 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
sec-Butylbenzene	ND		0.76	0.44 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Styrene	ND		0.76	0.46 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
trans-1,2-Dichloroethene	ND		0.76	0.39 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
trans-1,3-Dichloropropene	ND	*	1.5	0.46 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Tert-amyl-methyl ether (TAME)	ND		0.76	0.27 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
tert-Butyl alcohol (TBA)	ND		15	3.9 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
tert-Butylbenzene	ND		0.76	0.11 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Tetrachloroethene	ND		0.76	0.16 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Toluene	ND		0.76	0.39 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Trichloroethene	ND		1.5	0.23 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Trichlorofluoromethane	ND		7.6	0.29 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Vinyl acetate	ND		7.6	3.6 ug/Kg		10/04/19 14:40	10/04/19 23:16	1
Vinyl chloride	ND		0.76	0.38 ug/Kg		10/04/19 14:40	10/04/19 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155	10/04/19 14:40	10/04/19 23:16	1
4-Bromofluorobenzene (Surr)	105		80 - 120	10/04/19 14:40	10/04/19 23:16	1
Dibromofluoromethane (Surr)	100		79 - 133	10/04/19 14:40	10/04/19 23:16	1
Toluene-d8 (Surr)	104		80 - 120	10/04/19 14:40	10/04/19 23:16	1

**Client Sample ID: SV3-1**  
**Date Collected: 10/03/19 10:30**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1,1-Trichloroethane	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.5	0.30 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1,2-Trichloroethane	ND		0.85	0.30 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1-Dichloroethane	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1-Dichloroethene	ND		0.85	0.29 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,1-Dichloropropene	ND		1.7	0.28 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2,3-Trichlorobenzene	ND	*	1.7	0.78 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2,3-Trichloropropane	ND		1.7	0.71 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2,4-Trichlorobenzene	ND	*	1.7	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2,4-Trimethylbenzene	ND		1.7	0.50 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2-Dibromo-3-Chloropropane	ND		8.5	1.5 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2-Dibromoethane	ND		0.85	0.22 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2-Dichlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2-Dichloroethane	ND		0.85	0.27 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,2-Dichloropropane	ND		0.85	0.37 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,3,5-Trimethylbenzene	ND		1.7	0.47 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,3-Dichlorobenzene	ND		0.85	0.15 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,3-Dichloropropane	ND		0.85	0.22 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
1,4-Dichlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
2,2-Dichloropropane	ND		4.3	0.28 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
2-Butanone	ND		17	3.2 ug/Kg		10/04/19 14:40	10/04/19 23:42	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-1**

**Date Collected: 10/03/19 10:30**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-11**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
4-Chlorotoluene	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
4-Methyl-2-pentanone	ND		17	3.7 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Acetone	ND		43	5.3 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
<b>Benzene</b>	<b>2.3</b>		0.85	0.11 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Bromobenzene	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Bromochloromethane	ND		1.7	0.59 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Bromodichloromethane	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Bromoform	ND		4.3	0.68 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Bromomethane	ND		17	8.0 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
cis-1,2-Dichloroethene	ND		0.85	0.24 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
cis-1,3-Dichloropropene	ND		0.85	0.22 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Carbon disulfide	ND		8.5	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Carbon tetrachloride	ND		0.85	0.24 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Chlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Chloroethane	ND		1.7	1.3 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Chloroform	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Chloromethane	ND		17	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Dibromochloromethane	ND		1.7	0.49 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Dibromomethane	ND		0.85	0.66 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Dichlorodifluoromethane	ND		1.7	0.38 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Di-isopropyl ether (DIPE)	ND		0.85	0.41 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Ethanol	ND		430	71 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Ethylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Isopropylbenzene	ND		0.85	0.47 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Methylene Chloride	ND		8.5	1.1 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Naphthalene	ND *		8.5	0.69 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
n-Butylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
N-Propylbenzene	ND		1.7	0.43 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
o-Xylene	ND		0.85	0.47 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
m,p-Xylene	ND		1.7	0.23 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
p-Isopropyltoluene	ND		0.85	0.54 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
sec-Butylbenzene	ND		0.85	0.49 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Styrene	ND		0.85	0.52 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
trans-1,2-Dichloroethene	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
trans-1,3-Dichloropropene	ND *		1.7	0.52 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Tert-amyl-methyl ether (TAME)	ND		0.85	0.30 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
tert-Butyl alcohol (TBA)	ND		17	4.4 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
tert-Butylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
<b>Tetrachloroethene</b>	<b>1.1</b>		0.85	0.18 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
<b>Toluene</b>	<b>1.5</b>		0.85	0.44 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Trichloroethene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Trichlorofluoromethane	ND		8.5	0.32 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Vinyl acetate	ND		8.5	4.0 ug/Kg		10/04/19 14:40	10/04/19 23:42	1
Vinyl chloride	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/04/19 23:42	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		71 - 155	10/04/19 14:40	10/04/19 23:42	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/04/19 14:40	10/04/19 23:42	1
Dibromofluoromethane (Surr)	99		79 - 133	10/04/19 14:40	10/04/19 23:42	1
Toluene-d8 (Surr)	102		80 - 120	10/04/19 14:40	10/04/19 23:42	1

Client Sample ID: SV3-3

Date Collected: 10/03/19 10:35

Date Received: 10/03/19 17:35

Lab Sample ID: 570-9135-12

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1,1-Trichloroethane	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1,2-Trichloroethane	ND		0.91	0.32 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1-Dichloroethane	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1-Dichloroethene	ND		0.91	0.32 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2,3-Trichlorobenzene	ND *		1.8	0.83 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2,3-Trichloropropane	ND		1.8	0.76 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2,4-Trichlorobenzene	ND *		1.8	0.28 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2,4-Trimethylbenzene	ND		1.8	0.54 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2-Dibromoethane	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2-Dichlorobenzene	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2-Dichloroethane	ND		0.91	0.29 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,2-Dichloropropane	ND		0.91	0.40 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,3,5-Trimethylbenzene	ND		1.8	0.50 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,3-Dichlorobenzene	ND		0.91	0.16 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,3-Dichloropropane	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
1,4-Dichlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
2,2-Dichloropropane	ND		4.6	0.30 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
2-Chlorotoluene	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
4-Chlorotoluene	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Acetone	ND		46	5.7 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
<b>Benzene</b>	<b>3.0</b>		0.91	0.12 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Bromobenzene	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Bromochloromethane	ND		1.8	0.63 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Bromodichloromethane	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Bromoform	ND		4.6	0.73 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Bromomethane	ND		18	8.6 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
cis-1,2-Dichloroethene	ND		0.91	0.26 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
cis-1,3-Dichloropropene	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Carbon disulfide	ND		9.1	0.28 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Carbon tetrachloride	ND		0.91	0.26 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Chlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Chloroform	ND		0.91	0.22 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Chloromethane	ND		18	0.28 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Dibromochloromethane	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/05/19 00:09	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-3**  
**Date Collected: 10/03/19 10:35**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.91	0.71 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Dichlorodifluoromethane	ND		1.8	0.41 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Ethanol	ND		460	76 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Ethylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Isopropylbenzene	ND		0.91	0.50 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Methylene Chloride	ND		9.1	1.2 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Naphthalene	ND	*	9.1	0.74 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
n-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
o-Xylene	ND		0.91	0.51 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
p-Isopropyltoluene	ND		0.91	0.58 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
sec-Butylbenzene	ND		0.91	0.53 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Styrene	ND		0.91	0.55 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
trans-1,2-Dichloroethene	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
trans-1,3-Dichloropropene	ND	*	1.8	0.55 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
tert-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
<b>Tetrachloroethene</b>	<b>2.6</b>		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
<b>Toluene</b>	<b>1.8</b>		0.91	0.47 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Trichlorofluoromethane	ND		9.1	0.34 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Vinyl acetate	ND		9.1	4.3 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Vinyl chloride	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 00:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155			10/04/19 14:40	10/05/19 00:09	1
4-Bromofluorobenzene (Surr)	99		80 - 120			10/04/19 14:40	10/05/19 00:09	1
Dibromofluoromethane (Surr)	100		79 - 133			10/04/19 14:40	10/05/19 00:09	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:40	10/05/19 00:09	1

**Client Sample ID: SV3-5**  
**Date Collected: 10/03/19 10:40**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-13**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1,1-Trichloroethane	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	0.31 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1,2-Trichloroethane	ND		0.89	0.32 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1-Dichloroethane	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1-Dichloroethene	ND		0.89	0.31 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2,3-Trichlorobenzene	ND		1.8	0.82 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2,3-Trichloropropane	ND		1.8	0.74 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/04/19 14:40	10/05/19 17:31	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-5**

**Date Collected: 10/03/19 10:40**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-13**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.6 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2-Dibromoethane	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2-Dichlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2-Dichloroethane	ND		0.89	0.28 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,2-Dichloropropane	ND		0.89	0.39 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,3-Dichlorobenzene	ND		0.89	0.16 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,3-Dichloropropane	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
1,4-Dichlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
2,2-Dichloropropane	ND		4.5	0.30 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
2-Chlorotoluene	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
4-Chlorotoluene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Acetone	ND		45	5.6 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
<b>Benzene</b>	<b>1.1</b>		0.89	0.12 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Bromobenzene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Bromochloromethane	ND		1.8	0.62 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Bromodichloromethane	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Bromoform	ND		4.5	0.71 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Bromomethane	ND		18	8.4 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
cis-1,2-Dichloroethene	ND		0.89	0.25 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
cis-1,3-Dichloropropene	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Carbon disulfide	ND		8.9	0.27 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Carbon tetrachloride	ND		0.89	0.25 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Chlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Chloroform	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Dibromochloromethane	ND		1.8	0.51 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Dibromomethane	ND		0.89	0.69 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Di-isopropyl ether (DIPE)	ND		0.89	0.43 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Ethanol	ND		450	75 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Ethylbenzene	ND		0.89	0.14 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Ethyl-t-butyl ether (ETBE)	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Isopropylbenzene	ND		0.89	0.49 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Methylene Chloride	ND		8.9	1.2 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Naphthalene	ND		8.9	0.73 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
n-Butylbenzene	ND		0.89	0.14 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
N-Propylbenzene	ND		1.8	0.45 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
o-Xylene	ND		0.89	0.50 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
p-Isopropyltoluene	ND		0.89	0.56 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
sec-Butylbenzene	ND		0.89	0.52 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Styrene	ND		0.89	0.54 ug/Kg		10/04/19 14:40	10/05/19 17:31	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-5**  
**Date Collected: 10/03/19 10:40**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-13**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Tert-amyl-methyl ether (TAME)	ND		0.89	0.32 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
tert-Butylbenzene	ND		0.89	0.13 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Tetrachloroethene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Toluene	ND		0.89	0.46 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Trichlorofluoromethane	ND		8.9	0.34 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Vinyl acetate	ND		8.9	4.2 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Vinyl chloride	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 17:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		71 - 155			10/04/19 14:40	10/05/19 17:31	1
4-Bromofluorobenzene (Surr)	105		80 - 120			10/04/19 14:40	10/05/19 17:31	1
Dibromofluoromethane (Surr)	85		79 - 133			10/04/19 14:40	10/05/19 17:31	1
Toluene-d8 (Surr)	102		80 - 120			10/04/19 14:40	10/05/19 17:31	1

**Client Sample ID: SV3-10**  
**Date Collected: 10/03/19 10:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1,2-Trichloroethane	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1-Dichloroethane	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,2-Dichloropropane	ND		0.83	0.36 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
1,4-Dichlorobenzene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
2,2-Dichloropropane	ND		4.1	0.27 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
2-Butanone	ND		17	3.1 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Acetone	ND		41	5.2 ug/Kg		10/04/19 14:40	10/05/19 18:26	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-10**  
**Date Collected: 10/03/19 10:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.94</b>		0.83	0.11 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Bromochloromethane	ND		1.7	0.57 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Bromoform	ND		4.1	0.66 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Bromomethane	ND		17	7.8 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Carbon tetrachloride	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Chlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Chloroform	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Dibromochloromethane	ND		1.7	0.47 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Dibromomethane	ND		0.83	0.64 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Ethanol	ND		410	69 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Isopropylbenzene	ND		0.83	0.45 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Naphthalene	ND		8.3	0.68 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
p-Isopropyltoluene	ND		0.83	0.52 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Styrene	ND		0.83	0.50 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
trans-1,3-Dichloropropene	ND		1.7	0.50 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
tert-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Toluene	ND		0.83	0.43 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Vinyl acetate	ND		8.3	3.9 ug/Kg		10/04/19 14:40	10/05/19 18:26	1
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155	10/04/19 14:40	10/05/19 18:26	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/04/19 14:40	10/05/19 18:26	1
Dibromofluoromethane (Surr)	93		79 - 133	10/04/19 14:40	10/05/19 18:26	1
Toluene-d8 (Surr)	101		80 - 120	10/04/19 14:40	10/05/19 18:26	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SV3-15**  
**Date Collected: 10/03/19 11:00**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.82	0.20 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1,1-Trichloroethane	ND		0.82	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.28 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.2	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1,2-Trichloroethane	ND		0.82	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1-Dichloroethane	ND		0.82	0.17 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1-Dichloroethene	ND		0.82	0.28 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,1-Dichloropropene	ND		1.6	0.27 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2,3-Trichlorobenzene	ND		1.6	0.75 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2,3-Trichloropropane	ND		1.6	0.68 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2,4-Trichlorobenzene	ND		1.6	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2,4-Trimethylbenzene	ND		1.6	0.48 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2-Dibromo-3-Chloropropane	ND		8.2	1.4 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2-Dibromoethane	ND		0.82	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2-Dichlorobenzene	ND		0.82	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2-Dichloroethane	ND		0.82	0.26 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,2-Dichloropropane	ND		0.82	0.36 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,3,5-Trimethylbenzene	ND		1.6	0.45 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,3-Dichlorobenzene	ND		0.82	0.14 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,3-Dichloropropane	ND		0.82	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
1,4-Dichlorobenzene	ND		0.82	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
2,2-Dichloropropane	ND		4.1	0.27 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
2-Butanone	ND		16	3.1 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
2-Chlorotoluene	ND		0.82	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
2-Hexanone	ND		16	1.4 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
4-Chlorotoluene	ND		0.82	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
4-Methyl-2-pentanone	ND		16	3.6 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Acetone	ND		41	5.1 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Benzene	ND		0.82	0.11 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Bromobenzene	ND		0.82	0.17 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Bromochloromethane	ND		1.6	0.57 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Bromodichloromethane	ND		0.82	0.19 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Bromoform	ND		4.1	0.65 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Bromomethane	ND		16	7.7 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
cis-1,2-Dichloroethene	ND		0.82	0.23 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
cis-1,3-Dichloropropene	ND		0.82	0.21 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Carbon disulfide	ND		8.2	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Carbon tetrachloride	ND		0.82	0.23 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Chlorobenzene	ND		0.82	0.18 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Chloroethane	ND		1.6	1.2 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Chloroform	ND		0.82	0.20 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Chloromethane	ND		16	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Dibromochloromethane	ND		1.6	0.47 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Dibromomethane	ND		0.82	0.64 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Dichlorodifluoromethane	ND		1.6	0.36 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Di-isopropyl ether (DIPE)	ND		0.82	0.40 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Ethanol	ND		410	69 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Ethylbenzene	ND		0.82	0.12 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Ethyl-t-butyl ether (ETBE)	ND		0.82	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:54	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV3-15**  
**Date Collected: 10/03/19 11:00**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.82	0.45 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Methylene Chloride	ND		8.2	1.1 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.24 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Naphthalene	ND		8.2	0.67 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
n-Butylbenzene	ND		0.82	0.13 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
N-Propylbenzene	ND		1.6	0.41 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
o-Xylene	ND		0.82	0.46 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
m,p-Xylene	ND		1.6	0.22 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
p-Isopropyltoluene	ND		0.82	0.52 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
sec-Butylbenzene	ND		0.82	0.47 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Styrene	ND		0.82	0.50 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
trans-1,2-Dichloroethene	ND		0.82	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
trans-1,3-Dichloropropene	ND		1.6	0.50 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Tert-amyl-methyl ether (TAME)	ND		0.82	0.29 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
tert-Butyl alcohol (TBA)	ND		16	4.3 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
tert-Butylbenzene	ND		0.82	0.12 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Tetrachloroethene	ND		0.82	0.17 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Toluene	ND		0.82	0.42 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Trichloroethene	ND		1.6	0.25 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Trichlorofluoromethane	ND		8.2	0.31 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Vinyl acetate	ND		8.2	3.9 ug/Kg		10/04/19 14:40	10/05/19 18:54	1
Vinyl chloride	ND		0.82	0.41 ug/Kg		10/04/19 14:40	10/05/19 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		71 - 155	10/04/19 14:40	10/05/19 18:54	1
4-Bromofluorobenzene (Surr)	112		80 - 120	10/04/19 14:40	10/05/19 18:54	1
Dibromofluoromethane (Surr)	85		79 - 133	10/04/19 14:40	10/05/19 18:54	1
Toluene-d8 (Surr)	102		80 - 120	10/04/19 14:40	10/05/19 18:54	1

**Client Sample ID: SV2-1**  
**Date Collected: 10/03/19 11:40**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.98	0.24 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1,1-Trichloroethane	ND		0.98	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.34 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.8	0.35 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1,2-Trichloroethane	ND		0.98	0.35 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1-Dichloroethane	ND		0.98	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1-Dichloroethene	ND		0.98	0.34 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,1-Dichloropropene	ND		2.0	0.32 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2,3-Trichlorobenzene	ND		2.0	0.90 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2,3-Trichloropropane	ND		2.0	0.81 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2,4-Trichlorobenzene	ND		2.0	0.30 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2,4-Trimethylbenzene	ND		2.0	0.57 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2-Dibromoethane	ND		0.98	0.25 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2-Dichlorobenzene	ND		0.98	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2-Dichloroethane	ND		0.98	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,2-Dichloropropane	ND		0.98	0.43 ug/Kg		10/04/19 14:40	10/05/19 19:21	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-1**  
**Date Collected: 10/03/19 11:40**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,3-Dichlorobenzene	ND		0.98	0.17 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,3-Dichloropropane	ND		0.98	0.25 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
1,4-Dichlorobenzene	ND		0.98	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
2,2-Dichloropropane	ND		4.9	0.32 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
2-Butanone	ND		20	3.7 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
2-Chlorotoluene	ND		0.98	0.23 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
2-Hexanone	ND		20	1.7 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
4-Chlorotoluene	ND		0.98	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
4-Methyl-2-pentanone	ND		20	4.2 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Acetone	ND		49	6.1 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Benzene	ND		0.98	0.13 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Bromobenzene	ND		0.98	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Bromochloromethane	ND		2.0	0.68 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Bromodichloromethane	ND		0.98	0.23 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Bromoform	ND		4.9	0.78 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Bromomethane	ND		20	9.2 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
cis-1,2-Dichloroethene	ND		0.98	0.27 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
cis-1,3-Dichloropropene	ND		0.98	0.25 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Carbon disulfide	ND		9.8	0.30 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Carbon tetrachloride	ND		0.98	0.28 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Chlorobenzene	ND		0.98	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Chloroethane	ND		2.0	1.5 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Chloroform	ND		0.98	0.23 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Chloromethane	ND		20	0.30 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Dibromochloromethane	ND		2.0	0.56 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Dibromomethane	ND		0.98	0.76 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Dichlorodifluoromethane	ND		2.0	0.43 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Di-isopropyl ether (DIPE)	ND		0.98	0.47 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Ethanol	ND		490	82 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Ethylbenzene	ND		0.98	0.15 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Ethyl-t-butyl ether (ETBE)	ND		0.98	0.50 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Isopropylbenzene	ND		0.98	0.54 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Methylene Chloride	ND		9.8	1.3 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Naphthalene	ND		9.8	0.80 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
n-Butylbenzene	ND		0.98	0.15 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
N-Propylbenzene	ND		2.0	0.49 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
o-Xylene	ND		0.98	0.55 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
m,p-Xylene	ND		2.0	0.26 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
p-Isopropyltoluene	ND		0.98	0.62 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
sec-Butylbenzene	ND		0.98	0.57 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Styrene	ND		0.98	0.59 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
trans-1,2-Dichloroethene	ND		0.98	0.50 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
trans-1,3-Dichloropropene	ND		2.0	0.59 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Tert-amyl-methyl ether (TAME)	ND		0.98	0.35 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
tert-Butyl alcohol (TBA)	ND		20	5.1 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
tert-Butylbenzene	ND		0.98	0.15 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
<b>Tetrachloroethene</b>	<b>1.5</b>		0.98	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:21	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-1**  
**Date Collected: 10/03/19 11:40**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.98	0.51 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Trichloroethene	ND		2.0	0.29 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Trichlorofluoromethane	ND		9.8	0.37 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Vinyl acetate	ND		9.8	4.7 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Vinyl chloride	ND		0.98	0.49 ug/Kg		10/04/19 14:40	10/05/19 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155			10/04/19 14:40	10/05/19 19:21	1
4-Bromofluorobenzene (Surr)	112		80 - 120			10/04/19 14:40	10/05/19 19:21	1
Dibromofluoromethane (Surr)	90		79 - 133			10/04/19 14:40	10/05/19 19:21	1
Toluene-d8 (Surr)	100		80 - 120			10/04/19 14:40	10/05/19 19:21	1

**Client Sample ID: SV2-3**  
**Date Collected: 10/03/19 11:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1,1-Trichloroethane	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.8	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1,2-Trichloroethane	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1-Dichloroethane	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1-Dichloroethene	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2,3-Trichlorobenzene	ND		1.8	0.81 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2,3-Trichloropropane	ND		1.8	0.73 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2,4-Trichlorobenzene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2,4-Trimethylbenzene	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2-Dibromoethane	ND		0.88	0.23 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2-Dichloroethane	ND		0.88	0.28 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,2-Dichloropropane	ND		0.88	0.39 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,3-Dichlorobenzene	ND		0.88	0.16 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,3-Dichloropropane	ND		0.88	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
1,4-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
2,2-Dichloropropane	ND		4.4	0.29 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
2-Butanone	ND		18	3.3 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
2-Chlorotoluene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
4-Chlorotoluene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
4-Methyl-2-pentanone	ND		18	3.8 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Acetone	ND		44	5.5 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Benzene	ND		0.88	0.11 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Bromobenzene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Bromochloromethane	ND		1.8	0.61 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Bromodichloromethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Bromoform	ND		4.4	0.70 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Bromomethane	ND		18	8.3 ug/Kg		10/04/19 14:40	10/05/19 19:49	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-3**

**Date Collected: 10/03/19 11:45**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-17**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
cis-1,3-Dichloropropene	ND		0.88	0.22 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Carbon disulfide	ND		8.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Carbon tetrachloride	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Chlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Chloroform	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Dibromochloromethane	ND		1.8	0.50 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Dibromomethane	ND		0.88	0.68 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Dichlorodifluoromethane	ND		1.8	0.39 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Di-isopropyl ether (DIPE)	ND		0.88	0.43 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Ethanol	ND		440	74 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Ethylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Isopropylbenzene	ND		0.88	0.48 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Methylene Chloride	ND		8.8	1.2 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Naphthalene	ND		8.8	0.72 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
n-Butylbenzene	ND		0.88	0.14 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
N-Propylbenzene	ND		1.8	0.44 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
o-Xylene	ND		0.88	0.49 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
p-Isopropyltoluene	ND		0.88	0.56 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
sec-Butylbenzene	ND		0.88	0.51 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Styrene	ND		0.88	0.53 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
trans-1,2-Dichloroethene	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Tert-amyl-methyl ether (TAME)	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
tert-Butylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Tetrachloroethene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Toluene	ND		0.88	0.46 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Trichlorofluoromethane	ND		8.8	0.33 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Vinyl acetate	ND		8.8	4.2 ug/Kg		10/04/19 14:40	10/05/19 19:49	1
Vinyl chloride	ND		0.88	0.44 ug/Kg		10/04/19 14:40	10/05/19 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155	10/04/19 14:40	10/05/19 19:49	1
4-Bromofluorobenzene (Surr)	104		80 - 120	10/04/19 14:40	10/05/19 19:49	1
Dibromofluoromethane (Surr)	94		79 - 133	10/04/19 14:40	10/05/19 19:49	1
Toluene-d8 (Surr)	101		80 - 120	10/04/19 14:40	10/05/19 19:49	1

**Client Sample ID: SV2-5**

**Date Collected: 10/03/19 11:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-18**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:16	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-5**  
**Date Collected: 10/03/19 11:50**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1,2-Trichloroethane	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1-Dichloroethane	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2,3-Trichlorobenzene	ND		1.7	0.75 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2,4-Trimethylbenzene	ND		1.7	0.48 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,2-Dichloropropane	ND		0.83	0.36 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,3,5-Trimethylbenzene	ND		1.7	0.45 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
1,4-Dichlorobenzene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
2,2-Dichloropropane	ND		4.1	0.27 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
2-Butanone	ND		17	3.1 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Acetone	ND		41	5.2 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
<b>Benzene</b>	<b>1.6</b>		0.83	0.11 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Bromochloromethane	ND		1.7	0.57 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Bromoform	ND		4.1	0.66 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Bromomethane	ND		17	7.8 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Carbon tetrachloride	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Chlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Chloroform	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Dibromochloromethane	ND		1.7	0.47 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Dibromomethane	ND		0.83	0.64 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Ethanol	ND		410	69 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Isopropylbenzene	ND		0.83	0.45 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/04/19 14:40	10/05/19 20:16	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-5**  
**Date Collected: 10/03/19 11:50**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Naphthalene	ND		8.3	0.67 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
N-Propylbenzene	ND		1.7	0.41 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
p-Isopropyltoluene	ND		0.83	0.52 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Styrene	ND		0.83	0.50 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
trans-1,3-Dichloropropene	ND		1.7	0.50 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
tert-Butylbenzene	ND		0.83	0.12 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
<b>Toluene</b>	<b>0.86</b>		0.83	0.43 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Vinyl acetate	ND		8.3	3.9 ug/Kg		10/04/19 14:40	10/05/19 20:16	1
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155	10/04/19 14:40	10/05/19 20:16	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/04/19 14:40	10/05/19 20:16	1
Dibromofluoromethane (Surr)	83		79 - 133	10/04/19 14:40	10/05/19 20:16	1
Toluene-d8 (Surr)	100		80 - 120	10/04/19 14:40	10/05/19 20:16	1

**Client Sample ID: SV2-10**  
**Date Collected: 10/03/19 11:55**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1,1-Trichloroethane	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.5	0.30 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1,2-Trichloroethane	ND		0.85	0.30 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1-Dichloroethane	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1-Dichloroethene	ND		0.85	0.29 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,1-Dichloropropene	ND		1.7	0.28 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2,3-Trichlorobenzene	ND		1.7	0.77 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2,3-Trichloropropane	ND		1.7	0.70 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2,4-Trimethylbenzene	ND		1.7	0.50 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2-Dibromo-3-Chloropropane	ND		8.5	1.5 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2-Dibromoethane	ND		0.85	0.22 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2-Dichlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2-Dichloroethane	ND		0.85	0.27 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,2-Dichloropropane	ND		0.85	0.37 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,3-Dichlorobenzene	ND		0.85	0.15 ug/Kg		10/04/19 14:40	10/05/19 20:42	1

Euromins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-10**

**Date Collected: 10/03/19 11:55**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-19**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.85	0.21 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
1,4-Dichlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
2,2-Dichloropropane	ND		4.2	0.28 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
2-Butanone	ND		17	3.2 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
2-Chlorotoluene	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
4-Chlorotoluene	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
4-Methyl-2-pentanone	ND		17	3.7 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Acetone	ND		42	5.3 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
<b>Benzene</b>	<b>2.8</b>		0.85	0.11 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Bromobenzene	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Bromochloromethane	ND		1.7	0.58 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Bromodichloromethane	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Bromoform	ND		4.2	0.67 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Bromomethane	ND		17	8.0 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
cis-1,2-Dichloroethene	ND		0.85	0.24 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
cis-1,3-Dichloropropene	ND		0.85	0.22 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Carbon disulfide	ND		8.5	0.26 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Carbon tetrachloride	ND		0.85	0.24 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Chlorobenzene	ND		0.85	0.19 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Chloroethane	ND		1.7	1.3 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Chloroform	ND		0.85	0.20 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Chloromethane	ND		17	0.26 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Dibromochloromethane	ND		1.7	0.48 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Dibromomethane	ND		0.85	0.66 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Dichlorodifluoromethane	ND		1.7	0.38 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Di-isopropyl ether (DIPE)	ND		0.85	0.41 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Ethanol	ND		420	71 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Ethylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Isopropylbenzene	ND		0.85	0.46 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Methylene Chloride	ND		8.5	1.1 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Naphthalene	ND		8.5	0.69 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
n-Butylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
o-Xylene	ND		0.85	0.47 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
m,p-Xylene	ND		1.7	0.23 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
p-Isopropyltoluene	ND		0.85	0.53 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
sec-Butylbenzene	ND		0.85	0.49 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Styrene	ND		0.85	0.51 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
trans-1,2-Dichloroethene	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
trans-1,3-Dichloropropene	ND		1.7	0.51 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Tert-amyl-methyl ether (TAME)	ND		0.85	0.30 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
tert-Butyl alcohol (TBA)	ND		17	4.4 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
tert-Butylbenzene	ND		0.85	0.13 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Tetrachloroethene	ND		0.85	0.18 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
<b>Toluene</b>	<b>2.1</b>		0.85	0.44 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 20:42	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-10**  
**Date Collected: 10/03/19 11:55**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		8.5	0.32 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Vinyl acetate	ND		8.5	4.0 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Vinyl chloride	ND		0.85	0.43 ug/Kg		10/04/19 14:40	10/05/19 20:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155			10/04/19 14:40	10/05/19 20:42	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/04/19 14:40	10/05/19 20:42	1
Dibromofluoromethane (Surr)	94		79 - 133			10/04/19 14:40	10/05/19 20:42	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:40	10/05/19 20:42	1

**Client Sample ID: SV2-15**  
**Date Collected: 10/03/19 12:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1,2-Trichloroethane	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1-Dichloroethane	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,2-Dichloropropane	ND		0.83	0.36 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
1,4-Dichlorobenzene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
2,2-Dichloropropane	ND		4.2	0.27 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
2-Butanone	ND		17	3.1 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Acetone	ND		42	5.2 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Benzene	ND		0.83	0.11 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Bromochloromethane	ND		1.7	0.57 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Bromoform	ND		4.2	0.66 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Bromomethane	ND		17	7.8 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:09	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV2-15**  
**Date Collected: 10/03/19 12:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Carbon tetrachloride	ND		0.83	0.23 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Chlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Chloroform	ND		0.83	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Dibromochloromethane	ND		1.7	0.47 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Dibromomethane	ND		0.83	0.64 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Ethanol	ND		420	69 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Isopropylbenzene	ND		0.83	0.45 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Naphthalene	ND		8.3	0.68 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
p-Isopropyltoluene	ND		0.83	0.52 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Styrene	ND		0.83	0.50 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
trans-1,3-Dichloropropene	ND		1.7	0.50 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
tert-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Toluene	ND		0.83	0.43 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Vinyl acetate	ND		8.3	3.9 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/04/19 14:40	10/05/19 21:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		71 - 155			10/04/19 14:40	10/05/19 21:09	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/04/19 14:40	10/05/19 21:09	1
Dibromofluoromethane (Surr)	90		79 - 133			10/04/19 14:40	10/05/19 21:09	1
Toluene-d8 (Surr)	100		80 - 120			10/04/19 14:40	10/05/19 21:09	1

**Client Sample ID: SV8-1**  
**Date Collected: 10/03/19 13:35**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1,1-Trichloroethane	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	0.31 ug/Kg		10/04/19 14:40	10/05/19 21:35	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-1**  
**Date Collected: 10/03/19 13:35**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.89	0.32 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1-Dichloroethane	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1-Dichloroethene	ND		0.89	0.31 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2,3-Trichlorobenzene	ND		1.8	0.82 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2,3-Trichloropropane	ND		1.8	0.74 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2,4-Trimethylbenzene	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2-Dibromo-3-Chloropropane	ND		8.9	1.6 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2-Dibromoethane	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2-Dichlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2-Dichloroethane	ND		0.89	0.28 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,2-Dichloropropane	ND		0.89	0.39 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,3-Dichlorobenzene	ND		0.89	0.16 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,3-Dichloropropane	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
1,4-Dichlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
2,2-Dichloropropane	ND		4.5	0.30 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
2-Chlorotoluene	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
4-Chlorotoluene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
<b>Acetone</b>	<b>45</b>		45	5.6 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
<b>Benzene</b>	<b>4.0</b>		0.89	0.12 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Bromobenzene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Bromochloromethane	ND		1.8	0.62 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Bromodichloromethane	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Bromoform	ND		4.5	0.71 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Bromomethane	ND		18	8.4 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
cis-1,2-Dichloroethene	ND		0.89	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
cis-1,3-Dichloropropene	ND		0.89	0.23 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Carbon disulfide	ND		8.9	0.27 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Carbon tetrachloride	ND		0.89	0.25 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Chlorobenzene	ND		0.89	0.20 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Chloroform	ND		0.89	0.21 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Dibromochloromethane	ND		1.8	0.51 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Dibromomethane	ND		0.89	0.69 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Di-isopropyl ether (DIPE)	ND		0.89	0.43 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Ethanol	ND		450	75 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Ethylbenzene	ND		0.89	0.14 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Ethyl-t-butyl ether (ETBE)	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Isopropylbenzene	ND		0.89	0.49 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Methylene Chloride	ND		8.9	1.2 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Naphthalene	ND		8.9	0.73 ug/Kg		10/04/19 14:40	10/05/19 21:35	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-1**

**Date Collected: 10/03/19 13:35**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-21**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.89	0.14 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
N-Propylbenzene	ND		1.8	0.45 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
o-Xylene	ND		0.89	0.50 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
p-Isopropyltoluene	ND		0.89	0.56 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
sec-Butylbenzene	ND		0.89	0.52 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Styrene	ND		0.89	0.54 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
trans-1,2-Dichloroethene	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Tert-amyl-methyl ether (TAME)	ND		0.89	0.31 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
tert-Butylbenzene	ND		0.89	0.13 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Tetrachloroethene	ND		0.89	0.19 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
<b>Toluene</b>	<b>3.4</b>		0.89	0.46 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Trichlorofluoromethane	ND		8.9	0.34 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Vinyl acetate	ND		8.9	4.2 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Vinyl chloride	ND		0.89	0.45 ug/Kg		10/04/19 14:40	10/05/19 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155			10/04/19 14:40	10/05/19 21:35	1
4-Bromofluorobenzene (Surr)	99		80 - 120			10/04/19 14:40	10/05/19 21:35	1
Dibromofluoromethane (Surr)	94		79 - 133			10/04/19 14:40	10/05/19 21:35	1
Toluene-d8 (Surr)	100		80 - 120			10/04/19 14:40	10/05/19 21:35	1

**Client Sample ID: SV8-3**

**Date Collected: 10/03/19 13:40**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-22**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1,1-Trichloroethane	ND		0.91	0.20 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1,2-Trichloroethane	ND		0.91	0.32 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1-Dichloroethane	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1-Dichloroethene	ND		0.91	0.31 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2,3-Trichlorobenzene	ND		1.8	0.83 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2,3-Trichloropropane	ND		1.8	0.75 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2,4-Trimethylbenzene	ND		1.8	0.53 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2-Dibromoethane	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2-Dichlorobenzene	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2-Dichloroethane	ND		0.91	0.29 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,2-Dichloropropane	ND		0.91	0.40 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,3,5-Trimethylbenzene	ND		1.8	0.50 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,3-Dichlorobenzene	ND		0.91	0.16 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,3-Dichloropropane	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
1,4-Dichlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:40	10/05/19 22:02	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-3**

**Date Collected: 10/03/19 13:40**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-22**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		4.5	0.30 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
2-Chlorotoluene	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
4-Chlorotoluene	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Acetone	ND		45	5.7 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
<b>Benzene</b>	<b>1.1</b>		0.91	0.12 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Bromobenzene	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Bromochloromethane	ND		1.8	0.63 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Bromodichloromethane	ND		0.91	0.21 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Bromoform	ND		4.5	0.72 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Bromomethane	ND		18	8.6 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
cis-1,2-Dichloroethene	ND		0.91	0.25 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
cis-1,3-Dichloropropene	ND		0.91	0.23 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Carbon disulfide	ND		9.1	0.28 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Carbon tetrachloride	ND		0.91	0.26 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Chlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Chloroform	ND		0.91	0.22 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Chloromethane	ND		18	0.28 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Dibromochloromethane	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Dibromomethane	ND		0.91	0.70 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Ethanol	ND		450	76 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Ethylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Isopropylbenzene	ND		0.91	0.50 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Methylene Chloride	ND		9.1	1.2 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Naphthalene	ND		9.1	0.74 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
n-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
o-Xylene	ND		0.91	0.51 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
p-Isopropyltoluene	ND		0.91	0.57 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
sec-Butylbenzene	ND		0.91	0.52 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Styrene	ND		0.91	0.55 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
trans-1,2-Dichloroethene	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
trans-1,3-Dichloropropene	ND		1.8	0.55 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
tert-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Tetrachloroethene	ND		0.91	0.19 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Toluene	ND		0.91	0.47 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Trichlorofluoromethane	ND		9.1	0.34 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Vinyl acetate	ND		9.1	4.3 ug/Kg		10/04/19 14:40	10/05/19 22:02	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-3**

**Date Collected: 10/03/19 13:40**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-22**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.91	0.46 ug/Kg		10/04/19 14:40	10/05/19 22:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155			10/04/19 14:40	10/05/19 22:02	1
4-Bromofluorobenzene (Surr)	105		80 - 120			10/04/19 14:40	10/05/19 22:02	1
Dibromofluoromethane (Surr)	93		79 - 133			10/04/19 14:40	10/05/19 22:02	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:40	10/05/19 22:02	1

**Client Sample ID: SV8-5**

**Date Collected: 10/03/19 13:45**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-23**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1,1-Trichloroethane	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.8	0.31 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1,2-Trichloroethane	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1-Dichloroethane	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1-Dichloroethene	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2,3-Trichlorobenzene	ND		1.8	0.81 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2,3-Trichloropropane	ND		1.8	0.73 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2,4-Trichlorobenzene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2,4-Trimethylbenzene	ND		1.8	0.52 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2-Dibromo-3-Chloropropane	ND		8.8	1.5 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2-Dibromoethane	ND		0.88	0.23 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2-Dichloroethane	ND		0.88	0.28 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,2-Dichloropropane	ND		0.88	0.39 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,3-Dichlorobenzene	ND		0.88	0.16 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,3-Dichloropropane	ND		0.88	0.22 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
1,4-Dichlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
2,2-Dichloropropane	ND		4.4	0.29 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
2-Butanone	ND		18	3.3 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
2-Chlorotoluene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
4-Chlorotoluene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
4-Methyl-2-pentanone	ND		18	3.8 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Acetone	ND		44	5.5 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Benzene	ND		0.88	0.11 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Bromobenzene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Bromochloromethane	ND		1.8	0.61 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Bromodichloromethane	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Bromoform	ND		4.4	0.70 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Bromomethane	ND		18	8.3 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
cis-1,2-Dichloroethene	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
cis-1,3-Dichloropropene	ND		0.88	0.22 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Carbon disulfide	ND		8.8	0.27 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Carbon tetrachloride	ND		0.88	0.25 ug/Kg		10/04/19 14:40	10/08/19 13:41	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-5**  
**Date Collected: 10/03/19 13:45**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.88	0.20 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Chloroform	ND		0.88	0.21 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Dibromochloromethane	ND		1.8	0.50 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Dibromomethane	ND		0.88	0.68 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Dichlorodifluoromethane	ND		1.8	0.39 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Di-isopropyl ether (DIPE)	ND		0.88	0.43 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Ethanol	ND		440	74 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Ethylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Ethyl-t-butyl ether (ETBE)	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Isopropylbenzene	ND		0.88	0.48 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Methylene Chloride	ND		8.8	1.2 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Naphthalene	ND		8.8	0.72 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
n-Butylbenzene	ND		0.88	0.14 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
N-Propylbenzene	ND		1.8	0.44 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
o-Xylene	ND		0.88	0.49 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
p-Isopropyltoluene	ND		0.88	0.56 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
sec-Butylbenzene	ND		0.88	0.51 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Styrene	ND		0.88	0.53 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
trans-1,2-Dichloroethene	ND		0.88	0.45 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Tert-amyl-methyl ether (TAME)	ND		0.88	0.31 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
tert-Butylbenzene	ND		0.88	0.13 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Tetrachloroethene	ND		0.88	0.19 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Toluene	ND		0.88	0.46 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Trichlorofluoromethane	ND		8.8	0.33 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Vinyl acetate	ND		8.8	4.2 ug/Kg		10/04/19 14:40	10/08/19 13:41	1
Vinyl chloride	ND		0.88	0.44 ug/Kg		10/04/19 14:40	10/08/19 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		71 - 155	10/04/19 14:40	10/08/19 13:41	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120	10/04/19 14:40	10/08/19 13:41	1
<i>Dibromofluoromethane (Surr)</i>	105		79 - 133	10/04/19 14:40	10/08/19 13:41	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120	10/04/19 14:40	10/08/19 13:41	1

**Client Sample ID: SV8-10**  
**Date Collected: 10/03/19 13:55**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.84	0.20 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1,1-Trichloroethane	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.4	0.29 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1,2-Trichloroethane	ND		0.84	0.30 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1-Dichloroethane	ND		0.84	0.18 ug/Kg		10/04/19 14:40	10/08/19 14:07	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-10**  
**Date Collected: 10/03/19 13:55**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.84	0.29 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.5 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2-Dibromoethane	ND		0.84	0.21 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2-Dichlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2-Dichloroethane	ND		0.84	0.26 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,2-Dichloropropane	ND		0.84	0.37 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,3-Dichlorobenzene	ND		0.84	0.15 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,3-Dichloropropane	ND		0.84	0.21 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
1,4-Dichlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
2,2-Dichloropropane	ND		4.2	0.28 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
2-Butanone	ND		17	3.2 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
2-Chlorotoluene	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
4-Chlorotoluene	ND		0.84	0.18 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Acetone	ND		42	5.2 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Benzene	ND		0.84	0.11 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Bromobenzene	ND		0.84	0.18 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Bromochloromethane	ND		1.7	0.58 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Bromodichloromethane	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Bromoform	ND		4.2	0.66 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Bromomethane	ND		17	7.9 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
cis-1,2-Dichloroethene	ND		0.84	0.23 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
cis-1,3-Dichloropropene	ND		0.84	0.21 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Carbon disulfide	ND		8.4	0.26 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Carbon tetrachloride	ND		0.84	0.24 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Chlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Chloroform	ND		0.84	0.20 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Dibromochloromethane	ND		1.7	0.48 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Dibromomethane	ND		0.84	0.65 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Di-isopropyl ether (DIPE)	ND		0.84	0.40 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Ethanol	ND		420	70 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Ethylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Ethyl-t-butyl ether (ETBE)	ND		0.84	0.42 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Isopropylbenzene	ND		0.84	0.46 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Methylene Chloride	ND		8.4	1.1 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Naphthalene	ND		8.4	0.68 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
n-Butylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:40	10/08/19 14:07	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-10**  
**Date Collected: 10/03/19 13:55**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.84	0.47 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
p-Isopropyltoluene	ND		0.84	0.53 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
sec-Butylbenzene	ND		0.84	0.48 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Styrene	ND		0.84	0.51 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
trans-1,2-Dichloroethene	ND		0.84	0.42 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
trans-1,3-Dichloropropene	ND		1.7	0.51 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Tert-amyl-methyl ether (TAME)	ND		0.84	0.29 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
tert-Butylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Tetrachloroethene	ND		0.84	0.18 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Toluene	ND		0.84	0.43 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Trichlorofluoromethane	ND		8.4	0.31 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Vinyl acetate	ND		8.4	4.0 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Vinyl chloride	ND		0.84	0.42 ug/Kg		10/04/19 14:40	10/08/19 14:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155			10/04/19 14:40	10/08/19 14:07	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/04/19 14:40	10/08/19 14:07	1
Dibromofluoromethane (Surr)	104		79 - 133			10/04/19 14:40	10/08/19 14:07	1
Toluene-d8 (Surr)	100		80 - 120			10/04/19 14:40	10/08/19 14:07	1

**Client Sample ID: SV8-15**  
**Date Collected: 10/03/19 14:00**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.80	0.19 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1,1-Trichloroethane	ND		0.80	0.18 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.28 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	0.28 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1,2-Trichloroethane	ND		0.80	0.28 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1-Dichloroethane	ND		0.80	0.17 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1-Dichloroethene	ND		0.80	0.28 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,1-Dichloropropene	ND		1.6	0.26 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2,3-Trichlorobenzene	ND		1.6	0.73 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2,3-Trichloropropane	ND		1.6	0.66 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2,4-Trichlorobenzene	ND		1.6	0.25 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2,4-Trimethylbenzene	ND		1.6	0.47 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2-Dibromo-3-Chloropropane	ND		8.0	1.4 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2-Dibromoethane	ND		0.80	0.20 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2-Dichlorobenzene	ND		0.80	0.18 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2-Dichloroethane	ND		0.80	0.25 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,2-Dichloropropane	ND		0.80	0.35 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,3,5-Trimethylbenzene	ND		1.6	0.44 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,3-Dichlorobenzene	ND		0.80	0.14 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,3-Dichloropropane	ND		0.80	0.20 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
1,4-Dichlorobenzene	ND		0.80	0.18 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
2,2-Dichloropropane	ND		4.0	0.26 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
2-Butanone	ND		16	3.0 ug/Kg		10/04/19 14:16	10/05/19 17:36	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-15**

**Date Collected: 10/03/19 14:00**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-25**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.80	0.18 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
2-Hexanone	ND		16	1.4 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
4-Chlorotoluene	ND		0.80	0.17 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
4-Methyl-2-pentanone	ND		16	3.5 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Acetone	ND		40	5.0 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Benzene	ND		0.80	0.10 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Bromobenzene	ND		0.80	0.17 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Bromochloromethane	ND		1.6	0.55 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Bromodichloromethane	ND		0.80	0.19 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Bromoform	ND		4.0	0.63 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Bromomethane	ND		16	7.5 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
cis-1,2-Dichloroethene	ND		0.80	0.22 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
cis-1,3-Dichloropropene	ND		0.80	0.20 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Carbon disulfide	ND		8.0	0.24 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Carbon tetrachloride	ND		0.80	0.23 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Chlorobenzene	ND		0.80	0.18 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Chloroethane	ND		1.6	1.2 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Chloroform	ND		0.80	0.19 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Chloromethane	ND		16	0.24 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Dibromochloromethane	ND		1.6	0.46 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Dibromomethane	ND		0.80	0.62 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Dichlorodifluoromethane	ND		1.6	0.35 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Di-isopropyl ether (DIPE)	ND		0.80	0.39 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Ethanol	ND		400	67 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Ethylbenzene	ND		0.80	0.12 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Ethyl-t-butyl ether (ETBE)	ND		0.80	0.40 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Isopropylbenzene	ND		0.80	0.44 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Methylene Chloride	ND		8.0	1.1 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.24 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Naphthalene	ND		8.0	0.65 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
n-Butylbenzene	ND		0.80	0.13 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
N-Propylbenzene	ND		1.6	0.40 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
o-Xylene	ND		0.80	0.44 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
m,p-Xylene	ND		1.6	0.21 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
p-Isopropyltoluene	ND		0.80	0.50 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
sec-Butylbenzene	ND		0.80	0.46 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Styrene	ND		0.80	0.48 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
trans-1,2-Dichloroethene	ND		0.80	0.40 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
trans-1,3-Dichloropropene	ND		1.6	0.48 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Tert-amyl-methyl ether (TAME)	ND		0.80	0.28 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
tert-Butyl alcohol (TBA)	ND		16	4.1 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
tert-Butylbenzene	ND		0.80	0.12 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Tetrachloroethene	ND		0.80	0.17 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Toluene	ND		0.80	0.41 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Trichloroethene	ND		1.6	0.24 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Trichlorofluoromethane	ND		8.0	0.30 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Vinyl acetate	ND		8.0	3.8 ug/Kg		10/04/19 14:16	10/05/19 17:36	1
Vinyl chloride	ND		0.80	0.40 ug/Kg		10/04/19 14:16	10/05/19 17:36	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		71 - 155	10/04/19 14:16	10/05/19 17:36	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 17:36	1
Dibromofluoromethane (Surr)	100		79 - 133	10/04/19 14:16	10/05/19 17:36	1
Toluene-d8 (Surr)	102		80 - 120	10/04/19 14:16	10/05/19 17:36	1

**Client Sample ID: SV8-20**

**Date Collected: 10/03/19 14:05**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-26**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.84	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1,1-Trichloroethane	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.4	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1,2-Trichloroethane	ND		0.84	0.30 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1-Dichloroethane	ND		0.84	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1-Dichloroethene	ND		0.84	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2-Dibromo-3-Chloropropane	ND		8.4	1.5 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2-Dibromoethane	ND		0.84	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2-Dichlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2-Dichloroethane	ND		0.84	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,2-Dichloropropane	ND		0.84	0.37 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,3-Dichlorobenzene	ND		0.84	0.15 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,3-Dichloropropane	ND		0.84	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
1,4-Dichlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
2,2-Dichloropropane	ND		4.2	0.28 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
2-Butanone	ND		17	3.2 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
2-Chlorotoluene	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
4-Chlorotoluene	ND		0.84	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Acetone	ND		42	5.2 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Benzene	ND		0.84	0.11 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Bromobenzene	ND		0.84	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Bromochloromethane	ND		1.7	0.58 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Bromodichloromethane	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Bromoform	ND		4.2	0.66 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Bromomethane	ND		17	7.9 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
cis-1,2-Dichloroethene	ND		0.84	0.23 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
cis-1,3-Dichloropropene	ND		0.84	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Carbon disulfide	ND		8.4	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Carbon tetrachloride	ND		0.84	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Chlorobenzene	ND		0.84	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Chloroform	ND		0.84	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Dibromochloromethane	ND		1.7	0.48 ug/Kg		10/04/19 14:16	10/05/19 18:02	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-20**  
**Date Collected: 10/03/19 14:05**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.84	0.65 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Di-isopropyl ether (DIPE)	ND		0.84	0.40 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Ethanol	ND		420	70 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Ethylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Ethyl-t-butyl ether (ETBE)	ND		0.84	0.42 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Isopropylbenzene	ND		0.84	0.46 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Methylene Chloride	ND		8.4	1.1 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Naphthalene	ND		8.4	0.68 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
n-Butylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
o-Xylene	ND		0.84	0.46 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
p-Isopropyltoluene	ND		0.84	0.53 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
sec-Butylbenzene	ND		0.84	0.48 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Styrene	ND		0.84	0.51 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
trans-1,2-Dichloroethene	ND		0.84	0.42 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
trans-1,3-Dichloropropene	ND		1.7	0.51 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Tert-amyl-methyl ether (TAME)	ND		0.84	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
tert-Butylbenzene	ND		0.84	0.13 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Tetrachloroethene	ND		0.84	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Toluene	ND		0.84	0.43 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Trichlorofluoromethane	ND		8.4	0.31 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Vinyl acetate	ND		8.4	4.0 ug/Kg		10/04/19 14:16	10/05/19 18:02	1
Vinyl chloride	ND		0.84	0.42 ug/Kg		10/04/19 14:16	10/05/19 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155	10/04/19 14:16	10/05/19 18:02	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 18:02	1
Dibromofluoromethane (Surr)	97		79 - 133	10/04/19 14:16	10/05/19 18:02	1
Toluene-d8 (Surr)	102		80 - 120	10/04/19 14:16	10/05/19 18:02	1

**Client Sample ID: SV8-25**  
**Date Collected: 10/03/19 14:10**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-27**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.96	0.23 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1,1-Trichloroethane	ND		0.96	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.6	0.34 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1,2-Trichloroethane	ND		0.96	0.34 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1-Dichloroethane	ND		0.96	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1-Dichloroethene	ND		0.96	0.33 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2,3-Trichlorobenzene	ND		1.9	0.88 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2,3-Trichloropropane	ND		1.9	0.80 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2,4-Trichlorobenzene	ND		1.9	0.30 ug/Kg		10/04/19 14:16	10/05/19 18:27	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-25**  
**Date Collected: 10/03/19 14:10**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-27**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.9	0.56 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.7 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2-Dibromoethane	ND		0.96	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2-Dichlorobenzene	ND		0.96	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2-Dichloroethane	ND		0.96	0.30 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,2-Dichloropropane	ND		0.96	0.42 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,3,5-Trimethylbenzene	ND		1.9	0.53 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,3-Dichlorobenzene	ND		0.96	0.17 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,3-Dichloropropane	ND		0.96	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
1,4-Dichlorobenzene	ND		0.96	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
2,2-Dichloropropane	ND		4.8	0.32 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
2-Butanone	ND		19	3.6 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
2-Chlorotoluene	ND		0.96	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
2-Hexanone	ND		19	1.7 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
4-Chlorotoluene	ND		0.96	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Acetone	ND		48	6.0 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Benzene	ND		0.96	0.12 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Bromobenzene	ND		0.96	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Bromochloromethane	ND		1.9	0.66 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Bromodichloromethane	ND		0.96	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Bromoform	ND		4.8	0.76 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Bromomethane	ND		19	9.0 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
cis-1,2-Dichloroethene	ND		0.96	0.27 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
cis-1,3-Dichloropropene	ND		0.96	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Carbon disulfide	ND		9.6	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Carbon tetrachloride	ND		0.96	0.27 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Chlorobenzene	ND		0.96	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Chloroform	ND		0.96	0.23 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Chloromethane	ND		19	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Dibromochloromethane	ND		1.9	0.55 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Dibromomethane	ND		0.96	0.74 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Dichlorodifluoromethane	ND		1.9	0.43 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Di-isopropyl ether (DIPE)	ND		0.96	0.46 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Ethanol	ND		480	80 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Ethylbenzene	ND		0.96	0.15 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Ethyl-t-butyl ether (ETBE)	ND		0.96	0.49 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Isopropylbenzene	ND		0.96	0.52 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Methylene Chloride	ND		9.6	1.3 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Naphthalene	ND		9.6	0.78 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
n-Butylbenzene	ND		0.96	0.15 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
N-Propylbenzene	ND		1.9	0.48 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
o-Xylene	ND		0.96	0.53 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
m,p-Xylene	ND		1.9	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
p-Isopropyltoluene	ND		0.96	0.60 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
sec-Butylbenzene	ND		0.96	0.55 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Styrene	ND		0.96	0.58 ug/Kg		10/04/19 14:16	10/05/19 18:27	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-25**  
**Date Collected: 10/03/19 14:10**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-27**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.96	0.49 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
trans-1,3-Dichloropropene	ND		1.9	0.58 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Tert-amyl-methyl ether (TAME)	ND		0.96	0.34 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
tert-Butyl alcohol (TBA)	ND		19	5.0 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
tert-Butylbenzene	ND		0.96	0.14 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Tetrachloroethene	ND		0.96	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Toluene	ND		0.96	0.49 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Trichloroethene	ND		1.9	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Trichlorofluoromethane	ND		9.6	0.36 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Vinyl acetate	ND		9.6	4.6 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Vinyl chloride	ND		0.96	0.48 ug/Kg		10/04/19 14:16	10/05/19 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		71 - 155			10/04/19 14:16	10/05/19 18:27	1
4-Bromofluorobenzene (Surr)	101		80 - 120			10/04/19 14:16	10/05/19 18:27	1
Dibromofluoromethane (Surr)	94		79 - 133			10/04/19 14:16	10/05/19 18:27	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:16	10/05/19 18:27	1

**Client Sample ID: SV8-30**  
**Date Collected: 10/03/19 14:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1,1-Trichloroethane	ND		0.78	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	0.28 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1,2-Trichloroethane	ND		0.78	0.28 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1-Dichloroethane	ND		0.78	0.17 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1-Dichloroethene	ND		0.78	0.27 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,1-Dichloropropene	ND		1.6	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2,3-Trichlorobenzene	ND		1.6	0.71 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2,3-Trichloropropane	ND		1.6	0.65 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2,4-Trichlorobenzene	ND		1.6	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2,4-Trimethylbenzene	ND		1.6	0.46 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.4 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2-Dibromoethane	ND		0.78	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2-Dichlorobenzene	ND		0.78	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2-Dichloroethane	ND		0.78	0.25 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,2-Dichloropropane	ND		0.78	0.34 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,3,5-Trimethylbenzene	ND		1.6	0.43 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,3-Dichlorobenzene	ND		0.78	0.14 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,3-Dichloropropane	ND		0.78	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
1,4-Dichlorobenzene	ND		0.78	0.17 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
2,2-Dichloropropane	ND		3.9	0.26 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
2-Butanone	ND		16	2.9 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
2-Chlorotoluene	ND		0.78	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
2-Hexanone	ND		16	1.4 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
4-Chlorotoluene	ND		0.78	0.17 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
4-Methyl-2-pentanone	ND		16	3.4 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Acetone	ND		39	4.9 ug/Kg		10/04/19 14:16	10/05/19 18:53	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV8-30**  
**Date Collected: 10/03/19 14:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.79</b>		0.78	0.10 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Bromobenzene	ND		0.78	0.16 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Bromochloromethane	ND		1.6	0.54 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Bromodichloromethane	ND		0.78	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Bromoform	ND		3.9	0.62 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Bromomethane	ND		16	7.4 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
cis-1,2-Dichloroethene	ND		0.78	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
cis-1,3-Dichloropropene	ND		0.78	0.20 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Carbon disulfide	ND		7.8	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Carbon tetrachloride	ND		0.78	0.22 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Chlorobenzene	ND		0.78	0.18 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Chloroethane	ND		1.6	1.2 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Chloroform	ND		0.78	0.19 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Chloromethane	ND		16	0.24 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Dibromochloromethane	ND		1.6	0.45 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Dibromomethane	ND		0.78	0.61 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Dichlorodifluoromethane	ND		1.6	0.35 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Di-isopropyl ether (DIPE)	ND		0.78	0.38 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Ethanol	ND		390	65 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Ethylbenzene	ND		0.78	0.12 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Ethyl-t-butyl ether (ETBE)	ND		0.78	0.40 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Isopropylbenzene	ND		0.78	0.43 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Methylene Chloride	ND		7.8	1.0 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Naphthalene	ND		7.8	0.64 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
n-Butylbenzene	ND		0.78	0.12 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
N-Propylbenzene	ND		1.6	0.39 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
o-Xylene	ND		0.78	0.43 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
m,p-Xylene	ND		1.6	0.21 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
p-Isopropyltoluene	ND		0.78	0.49 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
sec-Butylbenzene	ND		0.78	0.45 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Styrene	ND		0.78	0.47 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
trans-1,2-Dichloroethene	ND		0.78	0.40 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
trans-1,3-Dichloropropene	ND		1.6	0.47 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Tert-amyl-methyl ether (TAME)	ND		0.78	0.28 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
tert-Butyl alcohol (TBA)	ND		16	4.0 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
tert-Butylbenzene	ND		0.78	0.12 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Tetrachloroethene	ND		0.78	0.16 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Toluene	ND		0.78	0.40 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Trichloroethene	ND		1.6	0.23 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Trichlorofluoromethane	ND		7.8	0.29 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Vinyl acetate	ND		7.8	3.7 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
Vinyl chloride	ND		0.78	0.39 ug/Kg		10/04/19 14:16	10/05/19 18:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		71 - 155			10/04/19 14:16	10/05/19 18:53	1
4-Bromofluorobenzene (Surr)	100		80 - 120			10/04/19 14:16	10/05/19 18:53	1
Dibromofluoromethane (Surr)	99		79 - 133			10/04/19 14:16	10/05/19 18:53	1
Toluene-d8 (Surr)	102		80 - 120			10/04/19 14:16	10/05/19 18:53	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SV1-1**

**Date Collected: 10/03/19 14:45**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-29**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.71	0.17 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1,1-Trichloroethane	ND		0.71	0.16 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.1	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1,2-Trichloroethane	ND		0.71	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1-Dichloroethane	ND		0.71	0.15 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1-Dichloroethene	ND		0.71	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2,3-Trichlorobenzene	ND		1.4	0.65 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2,3-Trichloropropane	ND		1.4	0.59 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2,4-Trichlorobenzene	ND		1.4	0.22 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2,4-Trimethylbenzene	ND		1.4	0.42 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2-Dibromoethane	ND		0.71	0.18 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2-Dichloroethane	ND		0.71	0.22 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,2-Dichloropropane	ND		0.71	0.31 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,3,5-Trimethylbenzene	ND		1.4	0.39 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,3-Dichlorobenzene	ND		0.71	0.13 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,3-Dichloropropane	ND		0.71	0.18 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
1,4-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
2,2-Dichloropropane	ND		3.6	0.24 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
2-Butanone	ND		14	2.7 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
2-Chlorotoluene	ND		0.71	0.16 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
2-Hexanone	ND		14	1.3 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
4-Chlorotoluene	ND		0.71	0.15 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
4-Methyl-2-pentanone	ND		14	3.1 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Acetone	ND		36	4.4 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
<b>Benzene</b>	<b>1.5</b>		0.71	0.093 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Bromobenzene	ND		0.71	0.15 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Bromochloromethane	ND		1.4	0.49 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Bromodichloromethane	ND		0.71	0.17 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Bromoform	ND		3.6	0.57 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Bromomethane	ND		14	6.7 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
cis-1,2-Dichloroethene	ND		0.71	0.20 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
cis-1,3-Dichloropropene	ND		0.71	0.18 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Carbon disulfide	ND		7.1	0.22 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Carbon tetrachloride	ND		0.71	0.20 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Chlorobenzene	ND		0.71	0.16 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Chloroethane	ND		1.4	1.1 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Chloroform	ND		0.71	0.17 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Chloromethane	ND		14	0.22 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Dibromochloromethane	ND		1.4	0.41 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Dibromomethane	ND		0.71	0.55 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Dichlorodifluoromethane	ND		1.4	0.32 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Di-isopropyl ether (DIPE)	ND		0.71	0.34 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Ethanol	ND		360	60 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Ethylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Ethyl-t-butyl ether (ETBE)	ND		0.71	0.36 ug/Kg		10/04/19 14:16	10/05/19 19:19	1

Eurofins Calscience LLC



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-1**

**Date Collected: 10/03/19 14:45**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-29**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.71	0.39 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Methylene Chloride	ND		7.1	0.95 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Naphthalene	ND		7.1	0.58 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
n-Butylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
N-Propylbenzene	ND		1.4	0.36 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
o-Xylene	ND		0.71	0.40 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
p-Isopropyltoluene	ND		0.71	0.45 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
sec-Butylbenzene	ND		0.71	0.41 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Styrene	ND		0.71	0.43 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
trans-1,2-Dichloroethene	ND		0.71	0.36 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
trans-1,3-Dichloropropene	ND		1.4	0.43 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Tert-amyl-methyl ether (TAME)	ND		0.71	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
tert-Butyl alcohol (TBA)	ND		14	3.7 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
tert-Butylbenzene	ND		0.71	0.11 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Tetrachloroethene	ND		0.71	0.15 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
<b>Toluene</b>	<b>0.99</b>		0.71	0.37 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Trichlorofluoromethane	ND		7.1	0.27 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Vinyl acetate	ND		7.1	3.4 ug/Kg		10/04/19 14:16	10/05/19 19:19	1
Vinyl chloride	ND		0.71	0.36 ug/Kg		10/04/19 14:16	10/05/19 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155	10/04/19 14:16	10/05/19 19:19	1
4-Bromofluorobenzene (Surr)	100		80 - 120	10/04/19 14:16	10/05/19 19:19	1
Dibromofluoromethane (Surr)	99		79 - 133	10/04/19 14:16	10/05/19 19:19	1
Toluene-d8 (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 19:19	1

**Client Sample ID: SV1-3**

**Date Collected: 10/03/19 14:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-30**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1,2-Trichloroethane	ND		0.83	0.30 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1-Dichloroethane	ND		0.83	0.18 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.5 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,2-Dichloropropane	ND		0.83	0.37 ug/Kg		10/04/19 14:16	10/05/19 19:45	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-3**

**Date Collected: 10/03/19 14:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-30**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.7	0.46 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
1,4-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
2,2-Dichloropropane	ND		4.2	0.28 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
2-Butanone	ND		17	3.1 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
2-Hexanone	ND		17	1.5 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Acetone	ND		42	5.2 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
<b>Benzene</b>	<b>0.91</b>		0.83	0.11 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Bromochloromethane	ND		1.7	0.58 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Bromoform	ND		4.2	0.66 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Bromomethane	ND		17	7.9 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Carbon tetrachloride	ND		0.83	0.24 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Chlorobenzene	ND		0.83	0.19 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Chloroform	ND		0.83	0.20 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Chloromethane	ND		17	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Dibromochloromethane	ND		1.7	0.48 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Dibromomethane	ND		0.83	0.65 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Ethanol	ND		420	70 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Isopropylbenzene	ND		0.83	0.46 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Naphthalene	ND		8.3	0.68 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
p-Isopropyltoluene	ND		0.83	0.53 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Styrene	ND		0.83	0.50 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
trans-1,3-Dichloropropene	ND		1.7	0.51 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
tert-Butylbenzene	ND		0.83	0.13 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/04/19 14:16	10/05/19 19:45	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-3**

**Date Collected: 10/03/19 14:50**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-30**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.83	0.43 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Vinyl acetate	ND		8.3	4.0 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/04/19 14:16	10/05/19 19:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155			10/04/19 14:16	10/05/19 19:45	1
4-Bromofluorobenzene (Surr)	99		80 - 120			10/04/19 14:16	10/05/19 19:45	1
Dibromofluoromethane (Surr)	99		79 - 133			10/04/19 14:16	10/05/19 19:45	1
Toluene-d8 (Surr)	101		80 - 120			10/04/19 14:16	10/05/19 19:45	1

**Client Sample ID: SV1-5**

**Date Collected: 10/03/19 14:55**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-31**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1,1-Trichloroethane	ND		0.91	0.21 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1,2-Trichloroethane	ND		0.91	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1-Dichloroethane	ND		0.91	0.19 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1-Dichloroethene	ND		0.91	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2,3-Trichlorobenzene	ND		1.8	0.83 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2,3-Trichloropropane	ND		1.8	0.76 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2,4-Trimethylbenzene	ND		1.8	0.54 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2-Dibromoethane	ND		0.91	0.23 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2-Dichlorobenzene	ND		0.91	0.21 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2-Dichloroethane	ND		0.91	0.29 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,2-Dichloropropane	ND		0.91	0.40 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,3,5-Trimethylbenzene	ND		1.8	0.50 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,3-Dichlorobenzene	ND		0.91	0.16 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,3-Dichloropropane	ND		0.91	0.23 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
1,4-Dichlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
2,2-Dichloropropane	ND		4.6	0.30 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
2-Chlorotoluene	ND		0.91	0.21 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
4-Chlorotoluene	ND		0.91	0.19 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Acetone	ND		46	5.7 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
<b>Benzene</b>	<b>1.0</b>		0.91	0.12 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Bromobenzene	ND		0.91	0.19 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Bromochloromethane	ND		1.8	0.63 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Bromodichloromethane	ND		0.91	0.21 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Bromoform	ND		4.6	0.73 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Bromomethane	ND		18	8.6 ug/Kg		10/04/19 14:16	10/05/19 20:11	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-5**

**Date Collected: 10/03/19 14:55**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-31**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.91	0.26 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
cis-1,3-Dichloropropene	ND		0.91	0.23 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Carbon disulfide	ND		9.1	0.28 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Carbon tetrachloride	ND		0.91	0.26 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Chlorobenzene	ND		0.91	0.20 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Chloroform	ND		0.91	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Chloromethane	ND		18	0.28 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Dibromochloromethane	ND		1.8	0.52 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Dibromomethane	ND		0.91	0.71 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Dichlorodifluoromethane	ND		1.8	0.41 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Ethanol	ND		460	76 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Ethylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Isopropylbenzene	ND		0.91	0.50 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Methylene Chloride	ND		9.1	1.2 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Naphthalene	ND		9.1	0.74 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
n-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
o-Xylene	ND		0.91	0.51 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
p-Isopropyltoluene	ND		0.91	0.58 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
sec-Butylbenzene	ND		0.91	0.53 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Styrene	ND		0.91	0.55 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
trans-1,2-Dichloroethene	ND		0.91	0.46 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
trans-1,3-Dichloropropene	ND		1.8	0.55 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
tert-Butylbenzene	ND		0.91	0.14 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Tetrachloroethene	ND		0.91	0.19 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Toluene	ND		0.91	0.47 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Trichlorofluoromethane	ND		9.1	0.34 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Vinyl acetate	ND		9.1	4.3 ug/Kg		10/04/19 14:16	10/05/19 20:11	1
Vinyl chloride	ND		0.91	0.46 ug/Kg		10/04/19 14:16	10/05/19 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155	10/04/19 14:16	10/05/19 20:11	1
4-Bromofluorobenzene (Surr)	99		80 - 120	10/04/19 14:16	10/05/19 20:11	1
Dibromofluoromethane (Surr)	98		79 - 133	10/04/19 14:16	10/05/19 20:11	1
Toluene-d8 (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 20:11	1

**Client Sample ID: SV1-10**

**Date Collected: 10/03/19 15:15**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-32**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.72	0.17 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1,1-Trichloroethane	ND		0.72	0.16 ug/Kg		10/04/19 14:16	10/05/19 20:37	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-10**  
**Date Collected: 10/03/19 15:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.4	0.25 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.2	0.25 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1,2-Trichloroethane	ND		0.72	0.25 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1-Dichloroethane	ND		0.72	0.15 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1-Dichloroethene	ND		0.72	0.25 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,1-Dichloropropene	ND		1.4	0.24 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2,3-Trichlorobenzene	ND		1.4	0.66 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2,3-Trichloropropane	ND		1.4	0.60 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2,4-Trichlorobenzene	ND		1.4	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2,4-Trimethylbenzene	ND		1.4	0.42 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2-Dibromo-3-Chloropropane	ND		7.2	1.2 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2-Dibromoethane	ND		0.72	0.18 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2-Dichlorobenzene	ND		0.72	0.16 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2-Dichloroethane	ND		0.72	0.23 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,2-Dichloropropane	ND		0.72	0.31 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,3,5-Trimethylbenzene	ND		1.4	0.39 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,3-Dichlorobenzene	ND		0.72	0.13 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,3-Dichloropropane	ND		0.72	0.18 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
1,4-Dichlorobenzene	ND		0.72	0.16 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
2,2-Dichloropropane	ND		3.6	0.24 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
2-Butanone	ND		14	2.7 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
2-Chlorotoluene	ND		0.72	0.17 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
2-Hexanone	ND		14	1.3 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
4-Chlorotoluene	ND		0.72	0.15 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
4-Methyl-2-pentanone	ND		14	3.1 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Acetone	ND		36	4.5 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Benzene	ND		0.72	0.093 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Bromobenzene	ND		0.72	0.15 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Bromochloromethane	ND		1.4	0.50 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Bromodichloromethane	ND		0.72	0.17 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Bromoform	ND		3.6	0.57 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Bromomethane	ND		14	6.8 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
cis-1,2-Dichloroethene	ND		0.72	0.20 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
cis-1,3-Dichloropropene	ND		0.72	0.18 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Carbon disulfide	ND		7.2	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Carbon tetrachloride	ND		0.72	0.20 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Chlorobenzene	ND		0.72	0.16 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Chloroethane	ND		1.4	1.1 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Chloroform	ND		0.72	0.17 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Chloromethane	ND		14	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Dibromochloromethane	ND		1.4	0.41 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Dibromomethane	ND		0.72	0.56 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Dichlorodifluoromethane	ND		1.4	0.32 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Di-isopropyl ether (DIPE)	ND		0.72	0.35 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Ethanol	ND		360	60 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Ethylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Ethyl-t-butyl ether (ETBE)	ND		0.72	0.36 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Isopropylbenzene	ND		0.72	0.39 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Methylene Chloride	ND		7.2	0.96 ug/Kg		10/04/19 14:16	10/05/19 20:37	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-10**  
**Date Collected: 10/03/19 15:15**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-32**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Naphthalene	ND		7.2	0.58 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
n-Butylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
N-Propylbenzene	ND		1.4	0.36 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
o-Xylene	ND		0.72	0.40 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
p-Isopropyltoluene	ND		0.72	0.45 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
sec-Butylbenzene	ND		0.72	0.41 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Styrene	ND		0.72	0.43 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
trans-1,2-Dichloroethene	ND		0.72	0.36 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
trans-1,3-Dichloropropene	ND		1.4	0.43 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Tert-amyl-methyl ether (TAME)	ND		0.72	0.25 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
tert-Butyl alcohol (TBA)	ND		14	3.7 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
tert-Butylbenzene	ND		0.72	0.11 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Tetrachloroethene	ND		0.72	0.15 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Toluene	ND		0.72	0.37 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Trichloroethene	ND		1.4	0.22 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Trichlorofluoromethane	ND		7.2	0.27 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Vinyl acetate	ND		7.2	3.4 ug/Kg		10/04/19 14:16	10/05/19 20:37	1
Vinyl chloride	ND		0.72	0.36 ug/Kg		10/04/19 14:16	10/05/19 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155	10/04/19 14:16	10/05/19 20:37	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 20:37	1
Dibromofluoromethane (Surr)	98		79 - 133	10/04/19 14:16	10/05/19 20:37	1
Toluene-d8 (Surr)	101		80 - 120	10/04/19 14:16	10/05/19 20:37	1

**Client Sample ID: SV1-15**  
**Date Collected: 10/03/19 15:20**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.90	0.21 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1,1-Trichloroethane	ND		0.90	0.20 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.0	0.32 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1,2-Trichloroethane	ND		0.90	0.32 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1-Dichloroethane	ND		0.90	0.19 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1-Dichloroethene	ND		0.90	0.31 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,1-Dichloropropene	ND		1.8	0.29 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2,3-Trichlorobenzene	ND		1.8	0.82 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2,3-Trichloropropane	ND		1.8	0.74 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2,4-Trimethylbenzene	ND		1.8	0.53 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2-Dibromo-3-Chloropropane	ND		9.0	1.6 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2-Dibromoethane	ND		0.90	0.23 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2-Dichlorobenzene	ND		0.90	0.20 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2-Dichloroethane	ND		0.90	0.28 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,2-Dichloropropane	ND		0.90	0.39 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,3-Dichlorobenzene	ND		0.90	0.16 ug/Kg		10/04/19 14:16	10/05/19 21:02	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-15**

**Date Collected: 10/03/19 15:20**

**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-33**

**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.90	0.23 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
1,4-Dichlorobenzene	ND		0.90	0.20 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
2,2-Dichloropropane	ND		4.5	0.30 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
2-Butanone	ND		18	3.4 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
2-Chlorotoluene	ND		0.90	0.21 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
2-Hexanone	ND		18	1.6 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
4-Chlorotoluene	ND		0.90	0.19 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Acetone	ND		45	5.6 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Benzene	ND		0.90	0.12 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Bromobenzene	ND		0.90	0.19 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Bromochloromethane	ND		1.8	0.62 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Bromodichloromethane	ND		0.90	0.21 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Bromoform	ND		4.5	0.71 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Bromomethane	ND		18	8.4 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
cis-1,2-Dichloroethene	ND		0.90	0.25 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
cis-1,3-Dichloropropene	ND		0.90	0.23 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Carbon disulfide	ND		9.0	0.27 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Carbon tetrachloride	ND		0.90	0.25 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Chlorobenzene	ND		0.90	0.20 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Chloroform	ND		0.90	0.21 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Chloromethane	ND		18	0.27 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Dibromochloromethane	ND		1.8	0.51 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Dibromomethane	ND		0.90	0.69 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Di-isopropyl ether (DIPE)	ND		0.90	0.43 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Ethanol	ND		450	75 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Ethylbenzene	ND		0.90	0.14 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Ethyl-t-butyl ether (ETBE)	ND		0.90	0.45 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Isopropylbenzene	ND		0.90	0.49 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Methylene Chloride	ND		9.0	1.2 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.26 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Naphthalene	ND		9.0	0.73 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
n-Butylbenzene	ND		0.90	0.14 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
N-Propylbenzene	ND		1.8	0.45 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
o-Xylene	ND		0.90	0.50 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
p-Isopropyltoluene	ND		0.90	0.56 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
sec-Butylbenzene	ND		0.90	0.52 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Styrene	ND		0.90	0.54 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
trans-1,2-Dichloroethene	ND		0.90	0.45 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Tert-amyl-methyl ether (TAME)	ND		0.90	0.32 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
tert-Butyl alcohol (TBA)	ND		18	4.6 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
tert-Butylbenzene	ND		0.90	0.14 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Tetrachloroethene	ND		0.90	0.19 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Toluene	ND		0.90	0.46 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/04/19 14:16	10/05/19 21:02	1

Euofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
 Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV1-15**  
**Date Collected: 10/03/19 15:20**  
**Date Received: 10/03/19 17:35**

**Lab Sample ID: 570-9135-33**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		9.0	0.34 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Vinyl acetate	ND		9.0	4.3 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Vinyl chloride	ND		0.90	0.45 ug/Kg		10/04/19 14:16	10/05/19 21:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		71 - 155			10/04/19 14:16	10/05/19 21:02	1
4-Bromofluorobenzene (Surr)	101		80 - 120			10/04/19 14:16	10/05/19 21:02	1
Dibromofluoromethane (Surr)	99		79 - 133			10/04/19 14:16	10/05/19 21:02	1
Toluene-d8 (Surr)	102		80 - 120			10/04/19 14:16	10/05/19 21:02	1



# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-9135-1	SV5-1	110	101	101	100
570-9135-2	SV5-3	109	102	101	100
570-9135-3	SV5-5	112	103	99	103
570-9135-4	SV5-10	109	105	97	103
570-9135-5	SV5-15	110	106	96	103
570-9135-6	SV6-1	114	105	103	101
570-9135-7	SV6-3	113	103	98	102
570-9135-8	SV6-5	108	104	96	103
570-9135-9	SV6-10	112	103	101	105
570-9135-10	SV6-15	112	105	100	104
570-9135-11	SV3-1	111	103	99	102
570-9135-12	SV3-3	113	99	100	101
570-9135-13	SV3-5	107	105	85	102
570-9135-14	SV3-10	110	101	93	101
570-9135-15	SV3-15	111	112	85	102
570-9135-16	SV2-1	113	112	90	100
570-9135-17	SV2-3	114	104	94	101
570-9135-18	SV2-5	113	103	83	100
570-9135-19	SV2-10	113	102	94	101
570-9135-20	SV2-15	115	102	90	100
570-9135-21	SV8-1	110	99	94	100
570-9135-22	SV8-3	114	105	93	101
570-9135-23	SV8-5	108	101	105	100
570-9135-24	SV8-10	110	102	104	100
570-9135-25	SV8-15	115	101	100	102
570-9135-26	SV8-20	113	101	97	102
570-9135-27	SV8-25	107	101	94	101
570-9135-28	SV8-30	108	100	99	102
570-9135-29	SV1-1	113	100	99	101
570-9135-30	SV1-3	114	99	99	101
570-9135-31	SV1-5	110	99	98	101
570-9135-32	SV1-10	114	101	98	101
570-9135-33	SV1-15	112	101	99	102
LCS 570-23882/4	Lab Control Sample	100	100	98	105
LCS 570-24036/3	Lab Control Sample	96	99	97	99
LCS 570-24064/4	Lab Control Sample	99	106	105	100
LCS 570-24419/3	Lab Control Sample	93	99	98	100
LCSD 570-23882/5	Lab Control Sample Dup	98	103	97	101
LCSD 570-24036/4	Lab Control Sample Dup	96	99	97	101
LCSD 570-24064/5	Lab Control Sample Dup	100	105	105	101
LCSD 570-24419/4	Lab Control Sample Dup	94	100	99	100
MB 570-23882/7	Method Blank	99	102	98	102
MB 570-24036/6	Method Blank	101	98	97	101
MB 570-24064/7	Method Blank	98	102	102	100
MB 570-24419/6	Method Blank	99	99	100	100

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003  
TOL = Toluene-d8 (Surr)

Job ID: 570-9135-1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-23882/7

Matrix: Solid

Analysis Batch: 23882

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg			10/04/19 18:44	1
1,1,1-Trichloroethane	ND		1.0	0.23 ug/Kg			10/04/19 18:44	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg			10/04/19 18:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg			10/04/19 18:44	1
1,1,2-Trichloroethane	ND		1.0	0.35 ug/Kg			10/04/19 18:44	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg			10/04/19 18:44	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg			10/04/19 18:44	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/04/19 18:44	1
1,2,3-Trichlorobenzene	ND		2.0	0.91 ug/Kg			10/04/19 18:44	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg			10/04/19 18:44	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/04/19 18:44	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg			10/04/19 18:44	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg			10/04/19 18:44	1
1,2-Dibromoethane	ND		1.0	0.26 ug/Kg			10/04/19 18:44	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg			10/04/19 18:44	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg			10/04/19 18:44	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg			10/04/19 18:44	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg			10/04/19 18:44	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg			10/04/19 18:44	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg			10/04/19 18:44	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg			10/04/19 18:44	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/04/19 18:44	1
2-Butanone	ND		20	3.8 ug/Kg			10/04/19 18:44	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg			10/04/19 18:44	1
2-Hexanone	ND		20	1.8 ug/Kg			10/04/19 18:44	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg			10/04/19 18:44	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/04/19 18:44	1
Acetone	ND		50	6.2 ug/Kg			10/04/19 18:44	1
Benzene	ND		1.0	0.13 ug/Kg			10/04/19 18:44	1
Bromobenzene	ND		1.0	0.21 ug/Kg			10/04/19 18:44	1
Bromochloromethane	ND		2.0	0.69 ug/Kg			10/04/19 18:44	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg			10/04/19 18:44	1
Bromoform	ND		5.0	0.79 ug/Kg			10/04/19 18:44	1
Bromomethane	ND		20	9.4 ug/Kg			10/04/19 18:44	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg			10/04/19 18:44	1
cis-1,3-Dichloropropene	ND		1.0	0.25 ug/Kg			10/04/19 18:44	1
Carbon disulfide	ND		10	0.31 ug/Kg			10/04/19 18:44	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg			10/04/19 18:44	1
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/04/19 18:44	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/04/19 18:44	1
Chloroform	ND		1.0	0.24 ug/Kg			10/04/19 18:44	1
Chloromethane	ND		20	0.30 ug/Kg			10/04/19 18:44	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/04/19 18:44	1
Dibromomethane	ND		1.0	0.77 ug/Kg			10/04/19 18:44	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/04/19 18:44	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/04/19 18:44	1
Ethanol	ND		500	84 ug/Kg			10/04/19 18:44	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/04/19 18:44	1

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-23882/7

Matrix: Solid

Analysis Batch: 23882

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg			10/04/19 18:44	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg			10/04/19 18:44	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/04/19 18:44	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg			10/04/19 18:44	1
Naphthalene	ND		10	0.81 ug/Kg			10/04/19 18:44	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/04/19 18:44	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/04/19 18:44	1
o-Xylene	ND		1.0	0.56 ug/Kg			10/04/19 18:44	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/04/19 18:44	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/04/19 18:44	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/04/19 18:44	1
Styrene	ND		1.0	0.60 ug/Kg			10/04/19 18:44	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg			10/04/19 18:44	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg			10/04/19 18:44	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/04/19 18:44	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/04/19 18:44	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/04/19 18:44	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/04/19 18:44	1
Toluene	ND		1.0	0.52 ug/Kg			10/04/19 18:44	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/04/19 18:44	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg			10/04/19 18:44	1
Vinyl acetate	ND		10	4.7 ug/Kg			10/04/19 18:44	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/04/19 18:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		71 - 155		10/04/19 18:44	1
4-Bromofluorobenzene (Surr)	102		80 - 120		10/04/19 18:44	1
Dibromofluoromethane (Surr)	98		79 - 133		10/04/19 18:44	1
Toluene-d8 (Surr)	102		80 - 120		10/04/19 18:44	1

Lab Sample ID: LCS 570-23882/4

Matrix: Solid

Analysis Batch: 23882

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
1,1-Dichloroethene	50.0	48.57		ug/Kg		97	71 - 125
1,2-Dibromoethane	50.0	52.56		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	50.0	57.24		ug/Kg		114	80 - 120
1,2-Dichloroethane	50.0	51.03		ug/Kg		102	79 - 121
Benzene	50.0	57.61		ug/Kg		115	79 - 120
Carbon tetrachloride	50.0	57.95		ug/Kg		116	58 - 142
Chlorobenzene	50.0	54.37		ug/Kg		109	80 - 120
Di-isopropyl ether (DIPE)	50.0	49.96		ug/Kg		100	65 - 131
Ethanol	500	539.4		ug/Kg		108	32 - 158
Ethylbenzene	50.0	54.04		ug/Kg		108	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	53.80		ug/Kg		108	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	50.45		ug/Kg		101	64 - 124
o-Xylene	50.0	55.78		ug/Kg		112	79 - 127

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-23882/4

Matrix: Solid

Analysis Batch: 23882

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	100	110.6		ug/Kg		111	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		71 - 155
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	98		79 - 133
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCSD 570-23882/5

Matrix: Solid

Analysis Batch: 23882

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	46.73		ug/Kg		93	71 - 125	4	20
1,2-Dibromoethane	50.0	54.28		ug/Kg		109	80 - 120	3	20
1,2-Dichlorobenzene	50.0	56.72		ug/Kg		113	80 - 120	1	20
1,2-Dichloroethane	50.0	49.32		ug/Kg		99	79 - 121	3	20
Benzene	50.0	53.87		ug/Kg		108	79 - 120	7	20
Carbon tetrachloride	50.0	57.58		ug/Kg		115	58 - 142	1	20
Chlorobenzene	50.0	54.10		ug/Kg		108	80 - 120	0	20
Di-isopropyl ether (DIPE)	50.0	50.81		ug/Kg		102	65 - 131	2	20
Ethanol	500	414.1	J	ug/Kg		83	32 - 158	26	27
Ethylbenzene	50.0	53.84		ug/Kg		108	57 - 153	0	20
Ethyl-t-butyl ether (ETBE)	50.0	52.18		ug/Kg		104	58 - 136	3	20
Methyl-t-Butyl Ether (MTBE)	50.0	51.63		ug/Kg		103	64 - 124	2	20
o-Xylene	50.0	55.22		ug/Kg		110	79 - 127	1	20
m,p-Xylene	100	108.8		ug/Kg		109	80 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		71 - 155
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	97		79 - 133
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: MB 570-24036/6

Matrix: Solid

Analysis Batch: 24036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.99	0.24 ug/Kg			10/05/19 12:52	1
1,1,1-Trichloroethane	ND		0.99	0.22 ug/Kg			10/05/19 12:52	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.34 ug/Kg			10/05/19 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.9	0.35 ug/Kg			10/05/19 12:52	1
1,1,2-Trichloroethane	ND		0.99	0.35 ug/Kg			10/05/19 12:52	1
1,1-Dichloroethane	ND		0.99	0.21 ug/Kg			10/05/19 12:52	1
1,1-Dichloroethene	ND		0.99	0.34 ug/Kg			10/05/19 12:52	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/05/19 12:52	1
1,2,3-Trichlorobenzene	ND		2.0	0.91 ug/Kg			10/05/19 12:52	1

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-24036/6

Matrix: Solid

Analysis Batch: 24036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2,3-Trichloropropane	ND		2.0	0.82 ug/Kg			10/05/19 12:52	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/05/19 12:52	1
1,2,4-Trimethylbenzene	ND		2.0	0.58 ug/Kg			10/05/19 12:52	1
1,2-Dibromo-3-Chloropropane	ND		9.9	1.7 ug/Kg			10/05/19 12:52	1
1,2-Dibromoethane	ND		0.99	0.25 ug/Kg			10/05/19 12:52	1
1,2-Dichlorobenzene	ND		0.99	0.23 ug/Kg			10/05/19 12:52	1
1,2-Dichloroethane	ND		0.99	0.31 ug/Kg			10/05/19 12:52	1
1,2-Dichloropropane	ND		0.99	0.43 ug/Kg			10/05/19 12:52	1
1,3,5-Trimethylbenzene	ND		2.0	0.54 ug/Kg			10/05/19 12:52	1
1,3-Dichlorobenzene	ND		0.99	0.17 ug/Kg			10/05/19 12:52	1
1,3-Dichloropropane	ND		0.99	0.25 ug/Kg			10/05/19 12:52	1
1,4-Dichlorobenzene	ND		0.99	0.22 ug/Kg			10/05/19 12:52	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/05/19 12:52	1
2-Butanone	ND		20	3.7 ug/Kg			10/05/19 12:52	1
2-Chlorotoluene	ND		0.99	0.23 ug/Kg			10/05/19 12:52	1
2-Hexanone	ND		20	1.7 ug/Kg			10/05/19 12:52	1
4-Chlorotoluene	ND		0.99	0.21 ug/Kg			10/05/19 12:52	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/05/19 12:52	1
Acetone	ND		50	6.2 ug/Kg			10/05/19 12:52	1
Benzene	ND		0.99	0.13 ug/Kg			10/05/19 12:52	1
Bromobenzene	ND		0.99	0.21 ug/Kg			10/05/19 12:52	1
Bromochloromethane	ND		2.0	0.68 ug/Kg			10/05/19 12:52	1
Bromodichloromethane	ND		0.99	0.23 ug/Kg			10/05/19 12:52	1
Bromoform	ND		5.0	0.79 ug/Kg			10/05/19 12:52	1
Bromomethane	ND		20	9.3 ug/Kg			10/05/19 12:52	1
cis-1,2-Dichloroethene	ND		0.99	0.28 ug/Kg			10/05/19 12:52	1
cis-1,3-Dichloropropene	ND		0.99	0.25 ug/Kg			10/05/19 12:52	1
Carbon disulfide	ND		9.9	0.30 ug/Kg			10/05/19 12:52	1
Carbon tetrachloride	ND		0.99	0.28 ug/Kg			10/05/19 12:52	1
Chlorobenzene	ND		0.99	0.22 ug/Kg			10/05/19 12:52	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/05/19 12:52	1
Chloroform	ND		0.99	0.24 ug/Kg			10/05/19 12:52	1
Chloromethane	ND		20	0.30 ug/Kg			10/05/19 12:52	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/05/19 12:52	1
Dibromomethane	ND		0.99	0.77 ug/Kg			10/05/19 12:52	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/05/19 12:52	1
Di-isopropyl ether (DIPE)	ND		0.99	0.48 ug/Kg			10/05/19 12:52	1
Ethanol	ND		500	83 ug/Kg			10/05/19 12:52	1
Ethylbenzene	ND		0.99	0.15 ug/Kg			10/05/19 12:52	1
Ethyl-t-butyl ether (ETBE)	ND		0.99	0.50 ug/Kg			10/05/19 12:52	1
Isopropylbenzene	ND		0.99	0.54 ug/Kg			10/05/19 12:52	1
Methylene Chloride	ND		9.9	1.3 ug/Kg			10/05/19 12:52	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29 ug/Kg			10/05/19 12:52	1
Naphthalene	ND		9.9	0.81 ug/Kg			10/05/19 12:52	1
n-Butylbenzene	ND		0.99	0.16 ug/Kg			10/05/19 12:52	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/05/19 12:52	1
o-Xylene	ND		0.99	0.55 ug/Kg			10/05/19 12:52	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/05/19 12:52	1
p-Isopropyltoluene	ND		0.99	0.62 ug/Kg			10/05/19 12:52	1

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-24036/6

Matrix: Solid

Analysis Batch: 24036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
sec-Butylbenzene	ND		0.99	0.57 ug/Kg			10/05/19 12:52	1
Styrene	ND		0.99	0.60 ug/Kg			10/05/19 12:52	1
trans-1,2-Dichloroethene	ND		0.99	0.50 ug/Kg			10/05/19 12:52	1
trans-1,3-Dichloropropene	ND		2.0	0.60 ug/Kg			10/05/19 12:52	1
Tert-amyl-methyl ether (TAME)	ND		0.99	0.35 ug/Kg			10/05/19 12:52	1
tert-Butyl alcohol (TBA)	ND		20	5.1 ug/Kg			10/05/19 12:52	1
tert-Butylbenzene	ND		0.99	0.15 ug/Kg			10/05/19 12:52	1
Tetrachloroethene	ND		0.99	0.21 ug/Kg			10/05/19 12:52	1
Toluene	ND		0.99	0.51 ug/Kg			10/05/19 12:52	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/05/19 12:52	1
Trichlorofluoromethane	ND		9.9	0.37 ug/Kg			10/05/19 12:52	1
Vinyl acetate	ND		9.9	4.7 ug/Kg			10/05/19 12:52	1
Vinyl chloride	ND		0.99	0.50 ug/Kg			10/05/19 12:52	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		71 - 155		10/05/19 12:52	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/05/19 12:52	1
Dibromofluoromethane (Surr)	97		79 - 133		10/05/19 12:52	1
Toluene-d8 (Surr)	101		80 - 120		10/05/19 12:52	1

Lab Sample ID: LCS 570-24036/3

Matrix: Solid

Analysis Batch: 24036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1-Dichloroethene	50.1	49.57		ug/Kg		99	71 - 125
1,2-Dibromoethane	50.1	51.42		ug/Kg		103	80 - 120
1,2-Dichlorobenzene	50.1	53.77		ug/Kg		107	80 - 120
1,2-Dichloroethane	50.1	49.90		ug/Kg		100	79 - 121
Benzene	50.1	51.86		ug/Kg		104	79 - 120
Carbon tetrachloride	50.1	54.08		ug/Kg		108	58 - 142
Chlorobenzene	50.1	53.65		ug/Kg		107	80 - 120
Di-isopropyl ether (DIPE)	50.1	49.50		ug/Kg		99	65 - 131
Ethanol	50.1	477.0	J	ug/Kg		95	32 - 158
Ethylbenzene	50.1	53.56		ug/Kg		107	57 - 153
Ethyl-t-butyl ether (ETBE)	50.1	49.32		ug/Kg		98	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.1	47.36		ug/Kg		95	64 - 124
o-Xylene	50.1	52.51		ug/Kg		105	79 - 127
m,p-Xylene	100	106.7		ug/Kg		106	80 - 122

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	97		79 - 133
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-24036/4

Matrix: Solid

Analysis Batch: 24036

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.2	48.35		ug/Kg		96	71 - 125	2	20
1,2-Dibromoethane	50.2	51.04		ug/Kg		102	80 - 120	1	20
1,2-Dichlorobenzene	50.2	52.44		ug/Kg		104	80 - 120	3	20
1,2-Dichloroethane	50.2	49.96		ug/Kg		100	79 - 121	0	20
Benzene	50.2	52.43		ug/Kg		104	79 - 120	1	20
Carbon tetrachloride	50.2	54.01		ug/Kg		108	58 - 142	0	20
Chlorobenzene	50.2	52.75		ug/Kg		105	80 - 120	2	20
Di-isopropyl ether (DIPE)	50.2	48.97		ug/Kg		98	65 - 131	1	20
Ethanol	502	536.0		ug/Kg		107	32 - 158	12	27
Ethylbenzene	50.2	52.78		ug/Kg		105	57 - 153	1	20
Ethyl-t-butyl ether (ETBE)	50.2	49.52		ug/Kg		99	58 - 136	0	20
Methyl-t-Butyl Ether (MTBE)	50.2	47.46		ug/Kg		95	64 - 124	0	20
o-Xylene	50.2	51.64		ug/Kg		103	79 - 127	2	20
m,p-Xylene	100	104.5		ug/Kg		104	80 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	96		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	97		79 - 133
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: MB 570-24064/7

Matrix: Solid

Analysis Batch: 24064

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg			10/05/19 14:22	1
1,1,1-Trichloroethane	ND		1.0	0.22 ug/Kg			10/05/19 14:22	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.34 ug/Kg			10/05/19 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg			10/05/19 14:22	1
1,1,2-Trichloroethane	ND		1.0	0.35 ug/Kg			10/05/19 14:22	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg			10/05/19 14:22	1
1,1-Dichloroethane	ND		1.0	0.34 ug/Kg			10/05/19 14:22	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/05/19 14:22	1
1,2,3-Trichlorobenzene	ND		2.0	0.91 ug/Kg			10/05/19 14:22	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg			10/05/19 14:22	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/05/19 14:22	1
1,2,4-Trimethylbenzene	ND		2.0	0.58 ug/Kg			10/05/19 14:22	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg			10/05/19 14:22	1
1,2-Dibromoethane	ND		1.0	0.25 ug/Kg			10/05/19 14:22	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg			10/05/19 14:22	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg			10/05/19 14:22	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg			10/05/19 14:22	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg			10/05/19 14:22	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg			10/05/19 14:22	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg			10/05/19 14:22	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg			10/05/19 14:22	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/05/19 14:22	1

Euofins Calscience LLC



# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-24064/7

Matrix: Solid

Analysis Batch: 24064

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
2-Butanone	ND		20	3.8 ug/Kg			10/05/19 14:22	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg			10/05/19 14:22	1
2-Hexanone	ND		20	1.8 ug/Kg			10/05/19 14:22	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg			10/05/19 14:22	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/05/19 14:22	1
Acetone	ND		50	6.2 ug/Kg			10/05/19 14:22	1
Benzene	ND		1.0	0.13 ug/Kg			10/05/19 14:22	1
Bromobenzene	ND		1.0	0.21 ug/Kg			10/05/19 14:22	1
Bromochloromethane	ND		2.0	0.69 ug/Kg			10/05/19 14:22	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg			10/05/19 14:22	1
Bromoform	ND		5.0	0.79 ug/Kg			10/05/19 14:22	1
Bromomethane	ND		20	9.4 ug/Kg			10/05/19 14:22	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg			10/05/19 14:22	1
cis-1,3-Dichloropropene	ND		1.0	0.25 ug/Kg			10/05/19 14:22	1
Carbon disulfide	ND		10	0.30 ug/Kg			10/05/19 14:22	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg			10/05/19 14:22	1
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/05/19 14:22	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/05/19 14:22	1
Chloroform	ND		1.0	0.24 ug/Kg			10/05/19 14:22	1
Chloromethane	ND		20	0.30 ug/Kg			10/05/19 14:22	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/05/19 14:22	1
Dibromomethane	ND		1.0	0.77 ug/Kg			10/05/19 14:22	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/05/19 14:22	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/05/19 14:22	1
Ethanol	ND		500	83 ug/Kg			10/05/19 14:22	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/05/19 14:22	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.50 ug/Kg			10/05/19 14:22	1
Isopropylbenzene	ND		1.0	0.54 ug/Kg			10/05/19 14:22	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/05/19 14:22	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29 ug/Kg			10/05/19 14:22	1
Naphthalene	ND		10	0.81 ug/Kg			10/05/19 14:22	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/05/19 14:22	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/05/19 14:22	1
o-Xylene	ND		1.0	0.55 ug/Kg			10/05/19 14:22	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/05/19 14:22	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/05/19 14:22	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/05/19 14:22	1
Styrene	ND		1.0	0.60 ug/Kg			10/05/19 14:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50 ug/Kg			10/05/19 14:22	1
trans-1,3-Dichloropropene	ND		2.0	0.60 ug/Kg			10/05/19 14:22	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/05/19 14:22	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/05/19 14:22	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/05/19 14:22	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/05/19 14:22	1
Toluene	ND		1.0	0.51 ug/Kg			10/05/19 14:22	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/05/19 14:22	1
Trichlorofluoromethane	ND		10	0.37 ug/Kg			10/05/19 14:22	1
Vinyl acetate	ND		10	4.7 ug/Kg			10/05/19 14:22	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/05/19 14:22	1

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		71 - 155		10/05/19 14:22	1
4-Bromofluorobenzene (Surr)	102		80 - 120		10/05/19 14:22	1
Dibromofluoromethane (Surr)	102		79 - 133		10/05/19 14:22	1
Toluene-d8 (Surr)	100		80 - 120		10/05/19 14:22	1

Lab Sample ID: LCS 570-24064/4

Matrix: Solid

Analysis Batch: 24064

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
1,1-Dichloroethene	50.2	47.45		ug/Kg		95	71 - 125	
1,2-Dibromoethane	50.2	53.31		ug/Kg		106	80 - 120	
1,2-Dichlorobenzene	50.2	56.19		ug/Kg		112	80 - 120	
1,2-Dichloroethane	50.2	51.70		ug/Kg		103	79 - 121	
Benzene	50.2	55.11		ug/Kg		110	79 - 120	
Carbon tetrachloride	50.2	61.61		ug/Kg		123	58 - 142	
Chlorobenzene	50.2	54.03		ug/Kg		108	80 - 120	
Di-isopropyl ether (DIPE)	50.2	51.79		ug/Kg		103	65 - 131	
Ethanol	502	382.2	J	ug/Kg		76	32 - 158	
Ethylbenzene	50.2	54.94		ug/Kg		109	57 - 153	
Ethyl-t-butyl ether (ETBE)	50.2	54.08		ug/Kg		108	58 - 136	
Methyl-t-Butyl Ether (MTBE)	50.2	53.88		ug/Kg		107	64 - 124	
o-Xylene	50.2	55.98		ug/Kg		112	79 - 127	
m,p-Xylene	100	111.6		ug/Kg		111	80 - 122	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		71 - 155
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	105		79 - 133
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 570-24064/5

Matrix: Solid

Analysis Batch: 24064

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
									RPD	Limit
1,1-Dichloroethene	50.0	47.11		ug/Kg		94	71 - 125	1	20	
1,2-Dibromoethane	50.0	53.04		ug/Kg		106	80 - 120	0	20	
1,2-Dichlorobenzene	50.0	54.15		ug/Kg		108	80 - 120	4	20	
1,2-Dichloroethane	50.0	50.88		ug/Kg		102	79 - 121	2	20	
Benzene	50.0	54.48		ug/Kg		109	79 - 120	1	20	
Carbon tetrachloride	50.0	61.35		ug/Kg		123	58 - 142	0	20	
Chlorobenzene	50.0	52.97		ug/Kg		106	80 - 120	2	20	
Di-isopropyl ether (DIPE)	50.0	50.72		ug/Kg		101	65 - 131	2	20	
Ethanol	500	433.9	J	ug/Kg		87	32 - 158	13	27	
Ethylbenzene	50.0	53.39		ug/Kg		107	57 - 153	3	20	
Ethyl-t-butyl ether (ETBE)	50.0	53.52		ug/Kg		107	58 - 136	1	20	
Methyl-t-Butyl Ether (MTBE)	50.0	52.03		ug/Kg		104	64 - 124	3	20	
o-Xylene	50.0	54.62		ug/Kg		109	79 - 127	2	20	
m,p-Xylene	100	108.9		ug/Kg		109	80 - 122	2	20	

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-24064/5

Matrix: Solid

Analysis Batch: 24064

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		71 - 155
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	105		79 - 133
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: MB 570-24419/6

Matrix: Solid

Analysis Batch: 24419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		1.0	0.24			10/08/19 12:49	1
1,1,1-Trichloroethane	ND		1.0	0.23			10/08/19 12:49	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35			10/08/19 12:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35			10/08/19 12:49	1
1,1,2-Trichloroethane	ND		1.0	0.35			10/08/19 12:49	1
1,1-Dichloroethane	ND		1.0	0.21			10/08/19 12:49	1
1,1-Dichloroethene	ND		1.0	0.35			10/08/19 12:49	1
1,1-Dichloropropene	ND		2.0	0.33			10/08/19 12:49	1
1,2,3-Trichlorobenzene	ND		2.0	0.91			10/08/19 12:49	1
1,2,3-Trichloropropane	ND		2.0	0.83			10/08/19 12:49	1
1,2,4-Trichlorobenzene	ND		2.0	0.31			10/08/19 12:49	1
1,2,4-Trimethylbenzene	ND		2.0	0.59			10/08/19 12:49	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7			10/08/19 12:49	1
1,2-Dibromoethane	ND		1.0	0.26			10/08/19 12:49	1
1,2-Dichlorobenzene	ND		1.0	0.23			10/08/19 12:49	1
1,2-Dichloroethane	ND		1.0	0.31			10/08/19 12:49	1
1,2-Dichloropropane	ND		1.0	0.44			10/08/19 12:49	1
1,3,5-Trimethylbenzene	ND		2.0	0.55			10/08/19 12:49	1
1,3-Dichlorobenzene	ND		1.0	0.18			10/08/19 12:49	1
1,3-Dichloropropane	ND		1.0	0.25			10/08/19 12:49	1
1,4-Dichlorobenzene	ND		1.0	0.22			10/08/19 12:49	1
2,2-Dichloropropane	ND		5.0	0.33			10/08/19 12:49	1
2-Butanone	ND		20	3.8			10/08/19 12:49	1
2-Chlorotoluene	ND		1.0	0.23			10/08/19 12:49	1
2-Hexanone	ND		20	1.8			10/08/19 12:49	1
4-Chlorotoluene	ND		1.0	0.21			10/08/19 12:49	1
4-Methyl-2-pentanone	ND		20	4.3			10/08/19 12:49	1
Acetone	ND		50	6.2			10/08/19 12:49	1
Benzene	ND		1.0	0.13			10/08/19 12:49	1
Bromobenzene	ND		1.0	0.21			10/08/19 12:49	1
Bromochloromethane	ND		2.0	0.69			10/08/19 12:49	1
Bromodichloromethane	ND		1.0	0.23			10/08/19 12:49	1
Bromoform	ND		5.0	0.79			10/08/19 12:49	1
Bromomethane	ND		20	9.4			10/08/19 12:49	1
cis-1,2-Dichloroethene	ND		1.0	0.28			10/08/19 12:49	1
cis-1,3-Dichloropropene	ND		1.0	0.25			10/08/19 12:49	1
Carbon disulfide	ND		10	0.31			10/08/19 12:49	1
Carbon tetrachloride	ND		1.0	0.28			10/08/19 12:49	1

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-24419/6

Matrix: Solid

Analysis Batch: 24419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/08/19 12:49	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/08/19 12:49	1
Chloroform	ND		1.0	0.24 ug/Kg			10/08/19 12:49	1
Chloromethane	ND		20	0.30 ug/Kg			10/08/19 12:49	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/08/19 12:49	1
Dibromomethane	ND		1.0	0.77 ug/Kg			10/08/19 12:49	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/08/19 12:49	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/08/19 12:49	1
Ethanol	ND		500	84 ug/Kg			10/08/19 12:49	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/08/19 12:49	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg			10/08/19 12:49	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg			10/08/19 12:49	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/08/19 12:49	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg			10/08/19 12:49	1
Naphthalene	ND		10	0.81 ug/Kg			10/08/19 12:49	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/08/19 12:49	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/08/19 12:49	1
o-Xylene	ND		1.0	0.56 ug/Kg			10/08/19 12:49	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/08/19 12:49	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/08/19 12:49	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/08/19 12:49	1
Styrene	ND		1.0	0.60 ug/Kg			10/08/19 12:49	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg			10/08/19 12:49	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg			10/08/19 12:49	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/08/19 12:49	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/08/19 12:49	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/08/19 12:49	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/08/19 12:49	1
Toluene	ND		1.0	0.52 ug/Kg			10/08/19 12:49	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/08/19 12:49	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg			10/08/19 12:49	1
Vinyl acetate	ND		10	4.7 ug/Kg			10/08/19 12:49	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/08/19 12:49	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		71 - 155		10/08/19 12:49	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/08/19 12:49	1
Dibromofluoromethane (Surr)	100		79 - 133		10/08/19 12:49	1
Toluene-d8 (Surr)	100		80 - 120		10/08/19 12:49	1

Lab Sample ID: LCS 570-24419/3

Matrix: Solid

Analysis Batch: 24419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	50.0	50.75		ug/Kg		102	80 - 120
1,2-Dichlorobenzene	50.0	49.36		ug/Kg		99	80 - 120

Euofins Calscience LLC

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-24419/3

Matrix: Solid

Analysis Batch: 24419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	47.32		ug/Kg		95	79 - 121
Benzene	50.0	51.53		ug/Kg		103	79 - 120
Carbon tetrachloride	50.0	56.53		ug/Kg		113	58 - 142
Chlorobenzene	50.0	49.78		ug/Kg		100	80 - 120
Di-isopropyl ether (DIPE)	50.0	46.78		ug/Kg		94	65 - 131
Ethanol	500	414.7	J	ug/Kg		83	32 - 158
Ethylbenzene	50.0	49.68		ug/Kg		99	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	51.92		ug/Kg		104	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	48.25		ug/Kg		97	64 - 124
o-Xylene	50.0	50.22		ug/Kg		100	79 - 127
m,p-Xylene	100	101.2		ug/Kg		101	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	98		79 - 133
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 570-24419/4

Matrix: Solid

Analysis Batch: 24419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1-Dichloroethene	50.0	49.78		ug/Kg		100	71 - 125	3	20
1,2-Dibromoethane	50.0	52.12		ug/Kg		104	80 - 120	3	20
1,2-Dichlorobenzene	50.0	51.87		ug/Kg		104	80 - 120	5	20
1,2-Dichloroethane	50.0	49.18		ug/Kg		98	79 - 121	4	20
Benzene	50.0	53.50		ug/Kg		107	79 - 120	4	20
Carbon tetrachloride	50.0	57.97		ug/Kg		116	58 - 142	3	20
Chlorobenzene	50.0	52.51		ug/Kg		105	80 - 120	5	20
Di-isopropyl ether (DIPE)	50.0	48.55		ug/Kg		97	65 - 131	4	20
Ethanol	500	463.1	J	ug/Kg		93	32 - 158	11	27
Ethylbenzene	50.0	51.58		ug/Kg		103	57 - 153	4	20
Ethyl-t-butyl ether (ETBE)	50.0	54.09		ug/Kg		108	58 - 136	4	20
Methyl-t-Butyl Ether (MTBE)	50.0	50.97		ug/Kg		102	64 - 124	5	20
o-Xylene	50.0	52.32		ug/Kg		105	79 - 127	4	20
m,p-Xylene	100	105.5		ug/Kg		105	80 - 122	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		71 - 155
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	99		79 - 133
Toluene-d8 (Surr)	100		80 - 120

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV5-1

## Lab Sample ID: 570-9135-1

Date Collected: 10/03/19 08:30

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.272 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 g	5 mL	23882	10/04/19 19:12	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV5-3

## Lab Sample ID: 570-9135-2

Date Collected: 10/03/19 00:35

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.348 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 19:39	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV5-5

## Lab Sample ID: 570-9135-3

Date Collected: 10/03/19 08:38

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.653 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 20:06	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV5-10

## Lab Sample ID: 570-9135-4

Date Collected: 10/03/19 08:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.051 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 20:33	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV5-15

## Lab Sample ID: 570-9135-5

Date Collected: 10/03/19 08:50

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.903 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 21:00	MGX6	ECL 2
Instrument ID: GCMSCC										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV6-1

Lab Sample ID: 570-9135-6

Date Collected: 10/03/19 09:25

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.152 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 21:27	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV6-3

Lab Sample ID: 570-9135-7

Date Collected: 10/03/19 09:30

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.278 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 21:54	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV6-5

Lab Sample ID: 570-9135-8

Date Collected: 10/03/19 09:35

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.331 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 22:21	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV6-10

Lab Sample ID: 570-9135-9

Date Collected: 10/03/19 09:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.183 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 22:49	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV6-15

Lab Sample ID: 570-9135-10

Date Collected: 10/03/19 09:50

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.571 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 23:16	MGX6	ECL 2
Instrument ID: GCMSCC										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV3-1

Lab Sample ID: 570-9135-11

Date Collected: 10/03/19 10:30

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.867 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/04/19 23:42	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV3-3

Lab Sample ID: 570-9135-12

Date Collected: 10/03/19 10:35

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.472 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	23882	10/05/19 00:09	MGX6	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV3-5

Lab Sample ID: 570-9135-13

Date Collected: 10/03/19 10:40

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.591 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 17:31	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV3-10

Lab Sample ID: 570-9135-14

Date Collected: 10/03/19 10:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.027 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 18:26	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV3-15

Lab Sample ID: 570-9135-15

Date Collected: 10/03/19 11:00

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.084 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 18:54	NET3	ECL 2
Instrument ID: GCMSCC										



# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV2-1

Lab Sample ID: 570-9135-16

Date Collected: 10/03/19 11:40

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.098 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 19:21	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV2-3

Lab Sample ID: 570-9135-17

Date Collected: 10/03/19 11:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.659 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 19:49	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV2-5

Lab Sample ID: 570-9135-18

Date Collected: 10/03/19 11:50

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.05 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 20:16	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV2-10

Lab Sample ID: 570-9135-19

Date Collected: 10/03/19 11:55

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.911 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 20:42	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV2-15

Lab Sample ID: 570-9135-20

Date Collected: 10/03/19 12:15

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.02 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 21:09	NET3	ECL 2
Instrument ID: GCMSCC										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV8-1

Lab Sample ID: 570-9135-21

Date Collected: 10/03/19 13:35

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.594 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 21:35	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV8-3

Lab Sample ID: 570-9135-22

Date Collected: 10/03/19 13:40

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.506 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24064	10/05/19 22:02	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV8-5

Lab Sample ID: 570-9135-23

Date Collected: 10/03/19 13:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.655 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24419	10/08/19 13:41	MGX6	ECL 2
Instrument ID: GCMSQ										

## Client Sample ID: SV8-10

Lab Sample ID: 570-9135-24

Date Collected: 10/03/19 13:55

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.977 g	5 g	23874	10/04/19 14:40	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24419	10/08/19 14:07	MGX6	ECL 2
Instrument ID: GCMSQ										

## Client Sample ID: SV8-15

Lab Sample ID: 570-9135-25

Date Collected: 10/03/19 14:00

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.257 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 17:36	G6NI	ECL 2
Instrument ID: GCMSQQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Client Sample ID: SV8-20

Lab Sample ID: 570-9135-26

Date Collected: 10/03/19 14:05

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.985 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 18:02	G6NI	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV8-25

Lab Sample ID: 570-9135-27

Date Collected: 10/03/19 14:10

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.212 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 18:27	G6NI	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV8-30

Lab Sample ID: 570-9135-28

Date Collected: 10/03/19 14:15

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.396 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 18:53	G6NI	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV1-1

Lab Sample ID: 570-9135-29

Date Collected: 10/03/19 14:45

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.013 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 19:19	G6NI	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV1-3

Lab Sample ID: 570-9135-30

Date Collected: 10/03/19 14:50

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.996 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 19:45	G6NI	ECL 2
Instrument ID: GCMSQQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

**Client Sample ID: SV1-5**

**Lab Sample ID: 570-9135-31**

Date Collected: 10/03/19 14:55

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.472 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 20:11	G6NI	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV1-10**

**Lab Sample ID: 570-9135-32**

Date Collected: 10/03/19 15:15

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.966 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 20:37	G6NI	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV1-15**

**Lab Sample ID: 570-9135-33**

Date Collected: 10/03/19 15:20

Matrix: Solid

Date Received: 10/03/19 17:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.583 g	5 g	23863	10/04/19 14:16	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24036	10/05/19 21:02	G6NI	ECL 2
Instrument ID: GCMSQQ										

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Guam	State	19-004R	10-31-19
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20
Washington	State	C916-18	10-11-19

# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
5035	Closed System Purge and Trap	SW846	ECL 2

**Protocol References:**

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

**Laboratory References:**

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578.200.0003

Job ID: 570-9135-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-9135-1	SV5-1	Solid	10/03/19 08:30	10/03/19 17:35	
570-9135-2	SV5-3	Solid	10/03/19 00:35	10/03/19 17:35	
570-9135-3	SV5-5	Solid	10/03/19 08:38	10/03/19 17:35	
570-9135-4	SV5-10	Solid	10/03/19 08:45	10/03/19 17:35	
570-9135-5	SV5-15	Solid	10/03/19 08:50	10/03/19 17:35	
570-9135-6	SV6-1	Solid	10/03/19 09:25	10/03/19 17:35	
570-9135-7	SV6-3	Solid	10/03/19 09:30	10/03/19 17:35	
570-9135-8	SV6-5	Solid	10/03/19 09:35	10/03/19 17:35	
570-9135-9	SV6-10	Solid	10/03/19 09:45	10/03/19 17:35	
570-9135-10	SV6-15	Solid	10/03/19 09:50	10/03/19 17:35	
570-9135-11	SV3-1	Solid	10/03/19 10:30	10/03/19 17:35	
570-9135-12	SV3-3	Solid	10/03/19 10:35	10/03/19 17:35	
570-9135-13	SV3-5	Solid	10/03/19 10:40	10/03/19 17:35	
570-9135-14	SV3-10	Solid	10/03/19 10:45	10/03/19 17:35	
570-9135-15	SV3-15	Solid	10/03/19 11:00	10/03/19 17:35	
570-9135-16	SV2-1	Solid	10/03/19 11:40	10/03/19 17:35	
570-9135-17	SV2-3	Solid	10/03/19 11:45	10/03/19 17:35	
570-9135-18	SV2-5	Solid	10/03/19 11:50	10/03/19 17:35	
570-9135-19	SV2-10	Solid	10/03/19 11:55	10/03/19 17:35	
570-9135-20	SV2-15	Solid	10/03/19 12:15	10/03/19 17:35	
570-9135-21	SV8-1	Solid	10/03/19 13:35	10/03/19 17:35	
570-9135-22	SV8-3	Solid	10/03/19 13:40	10/03/19 17:35	
570-9135-23	SV8-5	Solid	10/03/19 13:45	10/03/19 17:35	
570-9135-24	SV8-10	Solid	10/03/19 13:55	10/03/19 17:35	
570-9135-25	SV8-15	Solid	10/03/19 14:00	10/03/19 17:35	
570-9135-26	SV8-20	Solid	10/03/19 14:05	10/03/19 17:35	
570-9135-27	SV8-25	Solid	10/03/19 14:10	10/03/19 17:35	
570-9135-28	SV8-30	Solid	10/03/19 14:15	10/03/19 17:35	
570-9135-29	SV1-1	Solid	10/03/19 14:45	10/03/19 17:35	
570-9135-30	SV1-3	Solid	10/03/19 14:50	10/03/19 17:35	
570-9135-31	SV1-5	Solid	10/03/19 14:55	10/03/19 17:35	
570-9135-32	SV1-10	Solid	10/03/19 15:15	10/03/19 17:35	
570-9135-33	SV1-15	Solid	10/03/19 15:20	10/03/19 17:35	



Confidential

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494  
For courier service / sample drop off information, contact us26\_sales@eurofins.com or call us.

LABORATORY CLIENT: **Stantec Consulting Services Inc**

ADDRESS: **290 Congo Ridge Ave** STATE: **CA** ZIP: **91362**

CITY: **Thousand Oaks**

TEL: **905 719 9301** E-MAIL: **brian.goss@stantec.com**

CLIENT PROJECT NAME / NUMBER: **185804578.200.0003**

PROJECT CONTACT: **brian goss**

SAMPLER(S), (PRINT): **Danny Law**

P.G. NO: **Brian Goss**

TURNAROUND TIME (Rush surcharges may apply to any FAT not "STANDARD"):

SAME DAY  24 HR  48 HR  72 HR  **STANDARD**

COELT EDF GLOBAL ID: **LOG CODE:**

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOG CODE:		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
1	SV5-1	10/3/19	830	Soil	4			
2	SV5-3		835					
3	SV5-5		838					
4	SV5-10		845					
5	SV5-15		850					
6	SV6-1		925					
7	SV6-3		930					
8	SV6-5		935					
9	SV6-10		945					
10	SV6-15		950					

Requested Analyses:

TP(h)  GRO  TP(h)  DRO  TP(h)  C6-C36  C6-C44

TP(h)  MTBE  8260

VOCs (8260)  Oxygenates (8260)  Prep (5035)  En Core  Terra Core

SVOCs (8270)  Pesticides (8081)  PCBs (8082)

PAHs  8270  8270 SIM  T22 Metals  6010/747X  6020/747X  Cr(VI)  7196  7199  218.6

Please check box or fill in blank as needed.

Relinquished by: (Signature) **Brian Goss** Date: **10/03/19** Time: **1530**

Relinquished by: (Signature) **[Signature]** Date: **10/23/19** Time: **1730**

Relinquished by: (Signature) **[Signature]** Date: **10/23/19** Time: **1730**

CHAIN OF CUSTODY RECORD

DATE: **10/3/19** PAGE: **1** OF **4**



570-9135 Chain of Custody

06/02/14 Revision

1 2 3 4 5 6 7 8 9 10 11 12 13 14

2.7/32 - 2.9/3.4 - 3.0/3





Calcience

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LABORATORY CLIENT

Stantec Consulting Services Inc

290 Cango Ridge Ave

Thousand Oaks CA 91362

805719 9301 E-MAIL: brian.goss@stantec.com

TURNAROUND TIME: (Rush surcharges may apply to any TAT not "STANDARD")

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

GLOBAL ID:

LOG CODE

SPECIAL INSTRUCTIONS

# CHAIN OF CUSTODY RECORD

DATE: 10/3/19

PAGE: 2 OF 4

CLIENT PROJECT NAME / NUMBER 185804578.200.0003		P.O. NO	
PROJECT CONTACT brian.goss		SAMPLER(S) (PRINT) Denny Law Brian Goss	
REQUESTED ANALYSES			
Please check box or fill in blank as needed.			
<input type="checkbox"/> TPH (g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH (g) <input type="checkbox"/> C6-C14	<input type="checkbox"/> TPH (g) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH (g) <input type="checkbox"/> C6-C4
<input type="checkbox"/> TPH (g) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH (g) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH (g) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH (g) <input type="checkbox"/> DRO
<input type="checkbox"/> Unpreserved	<input type="checkbox"/> Preserved	<input type="checkbox"/> Field Filtered	<input type="checkbox"/> Field Filtered
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	NO. OF CONT.
		TIME	
11	SV3-1	10/3/19 1030	4
12	SV3-3	1035	
13	SV3-5	1040	
14	SV3-10	1045	
15	SV3-15	1100	
16	SV2-1	1140	
17	SV2-3	1145	
18	SV2-5	1150	
19	SV2-10	1155	
20	SV2-15	1215	
Relinquished by: (Signature) Brian Goss		Received by: (Signature/Affiliation) Denny Law	
Relinquished by: (Signature)		Received by: (Signature/Affiliation) Denny Law	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)	
		Date: 10/03/19	Time: 10:00
		Date: 10/03/19	Time: 17:35
		Date:	Time:



9135



# CHAIN OF CUSTODY RECORD

CalScience

DATE: 10/3/19

PAGE: 3 OF 4

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LABORATORY CLIENT:		CLIENT PROJECT NAME / NUMBER:		P.O. NO.:	
ADDRESS:		18580Y578.200.0003			
CITY:	STATE:	ZIP:	SAMPLER(S): (PRINT)		
Thousand Oaks	CA	91322	DANNY LAW		
TEL:	E-MAIL:	PROJECT CONTACT:			
805 719 9301	brian.goss@stantec.com	BRIAN GOSS			
TURNAROUND TIME (Kush surcharges may apply to any TAT not "STANDARD"):					
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> STANDARD					
SPECIAL INSTRUCTIONS:		LOG CODE:			
COELT EDF		Unpreserved			
GLOBAL ID		Preserved			
FIELD FILLED		Field Filled			
NO. OF CONT.		NO. OF CONT.			
MATRIX		MATRIX			
SAMPLING DATE		SAMPLING TIME			
10/3/19		1335			
1340		1345			
1355		1400			
1405		1410			
1415		1445			
1450					
LAB USE ONLY	SAMPLE ID	NO. OF CONT.	MATRIX	DATE	TIME
1	SV8-1	4	Soil	10/3/19	1335
2	SV8-3				
3	SV8-5				
4	SV8-10				
5	SV8-15				
6	SV8-20				
7	SV8-25				
8	SV8-30				
9	SV1-1				
10	SV1-3				
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			
Bryan Goss		STANTEC			
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			
Relinquished by: (Signature)		Received by: (Signature/Affiliation)			
		Mantel ca			
		Date: 10/3/19			
		Time: 1630			
		Date: 10/3/19			
		Time: 1735			
		Date:			
		Time:			

06/02/14 Revision 1 2 3 4 5 6 7 8 9 10 11 12 13 14



CalScience

### CHAIN OF CUSTODY RECORD

9/13/15

DATE: 10/3/19

PAGE: 4 OF 4

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LABORATORY CLIENT:		CLIENT PROJECT NAME / NUMBER	
Stantec Consulting Services Inc		185804578.200.0003	
ADDRESS		PROJECT CONTACT:	
290 Concho Ridge Ave		Brian Goss	
CITY	STAFF	STATE	ZIP
Thousand Oaks	CA	CA	91322
TEL:		E-MAIL	
805 719 9301		brian.goss@stantec	

### REQUESTED ANALYSES

TURNAROUND TIME (Fast Turnarounds may apply to any TAT not "STANDARD")  
 SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD  
 COELT EDF  GLOBAL ID

SPECIAL INSTRUCTIONS

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	LOS CODE:		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
31	SV1-5	10/3/19	1455	soil	4			
32	SV1-10		1515					
33	SV1-15		1520					

Please check box or fill in blank as needed.

<input type="checkbox"/> TP(h) <input type="checkbox"/> DR0	<input type="checkbox"/> TP(h) <input type="checkbox"/> GR0	<input type="checkbox"/> TP(h) <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	<input type="checkbox"/> TP(h)	<input type="checkbox"/> BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	<input type="checkbox"/> VOCs (8260)	<input type="checkbox"/> Oxygenates (8260)	<input checked="" type="checkbox"/> Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	<input type="checkbox"/> SVOCs (8270)	<input type="checkbox"/> Pesticides (8081)	<input type="checkbox"/> PCBs (8082)	<input type="checkbox"/> PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	<input type="checkbox"/> T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	<input type="checkbox"/> Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6
---	---	--	--------------------------------	---	--------------------------------------	--	--	---------------------------------------	--	--------------------------------------	---	---	--

Relinquished by: (Signature)		Received by: (Signature/Affiliation)	
Relinquished by: (Signature)		Received by: (Signature/Affiliation)	Chantel M
Relinquished by: (Signature)		Received by: (Signature/Affiliation)	

Date: 10/3/19 Time: 1630  
 Date: 10/3/19 Time: 1735



## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-9135-1

**Login Number: 9135**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Cruise, Noel**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-9320-1  
Client Project/Site: 185804578

**For:**

Stantec Consulting Corp.  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, California 91361

Attn: Brian Goss



---

*Authorized for release by:*  
*10/15/2019 8:17:36 PM*

Carla Hollowell, Project Manager I  
(714)895-5494  
[carlahollowell@eurofinsus.com](mailto:carlahollowell@eurofinsus.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC Semi VOA

Qualifier	Qualifier Description
Z	The chromatographic response does not resemble a typical fuel pattern.

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

---

## Job ID: 570-9320-1

---

### Laboratory: Eurofins Calscience LLC

#### Narrative

---

#### Job Narrative 570-9320-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/4/2019 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.0° C and 4.2° C.

#### GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-24701.

Method 8260B: The initial calibration curve analyzed in batch 570-24670 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-24670.

Method 8260B: The initial calibration curve analyzed in batch 570-24988 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-24988.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Metals

Method 6010B: The absolute response for Selenium was greater than the method reporting limit (RL) in the following samples: Comp 1 (570-9320-9) and Comp 2 (570-9320-10).

The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-24946 and analytical batch 570-25565 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: Due to the high concentration of Barium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-24946 and analytical batch 570-25565 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep



# Case Narrative

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

---

## Job ID: 570-9320-1 (Continued)

---

### Laboratory: Eurofins Calscience LLC (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: SV10-1

Lab Sample ID: 570-9320-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		1.0	0.13 ug/Kg	1		8260B	Total/NA
Toluene	1.3		1.0	0.52 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV10-3

Lab Sample ID: 570-9320-2

No Detections.

## Client Sample ID: SV10-5

Lab Sample ID: 570-9320-3

No Detections.

## Client Sample ID: SV10-10

Lab Sample ID: 570-9320-4

No Detections.

## Client Sample ID: SV10-15

Lab Sample ID: 570-9320-5

No Detections.

## Client Sample ID: SV10-20

Lab Sample ID: 570-9320-6

No Detections.

## Client Sample ID: SV10-25

Lab Sample ID: 570-9320-7

No Detections.

## Client Sample ID: SV10-30

Lab Sample ID: 570-9320-8

No Detections.

## Client Sample ID: Comp 1

Lab Sample ID: 570-9320-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	13	Z	4.9	3.5 mg/Kg	1		8015B	Total/NA
Arsenic	4.04		0.754	0.260 mg/Kg	1		6010B	Total/NA
Barium	131		0.503	0.155 mg/Kg	1		6010B	Total/NA
Beryllium	0.688		0.251	0.138 mg/Kg	1		6010B	Total/NA
Cobalt	8.81		0.251	0.149 mg/Kg	1		6010B	Total/NA
Chromium	14.5		0.251	0.143 mg/Kg	1		6010B	Total/NA
Copper	35.6		0.503	0.136 mg/Kg	1		6010B	Total/NA
Molybdenum	0.290		0.251	0.133 mg/Kg	1		6010B	Total/NA
Nickel	11.5		0.251	0.146 mg/Kg	1		6010B	Total/NA
Antimony	1.35		0.754	0.150 mg/Kg	1		6010B	Total/NA
Thallium	1.45		0.754	0.153 mg/Kg	1		6010B	Total/NA
Vanadium	37.9		0.251	0.142 mg/Kg	1		6010B	Total/NA
Zinc	69.1		1.01	0.179 mg/Kg	1		6010B	Total/NA
Lead	12.0		0.503	0.133 mg/Kg	1		6010B	Total/NA

## Client Sample ID: Comp 2

Lab Sample ID: 570-9320-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	9.8	Z	4.8	3.4 mg/Kg	1		8015B	Total/NA
Arsenic	4.10		0.750	0.259 mg/Kg	1		6010B	Total/NA
Barium	128		0.500	0.154 mg/Kg	1		6010B	Total/NA
Beryllium	0.669		0.250	0.137 mg/Kg	1		6010B	Total/NA
Cobalt	8.52		0.250	0.148 mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: Comp 2 (Continued)

Lab Sample ID: 570-9320-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chromium	15.1		0.250	0.142 mg/Kg	1		6010B	Total/NA
Copper	29.0	F1	0.500	0.135 mg/Kg	1		6010B	Total/NA
Molybdenum	0.408		0.250	0.132 mg/Kg	1		6010B	Total/NA
Nickel	11.5		0.250	0.145 mg/Kg	1		6010B	Total/NA
Antimony	1.95		0.750	0.149 mg/Kg	1		6010B	Total/NA
Thallium	1.91		0.750	0.152 mg/Kg	1		6010B	Total/NA
Vanadium	38.0		0.250	0.141 mg/Kg	1		6010B	Total/NA
Zinc	63.5	F1	1.00	0.178 mg/Kg	1		6010B	Total/NA
Lead	11.0		0.500	0.132 mg/Kg	1		6010B	Total/NA

## Client Sample ID: SV7-1

Lab Sample ID: 570-9320-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.8		0.91	0.12 ug/Kg	1		8260B	Total/NA
Toluene	2.0		0.91	0.47 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV7-3

Lab Sample ID: 570-9320-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.93	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV7-5

Lab Sample ID: 570-9320-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.2		0.90	0.12 ug/Kg	1		8260B	Total/NA
Toluene	1.6		0.90	0.46 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV7-10

Lab Sample ID: 570-9320-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		0.74	0.096 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV7-15

Lab Sample ID: 570-9320-15

No Detections.

## Client Sample ID: SV9-1

Lab Sample ID: 570-9320-16

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Acetone	50		46	5.8 ug/Kg	1		8260B	Total/NA
Tetrachloroethene	3.5		0.92	0.19 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV9-3

Lab Sample ID: 570-9320-17

No Detections.

## Client Sample ID: SV9-5

Lab Sample ID: 570-9320-18

No Detections.

## Client Sample ID: SV9-10

Lab Sample ID: 570-9320-19

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.1		0.79	0.17 ug/Kg	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: SV9-15

Lab Sample ID: 570-9320-20

No Detections.

## Client Sample ID: SV9-20

Lab Sample ID: 570-9320-21

No Detections.

## Client Sample ID: SV9-25

Lab Sample ID: 570-9320-22

No Detections.

## Client Sample ID: SV9-30

Lab Sample ID: 570-9320-23

No Detections.

## Client Sample ID: SV4-1

Lab Sample ID: 570-9320-24

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.99		0.93	0.12 ug/Kg	1		8260B	Total/NA
Tetrachloroethene	1.8		0.93	0.20 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV4-3

Lab Sample ID: 570-9320-25

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		1.0	0.13 ug/Kg	1		8260B	Total/NA
Tetrachloroethene	1.7		1.0	0.21 ug/Kg	1		8260B	Total/NA
Toluene	1.5		1.0	0.52 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV4-5

Lab Sample ID: 570-9320-26

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.94	0.12 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV4-10

Lab Sample ID: 570-9320-27

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.99		0.76	0.16 ug/Kg	1		8260B	Total/NA

## Client Sample ID: SV4-15

Lab Sample ID: 570-9320-28

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SV10-1**  
**Date Collected: 10/04/19 08:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-1**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1,1-Trichloroethane	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1,2-Trichloroethane	ND		1.0	0.36 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2,3-Trichlorobenzene	ND		2.0	0.92 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2-Dibromoethane	ND		1.0	0.26 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2-Dichloroethane	ND		1.0	0.32 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
2-Butanone	ND		20	3.8 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
2-Hexanone	ND		20	1.8 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Acetone	ND		50	6.3 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
<b>Benzene</b>	<b>2.1</b>		1.0	0.13 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Bromobenzene	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Bromochloromethane	ND		2.0	0.69 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Bromoform	ND		5.0	0.80 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Bromomethane	ND		20	9.5 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
cis-1,3-Dichloropropene	ND		1.0	0.26 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Carbon disulfide	ND		10	0.31 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Chlorobenzene	ND		1.0	0.22 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Chloroethane	ND		2.0	1.5 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Chloroform	ND		1.0	0.24 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Chloromethane	ND		20	0.31 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Dibromomethane	ND		1.0	0.78 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Ethanol	ND		500	84 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Ethylbenzene	ND		1.0	0.15 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg		10/08/19 17:34	10/09/19 12:56	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-1**  
**Date Collected: 10/04/19 08:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-1**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.55 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Methylene Chloride	ND		10	1.3 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Naphthalene	ND		10	0.82 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
o-Xylene	ND		1.0	0.56 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
m,p-Xylene	ND		2.0	0.27 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Styrene	ND		1.0	0.61 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
<b>Toluene</b>	<b>1.3</b>		1.0	0.52 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Trichloroethene	ND		2.0	0.30 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Vinyl acetate	ND		10	4.8 ug/Kg		10/08/19 17:34	10/09/19 12:56	1
Vinyl chloride	ND		1.0	0.50 ug/Kg		10/08/19 17:34	10/09/19 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		71 - 155	10/08/19 17:34	10/09/19 12:56	1
4-Bromofluorobenzene (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 12:56	1
Dibromofluoromethane (Surr)	103		79 - 133	10/08/19 17:34	10/09/19 12:56	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 12:56	1

**Client Sample ID: SV10-3**  
**Date Collected: 10/04/19 08:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-2**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.96	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1,1-Trichloroethane	ND		0.96	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.6	0.34 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1,2-Trichloroethane	ND		0.96	0.34 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1-Dichloroethane	ND		0.96	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1-Dichloroethene	ND		0.96	0.33 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,1-Dichloropropene	ND		1.9	0.32 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2,3-Trichlorobenzene	ND		1.9	0.88 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2,3-Trichloropropane	ND		1.9	0.80 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2,4-Trichlorobenzene	ND		1.9	0.30 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2,4-Trimethylbenzene	ND		1.9	0.56 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2-Dibromo-3-Chloropropane	ND		9.6	1.7 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2-Dibromoethane	ND		0.96	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2-Dichlorobenzene	ND		0.96	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2-Dichloroethane	ND		0.96	0.30 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,2-Dichloropropane	ND		0.96	0.42 ug/Kg		10/08/19 17:34	10/09/19 13:22	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-3**  
**Date Collected: 10/04/19 08:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-2**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.9	0.53 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,3-Dichlorobenzene	ND		0.96	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,3-Dichloropropane	ND		0.96	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
1,4-Dichlorobenzene	ND		0.96	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
2,2-Dichloropropane	ND		4.8	0.32 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
2-Butanone	ND		19	3.6 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
2-Chlorotoluene	ND		0.96	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
2-Hexanone	ND		19	1.7 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
4-Chlorotoluene	ND		0.96	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Acetone	ND		48	6.0 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Benzene	ND		0.96	0.12 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Bromobenzene	ND		0.96	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Bromochloromethane	ND		1.9	0.66 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Bromodichloromethane	ND		0.96	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Bromoform	ND		4.8	0.76 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Bromomethane	ND		19	9.0 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
cis-1,2-Dichloroethene	ND		0.96	0.27 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
cis-1,3-Dichloropropene	ND		0.96	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Carbon disulfide	ND		9.6	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Carbon tetrachloride	ND		0.96	0.27 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Chlorobenzene	ND		0.96	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Chloroform	ND		0.96	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Chloromethane	ND		19	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Dibromochloromethane	ND		1.9	0.55 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Dibromomethane	ND		0.96	0.74 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Dichlorodifluoromethane	ND		1.9	0.43 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Di-isopropyl ether (DIPE)	ND		0.96	0.46 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Ethanol	ND		480	80 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Ethylbenzene	ND		0.96	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Ethyl-t-butyl ether (ETBE)	ND		0.96	0.49 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Isopropylbenzene	ND		0.96	0.52 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Methylene Chloride	ND		9.6	1.3 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Naphthalene	ND		9.6	0.78 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
n-Butylbenzene	ND		0.96	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
N-Propylbenzene	ND		1.9	0.48 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
o-Xylene	ND		0.96	0.53 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
m,p-Xylene	ND		1.9	0.26 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
p-Isopropyltoluene	ND		0.96	0.60 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
sec-Butylbenzene	ND		0.96	0.55 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Styrene	ND		0.96	0.58 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
trans-1,2-Dichloroethene	ND		0.96	0.49 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
trans-1,3-Dichloropropene	ND		1.9	0.58 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Tert-amyl-methyl ether (TAME)	ND		0.96	0.34 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
tert-Butyl alcohol (TBA)	ND		19	5.0 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
tert-Butylbenzene	ND		0.96	0.14 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Tetrachloroethene	ND		0.96	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:22	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-3**  
**Date Collected: 10/04/19 08:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-2**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.96	0.49 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Trichloroethene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Trichlorofluoromethane	ND		9.6	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Vinyl acetate	ND		9.6	4.6 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
Vinyl chloride	ND		0.96	0.48 ug/Kg		10/08/19 17:34	10/09/19 13:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		71 - 155			10/08/19 17:34	10/09/19 13:22	1
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120			10/08/19 17:34	10/09/19 13:22	1
<i>Dibromofluoromethane (Surr)</i>	100		79 - 133			10/08/19 17:34	10/09/19 13:22	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120			10/08/19 17:34	10/09/19 13:22	1

**Client Sample ID: SV10-5**  
**Date Collected: 10/04/19 08:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.92	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1,1-Trichloroethane	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.2	0.33 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1,2-Trichloroethane	ND		0.92	0.33 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1-Dichloroethane	ND		0.92	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1-Dichloroethene	ND		0.92	0.32 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2,3-Trichlorobenzene	ND		1.8	0.84 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2,3-Trichloropropane	ND		1.8	0.77 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2,4-Trichlorobenzene	ND		1.8	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2,4-Trimethylbenzene	ND		1.8	0.54 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2-Dibromo-3-Chloropropane	ND		9.2	1.6 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2-Dibromoethane	ND		0.92	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2-Dichlorobenzene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2-Dichloroethane	ND		0.92	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,2-Dichloropropane	ND		0.92	0.41 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,3,5-Trimethylbenzene	ND		1.8	0.51 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,3-Dichlorobenzene	ND		0.92	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,3-Dichloropropane	ND		0.92	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
1,4-Dichlorobenzene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
2,2-Dichloropropane	ND		4.6	0.31 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
2-Butanone	ND		18	3.5 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
2-Chlorotoluene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
2-Hexanone	ND		18	1.6 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
4-Chlorotoluene	ND		0.92	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
4-Methyl-2-pentanone	ND		18	4.0 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Acetone	ND		46	5.8 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Benzene	ND		0.92	0.12 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Bromobenzene	ND		0.92	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Bromochloromethane	ND		1.8	0.64 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Bromodichloromethane	ND		0.92	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Bromoform	ND		4.6	0.73 ug/Kg		10/08/19 17:34	10/09/19 13:47	1
Bromomethane	ND		18	8.7 ug/Kg		10/08/19 17:34	10/09/19 13:47	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-5**  
**Date Collected: 10/04/19 08:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-3**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.92	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
cis-1,3-Dichloropropene	ND		0.92	0.24 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Carbon disulfide	ND		9.2	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Carbon tetrachloride	ND		0.92	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Chlorobenzene	ND		0.92	0.21 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Chloroethane	ND		1.8	1.4 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Chloroform	ND		0.92	0.22 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Chloromethane	ND		18	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Dibromochloromethane	ND		1.8	0.53 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Dibromomethane	ND		0.92	0.72 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Dichlorodifluoromethane	ND		1.8	0.41 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Di-isopropyl ether (DIPE)	ND		0.92	0.45 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Ethanol	ND		460	77 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Ethylbenzene	ND		0.92	0.14 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Ethyl-t-butyl ether (ETBE)	ND		0.92	0.47 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Isopropylbenzene	ND		0.92	0.51 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Methylene Chloride	ND		9.2	1.2 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Naphthalene	ND		9.2	0.75 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
n-Butylbenzene	ND		0.92	0.14 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
o-Xylene	ND		0.92	0.51 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
m,p-Xylene	ND		1.8	0.25 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
p-Isopropyltoluene	ND		0.92	0.58 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
sec-Butylbenzene	ND		0.92	0.53 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Styrene	ND		0.92	0.56 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
trans-1,2-Dichloroethene	ND		0.92	0.47 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
trans-1,3-Dichloropropene	ND		1.8	0.56 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Tert-amyl-methyl ether (TAME)	ND		0.92	0.33 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
tert-Butyl alcohol (TBA)	ND		18	4.8 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
tert-Butylbenzene	ND		0.92	0.14 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Tetrachloroethene	ND		0.92	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Toluene	ND		0.92	0.48 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Trichloroethene	ND		1.8	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Trichlorofluoromethane	ND		9.2	0.35 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Vinyl acetate	ND		9.2	4.4 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1
Vinyl chloride	ND		0.92	0.47 ug/Kg	-	10/08/19 17:34	10/09/19 13:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	112		71 - 155	10/08/19 17:34	10/09/19 13:47	1
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120	10/08/19 17:34	10/09/19 13:47	1
<i>Dibromofluoromethane (Surr)</i>	100		79 - 133	10/08/19 17:34	10/09/19 13:47	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120	10/08/19 17:34	10/09/19 13:47	1

**Client Sample ID: SV10-10**  
**Date Collected: 10/04/19 08:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.74	0.18 ug/Kg	-	10/08/19 17:34	10/09/19 14:13	1
1,1,1-Trichloroethane	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 14:13	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-10**  
**Date Collected: 10/04/19 08:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.5	0.25 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.4	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,1,2-Trichloroethane	ND		0.74	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,1-Dichloroethane	ND		0.74	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,1-Dichloroethene	ND		0.74	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,1-Dichloropropene	ND		1.5	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2,3-Trichlorobenzene	ND		1.5	0.67 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2,3-Trichloropropane	ND		1.5	0.61 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2,4-Trichlorobenzene	ND		1.5	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2,4-Trimethylbenzene	ND		1.5	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2-Dibromo-3-Chloropropane	ND		7.4	1.3 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2-Dibromoethane	ND		0.74	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2-Dichlorobenzene	ND		0.74	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2-Dichloroethane	ND		0.74	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,2-Dichloropropane	ND		0.74	0.32 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,3,5-Trimethylbenzene	ND		1.5	0.40 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,3-Dichlorobenzene	ND		0.74	0.13 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,3-Dichloropropane	ND		0.74	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
1,4-Dichlorobenzene	ND		0.74	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
2,2-Dichloropropane	ND		3.7	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
2-Butanone	ND		15	2.8 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
2-Chlorotoluene	ND		0.74	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
2-Hexanone	ND		15	1.3 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
4-Chlorotoluene	ND		0.74	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
4-Methyl-2-pentanone	ND		15	3.2 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Acetone	ND		37	4.6 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Benzene	ND		0.74	0.096 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Bromobenzene	ND		0.74	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Bromochloromethane	ND		1.5	0.51 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Bromodichloromethane	ND		0.74	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Bromoform	ND		3.7	0.59 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Bromomethane	ND		15	6.9 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
cis-1,2-Dichloroethene	ND		0.74	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
cis-1,3-Dichloropropene	ND		0.74	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Carbon disulfide	ND		7.4	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Carbon tetrachloride	ND		0.74	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Chlorobenzene	ND		0.74	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Chloroethane	ND		1.5	1.1 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Chloroform	ND		0.74	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Chloromethane	ND		15	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Dibromochloromethane	ND		1.5	0.42 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Dibromomethane	ND		0.74	0.57 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Dichlorodifluoromethane	ND		1.5	0.33 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Di-isopropyl ether (DIPE)	ND		0.74	0.36 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Ethanol	ND		370	62 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Ethylbenzene	ND		0.74	0.11 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Ethyl-t-butyl ether (ETBE)	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Isopropylbenzene	ND		0.74	0.40 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Methylene Chloride	ND		7.4	0.99 ug/Kg		10/08/19 17:34	10/09/19 14:13	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-10**  
**Date Collected: 10/04/19 08:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-4**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Naphthalene	ND		7.4	0.60 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
n-Butylbenzene	ND		0.74	0.12 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
N-Propylbenzene	ND		1.5	0.37 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
o-Xylene	ND		0.74	0.41 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
m,p-Xylene	ND		1.5	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
p-Isopropyltoluene	ND		0.74	0.46 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
sec-Butylbenzene	ND		0.74	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Styrene	ND		0.74	0.45 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
trans-1,2-Dichloroethene	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
trans-1,3-Dichloropropene	ND		1.5	0.45 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Tert-amyl-methyl ether (TAME)	ND		0.74	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
tert-Butyl alcohol (TBA)	ND		15	3.8 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
tert-Butylbenzene	ND		0.74	0.11 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Tetrachloroethene	ND		0.74	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Toluene	ND		0.74	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Trichloroethene	ND		1.5	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Trichlorofluoromethane	ND		7.4	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Vinyl acetate	ND		7.4	3.5 ug/Kg		10/08/19 17:34	10/09/19 14:13	1
Vinyl chloride	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		71 - 155	10/08/19 17:34	10/09/19 14:13	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 14:13	1
Dibromofluoromethane (Surr)	105		79 - 133	10/08/19 17:34	10/09/19 14:13	1
Toluene-d8 (Surr)	99		80 - 120	10/08/19 17:34	10/09/19 14:13	1

**Client Sample ID: SV10-15**  
**Date Collected: 10/04/19 08:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.69	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,1-Trichloroethane	ND		0.69	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.9	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2-Trichloroethane	ND		0.69	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloroethane	ND		0.69	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloroethene	ND		0.69	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,3-Trichlorobenzene	ND		1.4	0.63 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,3-Trichloropropane	ND		1.4	0.57 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,4-Trichlorobenzene	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,4-Trimethylbenzene	ND		1.4	0.40 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dibromo-3-Chloropropane	ND		6.9	1.2 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dibromoethane	ND		0.69	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichlorobenzene	ND		0.69	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichloroethane	ND		0.69	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichloropropane	ND		0.69	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,3,5-Trimethylbenzene	ND		1.4	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,3-Dichlorobenzene	ND		0.69	0.12 ug/Kg		10/08/19 17:34	10/09/19 14:39	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-15**  
**Date Collected: 10/04/19 08:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.69	0.17 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,4-Dichlorobenzene	ND		0.69	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2,2-Dichloropropane	ND		3.5	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Butanone	ND		14	2.6 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Chlorotoluene	ND		0.69	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Hexanone	ND		14	1.2 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
4-Chlorotoluene	ND		0.69	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
4-Methyl-2-pentanone	ND		14	3.0 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Acetone	ND		35	4.3 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Benzene	ND		0.69	0.090 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromobenzene	ND		0.69	0.14 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromochloromethane	ND		1.4	0.48 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromodichloromethane	ND		0.69	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromoform	ND		3.5	0.55 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromomethane	ND		14	6.5 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
cis-1,2-Dichloroethene	ND		0.69	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
cis-1,3-Dichloropropene	ND		0.69	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Carbon disulfide	ND		6.9	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Carbon tetrachloride	ND		0.69	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chlorobenzene	ND		0.69	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloroethane	ND		1.4	1.0 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloroform	ND		0.69	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloromethane	ND		14	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dibromochloromethane	ND		1.4	0.39 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dibromomethane	ND		0.69	0.53 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dichlorodifluoromethane	ND		1.4	0.31 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Di-isopropyl ether (DIPE)	ND		0.69	0.33 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethanol	ND		350	58 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethylbenzene	ND		0.69	0.10 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethyl-t-butyl ether (ETBE)	ND		0.69	0.35 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Isopropylbenzene	ND		0.69	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Methylene Chloride	ND		6.9	0.92 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Naphthalene	ND		6.9	0.56 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
n-Butylbenzene	ND		0.69	0.11 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
N-Propylbenzene	ND		1.4	0.35 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
o-Xylene	ND		0.69	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
m,p-Xylene	ND		1.4	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
p-Isopropyltoluene	ND		0.69	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
sec-Butylbenzene	ND		0.69	0.40 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Styrene	ND		0.69	0.42 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
trans-1,2-Dichloroethene	ND		0.69	0.35 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
trans-1,3-Dichloropropene	ND		1.4	0.42 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Tert-amyl-methyl ether (TAME)	ND		0.69	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
tert-Butyl alcohol (TBA)	ND		14	3.6 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
tert-Butylbenzene	ND		0.69	0.10 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Tetrachloroethene	ND		0.69	0.14 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Toluene	ND		0.69	0.36 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-15**  
**Date Collected: 10/04/19 08:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-5**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		6.9	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Vinyl acetate	ND		6.9	3.3 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Vinyl chloride	ND		0.69	0.35 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		71 - 155			10/08/19 17:34	10/09/19 14:39	1
<i>4-Bromofluorobenzene (Surr)</i>	103		80 - 120			10/08/19 17:34	10/09/19 14:39	1
<i>Dibromofluoromethane (Surr)</i>	106		79 - 133			10/08/19 17:34	10/09/19 14:39	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120			10/08/19 17:34	10/09/19 14:39	1

**Client Sample ID: SV10-20**  
**Date Collected: 10/04/19 08:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-6**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1,1-Trichloroethane	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1,2-Trichloroethane	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1-Dichloroethane	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1-Dichloroethene	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2,3-Trichlorobenzene	ND		1.8	0.84 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2,3-Trichloropropane	ND		1.8	0.76 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2,4-Trimethylbenzene	ND		1.8	0.54 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2-Dibromoethane	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2-Dichlorobenzene	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2-Dichloroethane	ND		0.91	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,2-Dichloropropane	ND		0.91	0.40 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,3,5-Trimethylbenzene	ND		1.8	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,3-Dichlorobenzene	ND		0.91	0.16 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,3-Dichloropropane	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
1,4-Dichlorobenzene	ND		0.91	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
2,2-Dichloropropane	ND		4.6	0.30 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
2-Butanone	ND		18	3.4 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
2-Chlorotoluene	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
2-Hexanone	ND		18	1.6 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
4-Chlorotoluene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
4-Methyl-2-pentanone	ND		18	4.0 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Acetone	ND		46	5.7 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Benzene	ND		0.91	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Bromobenzene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Bromochloromethane	ND		1.8	0.63 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Bromodichloromethane	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Bromoform	ND		4.6	0.73 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Bromomethane	ND		18	8.6 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
cis-1,2-Dichloroethene	ND		0.91	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
cis-1,3-Dichloropropene	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:05	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-20**  
**Date Collected: 10/04/19 08:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-6**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		9.1	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Carbon tetrachloride	ND		0.91	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Chlorobenzene	ND		0.91	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Chloroform	ND		0.91	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Chloromethane	ND		18	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Dibromochloromethane	ND		1.8	0.52 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Dibromomethane	ND		0.91	0.71 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Dichlorodifluoromethane	ND		1.8	0.41 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Ethanol	ND		460	76 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Ethylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Isopropylbenzene	ND		0.91	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Methylene Chloride	ND		9.1	1.2 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Naphthalene	ND		9.1	0.74 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
n-Butylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
o-Xylene	ND		0.91	0.51 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
m,p-Xylene	ND		1.8	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
p-Isopropyltoluene	ND		0.91	0.58 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
sec-Butylbenzene	ND		0.91	0.53 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Styrene	ND		0.91	0.55 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
trans-1,2-Dichloroethene	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
trans-1,3-Dichloropropene	ND		1.8	0.55 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
tert-Butylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Tetrachloroethene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Toluene	ND		0.91	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Trichlorofluoromethane	ND		9.1	0.34 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Vinyl acetate	ND		9.1	4.3 ug/Kg		10/08/19 17:34	10/09/19 15:05	1
Vinyl chloride	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		71 - 155	10/08/19 17:34	10/09/19 15:05	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 15:05	1
Dibromofluoromethane (Surr)	105		79 - 133	10/08/19 17:34	10/09/19 15:05	1
Toluene-d8 (Surr)	101		80 - 120	10/08/19 17:34	10/09/19 15:05	1

**Client Sample ID: SV10-25**  
**Date Collected: 10/04/19 08:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.78	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1,1-Trichloroethane	ND		0.78	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:31	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-25**  
**Date Collected: 10/04/19 08:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.78	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1-Dichloroethane	ND		0.78	0.16 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1-Dichloroethene	ND		0.78	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,1-Dichloropropene	ND		1.6	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2,3-Trichlorobenzene	ND		1.6	0.71 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2,3-Trichloropropane	ND		1.6	0.64 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2,4-Trichlorobenzene	ND		1.6	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2,4-Trimethylbenzene	ND		1.6	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2-Dibromo-3-Chloropropane	ND		7.8	1.4 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2-Dibromoethane	ND		0.78	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2-Dichlorobenzene	ND		0.78	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2-Dichloroethane	ND		0.78	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,2-Dichloropropane	ND		0.78	0.34 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,3,5-Trimethylbenzene	ND		1.6	0.43 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,3-Dichlorobenzene	ND		0.78	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,3-Dichloropropane	ND		0.78	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
1,4-Dichlorobenzene	ND		0.78	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
2,2-Dichloropropane	ND		3.9	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
2-Butanone	ND		16	2.9 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
2-Chlorotoluene	ND		0.78	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
2-Hexanone	ND		16	1.4 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
4-Chlorotoluene	ND		0.78	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
4-Methyl-2-pentanone	ND		16	3.4 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Acetone	ND		39	4.8 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Benzene	ND		0.78	0.10 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Bromobenzene	ND		0.78	0.16 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Bromochloromethane	ND		1.6	0.54 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Bromodichloromethane	ND		0.78	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Bromoform	ND		3.9	0.62 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Bromomethane	ND		16	7.3 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
cis-1,2-Dichloroethene	ND		0.78	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
cis-1,3-Dichloropropane	ND		0.78	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Carbon disulfide	ND		7.8	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Carbon tetrachloride	ND		0.78	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Chlorobenzene	ND		0.78	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Chloroethane	ND		1.6	1.2 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Chloroform	ND		0.78	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Chloromethane	ND		16	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Dibromochloromethane	ND		1.6	0.44 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Dibromomethane	ND		0.78	0.60 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Dichlorodifluoromethane	ND		1.6	0.34 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Di-isopropyl ether (DIPE)	ND		0.78	0.37 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Ethanol	ND		390	65 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Ethylbenzene	ND		0.78	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Ethyl-t-butyl ether (ETBE)	ND		0.78	0.39 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Isopropylbenzene	ND		0.78	0.42 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Methylene Chloride	ND		7.8	1.0 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Naphthalene	ND		7.8	0.63 ug/Kg		10/08/19 17:34	10/09/19 15:31	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-25**  
**Date Collected: 10/04/19 08:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-7**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.78	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
N-Propylbenzene	ND		1.6	0.39 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
o-Xylene	ND		0.78	0.43 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
m,p-Xylene	ND		1.6	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
p-Isopropyltoluene	ND		0.78	0.49 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
sec-Butylbenzene	ND		0.78	0.45 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Styrene	ND		0.78	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
trans-1,2-Dichloroethene	ND		0.78	0.39 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
trans-1,3-Dichloropropene	ND		1.6	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Tert-amyl-methyl ether (TAME)	ND		0.78	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
tert-Butyl alcohol (TBA)	ND		16	4.0 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
tert-Butylbenzene	ND		0.78	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Tetrachloroethene	ND		0.78	0.16 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Toluene	ND		0.78	0.40 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Trichloroethene	ND		1.6	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Trichlorofluoromethane	ND		7.8	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Vinyl acetate	ND		7.8	3.7 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Vinyl chloride	ND		0.78	0.39 ug/Kg		10/08/19 17:34	10/09/19 15:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 155			10/08/19 17:34	10/09/19 15:31	1
4-Bromofluorobenzene (Surr)	103		80 - 120			10/08/19 17:34	10/09/19 15:31	1
Dibromofluoromethane (Surr)	98		79 - 133			10/08/19 17:34	10/09/19 15:31	1
Toluene-d8 (Surr)	100		80 - 120			10/08/19 17:34	10/09/19 15:31	1

**Client Sample ID: SV10-30**  
**Date Collected: 10/04/19 08:55**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1,2-Trichloroethane	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1-Dichloroethane	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2,3-Trichlorobenzene	ND		1.7	0.75 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2,4-Trimethylbenzene	ND		1.7	0.48 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,2-Dichloropropane	ND		0.83	0.36 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,3,5-Trimethylbenzene	ND		1.7	0.45 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
1,4-Dichlorobenzene	ND		0.83	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:57	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-30**  
**Date Collected: 10/04/19 08:55**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		4.1	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
2-Butanone	ND		17	3.1 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
2-Hexanone	ND		17	1.5 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Acetone	ND		41	5.1 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Benzene	ND		0.83	0.11 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Bromochloromethane	ND		1.7	0.57 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Bromoform	ND		4.1	0.66 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Bromomethane	ND		17	7.8 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Carbon tetrachloride	ND		0.83	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Chlorobenzene	ND		0.83	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Chloroform	ND		0.83	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Chloromethane	ND		17	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Dibromochloromethane	ND		1.7	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Dibromomethane	ND		0.83	0.64 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Ethanol	ND		410	69 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Isopropylbenzene	ND		0.83	0.45 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Naphthalene	ND		8.3	0.67 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
N-Propylbenzene	ND		1.7	0.41 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
p-Isopropyltoluene	ND		0.83	0.52 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Styrene	ND		0.83	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
trans-1,3-Dichloropropene	ND		1.7	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
tert-Butylbenzene	ND		0.83	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Toluene	ND		0.83	0.43 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Vinyl acetate	ND		8.3	3.9 ug/Kg		10/08/19 17:34	10/09/19 15:57	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV10-30**  
**Date Collected: 10/04/19 08:55**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-8**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 15:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		71 - 155			10/08/19 17:34	10/09/19 15:57	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/08/19 17:34	10/09/19 15:57	1
Dibromofluoromethane (Surr)	103		79 - 133			10/08/19 17:34	10/09/19 15:57	1
Toluene-d8 (Surr)	99		80 - 120			10/08/19 17:34	10/09/19 15:57	1

**Client Sample ID: SV7-1**  
**Date Collected: 10/04/19 09:15**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.91	0.22 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1,1-Trichloroethane	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.1	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1,2-Trichloroethane	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1-Dichloroethane	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1-Dichloroethene	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2,3-Trichlorobenzene	ND		1.8	0.83 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2,3-Trichloropropane	ND		1.8	0.76 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2,4-Trimethylbenzene	ND		1.8	0.53 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2-Dibromo-3-Chloropropane	ND		9.1	1.6 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2-Dibromoethane	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2-Dichlorobenzene	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2-Dichloroethane	ND		0.91	0.29 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,2-Dichloropropane	ND		0.91	0.40 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,3,5-Trimethylbenzene	ND		1.8	0.50 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,3-Dichlorobenzene	ND		0.91	0.16 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,3-Dichloropropane	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
1,4-Dichlorobenzene	ND		0.91	0.20 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
2,2-Dichloropropane	ND		4.6	0.30 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
2-Butanone	ND		18	3.4 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
2-Chlorotoluene	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
2-Hexanone	ND		18	1.6 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
4-Chlorotoluene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Acetone	ND		46	5.7 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
<b>Benzene</b>	<b>2.8</b>		0.91	0.12 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Bromobenzene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Bromochloromethane	ND		1.8	0.63 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Bromodichloromethane	ND		0.91	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Bromoform	ND		4.6	0.72 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Bromomethane	ND		18	8.6 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
cis-1,2-Dichloroethene	ND		0.91	0.26 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
cis-1,3-Dichloropropene	ND		0.91	0.23 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Carbon disulfide	ND		9.1	0.28 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Carbon tetrachloride	ND		0.91	0.26 ug/Kg		10/08/19 17:34	10/09/19 16:22	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-1**  
**Date Collected: 10/04/19 09:15**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-11**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.91	0.20 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Chloroform	ND		0.91	0.22 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Chloromethane	ND		18	0.28 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Dibromochloromethane	ND		1.8	0.52 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Dibromomethane	ND		0.91	0.71 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Di-isopropyl ether (DIPE)	ND		0.91	0.44 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Ethanol	ND		460	76 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Ethylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Ethyl-t-butyl ether (ETBE)	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Isopropylbenzene	ND		0.91	0.50 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Methylene Chloride	ND		9.1	1.2 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Naphthalene	ND		9.1	0.74 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
n-Butylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
o-Xylene	ND		0.91	0.51 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
p-Isopropyltoluene	ND		0.91	0.57 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
sec-Butylbenzene	ND		0.91	0.53 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Styrene	ND		0.91	0.55 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
trans-1,2-Dichloroethene	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
trans-1,3-Dichloropropene	ND		1.8	0.55 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Tert-amyl-methyl ether (TAME)	ND		0.91	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
tert-Butylbenzene	ND		0.91	0.14 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Tetrachloroethene	ND		0.91	0.19 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
<b>Toluene</b>	<b>2.0</b>		0.91	0.47 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Trichlorofluoromethane	ND		9.1	0.34 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Vinyl acetate	ND		9.1	4.3 ug/Kg		10/08/19 17:34	10/09/19 16:22	1
Vinyl chloride	ND		0.91	0.46 ug/Kg		10/08/19 17:34	10/09/19 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	10/08/19 17:34	10/09/19 16:22	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/08/19 17:34	10/09/19 16:22	1
Dibromofluoromethane (Surr)	102		79 - 133	10/08/19 17:34	10/09/19 16:22	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 16:22	1

**Client Sample ID: SV7-3**  
**Date Collected: 10/04/19 09:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1,1-Trichloroethane	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.3	0.33 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1,2-Trichloroethane	ND		0.93	0.33 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1-Dichloroethane	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 16:48	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-3**  
**Date Collected: 10/04/19 09:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.93	0.32 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2,3-Trichlorobenzene	ND		1.9	0.85 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2,3-Trichloropropane	ND		1.9	0.77 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2,4-Trichlorobenzene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2,4-Trimethylbenzene	ND		1.9	0.54 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2-Dibromoethane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2-Dichloroethane	ND		0.93	0.29 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,2-Dichloropropane	ND		0.93	0.41 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,3-Dichlorobenzene	ND		0.93	0.16 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,3-Dichloropropane	ND		0.93	0.23 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
1,4-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
2,2-Dichloropropane	ND		4.6	0.31 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
2-Butanone	ND		19	3.5 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
2-Chlorotoluene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
2-Hexanone	ND		19	1.6 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
4-Chlorotoluene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
4-Methyl-2-pentanone	ND		19	4.0 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Acetone	ND		46	5.8 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
<b>Benzene</b>	<b>1.1</b>		0.93	0.12 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Bromobenzene	ND		0.93	0.19 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Bromochloromethane	ND		1.9	0.64 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Bromodichloromethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Bromoform	ND		4.6	0.74 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Bromomethane	ND		19	8.8 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
cis-1,2-Dichloroethene	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
cis-1,3-Dichloropropane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Carbon disulfide	ND		9.3	0.28 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Carbon tetrachloride	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Chlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Chloroform	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Chloromethane	ND		19	0.28 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Dibromomethane	ND		0.93	0.72 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Dichlorodifluoromethane	ND		1.9	0.41 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Di-isopropyl ether (DIPE)	ND		0.93	0.45 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Ethanol	ND		460	78 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Ethylbenzene	ND		0.93	0.14 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Ethyl-t-butyl ether (ETBE)	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Isopropylbenzene	ND		0.93	0.51 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Methylene Chloride	ND		9.3	1.2 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.27 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
Naphthalene	ND		9.3	0.76 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
n-Butylbenzene	ND		0.93	0.15 ug/Kg		10/08/19 17:34	10/09/19 16:48	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/08/19 17:34	10/09/19 16:48	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-3**  
**Date Collected: 10/04/19 09:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-12**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.93	0.52 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
m,p-Xylene	ND		1.9	0.25 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
p-Isopropyltoluene	ND		0.93	0.59 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
sec-Butylbenzene	ND		0.93	0.54 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Styrene	ND		0.93	0.56 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
trans-1,2-Dichloroethene	ND		0.93	0.47 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
trans-1,3-Dichloropropene	ND		1.9	0.56 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Tert-amyl-methyl ether (TAME)	ND		0.93	0.33 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
tert-Butyl alcohol (TBA)	ND		19	4.8 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
tert-Butylbenzene	ND		0.93	0.14 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Tetrachloroethene	ND		0.93	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Toluene	ND		0.93	0.48 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Trichloroethene	ND		1.9	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Trichlorofluoromethane	ND		9.3	0.35 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Vinyl acetate	ND		9.3	4.4 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1
Vinyl chloride	ND		0.93	0.47 ug/Kg	-	10/08/19 17:34	10/09/19 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		71 - 155	10/08/19 17:34	10/09/19 16:48	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 16:48	1
Dibromofluoromethane (Surr)	102		79 - 133	10/08/19 17:34	10/09/19 16:48	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 16:48	1

**Client Sample ID: SV7-5**  
**Date Collected: 10/04/19 09:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-13**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.90	0.22 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1,1-Trichloroethane	ND		0.90	0.20 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.31 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.0	0.32 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1,2-Trichloroethane	ND		0.90	0.32 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1-Dichloroethane	ND		0.90	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1-Dichloroethene	ND		0.90	0.31 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2,3-Trichlorobenzene	ND		1.8	0.82 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2,3-Trichloropropane	ND		1.8	0.75 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2,4-Trichlorobenzene	ND		1.8	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2,4-Trimethylbenzene	ND		1.8	0.53 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2-Dibromo-3-Chloropropane	ND		9.0	1.6 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2-Dibromoethane	ND		0.90	0.23 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2-Dichlorobenzene	ND		0.90	0.21 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2-Dichloroethane	ND		0.90	0.28 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,2-Dichloropropane	ND		0.90	0.39 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,3,5-Trimethylbenzene	ND		1.8	0.49 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,3-Dichlorobenzene	ND		0.90	0.16 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,3-Dichloropropane	ND		0.90	0.23 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
1,4-Dichlorobenzene	ND		0.90	0.20 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
2,2-Dichloropropane	ND		4.5	0.30 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1
2-Butanone	ND		18	3.4 ug/Kg	-	10/08/19 17:34	10/09/19 17:14	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-5**  
**Date Collected: 10/04/19 09:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-13**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.90	0.21 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
2-Hexanone	ND		18	1.6 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
4-Chlorotoluene	ND		0.90	0.19 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
4-Methyl-2-pentanone	ND		18	3.9 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Acetone	ND		45	5.6 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
<b>Benzene</b>	<b>3.2</b>		0.90	0.12 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Bromobenzene	ND		0.90	0.19 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Bromochloromethane	ND		1.8	0.62 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Bromodichloromethane	ND		0.90	0.21 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Bromoform	ND		4.5	0.71 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Bromomethane	ND		18	8.5 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
cis-1,2-Dichloroethene	ND		0.90	0.25 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
cis-1,3-Dichloropropene	ND		0.90	0.23 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Carbon disulfide	ND		9.0	0.27 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Carbon tetrachloride	ND		0.90	0.25 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Chlorobenzene	ND		0.90	0.20 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Chloroethane	ND		1.8	1.3 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Chloroform	ND		0.90	0.21 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Chloromethane	ND		18	0.27 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Dibromochloromethane	ND		1.8	0.51 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Dibromomethane	ND		0.90	0.70 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Dichlorodifluoromethane	ND		1.8	0.40 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Di-isopropyl ether (DIPE)	ND		0.90	0.43 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Ethanol	ND		450	75 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Ethylbenzene	ND		0.90	0.14 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Ethyl-t-butyl ether (ETBE)	ND		0.90	0.46 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Isopropylbenzene	ND		0.90	0.49 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Methylene Chloride	ND		9.0	1.2 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Naphthalene	ND		9.0	0.73 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
n-Butylbenzene	ND		0.90	0.14 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
N-Propylbenzene	ND		1.8	0.45 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
o-Xylene	ND		0.90	0.50 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
m,p-Xylene	ND		1.8	0.24 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
p-Isopropyltoluene	ND		0.90	0.57 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
sec-Butylbenzene	ND		0.90	0.52 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Styrene	ND		0.90	0.54 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
trans-1,2-Dichloroethene	ND		0.90	0.45 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
trans-1,3-Dichloropropene	ND		1.8	0.54 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Tert-amyl-methyl ether (TAME)	ND		0.90	0.32 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
tert-Butyl alcohol (TBA)	ND		18	4.7 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
tert-Butylbenzene	ND		0.90	0.14 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Tetrachloroethene	ND		0.90	0.19 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
<b>Toluene</b>	<b>1.6</b>		0.90	0.46 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Trichloroethene	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Trichlorofluoromethane	ND		9.0	0.34 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Vinyl acetate	ND		9.0	4.3 ug/Kg		10/08/19 17:34	10/09/19 17:14	1
Vinyl chloride	ND		0.90	0.45 ug/Kg		10/08/19 17:34	10/09/19 17:14	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		71 - 155	10/08/19 17:34	10/09/19 17:14	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 17:14	1
Dibromofluoromethane (Surr)	102		79 - 133	10/08/19 17:34	10/09/19 17:14	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 17:14	1

**Client Sample ID: SV7-10**  
**Date Collected: 10/04/19 09:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.74	0.18 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1,1-Trichloroethane	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.4	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1,2-Trichloroethane	ND		0.74	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1-Dichloroethane	ND		0.74	0.16 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1-Dichloroethene	ND		0.74	0.26 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,1-Dichloropropene	ND		1.5	0.24 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2,3-Trichlorobenzene	ND		1.5	0.67 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2,3-Trichloropropane	ND		1.5	0.61 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2,4-Trichlorobenzene	ND		1.5	0.23 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2,4-Trimethylbenzene	ND		1.5	0.43 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2-Dibromo-3-Chloropropane	ND		7.4	1.3 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2-Dibromoethane	ND		0.74	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2-Dichlorobenzene	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2-Dichloroethane	ND		0.74	0.23 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,2-Dichloropropane	ND		0.74	0.32 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,3,5-Trimethylbenzene	ND		1.5	0.41 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,3-Dichlorobenzene	ND		0.74	0.13 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,3-Dichloropropane	ND		0.74	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
1,4-Dichlorobenzene	ND		0.74	0.16 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
2,2-Dichloropropane	ND		3.7	0.24 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
2-Butanone	ND		15	2.8 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
2-Chlorotoluene	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
2-Hexanone	ND		15	1.3 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
4-Chlorotoluene	ND		0.74	0.16 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
4-Methyl-2-pentanone	ND		15	3.2 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Acetone	ND		37	4.6 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
<b>Benzene</b>	<b>1.1</b>		0.74	0.096 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Bromobenzene	ND		0.74	0.15 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Bromochloromethane	ND		1.5	0.51 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Bromodichloromethane	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Bromoform	ND		3.7	0.59 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Bromomethane	ND		15	7.0 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
cis-1,2-Dichloroethene	ND		0.74	0.21 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
cis-1,3-Dichloropropene	ND		0.74	0.19 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Carbon disulfide	ND		7.4	0.23 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Carbon tetrachloride	ND		0.74	0.21 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Chlorobenzene	ND		0.74	0.17 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Chloroethane	ND		1.5	1.1 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Chloroform	ND		0.74	0.18 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Chloromethane	ND		15	0.22 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1
Dibromochloromethane	ND		1.5	0.42 ug/Kg	-	10/08/19 17:34	10/09/19 17:40	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-10**  
**Date Collected: 10/04/19 09:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-14**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.74	0.57 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Dichlorodifluoromethane	ND		1.5	0.33 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Di-isopropyl ether (DIPE)	ND		0.74	0.36 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Ethanol	ND		370	62 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Ethylbenzene	ND		0.74	0.11 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Ethyl-t-butyl ether (ETBE)	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Isopropylbenzene	ND		0.74	0.40 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Methylene Chloride	ND		7.4	0.99 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Naphthalene	ND		7.4	0.60 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
n-Butylbenzene	ND		0.74	0.12 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
N-Propylbenzene	ND		1.5	0.37 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
o-Xylene	ND		0.74	0.41 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
m,p-Xylene	ND		1.5	0.20 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
p-Isopropyltoluene	ND		0.74	0.47 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
sec-Butylbenzene	ND		0.74	0.43 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Styrene	ND		0.74	0.45 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
trans-1,2-Dichloroethene	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
trans-1,3-Dichloropropene	ND		1.5	0.45 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Tert-amyl-methyl ether (TAME)	ND		0.74	0.26 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
tert-Butyl alcohol (TBA)	ND		15	3.8 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
tert-Butylbenzene	ND		0.74	0.11 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Tetrachloroethene	ND		0.74	0.15 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Toluene	ND		0.74	0.38 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Trichloroethene	ND		1.5	0.22 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Trichlorofluoromethane	ND		7.4	0.28 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Vinyl acetate	ND		7.4	3.5 ug/Kg		10/08/19 17:34	10/09/19 17:40	1
Vinyl chloride	ND		0.74	0.37 ug/Kg		10/08/19 17:34	10/09/19 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		71 - 155	10/08/19 17:34	10/09/19 17:40	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/08/19 17:34	10/09/19 17:40	1
Dibromofluoromethane (Surr)	104		79 - 133	10/08/19 17:34	10/09/19 17:40	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 17:40	1

**Client Sample ID: SV7-15**  
**Date Collected: 10/04/19 09:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1,1-Trichloroethane	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1,2,2-Tetrachloroethane	ND		1.1	0.19 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1,2-Trichloroethane	ND		0.56	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1-Dichloroethane	ND		0.56	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1-Dichloroethene	ND		0.56	0.19 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,1-Dichloropropene	ND		1.1	0.18 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2,3-Trichlorobenzene	ND		1.1	0.51 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2,3-Trichloropropane	ND		1.1	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2,4-Trichlorobenzene	ND		1.1	0.17 ug/Kg		10/08/19 17:34	10/09/19 18:06	1

Eurofins Calscience LLC



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-15**  
**Date Collected: 10/04/19 09:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.1	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2-Dibromo-3-Chloropropane	ND		5.6	0.98 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2-Dibromoethane	ND		0.56	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2-Dichlorobenzene	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2-Dichloroethane	ND		0.56	0.18 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,2-Dichloropropane	ND		0.56	0.25 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,3,5-Trimethylbenzene	ND		1.1	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,3-Dichlorobenzene	ND		0.56	0.099 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,3-Dichloropropane	ND		0.56	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
1,4-Dichlorobenzene	ND		0.56	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
2,2-Dichloropropane	ND		2.8	0.19 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
2-Butanone	ND		11	2.1 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
2-Chlorotoluene	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
2-Hexanone	ND		11	0.99 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
4-Chlorotoluene	ND		0.56	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
4-Methyl-2-pentanone	ND		11	2.4 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Acetone	ND		28	3.5 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Benzene	ND		0.56	0.073 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Bromobenzene	ND		0.56	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Bromochloromethane	ND		1.1	0.39 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Bromodichloromethane	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Bromoform	ND		2.8	0.45 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Bromomethane	ND		11	5.3 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
cis-1,2-Dichloroethene	ND		0.56	0.16 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
cis-1,3-Dichloropropene	ND		0.56	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Carbon disulfide	ND		5.6	0.17 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Carbon tetrachloride	ND		0.56	0.16 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Chlorobenzene	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Chloroethane	ND		1.1	0.84 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Chloroform	ND		0.56	0.13 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Chloromethane	ND		11	0.17 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Dibromochloromethane	ND		1.1	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Dibromomethane	ND		0.56	0.44 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Dichlorodifluoromethane	ND		1.1	0.25 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Di-isopropyl ether (DIPE)	ND		0.56	0.27 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Ethanol	ND		280	47 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Ethylbenzene	ND		0.56	0.085 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Ethyl-t-butyl ether (ETBE)	ND		0.56	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Isopropylbenzene	ND		0.56	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Methylene Chloride	ND		5.6	0.75 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Methyl-t-Butyl Ether (MTBE)	ND		1.1	0.17 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Naphthalene	ND		5.6	0.46 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
n-Butylbenzene	ND		0.56	0.088 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
N-Propylbenzene	ND		1.1	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
o-Xylene	ND		0.56	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
m,p-Xylene	ND		1.1	0.15 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
p-Isopropyltoluene	ND		0.56	0.35 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
sec-Butylbenzene	ND		0.56	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Styrene	ND		0.56	0.34 ug/Kg		10/08/19 17:34	10/09/19 18:06	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV7-15**  
**Date Collected: 10/04/19 09:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-15**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.56	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
trans-1,3-Dichloropropene	ND		1.1	0.34 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Tert-amyl-methyl ether (TAME)	ND		0.56	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
tert-Butyl alcohol (TBA)	ND		11	2.9 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
tert-Butylbenzene	ND		0.56	0.085 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Tetrachloroethene	ND		0.56	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Toluene	ND		0.56	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Trichloroethene	ND		1.1	0.17 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Trichlorofluoromethane	ND		5.6	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Vinyl acetate	ND		5.6	2.7 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Vinyl chloride	ND		0.56	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		71 - 155			10/08/19 17:34	10/09/19 18:06	1
4-Bromofluorobenzene (Surr)	102		80 - 120			10/08/19 17:34	10/09/19 18:06	1
Dibromofluoromethane (Surr)	107		79 - 133			10/08/19 17:34	10/09/19 18:06	1
Toluene-d8 (Surr)	101		80 - 120			10/08/19 17:34	10/09/19 18:06	1

**Client Sample ID: SV9-1**  
**Date Collected: 10/04/19 10:15**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.92	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1,1-Trichloroethane	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1,2,2-Tetrachloroethane	ND		1.8	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.2	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1,2-Trichloroethane	ND		0.92	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1-Dichloroethane	ND		0.92	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1-Dichloroethene	ND		0.92	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,1-Dichloropropene	ND		1.8	0.30 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2,3-Trichlorobenzene	ND		1.8	0.84 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2,3-Trichloropropane	ND		1.8	0.77 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2,4-Trichlorobenzene	ND		1.8	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2,4-Trimethylbenzene	ND		1.8	0.54 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2-Dibromo-3-Chloropropane	ND		9.2	1.6 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2-Dibromoethane	ND		0.92	0.24 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2-Dichlorobenzene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2-Dichloroethane	ND		0.92	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,2-Dichloropropane	ND		0.92	0.40 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,3,5-Trimethylbenzene	ND		1.8	0.51 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,3-Dichlorobenzene	ND		0.92	0.16 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,3-Dichloropropane	ND		0.92	0.23 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
1,4-Dichlorobenzene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
2,2-Dichloropropane	ND		4.6	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
2-Butanone	ND		18	3.5 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
2-Chlorotoluene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
2-Hexanone	ND		18	1.6 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
4-Chlorotoluene	ND		0.92	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
4-Methyl-2-pentanone	ND		18	4.0 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Acetone	50		46	5.8 ug/Kg		10/08/19 17:34	10/09/19 18:32	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-1**  
**Date Collected: 10/04/19 10:15**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-16**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.92	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Bromobenzene	ND		0.92	0.19 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Bromochloromethane	ND		1.8	0.64 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Bromodichloromethane	ND		0.92	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Bromoform	ND		4.6	0.73 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Bromomethane	ND		18	8.7 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
cis-1,2-Dichloroethene	ND		0.92	0.26 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
cis-1,3-Dichloropropene	ND		0.92	0.24 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Carbon disulfide	ND		9.2	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Carbon tetrachloride	ND		0.92	0.26 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Chlorobenzene	ND		0.92	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Chloroethane	ND		1.8	1.4 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Chloroform	ND		0.92	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Chloromethane	ND		18	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Dibromochloromethane	ND		1.8	0.53 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Dibromomethane	ND		0.92	0.72 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Dichlorodifluoromethane	ND		1.8	0.41 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Di-isopropyl ether (DIPE)	ND		0.92	0.45 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Ethanol	ND		460	77 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Ethylbenzene	ND		0.92	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Ethyl-t-butyl ether (ETBE)	ND		0.92	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Isopropylbenzene	ND		0.92	0.50 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Methylene Chloride	ND		9.2	1.2 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Methyl-t-Butyl Ether (MTBE)	ND		1.8	0.27 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Naphthalene	ND		9.2	0.75 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
n-Butylbenzene	ND		0.92	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
N-Propylbenzene	ND		1.8	0.46 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
o-Xylene	ND		0.92	0.51 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
m,p-Xylene	ND		1.8	0.25 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
p-Isopropyltoluene	ND		0.92	0.58 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
sec-Butylbenzene	ND		0.92	0.53 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Styrene	ND		0.92	0.56 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
trans-1,2-Dichloroethene	ND		0.92	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
trans-1,3-Dichloropropene	ND		1.8	0.56 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Tert-amyl-methyl ether (TAME)	ND		0.92	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
tert-Butyl alcohol (TBA)	ND		18	4.8 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
tert-Butylbenzene	ND		0.92	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
<b>Tetrachloroethene</b>	<b>3.5</b>		0.92	0.19 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Toluene	ND		0.92	0.48 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Trichloroethene	ND		1.8	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Trichlorofluoromethane	ND		9.2	0.35 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Vinyl acetate	ND		9.2	4.4 ug/Kg		10/08/19 17:34	10/09/19 18:32	1
Vinyl chloride	ND		0.92	0.46 ug/Kg		10/08/19 17:34	10/09/19 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		71 - 155	10/08/19 17:34	10/09/19 18:32	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 18:32	1
Dibromofluoromethane (Surr)	101		79 - 133	10/08/19 17:34	10/09/19 18:32	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 18:32	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: SV9-3**  
**Date Collected: 10/04/19 10:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1,1-Trichloroethane	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.3	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1,2-Trichloroethane	ND		0.93	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1-Dichloroethane	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1-Dichloroethene	ND		0.93	0.32 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2,3-Trichlorobenzene	ND		1.9	0.85 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2,4-Trichlorobenzene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2-Dibromoethane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2-Dichloroethane	ND		0.93	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,2-Dichloropropane	ND		0.93	0.41 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,3-Dichlorobenzene	ND		0.93	0.16 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,3-Dichloropropane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
1,4-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
2-Butanone	ND		19	3.5 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
2-Chlorotoluene	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
2-Hexanone	ND		19	1.6 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
4-Chlorotoluene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
4-Methyl-2-pentanone	ND		19	4.0 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Acetone	ND		47	5.8 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Benzene	ND		0.93	0.12 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Bromobenzene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Bromochloromethane	ND		1.9	0.64 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Bromodichloromethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Bromoform	ND		4.7	0.74 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Bromomethane	ND		19	8.8 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
cis-1,2-Dichloroethene	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
cis-1,3-Dichloropropene	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Carbon disulfide	ND		9.3	0.29 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Carbon tetrachloride	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Chlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Chloroform	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Chloromethane	ND		19	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Dibromomethane	ND		0.93	0.72 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Dichlorodifluoromethane	ND		1.9	0.41 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Di-isopropyl ether (DIPE)	ND		0.93	0.45 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Ethanol	ND		470	78 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Ethylbenzene	ND		0.93	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Ethyl-t-butyl ether (ETBE)	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:58	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-3**  
**Date Collected: 10/04/19 10:20**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-17**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		0.93	0.51 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Methylene Chloride	ND		9.3	1.2 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Naphthalene	ND		9.3	0.76 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
n-Butylbenzene	ND		0.93	0.15 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
o-Xylene	ND		0.93	0.52 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
p-Isopropyltoluene	ND		0.93	0.59 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
sec-Butylbenzene	ND		0.93	0.54 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Styrene	ND		0.93	0.56 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
trans-1,2-Dichloroethene	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
trans-1,3-Dichloropropene	ND		1.9	0.57 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Tert-amyl-methyl ether (TAME)	ND		0.93	0.33 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
tert-Butyl alcohol (TBA)	ND		19	4.8 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
tert-Butylbenzene	ND		0.93	0.14 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Tetrachloroethene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Toluene	ND		0.93	0.48 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Trichlorofluoromethane	ND		9.3	0.35 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Vinyl acetate	ND		9.3	4.4 ug/Kg		10/08/19 17:34	10/09/19 18:58	1
Vinyl chloride	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	10/08/19 17:34	10/09/19 18:58	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/08/19 17:34	10/09/19 18:58	1
Dibromofluoromethane (Surr)	101		79 - 133	10/08/19 17:34	10/09/19 18:58	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 18:58	1

**Client Sample ID: SV9-5**  
**Date Collected: 10/04/19 10:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.23 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1,1-Trichloroethane	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.33 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1,2-Trichloroethane	ND		0.94	0.33 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1-Dichloroethane	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1-Dichloroethene	ND		0.94	0.33 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2,3-Trichlorobenzene	ND		1.9	0.86 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2,4-Trichlorobenzene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2-Dibromoethane	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2-Dichlorobenzene	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2-Dichloroethane	ND		0.94	0.30 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,2-Dichloropropane	ND		0.94	0.41 ug/Kg		10/08/19 17:34	10/09/19 19:23	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-5**  
**Date Collected: 10/04/19 10:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.9	0.52 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,3-Dichlorobenzene	ND		0.94	0.17 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,3-Dichloropropane	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
1,4-Dichlorobenzene	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
2-Butanone	ND		19	3.5 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
2-Chlorotoluene	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
2-Hexanone	ND		19	1.7 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
4-Chlorotoluene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
4-Methyl-2-pentanone	ND		19	4.1 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Acetone	ND		47	5.9 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Benzene	ND		0.94	0.12 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Bromobenzene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Bromodichloromethane	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Bromoform	ND		4.7	0.75 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Bromomethane	ND		19	8.9 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
cis-1,2-Dichloroethene	ND		0.94	0.26 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
cis-1,3-Dichloropropene	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Carbon disulfide	ND		9.4	0.29 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Carbon tetrachloride	ND		0.94	0.27 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Chlorobenzene	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Chloroform	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Chloromethane	ND		19	0.29 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Dibromochloromethane	ND		1.9	0.54 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Dibromomethane	ND		0.94	0.73 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Dichlorodifluoromethane	ND		1.9	0.42 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Ethanol	ND		470	79 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Ethylbenzene	ND		0.94	0.14 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.48 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Isopropylbenzene	ND		0.94	0.51 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Methylene Chloride	ND		9.4	1.3 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Naphthalene	ND		9.4	0.77 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
n-Butylbenzene	ND		0.94	0.15 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
o-Xylene	ND		0.94	0.52 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
p-Isopropyltoluene	ND		0.94	0.59 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
sec-Butylbenzene	ND		0.94	0.54 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Styrene	ND		0.94	0.57 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
trans-1,2-Dichloroethene	ND		0.94	0.48 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
trans-1,3-Dichloropropene	ND		1.9	0.57 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
tert-Butyl alcohol (TBA)	ND		19	4.9 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
tert-Butylbenzene	ND		0.94	0.14 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Tetrachloroethene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:23	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-5**  
**Date Collected: 10/04/19 10:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-18**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.94	0.48 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Trichlorofluoromethane	ND		9.4	0.35 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Vinyl acetate	ND		9.4	4.5 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
Vinyl chloride	ND		0.94	0.47 ug/Kg		10/08/19 17:34	10/09/19 19:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		71 - 155			10/08/19 17:34	10/09/19 19:23	1
<i>4-Bromofluorobenzene (Surr)</i>	102		80 - 120			10/08/19 17:34	10/09/19 19:23	1
<i>Dibromofluoromethane (Surr)</i>	101		79 - 133			10/08/19 17:34	10/09/19 19:23	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120			10/08/19 17:34	10/09/19 19:23	1

**Client Sample ID: SV9-10**  
**Date Collected: 10/04/19 10:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.79	0.19 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1,1-Trichloroethane	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1,2,2-Tetrachloroethane	ND		1.6	0.27 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1,2-Trichloroethane	ND		0.79	0.28 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1-Dichloroethane	ND		0.79	0.17 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1-Dichloroethene	ND		0.79	0.27 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,1-Dichloropropene	ND		1.6	0.26 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2,3-Trichlorobenzene	ND		1.6	0.72 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2,3-Trichloropropane	ND		1.6	0.66 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2,4-Trichlorobenzene	ND		1.6	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2,4-Trimethylbenzene	ND		1.6	0.46 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2-Dibromo-3-Chloropropane	ND		7.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2-Dibromoethane	ND		0.79	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2-Dichlorobenzene	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2-Dichloroethane	ND		0.79	0.25 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,2-Dichloropropane	ND		0.79	0.35 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,3,5-Trimethylbenzene	ND		1.6	0.43 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,3-Dichlorobenzene	ND		0.79	0.14 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,3-Dichloropropane	ND		0.79	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
1,4-Dichlorobenzene	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
2,2-Dichloropropane	ND		3.9	0.26 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
2-Butanone	ND		16	3.0 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
2-Chlorotoluene	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
2-Hexanone	ND		16	1.4 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
4-Chlorotoluene	ND		0.79	0.17 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
4-Methyl-2-pentanone	ND		16	3.4 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Acetone	ND		39	4.9 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Benzene	ND		0.79	0.10 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Bromobenzene	ND		0.79	0.17 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Bromochloromethane	ND		1.6	0.55 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Bromodichloromethane	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Bromoform	ND		3.9	0.63 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Bromomethane	ND		16	7.4 ug/Kg		10/08/19 17:34	10/09/19 19:49	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-10**  
**Date Collected: 10/04/19 10:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-19**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.79	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
cis-1,3-Dichloropropene	ND		0.79	0.20 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Carbon disulfide	ND		7.9	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Carbon tetrachloride	ND		0.79	0.22 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Chlorobenzene	ND		0.79	0.18 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Chloroethane	ND		1.6	1.2 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Chloroform	ND		0.79	0.19 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Chloromethane	ND		16	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Dibromochloromethane	ND		1.6	0.45 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Dibromomethane	ND		0.79	0.61 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Dichlorodifluoromethane	ND		1.6	0.35 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Di-isopropyl ether (DIPE)	ND		0.79	0.38 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Ethanol	ND		390	66 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Ethylbenzene	ND		0.79	0.12 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Ethyl-t-butyl ether (ETBE)	ND		0.79	0.40 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Isopropylbenzene	ND		0.79	0.43 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Methylene Chloride	ND		7.9	1.1 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.6	0.23 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Naphthalene	ND		7.9	0.64 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
n-Butylbenzene	ND		0.79	0.12 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
N-Propylbenzene	ND		1.6	0.40 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
o-Xylene	ND		0.79	0.44 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
m,p-Xylene	ND		1.6	0.21 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
p-Isopropyltoluene	ND		0.79	0.50 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
sec-Butylbenzene	ND		0.79	0.46 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Styrene	ND		0.79	0.48 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
trans-1,2-Dichloroethene	ND		0.79	0.40 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
trans-1,3-Dichloropropene	ND		1.6	0.48 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Tert-amyl-methyl ether (TAME)	ND		0.79	0.28 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
tert-Butyl alcohol (TBA)	ND		16	4.1 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
tert-Butylbenzene	ND		0.79	0.12 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
<b>Tetrachloroethene</b>	<b>2.1</b>		0.79	0.17 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Toluene	ND		0.79	0.41 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Trichloroethene	ND		1.6	0.24 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Trichlorofluoromethane	ND		7.9	0.30 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Vinyl acetate	ND		7.9	3.7 ug/Kg		10/08/19 17:34	10/09/19 19:49	1
Vinyl chloride	ND		0.79	0.40 ug/Kg		10/08/19 17:34	10/09/19 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		71 - 155	10/08/19 17:34	10/09/19 19:49	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/08/19 17:34	10/09/19 19:49	1
Dibromofluoromethane (Surr)	106		79 - 133	10/08/19 17:34	10/09/19 19:49	1
Toluene-d8 (Surr)	100		80 - 120	10/08/19 17:34	10/09/19 19:49	1

**Client Sample ID: SV9-15**  
**Date Collected: 10/04/19 10:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.70	0.17 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1,1-Trichloroethane	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-15**  
**Date Collected: 10/04/19 10:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.4	0.24 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.0	0.25 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1,2-Trichloroethane	ND		0.70	0.25 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1-Dichloroethane	ND		0.70	0.15 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1-Dichloroethene	ND		0.70	0.24 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2,3-Trichlorobenzene	ND		1.4	0.64 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2,3-Trichloropropane	ND		1.4	0.58 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2,4-Trichlorobenzene	ND		1.4	0.22 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2,4-Trimethylbenzene	ND		1.4	0.41 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2-Dibromo-3-Chloropropane	ND		7.0	1.2 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2-Dibromoethane	ND		0.70	0.18 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2-Dichlorobenzene	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2-Dichloroethane	ND		0.70	0.22 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,2-Dichloropropane	ND		0.70	0.31 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,3,5-Trimethylbenzene	ND		1.4	0.38 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,3-Dichlorobenzene	ND		0.70	0.12 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,3-Dichloropropane	ND		0.70	0.18 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
1,4-Dichlorobenzene	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
2,2-Dichloropropane	ND		3.5	0.23 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
2-Butanone	ND		14	2.6 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
2-Chlorotoluene	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
2-Hexanone	ND		14	1.2 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
4-Chlorotoluene	ND		0.70	0.15 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
4-Methyl-2-pentanone	ND		14	3.0 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Acetone	ND		35	4.4 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Benzene	ND		0.70	0.091 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Bromobenzene	ND		0.70	0.15 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Bromochloromethane	ND		1.4	0.48 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Bromodichloromethane	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Bromoform	ND		3.5	0.56 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Bromomethane	ND		14	6.6 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
cis-1,2-Dichloroethene	ND		0.70	0.20 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
cis-1,3-Dichloropropane	ND		0.70	0.18 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Carbon disulfide	ND		7.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Carbon tetrachloride	ND		0.70	0.20 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Chlorobenzene	ND		0.70	0.16 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Chloroethane	ND		1.4	1.0 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Chloroform	ND		0.70	0.17 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Chloromethane	ND		14	0.21 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Dibromochloromethane	ND		1.4	0.40 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Dibromomethane	ND		0.70	0.54 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Dichlorodifluoromethane	ND		1.4	0.31 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Di-isopropyl ether (DIPE)	ND		0.70	0.34 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Ethanol	ND		350	59 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Ethylbenzene	ND		0.70	0.11 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Ethyl-t-butyl ether (ETBE)	ND		0.70	0.36 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Isopropylbenzene	ND		0.70	0.38 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Methylene Chloride	ND		7.0	0.94 ug/Kg		10/08/19 17:34	10/09/19 20:15	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-15**  
**Date Collected: 10/04/19 10:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-20**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Naphthalene	ND		7.0	0.57 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
n-Butylbenzene	ND		0.70	0.11 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
N-Propylbenzene	ND		1.4	0.35 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
o-Xylene	ND		0.70	0.39 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
p-Isopropyltoluene	ND		0.70	0.44 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
sec-Butylbenzene	ND		0.70	0.40 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Styrene	ND		0.70	0.42 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
trans-1,2-Dichloroethene	ND		0.70	0.35 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
trans-1,3-Dichloropropene	ND		1.4	0.42 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Tert-amyl-methyl ether (TAME)	ND		0.70	0.25 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
tert-Butyl alcohol (TBA)	ND		14	3.6 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
tert-Butylbenzene	ND		0.70	0.11 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Tetrachloroethene	ND		0.70	0.15 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Toluene	ND		0.70	0.36 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Trichlorofluoromethane	ND		7.0	0.26 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Vinyl acetate	ND		7.0	3.3 ug/Kg		10/08/19 17:34	10/09/19 20:15	1
Vinyl chloride	ND		0.70	0.35 ug/Kg		10/08/19 17:34	10/09/19 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		71 - 155	10/08/19 17:34	10/09/19 20:15	1
4-Bromofluorobenzene (Surr)	101		80 - 120	10/08/19 17:34	10/09/19 20:15	1
Dibromofluoromethane (Surr)	102		79 - 133	10/08/19 17:34	10/09/19 20:15	1
Toluene-d8 (Surr)	98		80 - 120	10/08/19 17:34	10/09/19 20:15	1

**Client Sample ID: SV9-20**  
**Date Collected: 10/04/19 10:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.71	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1,1-Trichloroethane	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.1	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1,2-Trichloroethane	ND		0.71	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1-Dichloroethane	ND		0.71	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1-Dichloroethene	ND		0.71	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,1-Dichloropropene	ND		1.4	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2,3-Trichlorobenzene	ND		1.4	0.65 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2,3-Trichloropropane	ND		1.4	0.59 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2,4-Trichlorobenzene	ND		1.4	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2,4-Trimethylbenzene	ND		1.4	0.41 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2-Dibromo-3-Chloropropane	ND		7.1	1.2 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2-Dibromoethane	ND		0.71	0.18 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2-Dichloroethane	ND		0.71	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,2-Dichloropropane	ND		0.71	0.31 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,3,5-Trimethylbenzene	ND		1.4	0.39 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,3-Dichlorobenzene	ND		0.71	0.12 ug/Kg		10/08/19 17:34	10/09/19 13:14	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-20**  
**Date Collected: 10/04/19 10:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		0.71	0.18 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
1,4-Dichlorobenzene	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
2,2-Dichloropropane	ND		3.5	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
2-Butanone	ND		14	2.7 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
2-Chlorotoluene	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
2-Hexanone	ND		14	1.2 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
4-Chlorotoluene	ND		0.71	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
4-Methyl-2-pentanone	ND		14	3.1 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Acetone	ND		35	4.4 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Benzene	ND		0.71	0.092 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Bromobenzene	ND		0.71	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Bromochloromethane	ND		1.4	0.49 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Bromodichloromethane	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Bromoform	ND		3.5	0.56 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Bromomethane	ND		14	6.7 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
cis-1,2-Dichloroethene	ND		0.71	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
cis-1,3-Dichloropropene	ND		0.71	0.18 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Carbon disulfide	ND		7.1	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Carbon tetrachloride	ND		0.71	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Chlorobenzene	ND		0.71	0.16 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Chloroethane	ND		1.4	1.1 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Chloroform	ND		0.71	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Chloromethane	ND		14	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Dibromochloromethane	ND		1.4	0.40 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Dibromomethane	ND		0.71	0.55 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Dichlorodifluoromethane	ND		1.4	0.31 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Di-isopropyl ether (DIPE)	ND		0.71	0.34 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Ethanol	ND		350	59 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Ethylbenzene	ND		0.71	0.11 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Ethyl-t-butyl ether (ETBE)	ND		0.71	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Isopropylbenzene	ND		0.71	0.39 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Methylene Chloride	ND		7.1	0.95 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Naphthalene	ND		7.1	0.58 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
n-Butylbenzene	ND		0.71	0.11 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
N-Propylbenzene	ND		1.4	0.35 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
o-Xylene	ND		0.71	0.39 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
m,p-Xylene	ND		1.4	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
p-Isopropyltoluene	ND		0.71	0.45 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
sec-Butylbenzene	ND		0.71	0.41 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Styrene	ND		0.71	0.43 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
trans-1,2-Dichloroethene	ND		0.71	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
trans-1,3-Dichloropropene	ND		1.4	0.43 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Tert-amyl-methyl ether (TAME)	ND		0.71	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
tert-Butyl alcohol (TBA)	ND		14	3.7 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
tert-Butylbenzene	ND		0.71	0.11 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Tetrachloroethene	ND		0.71	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Toluene	ND		0.71	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Trichloroethene	ND		1.4	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:14	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-20**  
**Date Collected: 10/04/19 10:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-21**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		7.1	0.27 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Vinyl acetate	ND		7.1	3.4 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Vinyl chloride	ND		0.71	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 155			10/08/19 17:34	10/09/19 13:14	1
4-Bromofluorobenzene (Surr)	104		80 - 120			10/08/19 17:34	10/09/19 13:14	1
Dibromofluoromethane (Surr)	91		79 - 133			10/08/19 17:34	10/09/19 13:14	1
Toluene-d8 (Surr)	99		80 - 120			10/08/19 17:34	10/09/19 13:14	1

**Client Sample ID: SV9-25**  
**Date Collected: 10/04/19 10:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-22**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.83	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1,1-Trichloroethane	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1,2-Trichloroethane	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1-Dichloroethane	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1-Dichloroethene	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,1-Dichloropropene	ND		1.7	0.27 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2,3-Trichlorobenzene	ND		1.7	0.76 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2,3-Trichloropropane	ND		1.7	0.69 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2,4-Trichlorobenzene	ND		1.7	0.26 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2,4-Trimethylbenzene	ND		1.7	0.49 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2-Dibromo-3-Chloropropane	ND		8.3	1.4 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2-Dibromoethane	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2-Dichlorobenzene	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2-Dichloroethane	ND		0.83	0.26 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,2-Dichloropropane	ND		0.83	0.36 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,3,5-Trimethylbenzene	ND		1.7	0.45 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,3-Dichlorobenzene	ND		0.83	0.15 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,3-Dichloropropane	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
1,4-Dichlorobenzene	ND		0.83	0.18 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
2,2-Dichloropropane	ND		4.1	0.27 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
2-Butanone	ND		17	3.1 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
2-Chlorotoluene	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
2-Hexanone	ND		17	1.5 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
4-Chlorotoluene	ND		0.83	0.18 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
4-Methyl-2-pentanone	ND		17	3.6 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Acetone	ND		41	5.2 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Benzene	ND		0.83	0.11 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Bromobenzene	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Bromochloromethane	ND		1.7	0.57 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Bromodichloromethane	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Bromoform	ND		4.1	0.66 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Bromomethane	ND		17	7.8 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
cis-1,2-Dichloroethene	ND		0.83	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
cis-1,3-Dichloropropene	ND		0.83	0.21 ug/Kg		10/08/19 17:34	10/09/19 13:42	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-25**  
**Date Collected: 10/04/19 10:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-22**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		8.3	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Carbon tetrachloride	ND		0.83	0.23 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Chlorobenzene	ND		0.83	0.19 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Chloroethane	ND		1.7	1.2 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Chloroform	ND		0.83	0.20 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Chloromethane	ND		17	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Dibromochloromethane	ND		1.7	0.47 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Dibromomethane	ND		0.83	0.64 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Dichlorodifluoromethane	ND		1.7	0.37 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Di-isopropyl ether (DIPE)	ND		0.83	0.40 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Ethanol	ND		410	69 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Ethylbenzene	ND		0.83	0.13 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Ethyl-t-butyl ether (ETBE)	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Isopropylbenzene	ND		0.83	0.45 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Methylene Chloride	ND		8.3	1.1 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.24 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Naphthalene	ND		8.3	0.67 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
n-Butylbenzene	ND		0.83	0.13 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
N-Propylbenzene	ND		1.7	0.42 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
o-Xylene	ND		0.83	0.46 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
m,p-Xylene	ND		1.7	0.22 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
p-Isopropyltoluene	ND		0.83	0.52 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
sec-Butylbenzene	ND		0.83	0.48 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Styrene	ND		0.83	0.50 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
trans-1,2-Dichloroethene	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
trans-1,3-Dichloropropene	ND		1.7	0.50 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Tert-amyl-methyl ether (TAME)	ND		0.83	0.29 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
tert-Butyl alcohol (TBA)	ND		17	4.3 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
tert-Butylbenzene	ND		0.83	0.12 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Tetrachloroethene	ND		0.83	0.17 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Toluene	ND		0.83	0.43 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Trichloroethene	ND		1.7	0.25 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Trichlorofluoromethane	ND		8.3	0.31 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Vinyl acetate	ND		8.3	3.9 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Vinyl chloride	ND		0.83	0.42 ug/Kg		10/08/19 17:34	10/09/19 13:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		71 - 155			10/08/19 17:34	10/09/19 13:42	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120			10/08/19 17:34	10/09/19 13:42	1
<i>Dibromofluoromethane (Surr)</i>	91		79 - 133			10/08/19 17:34	10/09/19 13:42	1
<i>Toluene-d8 (Surr)</i>	98		80 - 120			10/08/19 17:34	10/09/19 13:42	1

**Client Sample ID: SV9-30**  
**Date Collected: 10/04/19 10:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.86	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1,1-Trichloroethane	ND		0.86	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1,2,2-Tetrachloroethane	ND		1.7	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.6	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:10	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-30**  
**Date Collected: 10/04/19 10:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.86	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1-Dichloroethane	ND		0.86	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1-Dichloroethene	ND		0.86	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,1-Dichloropropene	ND		1.7	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2,3-Trichlorobenzene	ND		1.7	0.78 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2,3-Trichloropropane	ND		1.7	0.71 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2,4-Trichlorobenzene	ND		1.7	0.27 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2,4-Trimethylbenzene	ND		1.7	0.50 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2-Dibromo-3-Chloropropane	ND		8.6	1.5 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2-Dibromoethane	ND		0.86	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2-Dichlorobenzene	ND		0.86	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2-Dichloroethane	ND		0.86	0.27 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,2-Dichloropropane	ND		0.86	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,3,5-Trimethylbenzene	ND		1.7	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,3-Dichlorobenzene	ND		0.86	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,3-Dichloropropane	ND		0.86	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
1,4-Dichlorobenzene	ND		0.86	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
2,2-Dichloropropane	ND		4.3	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
2-Butanone	ND		17	3.2 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
2-Chlorotoluene	ND		0.86	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
2-Hexanone	ND		17	1.5 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
4-Chlorotoluene	ND		0.86	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
4-Methyl-2-pentanone	ND		17	3.7 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Acetone	ND		43	5.4 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Benzene	ND		0.86	0.11 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Bromobenzene	ND		0.86	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Bromochloromethane	ND		1.7	0.59 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Bromodichloromethane	ND		0.86	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Bromoform	ND		4.3	0.68 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Bromomethane	ND		17	8.1 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
cis-1,2-Dichloroethene	ND		0.86	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
cis-1,3-Dichloropropane	ND		0.86	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Carbon disulfide	ND		8.6	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Carbon tetrachloride	ND		0.86	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Chlorobenzene	ND		0.86	0.19 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Chloroethane	ND		1.7	1.3 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Chloroform	ND		0.86	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Chloromethane	ND		17	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Dibromochloromethane	ND		1.7	0.49 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Dibromomethane	ND		0.86	0.66 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Dichlorodifluoromethane	ND		1.7	0.38 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Di-isopropyl ether (DIPE)	ND		0.86	0.41 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Ethanol	ND		430	72 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Ethylbenzene	ND		0.86	0.13 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Ethyl-t-butyl ether (ETBE)	ND		0.86	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Isopropylbenzene	ND		0.86	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Methylene Chloride	ND		8.6	1.1 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Methyl-t-Butyl Ether (MTBE)	ND		1.7	0.25 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Naphthalene	ND		8.6	0.70 ug/Kg		10/08/19 17:34	10/09/19 14:10	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV9-30**  
**Date Collected: 10/04/19 10:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-23**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.86	0.13 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
N-Propylbenzene	ND		1.7	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
o-Xylene	ND		0.86	0.48 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
m,p-Xylene	ND		1.7	0.23 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
p-Isopropyltoluene	ND		0.86	0.54 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
sec-Butylbenzene	ND		0.86	0.50 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Styrene	ND		0.86	0.52 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
trans-1,2-Dichloroethene	ND		0.86	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
trans-1,3-Dichloropropene	ND		1.7	0.52 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Tert-amyl-methyl ether (TAME)	ND		0.86	0.30 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
tert-Butyl alcohol (TBA)	ND		17	4.4 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
tert-Butylbenzene	ND		0.86	0.13 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Tetrachloroethene	ND		0.86	0.18 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Toluene	ND		0.86	0.44 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Trichloroethene	ND		1.7	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Trichlorofluoromethane	ND		8.6	0.32 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Vinyl acetate	ND		8.6	4.1 ug/Kg		10/08/19 17:34	10/09/19 14:10	1
Vinyl chloride	ND		0.86	0.43 ug/Kg		10/08/19 17:34	10/09/19 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		71 - 155	10/08/19 17:34	10/09/19 14:10	1
4-Bromofluorobenzene (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 14:10	1
Dibromofluoromethane (Surr)	91		79 - 133	10/08/19 17:34	10/09/19 14:10	1
Toluene-d8 (Surr)	97		80 - 120	10/08/19 17:34	10/09/19 14:10	1

**Client Sample ID: SV4-1**  
**Date Collected: 10/04/19 11:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,1-Trichloroethane	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.3	0.33 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1,2-Trichloroethane	ND		0.93	0.33 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloroethane	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloroethene	ND		0.93	0.32 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,3-Trichlorobenzene	ND		1.9	0.85 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,4-Trichlorobenzene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dibromo-3-Chloropropane	ND		9.3	1.6 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dibromoethane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichloroethane	ND		0.93	0.29 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,2-Dichloropropane	ND		0.93	0.41 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,3-Dichlorobenzene	ND		0.93	0.16 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,3-Dichloropropane	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
1,4-Dichlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-1**  
**Date Collected: 10/04/19 11:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Butanone	ND		19	3.5 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Chlorotoluene	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
2-Hexanone	ND		19	1.6 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
4-Chlorotoluene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
4-Methyl-2-pentanone	ND		19	4.0 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Acetone	ND		47	5.8 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
<b>Benzene</b>	<b>0.99</b>		0.93	0.12 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromobenzene	ND		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromodichloromethane	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromoform	ND		4.7	0.74 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Bromomethane	ND		19	8.8 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
cis-1,2-Dichloroethene	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
cis-1,3-Dichloropropene	ND		0.93	0.24 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Carbon disulfide	ND		9.3	0.29 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Carbon tetrachloride	ND		0.93	0.26 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chlorobenzene	ND		0.93	0.21 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloroform	ND		0.93	0.22 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Chloromethane	ND		19	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dibromomethane	ND		0.93	0.72 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Dichlorodifluoromethane	ND		1.9	0.41 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Di-isopropyl ether (DIPE)	ND		0.93	0.45 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethanol	ND		470	78 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethylbenzene	ND		0.93	0.14 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Ethyl-t-butyl ether (ETBE)	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Isopropylbenzene	ND		0.93	0.51 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Methylene Chloride	ND		9.3	1.3 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Naphthalene	ND		9.3	0.76 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
n-Butylbenzene	ND		0.93	0.15 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
o-Xylene	ND		0.93	0.52 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
p-Isopropyltoluene	ND		0.93	0.59 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
sec-Butylbenzene	ND		0.93	0.54 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Styrene	ND		0.93	0.56 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
trans-1,2-Dichloroethene	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
trans-1,3-Dichloropropene	ND		1.9	0.57 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Tert-amyl-methyl ether (TAME)	ND		0.93	0.33 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
tert-Butyl alcohol (TBA)	ND		19	4.8 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
tert-Butylbenzene	ND		0.93	0.14 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
<b>Tetrachloroethene</b>	<b>1.8</b>		0.93	0.20 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Toluene	ND		0.93	0.48 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Trichlorofluoromethane	ND		9.3	0.35 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Vinyl acetate	ND		9.3	4.4 ug/Kg		10/08/19 17:34	10/09/19 14:39	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-1**  
**Date Collected: 10/04/19 11:25**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-24**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.93	0.47 ug/Kg		10/08/19 17:34	10/09/19 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		71 - 155			10/08/19 17:34	10/09/19 14:39	1
4-Bromofluorobenzene (Surr)	101		80 - 120			10/08/19 17:34	10/09/19 14:39	1
Dibromofluoromethane (Surr)	91		79 - 133			10/08/19 17:34	10/09/19 14:39	1
Toluene-d8 (Surr)	102		80 - 120			10/08/19 17:34	10/09/19 14:39	1

**Client Sample ID: SV4-3**  
**Date Collected: 10/04/19 11:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1,1-Trichloroethane	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1,2-Trichloroethane	ND		1.0	0.36 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2,3-Trichlorobenzene	ND		2.0	0.92 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2-Dibromoethane	ND		1.0	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
2-Butanone	ND		20	3.8 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
2-Hexanone	ND		20	1.8 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Acetone	ND		50	6.3 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
<b>Benzene</b>	<b>2.1</b>		1.0	0.13 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Bromobenzene	ND		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Bromochloromethane	ND		2.0	0.69 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Bromoform	ND		5.0	0.80 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Bromomethane	ND		20	9.5 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
cis-1,3-Dichloropropene	ND		1.0	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Carbon disulfide	ND		10	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:07	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-3**  
**Date Collected: 10/04/19 11:30**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-25**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Chloroethane	ND		2.0	1.5 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Chloroform	ND		1.0	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Chloromethane	ND		20	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Dibromomethane	ND		1.0	0.78 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Ethanol	ND		500	84 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Ethylbenzene	ND		1.0	0.15 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Methylene Chloride	ND		10	1.3 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Naphthalene	ND		10	0.82 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
o-Xylene	ND		1.0	0.56 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
m,p-Xylene	ND		2.0	0.27 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Styrene	ND		1.0	0.61 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
<b>Tetrachloroethene</b>	<b>1.7</b>		1.0	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
<b>Toluene</b>	<b>1.5</b>		1.0	0.52 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Trichloroethene	ND		2.0	0.30 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Vinyl acetate	ND		10	4.8 ug/Kg		10/08/19 17:34	10/09/19 15:07	1
Vinyl chloride	ND		1.0	0.50 ug/Kg		10/08/19 17:34	10/09/19 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	111		71 - 155	10/08/19 17:34	10/09/19 15:07	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120	10/08/19 17:34	10/09/19 15:07	1
<i>Dibromofluoromethane (Surr)</i>	87		79 - 133	10/08/19 17:34	10/09/19 15:07	1
<i>Toluene-d8 (Surr)</i>	99		80 - 120	10/08/19 17:34	10/09/19 15:07	1

**Client Sample ID: SV4-5**  
**Date Collected: 10/04/19 11:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1,1-Trichloroethane	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1,2,2-Tetrachloroethane	ND		1.9	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9.4	0.33 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1,2-Trichloroethane	ND		0.94	0.33 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1-Dichloroethane	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:34	1

Eurofins Calscience LLC

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-5**  
**Date Collected: 10/04/19 11:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.94	0.32 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,1-Dichloropropene	ND		1.9	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2,3-Trichlorobenzene	ND		1.9	0.86 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2,3-Trichloropropane	ND		1.9	0.78 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2,4-Trichlorobenzene	ND		1.9	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2,4-Trimethylbenzene	ND		1.9	0.55 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2-Dibromo-3-Chloropropane	ND		9.4	1.6 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2-Dibromoethane	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2-Dichlorobenzene	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2-Dichloroethane	ND		0.94	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,2-Dichloropropane	ND		0.94	0.41 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,3,5-Trimethylbenzene	ND		1.9	0.51 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,3-Dichlorobenzene	ND		0.94	0.17 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,3-Dichloropropane	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
1,4-Dichlorobenzene	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
2,2-Dichloropropane	ND		4.7	0.31 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
2-Butanone	ND		19	3.5 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
2-Chlorotoluene	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
2-Hexanone	ND		19	1.7 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
4-Chlorotoluene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
4-Methyl-2-pentanone	ND		19	4.0 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Acetone	ND		47	5.8 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
<b>Benzene</b>	<b>1.5</b>		0.94	0.12 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Bromobenzene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Bromochloromethane	ND		1.9	0.65 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Bromodichloromethane	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Bromoform	ND		4.7	0.74 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Bromomethane	ND		19	8.8 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
cis-1,2-Dichloroethene	ND		0.94	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
cis-1,3-Dichloropropane	ND		0.94	0.24 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Carbon disulfide	ND		9.4	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Carbon tetrachloride	ND		0.94	0.26 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Chlorobenzene	ND		0.94	0.21 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Chloroethane	ND		1.9	1.4 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Chloroform	ND		0.94	0.22 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Chloromethane	ND		19	0.29 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Dibromochloromethane	ND		1.9	0.53 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Dibromomethane	ND		0.94	0.73 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Dichlorodifluoromethane	ND		1.9	0.42 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Di-isopropyl ether (DIPE)	ND		0.94	0.45 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Ethanol	ND		470	78 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Ethylbenzene	ND		0.94	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Ethyl-t-butyl ether (ETBE)	ND		0.94	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Isopropylbenzene	ND		0.94	0.51 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Methylene Chloride	ND		9.4	1.3 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Naphthalene	ND		9.4	0.76 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
n-Butylbenzene	ND		0.94	0.15 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
N-Propylbenzene	ND		1.9	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:34	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-5**  
**Date Collected: 10/04/19 11:35**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-26**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		0.94	0.52 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
m,p-Xylene	ND		1.9	0.25 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
p-Isopropyltoluene	ND		0.94	0.59 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
sec-Butylbenzene	ND		0.94	0.54 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Styrene	ND		0.94	0.57 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
trans-1,2-Dichloroethene	ND		0.94	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
trans-1,3-Dichloropropene	ND		1.9	0.57 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Tert-amyl-methyl ether (TAME)	ND		0.94	0.33 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
tert-Butyl alcohol (TBA)	ND		19	4.9 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
tert-Butylbenzene	ND		0.94	0.14 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Tetrachloroethene	ND		0.94	0.20 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Toluene	ND		0.94	0.48 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Trichloroethene	ND		1.9	0.28 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Trichlorofluoromethane	ND		9.4	0.35 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Vinyl acetate	ND		9.4	4.4 ug/Kg		10/08/19 17:34	10/09/19 15:34	1
Vinyl chloride	ND		0.94	0.47 ug/Kg		10/08/19 17:34	10/09/19 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		71 - 155	10/08/19 17:34	10/09/19 15:34	1
4-Bromofluorobenzene (Surr)	103		80 - 120	10/08/19 17:34	10/09/19 15:34	1
Dibromofluoromethane (Surr)	89		79 - 133	10/08/19 17:34	10/09/19 15:34	1
Toluene-d8 (Surr)	102		80 - 120	10/08/19 17:34	10/09/19 15:34	1

**Client Sample ID: SV4-10**  
**Date Collected: 10/04/19 11:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-27**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.76	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1,1-Trichloroethane	ND		0.76	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.6	0.27 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1,2-Trichloroethane	ND		0.76	0.27 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1-Dichloroethane	ND		0.76	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1-Dichloroethene	ND		0.76	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,1-Dichloropropene	ND		1.5	0.25 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2,3-Trichlorobenzene	ND		1.5	0.69 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2,3-Trichloropropane	ND		1.5	0.63 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2,4-Trichlorobenzene	ND		1.5	0.24 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2,4-Trimethylbenzene	ND		1.5	0.44 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2-Dibromo-3-Chloropropane	ND		7.6	1.3 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2-Dibromoethane	ND		0.76	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2-Dichlorobenzene	ND		0.76	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2-Dichloroethane	ND		0.76	0.24 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,2-Dichloropropane	ND		0.76	0.33 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,3,5-Trimethylbenzene	ND		1.5	0.42 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,3-Dichlorobenzene	ND		0.76	0.13 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,3-Dichloropropane	ND		0.76	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
1,4-Dichlorobenzene	ND		0.76	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
2,2-Dichloropropane	ND		3.8	0.25 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
2-Butanone	ND		15	2.9 ug/Kg		10/08/19 17:57	10/10/19 12:23	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-10**  
**Date Collected: 10/04/19 11:40**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-27**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.76	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
2-Hexanone	ND		15	1.3 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
4-Chlorotoluene	ND		0.76	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
4-Methyl-2-pentanone	ND		15	3.3 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Acetone	ND		38	4.7 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Benzene	ND		0.76	0.098 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Bromobenzene	ND		0.76	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Bromochloromethane	ND		1.5	0.52 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Bromodichloromethane	ND		0.76	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Bromoform	ND		3.8	0.60 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Bromomethane	ND		15	7.1 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
cis-1,2-Dichloroethene	ND		0.76	0.21 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
cis-1,3-Dichloropropene	ND		0.76	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Carbon disulfide	ND		7.6	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Carbon tetrachloride	ND		0.76	0.21 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Chlorobenzene	ND		0.76	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Chloroethane	ND		1.5	1.1 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Chloroform	ND		0.76	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Chloromethane	ND		15	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Dibromochloromethane	ND		1.5	0.43 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Dibromomethane	ND		0.76	0.59 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Dichlorodifluoromethane	ND		1.5	0.34 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Di-isopropyl ether (DIPE)	ND		0.76	0.37 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Ethanol	ND		380	63 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Ethylbenzene	ND		0.76	0.11 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Ethyl-t-butyl ether (ETBE)	ND		0.76	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Isopropylbenzene	ND		0.76	0.41 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Methylene Chloride	ND		7.6	1.0 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Naphthalene	ND		7.6	0.62 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
n-Butylbenzene	ND		0.76	0.12 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
N-Propylbenzene	ND		1.5	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
o-Xylene	ND		0.76	0.42 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
m,p-Xylene	ND		1.5	0.20 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
p-Isopropyltoluene	ND		0.76	0.48 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
sec-Butylbenzene	ND		0.76	0.44 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Styrene	ND		0.76	0.46 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
trans-1,2-Dichloroethene	ND		0.76	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
trans-1,3-Dichloropropene	ND		1.5	0.46 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Tert-amyl-methyl ether (TAME)	ND		0.76	0.27 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
tert-Butyl alcohol (TBA)	ND		15	3.9 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
tert-Butylbenzene	ND		0.76	0.11 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
<b>Tetrachloroethene</b>	<b>0.99</b>		0.76	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Toluene	ND		0.76	0.39 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Trichloroethene	ND		1.5	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Trichlorofluoromethane	ND		7.6	0.28 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Vinyl acetate	ND		7.6	3.6 ug/Kg		10/08/19 17:57	10/10/19 12:23	1
Vinyl chloride	ND		0.76	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:23	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		71 - 155	10/08/19 17:57	10/10/19 12:23	1
4-Bromofluorobenzene (Surr)	97		80 - 120	10/08/19 17:57	10/10/19 12:23	1
Dibromofluoromethane (Surr)	95		79 - 133	10/08/19 17:57	10/10/19 12:23	1
Toluene-d8 (Surr)	95		80 - 120	10/08/19 17:57	10/10/19 12:23	1

**Client Sample ID: SV4-15**  
**Date Collected: 10/04/19 11:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.75	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1,1-Trichloroethane	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1,2,2-Tetrachloroethane	ND		1.5	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.5	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1,2-Trichloroethane	ND		0.75	0.27 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1-Dichloroethane	ND		0.75	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1-Dichloroethene	ND		0.75	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,1-Dichloropropene	ND		1.5	0.25 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2,3-Trichlorobenzene	ND		1.5	0.68 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2,3-Trichloropropane	ND		1.5	0.62 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2,4-Trichlorobenzene	ND		1.5	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2,4-Trimethylbenzene	ND		1.5	0.44 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2-Dibromo-3-Chloropropane	ND		7.5	1.3 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2-Dibromoethane	ND		0.75	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2-Dichlorobenzene	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2-Dichloroethane	ND		0.75	0.24 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,2-Dichloropropane	ND		0.75	0.33 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,3,5-Trimethylbenzene	ND		1.5	0.41 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,3-Dichlorobenzene	ND		0.75	0.13 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,3-Dichloropropane	ND		0.75	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
1,4-Dichlorobenzene	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
2,2-Dichloropropane	ND		3.7	0.25 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
2-Butanone	ND		15	2.8 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
2-Chlorotoluene	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
2-Hexanone	ND		15	1.3 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
4-Chlorotoluene	ND		0.75	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
4-Methyl-2-pentanone	ND		15	3.2 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Acetone	ND		37	4.7 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Benzene	ND		0.75	0.097 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Bromobenzene	ND		0.75	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Bromochloromethane	ND		1.5	0.52 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Bromodichloromethane	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Bromoform	ND		3.7	0.59 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Bromomethane	ND		15	7.1 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
cis-1,2-Dichloroethene	ND		0.75	0.21 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
cis-1,3-Dichloropropene	ND		0.75	0.19 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Carbon disulfide	ND		7.5	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Carbon tetrachloride	ND		0.75	0.21 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Chlorobenzene	ND		0.75	0.17 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Chloroethane	ND		1.5	1.1 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Chloroform	ND		0.75	0.18 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Chloromethane	ND		15	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Dibromochloromethane	ND		1.5	0.43 ug/Kg		10/08/19 17:57	10/10/19 12:50	1

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# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: SV4-15**  
**Date Collected: 10/04/19 11:45**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-28**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.75	0.58 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Dichlorodifluoromethane	ND		1.5	0.33 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Di-isopropyl ether (DIPE)	ND		0.75	0.36 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Ethanol	ND		370	63 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Ethylbenzene	ND		0.75	0.11 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Ethyl-t-butyl ether (ETBE)	ND		0.75	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Isopropylbenzene	ND		0.75	0.41 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Methylene Chloride	ND		7.5	1.0 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Methyl-t-Butyl Ether (MTBE)	ND		1.5	0.22 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Naphthalene	ND		7.5	0.61 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
n-Butylbenzene	ND		0.75	0.12 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
N-Propylbenzene	ND		1.5	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
o-Xylene	ND		0.75	0.42 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
m,p-Xylene	ND		1.5	0.20 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
p-Isopropyltoluene	ND		0.75	0.47 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
sec-Butylbenzene	ND		0.75	0.43 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Styrene	ND		0.75	0.45 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
trans-1,2-Dichloroethene	ND		0.75	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
trans-1,3-Dichloropropene	ND		1.5	0.45 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Tert-amyl-methyl ether (TAME)	ND		0.75	0.26 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
tert-Butyl alcohol (TBA)	ND		15	3.9 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
tert-Butylbenzene	ND		0.75	0.11 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Tetrachloroethene	ND		0.75	0.16 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Toluene	ND		0.75	0.39 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Trichloroethene	ND		1.5	0.23 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Trichlorofluoromethane	ND		7.5	0.28 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Vinyl acetate	ND		7.5	3.6 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Vinyl chloride	ND		0.75	0.38 ug/Kg		10/08/19 17:57	10/10/19 12:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	114		71 - 155			10/08/19 17:57	10/10/19 12:50	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120			10/08/19 17:57	10/10/19 12:50	1
<i>Dibromofluoromethane (Surr)</i>	95		79 - 133			10/08/19 17:57	10/10/19 12:50	1
<i>Toluene-d8 (Surr)</i>	101		80 - 120			10/08/19 17:57	10/10/19 12:50	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Client Sample ID: Comp 1**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.051 mg/Kg		10/08/19 15:03	10/09/19 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		42 - 126	10/08/19 15:03	10/09/19 00:33	1

**Client Sample ID: Comp 2**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.051 mg/Kg		10/08/19 15:03	10/09/19 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		42 - 126	10/08/19 15:03	10/09/19 02:25	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: Comp 1**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13	Z	4.9	3.5 mg/Kg	-	10/08/19 17:20	10/09/19 10:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n-Octacosane (Surr)</i>	109		61 - 145			10/08/19 17:20	10/09/19 10:31	1

**Client Sample ID: Comp 2**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9.8	Z	4.8	3.4 mg/Kg	-	10/08/19 17:20	10/09/19 10:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n-Octacosane (Surr)</i>	105		61 - 145			10/08/19 17:20	10/09/19 10:53	1



# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: Comp 1**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.251	0.0861 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Arsenic</b>	<b>4.04</b>		0.754	0.260 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Barium</b>	<b>131</b>		0.503	0.155 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Beryllium</b>	<b>0.688</b>		0.251	0.138 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
Cadmium	ND		0.503	0.136 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Cobalt</b>	<b>8.81</b>		0.251	0.149 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Chromium</b>	<b>14.5</b>		0.251	0.143 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Copper</b>	<b>35.6</b>		0.503	0.136 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Molybdenum</b>	<b>0.290</b>		0.251	0.133 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Nickel</b>	<b>11.5</b>		0.251	0.146 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Antimony</b>	<b>1.35</b>		0.754	0.150 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
Selenium	ND	L	0.754	0.302 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Thallium</b>	<b>1.45</b>		0.754	0.153 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Vanadium</b>	<b>37.9</b>		0.251	0.142 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Zinc</b>	<b>69.1</b>		1.01	0.179 mg/Kg		10/09/19 20:01	10/11/19 23:37	1
<b>Lead</b>	<b>12.0</b>		0.503	0.133 mg/Kg		10/09/19 20:01	10/11/19 23:37	1

**Client Sample ID: Comp 2**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.250	0.0857 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Arsenic</b>	<b>4.10</b>		0.750	0.259 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Barium</b>	<b>128</b>		0.500	0.154 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Beryllium</b>	<b>0.669</b>		0.250	0.137 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
Cadmium	ND		0.500	0.135 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Cobalt</b>	<b>8.52</b>		0.250	0.148 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Chromium</b>	<b>15.1</b>		0.250	0.142 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Copper</b>	<b>29.0</b>	F1	0.500	0.135 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Molybdenum</b>	<b>0.408</b>		0.250	0.132 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Nickel</b>	<b>11.5</b>		0.250	0.145 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Antimony</b>	<b>1.95</b>		0.750	0.149 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
Selenium	ND	L	0.750	0.300 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Thallium</b>	<b>1.91</b>		0.750	0.152 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Vanadium</b>	<b>38.0</b>		0.250	0.141 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Zinc</b>	<b>63.5</b>	F1	1.00	0.178 mg/Kg		10/09/19 20:01	10/11/19 23:31	1
<b>Lead</b>	<b>11.0</b>		0.500	0.132 mg/Kg		10/09/19 20:01	10/11/19 23:31	1

# Client Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: Comp 1**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-9**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0820	0.00578	mg/Kg		10/10/19 11:00	10/10/19 15:00	1

**Client Sample ID: Comp 2**  
**Date Collected: 10/04/19 11:50**  
**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-10**  
**Matrix: Solid**

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0833	0.00587	mg/Kg		10/10/19 11:00	10/10/19 14:53	1

# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (71-155)	BFB (80-120)	DBFM (79-133)	TOL (80-120)
570-9320-1	SV10-1	116	100	103	100
570-9320-2	SV10-3	116	102	100	101
570-9320-3	SV10-5	112	102	100	100
570-9320-4	SV10-10	117	102	105	99
570-9320-5	SV10-15	116	103	106	101
570-9320-6	SV10-20	115	102	105	101
570-9320-7	SV10-25	109	103	98	100
570-9320-8	SV10-30	115	102	103	99
570-9320-11	SV7-1	118	101	102	100
570-9320-12	SV7-3	117	102	102	100
570-9320-13	SV7-5	116	102	102	100
570-9320-14	SV7-10	113	101	104	100
570-9320-15	SV7-15	117	102	107	101
570-9320-16	SV9-1	114	102	101	100
570-9320-17	SV9-3	118	103	101	100
570-9320-18	SV9-5	116	102	101	99
570-9320-19	SV9-10	118	101	106	100
570-9320-20	SV9-15	110	101	102	98
570-9320-21	SV9-20	109	104	91	99
570-9320-22	SV9-25	106	101	91	98
570-9320-23	SV9-30	106	102	91	97
570-9320-24	SV4-1	102	101	91	102
570-9320-25	SV4-3	111	98	87	99
570-9320-26	SV4-5	109	103	89	102
570-9320-27	SV4-10	111	97	95	95
570-9320-28	SV4-15	114	101	95	101
LCS 570-24670/4	Lab Control Sample	96	103	96	99
LCS 570-24701/3	Lab Control Sample	98	99	101	99
LCS 570-24988/3	Lab Control Sample	98	103	95	97
LCSD 570-24670/5	Lab Control Sample Dup	95	101	95	97
LCSD 570-24701/4	Lab Control Sample Dup	100	102	102	99
LCSD 570-24988/4	Lab Control Sample Dup	100	102	92	99
MB 570-24670/8	Method Blank	95	102	89	101
MB 570-24701/6	Method Blank	101	101	102	102
MB 570-24988/6	Method Blank	98	98	91	100

### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (42-126)
570-9307-B-1-B MS	Matrix Spike	101
570-9307-B-1-C MSD	Matrix Spike Duplicate	103

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# Surrogate Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (42-126)
570-9320-9	Comp 1	85
570-9320-10	Comp 2	93
LCS 570-24521/2-A	Lab Control Sample	86
LCSD 570-24521/3-A	Lab Control Sample Dup	83
MB 570-24273/1-A	Method Blank	88
MB 570-24521/1-A	Method Blank	87

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (61-145)
570-9320-9	Comp 1	109
570-9320-10	Comp 2	105
570-9454-A-2-B MS	Matrix Spike	109
570-9454-A-2-C MSD	Matrix Spike Duplicate	100
LCS 570-24574/2-A	Lab Control Sample	109
MB 570-24574/1-A	Method Blank	108

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 570-24670/8**  
**Matrix: Solid**  
**Analysis Batch: 24670**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg			10/09/19 12:19	1
1,1,1-Trichloroethane	ND		1.0	0.23 ug/Kg			10/09/19 12:19	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg			10/09/19 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg			10/09/19 12:19	1
1,1,2-Trichloroethane	ND		1.0	0.35 ug/Kg			10/09/19 12:19	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg			10/09/19 12:19	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg			10/09/19 12:19	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/09/19 12:19	1
1,2,3-Trichlorobenzene	ND		2.0	0.92 ug/Kg			10/09/19 12:19	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg			10/09/19 12:19	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/09/19 12:19	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg			10/09/19 12:19	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg			10/09/19 12:19	1
1,2-Dibromoethane	ND		1.0	0.26 ug/Kg			10/09/19 12:19	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg			10/09/19 12:19	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg			10/09/19 12:19	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg			10/09/19 12:19	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg			10/09/19 12:19	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg			10/09/19 12:19	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg			10/09/19 12:19	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg			10/09/19 12:19	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/09/19 12:19	1
2-Butanone	ND		20	3.8 ug/Kg			10/09/19 12:19	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg			10/09/19 12:19	1
2-Hexanone	ND		20	1.8 ug/Kg			10/09/19 12:19	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg			10/09/19 12:19	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/09/19 12:19	1
Acetone	ND		50	6.3 ug/Kg			10/09/19 12:19	1
Benzene	ND		1.0	0.13 ug/Kg			10/09/19 12:19	1
Bromobenzene	ND		1.0	0.21 ug/Kg			10/09/19 12:19	1
Bromochloromethane	ND		2.0	0.69 ug/Kg			10/09/19 12:19	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg			10/09/19 12:19	1
Bromoform	ND		5.0	0.80 ug/Kg			10/09/19 12:19	1
Bromomethane	ND		20	9.4 ug/Kg			10/09/19 12:19	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg			10/09/19 12:19	1
cis-1,3-Dichloropropene	ND		1.0	0.25 ug/Kg			10/09/19 12:19	1
Carbon disulfide	ND		10	0.31 ug/Kg			10/09/19 12:19	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg			10/09/19 12:19	1
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/09/19 12:19	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/09/19 12:19	1
Chloroform	ND		1.0	0.24 ug/Kg			10/09/19 12:19	1
Chloromethane	ND		20	0.30 ug/Kg			10/09/19 12:19	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/09/19 12:19	1
Dibromomethane	ND		1.0	0.78 ug/Kg			10/09/19 12:19	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/09/19 12:19	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/09/19 12:19	1
Ethanol	ND		500	84 ug/Kg			10/09/19 12:19	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/09/19 12:19	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-24670/8**  
**Matrix: Solid**  
**Analysis Batch: 24670**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg			10/09/19 12:19	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg			10/09/19 12:19	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/09/19 12:19	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg			10/09/19 12:19	1
Naphthalene	ND		10	0.82 ug/Kg			10/09/19 12:19	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/09/19 12:19	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/09/19 12:19	1
o-Xylene	ND		1.0	0.56 ug/Kg			10/09/19 12:19	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/09/19 12:19	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/09/19 12:19	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/09/19 12:19	1
Styrene	ND		1.0	0.61 ug/Kg			10/09/19 12:19	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg			10/09/19 12:19	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg			10/09/19 12:19	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/09/19 12:19	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/09/19 12:19	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/09/19 12:19	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/09/19 12:19	1
Toluene	ND		1.0	0.52 ug/Kg			10/09/19 12:19	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/09/19 12:19	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg			10/09/19 12:19	1
Vinyl acetate	ND		10	4.8 ug/Kg			10/09/19 12:19	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/09/19 12:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		71 - 155		10/09/19 12:19	1
4-Bromofluorobenzene (Surr)	102		80 - 120		10/09/19 12:19	1
Dibromofluoromethane (Surr)	89		79 - 133		10/09/19 12:19	1
Toluene-d8 (Surr)	101		80 - 120		10/09/19 12:19	1

**Lab Sample ID: LCS 570-24670/4**  
**Matrix: Solid**  
**Analysis Batch: 24670**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	42.60		ug/Kg		85	71 - 125
1,2-Dibromoethane	50.0	52.28		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	50.0	55.71		ug/Kg		111	80 - 120
1,2-Dichloroethane	50.0	46.17		ug/Kg		92	79 - 121
Benzene	50.0	51.42		ug/Kg		103	79 - 120
Carbon tetrachloride	50.0	54.66		ug/Kg		109	58 - 142
Chlorobenzene	50.0	52.95		ug/Kg		106	80 - 120
Di-isopropyl ether (DIPE)	50.0	43.74		ug/Kg		87	65 - 131
Ethanol	500	406.6	J	ug/Kg		81	32 - 158
Ethylbenzene	50.0	53.24		ug/Kg		106	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	45.90		ug/Kg		92	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	45.74		ug/Kg		91	64 - 124
o-Xylene	50.0	54.41		ug/Kg		109	79 - 127

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 570-24670/4**  
**Matrix: Solid**  
**Analysis Batch: 24670**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	100	106.6		ug/Kg		107	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		71 - 155
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	96		79 - 133
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: LCSD 570-24670/5**  
**Matrix: Solid**  
**Analysis Batch: 24670**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	43.14		ug/Kg		86	71 - 125	1	20
1,2-Dibromoethane	50.0	51.33		ug/Kg		103	80 - 120	2	20
1,2-Dichlorobenzene	50.0	55.89		ug/Kg		112	80 - 120	0	20
1,2-Dichloroethane	50.0	46.34		ug/Kg		93	79 - 121	0	20
Benzene	50.0	51.43		ug/Kg		103	79 - 120	0	20
Carbon tetrachloride	50.0	54.79		ug/Kg		110	58 - 142	0	20
Chlorobenzene	50.0	53.58		ug/Kg		107	80 - 120	1	20
Di-isopropyl ether (DIPE)	50.0	45.63		ug/Kg		91	65 - 131	4	20
Ethanol	500	450.3	J	ug/Kg		90	32 - 158	10	27
Ethylbenzene	50.0	53.60		ug/Kg		107	57 - 153	1	20
Ethyl-t-butyl ether (ETBE)	50.0	47.46		ug/Kg		95	58 - 136	3	20
Methyl-t-Butyl Ether (MTBE)	50.0	47.12		ug/Kg		94	64 - 124	3	20
o-Xylene	50.0	54.40		ug/Kg		109	79 - 127	0	20
m,p-Xylene	100	110.5		ug/Kg		110	80 - 122	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		71 - 155
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	95		79 - 133
Toluene-d8 (Surr)	97		80 - 120

**Lab Sample ID: MB 570-24701/6**  
**Matrix: Solid**  
**Analysis Batch: 24701**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg			10/09/19 12:04	1
1,1,1-Trichloroethane	ND		1.0	0.22 ug/Kg			10/09/19 12:04	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg			10/09/19 12:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg			10/09/19 12:04	1
1,1,2-Trichloroethane	ND		1.0	0.35 ug/Kg			10/09/19 12:04	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg			10/09/19 12:04	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg			10/09/19 12:04	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/09/19 12:04	1
1,2,3-Trichlorobenzene	ND		2.0	0.91 ug/Kg			10/09/19 12:04	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-24701/6**  
**Matrix: Solid**  
**Analysis Batch: 24701**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg			10/09/19 12:04	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/09/19 12:04	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg			10/09/19 12:04	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg			10/09/19 12:04	1
1,2-Dibromoethane	ND		1.0	0.25 ug/Kg			10/09/19 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg			10/09/19 12:04	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg			10/09/19 12:04	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg			10/09/19 12:04	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg			10/09/19 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg			10/09/19 12:04	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg			10/09/19 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg			10/09/19 12:04	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/09/19 12:04	1
2-Butanone	ND		20	3.8 ug/Kg			10/09/19 12:04	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg			10/09/19 12:04	1
2-Hexanone	ND		20	1.8 ug/Kg			10/09/19 12:04	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg			10/09/19 12:04	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/09/19 12:04	1
Acetone	ND		50	6.2 ug/Kg			10/09/19 12:04	1
Benzene	ND		1.0	0.13 ug/Kg			10/09/19 12:04	1
Bromobenzene	ND		1.0	0.21 ug/Kg			10/09/19 12:04	1
Bromochloromethane	ND		2.0	0.69 ug/Kg			10/09/19 12:04	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg			10/09/19 12:04	1
Bromoform	ND		5.0	0.79 ug/Kg			10/09/19 12:04	1
Bromomethane	ND		20	9.4 ug/Kg			10/09/19 12:04	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg			10/09/19 12:04	1
cis-1,3-Dichloropropene	ND		1.0	0.25 ug/Kg			10/09/19 12:04	1
Carbon disulfide	ND		10	0.31 ug/Kg			10/09/19 12:04	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg			10/09/19 12:04	1
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/09/19 12:04	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/09/19 12:04	1
Chloroform	ND		1.0	0.24 ug/Kg			10/09/19 12:04	1
Chloromethane	ND		20	0.30 ug/Kg			10/09/19 12:04	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/09/19 12:04	1
Dibromomethane	ND		1.0	0.77 ug/Kg			10/09/19 12:04	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/09/19 12:04	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/09/19 12:04	1
Ethanol	ND		500	83 ug/Kg			10/09/19 12:04	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/09/19 12:04	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg			10/09/19 12:04	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg			10/09/19 12:04	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/09/19 12:04	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.29 ug/Kg			10/09/19 12:04	1
Naphthalene	ND		10	0.81 ug/Kg			10/09/19 12:04	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/09/19 12:04	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/09/19 12:04	1
o-Xylene	ND		1.0	0.56 ug/Kg			10/09/19 12:04	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/09/19 12:04	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/09/19 12:04	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-24701/6**  
**Matrix: Solid**  
**Analysis Batch: 24701**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/09/19 12:04	1
Styrene	ND		1.0	0.60 ug/Kg			10/09/19 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50 ug/Kg			10/09/19 12:04	1
trans-1,3-Dichloropropene	ND		2.0	0.60 ug/Kg			10/09/19 12:04	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/09/19 12:04	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/09/19 12:04	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/09/19 12:04	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/09/19 12:04	1
Toluene	ND		1.0	0.51 ug/Kg			10/09/19 12:04	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/09/19 12:04	1
Trichlorofluoromethane	ND		10	0.37 ug/Kg			10/09/19 12:04	1
Vinyl acetate	ND		10	4.7 ug/Kg			10/09/19 12:04	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/09/19 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		71 - 155		10/09/19 12:04	1
4-Bromofluorobenzene (Surr)	101		80 - 120		10/09/19 12:04	1
Dibromofluoromethane (Surr)	102		79 - 133		10/09/19 12:04	1
Toluene-d8 (Surr)	102		80 - 120		10/09/19 12:04	1

**Lab Sample ID: LCS 570-24701/3**  
**Matrix: Solid**  
**Analysis Batch: 24701**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.5	51.50		ug/Kg		102	71 - 125
1,2-Dibromoethane	50.5	45.92		ug/Kg		91	80 - 120
1,2-Dichlorobenzene	50.5	49.56		ug/Kg		98	80 - 120
1,2-Dichloroethane	50.5	49.70		ug/Kg		98	79 - 121
Benzene	50.5	47.33		ug/Kg		94	79 - 120
Carbon tetrachloride	50.5	57.42		ug/Kg		114	58 - 142
Chlorobenzene	50.5	50.81		ug/Kg		101	80 - 120
Di-isopropyl ether (DIPE)	50.5	42.07		ug/Kg		83	65 - 131
Ethanol	505	412.7	J	ug/Kg		82	32 - 158
Ethylbenzene	50.5	49.82		ug/Kg		99	57 - 153
Ethyl-t-butyl ether (ETBE)	50.5	48.54		ug/Kg		96	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.5	45.92		ug/Kg		91	64 - 124
o-Xylene	50.5	49.45		ug/Kg		98	79 - 127
m,p-Xylene	101	101.8		ug/Kg		101	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		71 - 155
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		79 - 133
Toluene-d8 (Surr)	99		80 - 120

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-24701/4**  
**Matrix: Solid**  
**Analysis Batch: 24701**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.2	52.03		ug/Kg		104	71 - 125	1	20
1,2-Dibromoethane	50.2	46.90		ug/Kg		93	80 - 120	2	20
1,2-Dichlorobenzene	50.2	50.23		ug/Kg		100	80 - 120	1	20
1,2-Dichloroethane	50.2	51.20		ug/Kg		102	79 - 121	3	20
Benzene	50.2	47.53		ug/Kg		95	79 - 120	0	20
Carbon tetrachloride	50.2	56.32		ug/Kg		112	58 - 142	2	20
Chlorobenzene	50.2	52.01		ug/Kg		104	80 - 120	2	20
Di-isopropyl ether (DIPE)	50.2	42.49		ug/Kg		85	65 - 131	1	20
Ethanol	502	373.3	J	ug/Kg		74	32 - 158	10	27
Ethylbenzene	50.2	50.84		ug/Kg		101	57 - 153	2	20
Ethyl-t-butyl ether (ETBE)	50.2	49.88		ug/Kg		99	58 - 136	3	20
Methyl-t-Butyl Ether (MTBE)	50.2	47.22		ug/Kg		94	64 - 124	3	20
o-Xylene	50.2	50.96		ug/Kg		102	79 - 127	3	20
m,p-Xylene	100	104.1		ug/Kg		104	80 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	100		71 - 155
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	102		79 - 133
Toluene-d8 (Surr)	99		80 - 120

**Lab Sample ID: MB 570-24988/6**  
**Matrix: Solid**  
**Analysis Batch: 24988**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.24 ug/Kg			10/10/19 11:42	1
1,1,1-Trichloroethane	ND		1.0	0.23 ug/Kg			10/10/19 11:42	1
1,1,2,2-Tetrachloroethane	ND		2.0	0.35 ug/Kg			10/10/19 11:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	0.35 ug/Kg			10/10/19 11:42	1
1,1,2-Trichloroethane	ND		1.0	0.35 ug/Kg			10/10/19 11:42	1
1,1-Dichloroethane	ND		1.0	0.21 ug/Kg			10/10/19 11:42	1
1,1-Dichloroethene	ND		1.0	0.35 ug/Kg			10/10/19 11:42	1
1,1-Dichloropropene	ND		2.0	0.33 ug/Kg			10/10/19 11:42	1
1,2,3-Trichlorobenzene	ND		2.0	0.92 ug/Kg			10/10/19 11:42	1
1,2,3-Trichloropropane	ND		2.0	0.83 ug/Kg			10/10/19 11:42	1
1,2,4-Trichlorobenzene	ND		2.0	0.31 ug/Kg			10/10/19 11:42	1
1,2,4-Trimethylbenzene	ND		2.0	0.59 ug/Kg			10/10/19 11:42	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7 ug/Kg			10/10/19 11:42	1
1,2-Dibromoethane	ND		1.0	0.26 ug/Kg			10/10/19 11:42	1
1,2-Dichlorobenzene	ND		1.0	0.23 ug/Kg			10/10/19 11:42	1
1,2-Dichloroethane	ND		1.0	0.31 ug/Kg			10/10/19 11:42	1
1,2-Dichloropropane	ND		1.0	0.44 ug/Kg			10/10/19 11:42	1
1,3,5-Trimethylbenzene	ND		2.0	0.55 ug/Kg			10/10/19 11:42	1
1,3-Dichlorobenzene	ND		1.0	0.18 ug/Kg			10/10/19 11:42	1
1,3-Dichloropropane	ND		1.0	0.25 ug/Kg			10/10/19 11:42	1
1,4-Dichlorobenzene	ND		1.0	0.22 ug/Kg			10/10/19 11:42	1
2,2-Dichloropropane	ND		5.0	0.33 ug/Kg			10/10/19 11:42	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 570-24988/6**  
**Matrix: Solid**  
**Analysis Batch: 24988**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20	3.8 ug/Kg			10/10/19 11:42	1
2-Chlorotoluene	ND		1.0	0.23 ug/Kg			10/10/19 11:42	1
2-Hexanone	ND		20	1.8 ug/Kg			10/10/19 11:42	1
4-Chlorotoluene	ND		1.0	0.21 ug/Kg			10/10/19 11:42	1
4-Methyl-2-pentanone	ND		20	4.3 ug/Kg			10/10/19 11:42	1
Acetone	ND		50	6.3 ug/Kg			10/10/19 11:42	1
Benzene	ND		1.0	0.13 ug/Kg			10/10/19 11:42	1
Bromobenzene	ND		1.0	0.21 ug/Kg			10/10/19 11:42	1
Bromochloromethane	ND		2.0	0.69 ug/Kg			10/10/19 11:42	1
Bromodichloromethane	ND		1.0	0.23 ug/Kg			10/10/19 11:42	1
Bromoform	ND		5.0	0.80 ug/Kg			10/10/19 11:42	1
Bromomethane	ND		20	9.4 ug/Kg			10/10/19 11:42	1
cis-1,2-Dichloroethene	ND		1.0	0.28 ug/Kg			10/10/19 11:42	1
cis-1,3-Dichloropropene	ND		1.0	0.25 ug/Kg			10/10/19 11:42	1
Carbon disulfide	ND		10	0.31 ug/Kg			10/10/19 11:42	1
Carbon tetrachloride	ND		1.0	0.28 ug/Kg			10/10/19 11:42	1
Chlorobenzene	ND		1.0	0.22 ug/Kg			10/10/19 11:42	1
Chloroethane	ND		2.0	1.5 ug/Kg			10/10/19 11:42	1
Chloroform	ND		1.0	0.24 ug/Kg			10/10/19 11:42	1
Chloromethane	ND		20	0.30 ug/Kg			10/10/19 11:42	1
Dibromochloromethane	ND		2.0	0.57 ug/Kg			10/10/19 11:42	1
Dibromomethane	ND		1.0	0.78 ug/Kg			10/10/19 11:42	1
Dichlorodifluoromethane	ND		2.0	0.44 ug/Kg			10/10/19 11:42	1
Di-isopropyl ether (DIPE)	ND		1.0	0.48 ug/Kg			10/10/19 11:42	1
Ethanol	ND		500	84 ug/Kg			10/10/19 11:42	1
Ethylbenzene	ND		1.0	0.15 ug/Kg			10/10/19 11:42	1
Ethyl-t-butyl ether (ETBE)	ND		1.0	0.51 ug/Kg			10/10/19 11:42	1
Isopropylbenzene	ND		1.0	0.55 ug/Kg			10/10/19 11:42	1
Methylene Chloride	ND		10	1.3 ug/Kg			10/10/19 11:42	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.30 ug/Kg			10/10/19 11:42	1
Naphthalene	ND		10	0.82 ug/Kg			10/10/19 11:42	1
n-Butylbenzene	ND		1.0	0.16 ug/Kg			10/10/19 11:42	1
N-Propylbenzene	ND		2.0	0.50 ug/Kg			10/10/19 11:42	1
o-Xylene	ND		1.0	0.56 ug/Kg			10/10/19 11:42	1
m,p-Xylene	ND		2.0	0.27 ug/Kg			10/10/19 11:42	1
p-Isopropyltoluene	ND		1.0	0.63 ug/Kg			10/10/19 11:42	1
sec-Butylbenzene	ND		1.0	0.58 ug/Kg			10/10/19 11:42	1
Styrene	ND		1.0	0.61 ug/Kg			10/10/19 11:42	1
trans-1,2-Dichloroethene	ND		1.0	0.51 ug/Kg			10/10/19 11:42	1
trans-1,3-Dichloropropene	ND		2.0	0.61 ug/Kg			10/10/19 11:42	1
Tert-amyl-methyl ether (TAME)	ND		1.0	0.35 ug/Kg			10/10/19 11:42	1
tert-Butyl alcohol (TBA)	ND		20	5.2 ug/Kg			10/10/19 11:42	1
tert-Butylbenzene	ND		1.0	0.15 ug/Kg			10/10/19 11:42	1
Tetrachloroethene	ND		1.0	0.21 ug/Kg			10/10/19 11:42	1
Toluene	ND		1.0	0.52 ug/Kg			10/10/19 11:42	1
Trichloroethene	ND		2.0	0.30 ug/Kg			10/10/19 11:42	1
Trichlorofluoromethane	ND		10	0.38 ug/Kg			10/10/19 11:42	1
Vinyl acetate	ND		10	4.8 ug/Kg			10/10/19 11:42	1
Vinyl chloride	ND		1.0	0.50 ug/Kg			10/10/19 11:42	1

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		71 - 155		10/10/19 11:42	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/10/19 11:42	1
Dibromofluoromethane (Surr)	91		79 - 133		10/10/19 11:42	1
Toluene-d8 (Surr)	100		80 - 120		10/10/19 11:42	1

**Lab Sample ID: LCS 570-24988/3**  
**Matrix: Solid**  
**Analysis Batch: 24988**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	44.62		ug/Kg		89	71 - 125
1,2-Dibromoethane	50.0	51.16		ug/Kg		102	80 - 120
1,2-Dichlorobenzene	50.0	54.31		ug/Kg		109	80 - 120
1,2-Dichloroethane	50.0	46.36		ug/Kg		93	79 - 121
Benzene	50.0	49.99		ug/Kg		100	79 - 120
Carbon tetrachloride	50.0	54.30		ug/Kg		109	58 - 142
Chlorobenzene	50.0	52.22		ug/Kg		104	80 - 120
Di-isopropyl ether (DIPE)	50.0	44.59		ug/Kg		89	65 - 131
Ethanol	500	457.0	J	ug/Kg		91	32 - 158
Ethylbenzene	50.0	53.29		ug/Kg		107	57 - 153
Ethyl-t-butyl ether (ETBE)	50.0	46.50		ug/Kg		93	58 - 136
Methyl-t-Butyl Ether (MTBE)	50.0	45.98		ug/Kg		92	64 - 124
o-Xylene	50.0	53.53		ug/Kg		107	79 - 127
m,p-Xylene	100	106.2		ug/Kg		106	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		71 - 155
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	95		79 - 133
Toluene-d8 (Surr)	97		80 - 120

**Lab Sample ID: LCSD 570-24988/4**  
**Matrix: Solid**  
**Analysis Batch: 24988**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	47.59		ug/Kg		95	71 - 125	6	20
1,2-Dibromoethane	50.0	52.09		ug/Kg		104	80 - 120	2	20
1,2-Dichlorobenzene	50.0	54.98		ug/Kg		110	80 - 120	1	20
1,2-Dichloroethane	50.0	49.91		ug/Kg		100	79 - 121	7	20
Benzene	50.0	50.53		ug/Kg		101	79 - 120	1	20
Carbon tetrachloride	50.0	51.72		ug/Kg		103	58 - 142	5	20
Chlorobenzene	50.0	53.53		ug/Kg		107	80 - 120	2	20
Di-isopropyl ether (DIPE)	50.0	45.60		ug/Kg		91	65 - 131	2	20
Ethanol	500	457.9	J	ug/Kg		92	32 - 158	0	27
Ethylbenzene	50.0	52.30		ug/Kg		105	57 - 153	2	20
Ethyl-t-butyl ether (ETBE)	50.0	46.35		ug/Kg		93	58 - 136	0	20
Methyl-t-Butyl Ether (MTBE)	50.0	45.88		ug/Kg		92	64 - 124	0	20
o-Xylene	50.0	55.49		ug/Kg		111	79 - 127	4	20
m,p-Xylene	100	109.7		ug/Kg		110	80 - 122	3	20

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 570-24988/4**  
**Matrix: Solid**  
**Analysis Batch: 24988**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		71 - 155
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	92		79 - 133
Toluene-d8 (Surr)	99		80 - 120

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-24273/1-A**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 24273**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		4.1	2.0 mg/Kg		10/07/19 15:24	10/08/19 17:42	20

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		42 - 126	10/07/19 15:24	10/08/19 17:42	20

**Lab Sample ID: MB 570-24521/1-A**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 24521**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.10	0.050 mg/Kg		10/08/19 15:03	10/08/19 17:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		42 - 126	10/08/19 15:03	10/08/19 17:07	1

**Lab Sample ID: LCS 570-24521/2-A**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 24521**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C4-C13)	2.02	2.150		mg/Kg		107	70 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		42 - 126

**Lab Sample ID: LCSD 570-24521/3-A**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 24521**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	2.02	2.075		mg/Kg		103	70 - 124	4	18

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		42 - 126

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8015B - Gasoline Range Organics - (GC)

**Lab Sample ID: 570-9307-B-1-B MS**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 24521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (C4-C13)	ND		2.02	2.047		mg/Kg		101	48 - 114
<b>Surrogate</b>		<b>MS Qualifier</b>		<b>MS %Recovery</b>					<b>Limits</b>
4-Bromofluorobenzene (Surr)				101					42 - 126

**Lab Sample ID: 570-9307-B-1-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 24482**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 24521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	ND		1.96	1.988		mg/Kg		101	48 - 114	3	23
<b>Surrogate</b>		<b>MSD Qualifier</b>		<b>MSD %Recovery</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)				103					42 - 126		

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-24574/1-A**  
**Matrix: Solid**  
**Analysis Batch: 24465**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 24574**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		5.0	3.6 mg/Kg		10/08/19 17:20	10/09/19 05:13	1
<b>Surrogate</b>		<b>MB Qualifier</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)						10/08/19 17:20	10/09/19 05:13	1

**Lab Sample ID: LCS 570-24574/2-A**  
**Matrix: Solid**  
**Analysis Batch: 24465**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 24574**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	400	473.8		mg/Kg		118	67 - 121
<b>Surrogate</b>		<b>LCS %Recovery</b>					<b>Limits</b>
n-Octacosane (Surr)		109					61 - 145

**Lab Sample ID: 570-9454-A-2-B MS**  
**Matrix: Solid**  
**Analysis Batch: 24465**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 24574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	21	Z	401	472.3		mg/Kg		112	33 - 153

# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: 570-9454-A-2-B MS**  
**Matrix: Solid**  
**Analysis Batch: 24465**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 24574**

Surrogate	%Recovery	MS MS Qualifier	Limits
<i>n</i> -Octacosane (Surr)	109		61 - 145

**Lab Sample ID: 570-9454-A-2-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 24465**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 24574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Diesel Range Organics [C10-C28]	21	Z	401	482.4		mg/Kg		115	33 - 153	2	32	

Surrogate	%Recovery	MSD MSD Qualifier	Limits
<i>n</i> -Octacosane (Surr)	100		61 - 145

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 570-24946/1-A**  
**Matrix: Solid**  
**Analysis Batch: 25565**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 24946**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Silver	ND		0.243	0.0832 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Arsenic	ND		0.728	0.251 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Barium	ND		0.485	0.150 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Beryllium	ND		0.243	0.133 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Cadmium	ND		0.485	0.131 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Cobalt	ND		0.243	0.144 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Chromium	ND		0.243	0.138 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Copper	ND		0.485	0.131 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Molybdenum	ND		0.243	0.128 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Nickel	ND		0.243	0.141 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Antimony	ND		0.728	0.145 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Selenium	ND		0.728	0.291 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Thallium	ND		0.728	0.148 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Vanadium	ND		0.243	0.137 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Zinc	ND		0.971	0.173 mg/Kg		10/09/19 20:01	10/11/19 23:28	1
Lead	ND		0.485	0.128 mg/Kg		10/09/19 20:01	10/11/19 23:28	1

**Lab Sample ID: LCS 570-24946/2-A**  
**Matrix: Solid**  
**Analysis Batch: 25643**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 24946**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Silver	12.6	12.31		mg/Kg		98	80 - 120	
Arsenic	25.1	20.52		mg/Kg		82	80 - 120	
Barium	25.1	24.52		mg/Kg		98	80 - 120	
Beryllium	25.1	21.36		mg/Kg		85	80 - 120	
Cadmium	25.1	22.60		mg/Kg		90	80 - 120	
Cobalt	25.1	21.27		mg/Kg		85	80 - 120	
Chromium	25.1	22.03		mg/Kg		88	80 - 120	

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCS 570-24946/2-A**  
**Matrix: Solid**  
**Analysis Batch: 25643**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 24946**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	25.1	23.82		mg/Kg		95	80 - 120
Molybdenum	25.1	20.11		mg/Kg		80	80 - 120
Nickel	25.1	21.46		mg/Kg		85	80 - 120
Antimony	25.1	20.99		mg/Kg		84	80 - 120
Selenium	25.1	20.25		mg/Kg		81	80 - 120
Thallium	25.1	21.05		mg/Kg		84	80 - 120
Vanadium	25.1	21.55		mg/Kg		86	80 - 120
Zinc	25.1	20.51		mg/Kg		82	80 - 120
Lead	25.1	22.73		mg/Kg		90	80 - 120

**Lab Sample ID: 570-9320-10 MS**  
**Matrix: Solid**  
**Analysis Batch: 25565**

**Client Sample ID: Comp 2**  
**Prep Type: Total/NA**  
**Prep Batch: 24946**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		12.5	13.82		mg/Kg		111	75 - 125
Arsenic	4.10		25.0	32.86		mg/Kg		115	75 - 125
Barium	128		25.0	164.8	4	mg/Kg		147	75 - 125
Beryllium	0.669		25.0	30.25		mg/Kg		118	75 - 125
Cadmium	ND		25.0	27.92		mg/Kg		110	75 - 125
Cobalt	8.52		25.0	35.82		mg/Kg		109	75 - 125
Chromium	15.1		25.0	42.46		mg/Kg		109	75 - 125
Copper	29.0	F1	25.0	69.86	F1	mg/Kg		164	75 - 125
Molybdenum	0.408		25.0	24.84		mg/Kg		98	75 - 125
Nickel	11.5		25.0	38.62		mg/Kg		108	75 - 125
Antimony	1.95		25.0	15.78		mg/Kg		55	50 - 115
Selenium	ND	L	25.0	25.11		mg/Kg		100	75 - 125
Thallium	1.91		25.0	24.72		mg/Kg		91	75 - 125
Vanadium	38.0		25.0	68.95		mg/Kg		124	75 - 125
Zinc	63.5	F1	25.0	95.49	F1	mg/Kg		128	75 - 125
Lead	11.0		25.0	38.80		mg/Kg		111	75 - 125

**Lab Sample ID: 570-9320-10 MSD**  
**Matrix: Solid**  
**Analysis Batch: 25565**

**Client Sample ID: Comp 2**  
**Prep Type: Total/NA**  
**Prep Batch: 24946**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		12.5	13.87		mg/Kg		111	75 - 125	0	20
Arsenic	4.10		25.0	33.34		mg/Kg		117	75 - 125	1	20
Barium	128		25.0	164.7	4	mg/Kg		146	75 - 125	0	20
Beryllium	0.669		25.0	29.99		mg/Kg		117	75 - 125	1	20
Cadmium	ND		25.0	27.62		mg/Kg		109	75 - 125	1	20
Cobalt	8.52		25.0	35.36		mg/Kg		107	75 - 125	1	20
Chromium	15.1		25.0	42.50		mg/Kg		110	75 - 125	0	20
Copper	29.0	F1	25.0	69.95	F1	mg/Kg		164	75 - 125	0	20
Molybdenum	0.408		25.0	24.66		mg/Kg		97	75 - 125	1	20
Nickel	11.5		25.0	38.11		mg/Kg		106	75 - 125	1	20
Antimony	1.95		25.0	16.22		mg/Kg		57	50 - 115	3	20
Selenium	ND	L	25.0	23.78		mg/Kg		95	75 - 125	5	20

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# QC Sample Results

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 570-9320-10 MSD  
Matrix: Solid  
Analysis Batch: 25565

Client Sample ID: Comp 2  
Prep Type: Total/NA  
Prep Batch: 24946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	1.91		25.0	23.38		mg/Kg		86	75 - 125	6	20
Vanadium	38.0		25.0	68.88		mg/Kg		123	75 - 125	0	20
Zinc	63.5	F1	25.0	94.93	F1	mg/Kg		126	75 - 125	1	20
Lead	11.0		25.0	38.64		mg/Kg		111	75 - 125	0	20

## Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 570-24949/1-A  
Matrix: Solid  
Analysis Batch: 25138

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 24949

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0877	0.00618 mg/Kg		10/10/19 11:00	10/10/19 14:46	1

Lab Sample ID: LCS 570-24949/2-A  
Matrix: Solid  
Analysis Batch: 25138

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 24949

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.847	0.7743		mg/Kg		91	85 - 121

Lab Sample ID: LCSD 570-24949/3-A  
Matrix: Solid  
Analysis Batch: 25138

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 24949

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.877	0.7997		mg/Kg		91	85 - 121	3	10

Lab Sample ID: 570-9320-10 MS  
Matrix: Solid  
Analysis Batch: 25138

Client Sample ID: Comp 2  
Prep Type: Total/NA  
Prep Batch: 24949

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.820	0.7663		mg/Kg		89	71 - 137

Lab Sample ID: 570-9320-10 MSD  
Matrix: Solid  
Analysis Batch: 25138

Client Sample ID: Comp 2  
Prep Type: Total/NA  
Prep Batch: 24949

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.833	0.7971		mg/Kg		91	71 - 137	4	14

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

**Client Sample ID: SV10-1**

**Date Collected: 10/04/19 08:20**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.983 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 12:56	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-3**

**Date Collected: 10/04/19 08:25**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.21 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 13:22	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-5**

**Date Collected: 10/04/19 08:30**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.407 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 13:47	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-10**

**Date Collected: 10/04/19 08:35**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.78 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 14:13	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-15**

**Date Collected: 10/04/19 08:40**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-5**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.245 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 14:39	J78Y	ECL 2
Instrument ID: GCMSQQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

**Client Sample ID: SV10-20**

**Date Collected: 10/04/19 08:45**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-6**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.467 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 15:05	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-25**

**Date Collected: 10/04/19 08:50**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-7**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.44 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 15:31	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV10-30**

**Date Collected: 10/04/19 08:55**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-8**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.06 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 15:57	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: Comp 1**

**Date Collected: 10/04/19 11:50**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-9**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.97 g	5 mL	24521	10/08/19 15:03	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	24482	10/09/19 00:33	W6MG	ECL 2
Instrument ID: GC56										
Total/NA	Prep	3550C			10.15 g	10 mL	24574	10/08/19 17:20	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			24465	10/09/19 10:31	N5Y3	ECL 1
Instrument ID: GC46										
Total/NA	Prep	3050B			1.99 g	100 mL	24946	10/09/19 20:01	MD3A	ECL 1
Total/NA	Analysis	6010B		1			25565	10/11/19 23:37	OYW3	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.61 g	100 mL	24949	10/10/19 11:00	MD3A	ECL 1
Total/NA	Analysis	7471A		1			25138	10/10/19 15:00	I3IN	ECL 1
Instrument ID: HG7										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: Comp 2

Date Collected: 10/04/19 11:50

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.95 g	5 mL	24521	10/08/19 15:03	W6MG	ECL 2
Total/NA	Analysis	8015B		1	5 g	5 mL	24482	10/09/19 02:25	W6MG	ECL 2
Instrument ID: GC56										
Total/NA	Prep	3550C			10.41 g	10 mL	24574	10/08/19 17:20	Q8PV	ECL 1
Total/NA	Analysis	8015B		1			24465	10/09/19 10:53	N5Y3	ECL 1
Instrument ID: GC46										
Total/NA	Prep	3050B			2.00 g	100 mL	24946	10/09/19 20:01	MD3A	ECL 1
Total/NA	Analysis	6010B		1			25565	10/11/19 23:31	OYW3	ECL 1
Instrument ID: ICP8										
Total/NA	Prep	7471A			0.60 g	100 mL	24949	10/10/19 11:00	MD3A	ECL 1
Total/NA	Analysis	7471A		1			25138	10/10/19 14:53	I3IN	ECL 1
Instrument ID: HG7										

## Client Sample ID: SV7-1

Date Collected: 10/04/19 09:15

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.482 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 16:22	J78Y	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV7-3

Date Collected: 10/04/19 09:20

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.381 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 16:48	J78Y	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV7-5

Date Collected: 10/04/19 09:25

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.562 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 17:14	J78Y	ECL 2
Instrument ID: GCMSQQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

**Client Sample ID: SV7-10**

**Date Collected: 10/04/19 09:30**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-14**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.769 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 17:40	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV7-15**

**Date Collected: 10/04/19 09:35**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-15**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.898 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 18:06	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV9-1**

**Date Collected: 10/04/19 10:15**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-16**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.41 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 18:32	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV9-3**

**Date Collected: 10/04/19 10:20**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-17**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.356 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 18:58	J78Y	ECL 2
Instrument ID: GCMSQQ										

**Client Sample ID: SV9-5**

**Date Collected: 10/04/19 10:25**

**Date Received: 10/04/19 13:00**

**Lab Sample ID: 570-9320-18**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.312 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 19:23	J78Y	ECL 2
Instrument ID: GCMSQQ										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: SV9-10

Date Collected: 10/04/19 10:30

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.334 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 19:49	J78Y	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV9-15

Date Collected: 10/04/19 10:35

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.136 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24701	10/09/19 20:15	J78Y	ECL 2
Instrument ID: GCMSQQ										

## Client Sample ID: SV9-20

Date Collected: 10/04/19 10:40

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.071 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 13:14	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV9-25

Date Collected: 10/04/19 10:45

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.04 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 13:42	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV9-30

Date Collected: 10/04/19 10:50

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.828 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 14:10	NET3	ECL 2
Instrument ID: GCMSCC										

# Lab Chronicle

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Client Sample ID: SV4-1

Date Collected: 10/04/19 11:25

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.352 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 14:39	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV4-3

Date Collected: 10/04/19 11:30

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.985 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 15:07	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV4-5

Date Collected: 10/04/19 11:35

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.335 g	5 g	24584	10/08/19 17:34	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24670	10/09/19 15:34	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV4-10

Date Collected: 10/04/19 11:40

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.675 g	5 g	24588	10/08/19 17:57	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24988	10/10/19 12:23	NET3	ECL 2
Instrument ID: GCMSCC										

## Client Sample ID: SV4-15

Date Collected: 10/04/19 11:45

Date Received: 10/04/19 13:00

## Lab Sample ID: 570-9320-28

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.675 g	5 g	24588	10/08/19 17:57	P4DI	ECL 2
Total/NA	Analysis	8260B		1	5 mL	5 mL	24988	10/10/19 12:50	NET3	ECL 2
Instrument ID: GCMSCC										

### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494



# Accreditation/Certification Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	SCAQMD LAP	17LA0919	11-30-19
California	State	2944	09-29-20
Guam	State	19-004R	10-31-19
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

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# Method Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

Job ID: 570-9320-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 2
8015B	Gasoline Range Organics - (GC)	SW846	ECL 2
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
6010B	Metals (ICP)	SW846	ECL 1
7471A	Mercury (CVAA)	SW846	ECL 1
3050B	Preparation, Metals	SW846	ECL 1
3550C	Ultrasonic Extraction	SW846	ECL 1
5030C	Purge and Trap	SW846	ECL 2
5035	Closed System Purge and Trap	SW846	ECL 2
7471A	Preparation, Mercury	SW846	ECL 1

#### Protocol References:

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

#### Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Sample Summary

Client: Stantec Consulting Corp.  
Project/Site: 185804578

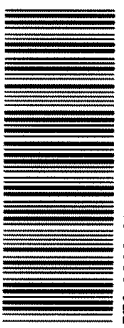
Job ID: 570-9320-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-9320-1	SV10-1	Solid	10/04/19 08:20	10/04/19 13:00	
570-9320-2	SV10-3	Solid	10/04/19 08:25	10/04/19 13:00	
570-9320-3	SV10-5	Solid	10/04/19 08:30	10/04/19 13:00	
570-9320-4	SV10-10	Solid	10/04/19 08:35	10/04/19 13:00	
570-9320-5	SV10-15	Solid	10/04/19 08:40	10/04/19 13:00	
570-9320-6	SV10-20	Solid	10/04/19 08:45	10/04/19 13:00	
570-9320-7	SV10-25	Solid	10/04/19 08:50	10/04/19 13:00	
570-9320-8	SV10-30	Solid	10/04/19 08:55	10/04/19 13:00	
570-9320-9	Comp 1	Solid	10/04/19 11:50	10/04/19 13:00	
570-9320-10	Comp 2	Solid	10/04/19 11:50	10/04/19 13:00	
570-9320-11	SV7-1	Solid	10/04/19 09:15	10/04/19 13:00	
570-9320-12	SV7-3	Solid	10/04/19 09:20	10/04/19 13:00	
570-9320-13	SV7-5	Solid	10/04/19 09:25	10/04/19 13:00	
570-9320-14	SV7-10	Solid	10/04/19 09:30	10/04/19 13:00	
570-9320-15	SV7-15	Solid	10/04/19 09:35	10/04/19 13:00	
570-9320-16	SV9-1	Solid	10/04/19 10:15	10/04/19 13:00	
570-9320-17	SV9-3	Solid	10/04/19 10:20	10/04/19 13:00	
570-9320-18	SV9-5	Solid	10/04/19 10:25	10/04/19 13:00	
570-9320-19	SV9-10	Solid	10/04/19 10:30	10/04/19 13:00	
570-9320-20	SV9-15	Solid	10/04/19 10:35	10/04/19 13:00	
570-9320-21	SV9-20	Solid	10/04/19 10:40	10/04/19 13:00	
570-9320-22	SV9-25	Solid	10/04/19 10:45	10/04/19 13:00	
570-9320-23	SV9-30	Solid	10/04/19 10:50	10/04/19 13:00	
570-9320-24	SV4-1	Solid	10/04/19 11:25	10/04/19 13:00	
570-9320-25	SV4-3	Solid	10/04/19 11:30	10/04/19 13:00	
570-9320-26	SV4-5	Solid	10/04/19 11:35	10/04/19 13:00	
570-9320-27	SV4-10	Solid	10/04/19 11:40	10/04/19 13:00	
570-9320-28	SV4-15	Solid	10/04/19 11:45	10/04/19 13:00	

CHAIN OF CUSTODY RECORD

DATE: 10-04-2019

PAGE: 1 OF 3



570-9320 Chain of Custody



7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5194  
For courier service / sample drop-off information, contact us26\_sales@eurofins.com or call us

<p>LAB USE ONLY</p>		<p>CLIENT PROJECT NAME - NUMBER 105804570</p>		<p>P.O. NO. 105804570 200.0003</p>	
<p>ADDRESS 290 Conejo Ridge AVE THOUSAND OAKS CA 91301</p>		<p>PROJECT CONTACT Brian Goss</p>		<p>SAMPLER(S): (PRINT) Tom Agui-lal DANNY LAW</p>	
<p>CITY: THOUSAND OAKS STATE: CA ZIP: 91301</p>		<p>TEL: (805) 719-9301 C-MAIL: brain.goss@stantec.com</p>		<p>REQUESTED ANALYSES</p>	
<p>TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD")  <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> STANDARD</p>		<p>LOG CODE</p>		<p>Please check box or fill in blank as needed.</p>	
<p><input type="checkbox"/> COELT EDF GLOBAL ID</p>		<p>SPECIAL INSTRUCTIONS: 5 DAY</p>		<p>TPH (g) <input checked="" type="checkbox"/> GRO TPH (d) <input checked="" type="checkbox"/> PRO TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44</p>	
<p>NO. OF CONT.</p>		<p>MATRIX</p>		<p>TPH (g) <input checked="" type="checkbox"/> GRO TPH (d) <input checked="" type="checkbox"/> PRO TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44</p>	
<p>SAMPLING DATE</p>		<p>SAMPLING TIME</p>		<p>Oxygenates (8260) <input checked="" type="checkbox"/></p>	
<p>1 10-4-19</p>		<p>0820</p>		<p>VOCs (8260) <input checked="" type="checkbox"/></p>	
<p>2 10-4-19</p>		<p>0825</p>		<p>Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core <input checked="" type="checkbox"/></p>	
<p>3 10-4-19</p>		<p>0830</p>		<p>BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/></p>	
<p>4 10-4-19</p>		<p>0835</p>		<p>PCBs (8082) <input type="checkbox"/></p>	
<p>5 10-4-19</p>		<p>0840</p>		<p>Pesticides (8081) <input type="checkbox"/></p>	
<p>6 10-4-19</p>		<p>0845</p>		<p>PAHs (8270) <input type="checkbox"/> 8270 SIM <input type="checkbox"/></p>	
<p>7 10-4-19</p>		<p>0850</p>		<p>Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6 <input type="checkbox"/></p>	
<p>8 10-4-19</p>		<p>0855</p>		<p>T22 Metals <input checked="" type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X <input type="checkbox"/></p>	
<p>9 10-4-19</p>		<p>1150</p>		<p>SVOCs (8270) <input checked="" type="checkbox"/></p>	
<p>10 10-4-19</p>		<p>1150</p>		<p>Date: 10-4-19 Time: 13:00</p>	
<p>Relinquished by: (Signature) DANNY LAW</p>		<p>Received by: (Signature/Affiliation) [Signature]</p>		<p>Date: 10-4-19 Time: 13:00</p>	
<p>Relinquished by: (Signature)</p>		<p>Received by: (Signature/Affiliation)</p>		<p>Date: Time:</p>	
<p>Relinquished by: (Signature)</p>		<p>Received by: (Signature/Affiliation)</p>		<p>Date: Time:</p>	





CalScience

CHAIN OF CUSTODY RECORD

DATE: 10-04-2019

PAGE: 2 OF 3

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LABORATORY CLIENT		CLIENT PROJECT NAME / NUMBER	
STANTEC		105804576.200.revs	
ADDRESS: 240 Conejo Ridge Ave CITY: THOUSAND OAKS CA 91361		PROJECT CONTACT Blair Cross	
TELEPHONE: 805-719-9301		SAMPLERS (PRINT) Tom Asvilia Danny Lam	
TURNAROUND TIME (rush surcharges may apply to any IAL not "STANDARD")		PO NO.	
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> DAYS <input type="checkbox"/> STANDARD <input type="checkbox"/> COELT EDF		105804576.200.revs	
SPECIAL INSTRUCTIONS 5 DAY		REQUESTED ANALYSES	
Please check box or fill in blank as needed.		Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 2186 T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM PCBs (8082) Pesticides (8081) SVOCs (8270) Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core Oxygenates (8260) VOCs (8260) BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/> TPH TPH <input type="checkbox"/> C6-C38 <input type="checkbox"/> C6-C44 <input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO <input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	
LOG CODE <input type="checkbox"/> UNPRESERVED <input type="checkbox"/> PRESERVED <input type="checkbox"/> FIELD FILTERED		Date: 10-4-19 Time: 13:00	
RECEIVED BY (Signature/Affiliation)		Date: 10-4-19 Time: 13:00	
RECEIVED BY (Signature/Affiliation)		Date: _____ Time: _____	
RECEIVED BY (Signature/Affiliation)		Date: _____ Time: _____	





Collection

# CHAIN OF CUSTODY RECORD

DATE: 10-04-2019  
PAGE: 3 OF 3

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494  
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LABORATORY CLIENT: STANTEC

CLIENT PROJECT NAME / NUMBER: \_\_\_\_\_

PROJECT CONTACT: Brain GOSS

P.O. NO.: 105804570,200,0003

SAMPLER(S): (PRINT)  
TOMY AGUILAN  
DANNY LAW

ADDRESS: 290 Camino Ridge Ave STATE: CA ZIP: 91301

CITY: THOUSAND OAKS E-MAIL: \_\_\_\_\_

TEL: 805-719-9301

TURNAROUND TIME (Rush surcharges may apply to any FAT not "STANDARD")

SAME DAY  24 HR  48 HR  72 HR  5 DAYS  STANDARD

COELT EDF GLOBAL ID: \_\_\_\_\_ LOG CODE: \_\_\_\_\_

SPECIAL INSTRUCTIONS: 5 Day

Field Filtered \_\_\_\_\_

Preserved \_\_\_\_\_

Unpreserved \_\_\_\_\_

LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.
		DATE	TIME		
21	SV9-20	10-4-19	1040	Spil	4
22	SV9-25		1045		
23	SV9-30		1050		
24	SV4-1		1125		
25	-3		1130		
26	-5		1135		
27	-10		1140		
28	SV4-15		1145		

Please check box or fill in blank as needed.

<input type="checkbox"/> TPH (g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPB (d) <input type="checkbox"/> DRO	<input type="checkbox"/> TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	<input type="checkbox"/> BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/> _____	<input type="checkbox"/> VOCs (8260)	<input type="checkbox"/> Oxygenates (8260)	<input checked="" type="checkbox"/>	<input type="checkbox"/> Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	<input type="checkbox"/> SVOCs (8270)	<input type="checkbox"/> Pesticides (8081)	<input type="checkbox"/> PCBs (8082)	<input type="checkbox"/> PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	<input type="checkbox"/> T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	<input type="checkbox"/> Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6
---	---	--	---	--------------------------------------	--	-------------------------------------	---	---------------------------------------	--	--------------------------------------	---	---	--

Relinquished by: (Signature) [Signature] Date: 10-4-19 Time: 13:00

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

## Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 570-9320-1

**Login Number: 9320**

**List Number: 1**

**Creator: Cruise, Noel**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# ATTACHMENT E



26 August 2019

Lewis Simons  
Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

H&P Project: ST081519-14  
Client Project: 740 E 111th Place

Dear Lewis Simons:



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 15-Aug-19 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 La Roux  
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SSV-1	E908084-01	Vapor	15-Aug-19	15-Aug-19
SSV-2	E908084-02	Vapor	15-Aug-19	15-Aug-19
SSV-3	E908084-03	Vapor	15-Aug-19	15-Aug-19
SSV-4	E908084-04	Vapor	15-Aug-19	15-Aug-19
SSV-5	E908084-05	Vapor	15-Aug-19	15-Aug-19
SSV-7	E908084-06	Vapor	15-Aug-19	15-Aug-19
SSV-6	E908084-07	Vapor	15-Aug-19	15-Aug-19

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**Soil Vapor/Air Analysis by ASTM D1945**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-1 (E908084-01) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>10</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>6.3</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>84</b>	0.20	"	"	"	"	"	"	
<b>SSV-2 (E908084-02) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>4.4</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>14</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>81</b>	0.20	"	"	"	"	"	"	
<b>SSV-3 (E908084-03) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>3.3</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>16</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>80</b>	0.20	"	"	"	"	"	"	
<b>SSV-4 (E908084-04) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>4.8</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>14</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>82</b>	0.20	"	"	"	"	"	"	
<b>SSV-5 (E908084-05) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>4.3</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>15</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>81</b>	0.20	"	"	"	"	"	"	
<b>SSV-7 (E908084-06) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Carbon dioxide	<b>1.5</b>	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	<b>18</b>	0.20	"	"	"	"	"	"	
Nitrogen	<b>80</b>	0.20	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**Soil Vapor/Air Analysis by ASTM D1945**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-6 (E908084-07) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
<b>Carbon dioxide</b>	<b>3.8</b>	<b>0.20</b>	<b>%</b>	<b>1</b>	<b>EH91915</b>	<b>16-Aug-19</b>	<b>19-Aug-19</b>	<b>ASTM D1945</b>	
<b>Oxygen</b>	<b>16</b>	<b>0.20</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	
<b>Nitrogen</b>	<b>80</b>	<b>0.20</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	<b>"</b>	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**Soil Vapor/Air Analysis by EPA 8015M**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-1 (E908084-01) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-2 (E908084-02) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-3 (E908084-03) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-4 (E908084-04) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-5 (E908084-05) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-7 (E908084-06) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-6 (E908084-07) Vapor    Sampled: 15-Aug-19    Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**Soil Vapor/Air Analysis by ASTM D1945 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch EH91915 - GC**

**Blank (EH91915-BLK1)**

Prepared & Analyzed: 16-Aug-19

Carbon dioxide	ND	0.20	%							
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**Blank (EH91915-BLK2)**

Prepared & Analyzed: 16-Aug-19

Carbon dioxide	ND	0.20	%							
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Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

**Soil Vapor/Air Analysis by EPA 8015M - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91914 - GC**

**Blank (EH91914-BLK1)**

Prepared & Analyzed: 16-Aug-19

Methane	ND	10	ppmv							
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**Blank (EH91914-BLK2)**

Prepared & Analyzed: 16-Aug-19

Methane	ND	10	ppmv							
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Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-14  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:26

### 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

All soil results are reported in wet weight.

### Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138.

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](http://www.handpmg.com/about/certifications).



Lab Client and Project Information	
Lab Client/Consultant: <u>STANTEC</u>	Project Name / #: <u>185751046, 200.005.2</u>
Lab Client Project Manager: <u>Lewis D. Simons</u>	Project Location: <u>800 E 11th Placo</u>
Lab Client Address: <u>290 Conejo Ridge Ave # 200</u>	Report E-Mail(s): <u>Lewis.Simons</u>
Lab Client City, State, Zip: <u>Thousand Oaks CA 91361</u>	<u>ANIKIA.NARULG</u>
Phone Number: <u>805-230-1266</u>	<u>Brian.Goss@STANTEC.COM</u>
Reporting Requirements	Turnaround Time
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____
Sampler Information	
Sampler(s): <u>J. ReKSC</u>	
Signature: <u>[Signature]</u>	
Date: <u>8/15/19</u>	

73T081519-14

E908084

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>8/15/19</u>	Control #: <u>190722.02</u>
H&P Project # <u>ST081519-A+14</u>	
Lab Work Order # <u>E908083</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID:	Temp:
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: <u>WRB</u>	

**Additional Instructions to Laboratory:**

\* Preferred VOC units (please choose one):

- µg/L    µg/m<sup>3</sup>    ppbv    ppmv

E908084

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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates	Naphthalene	TPHv as Gas	Aromatic/Aliphatic Fractions	Leak Check Compound	Methane by EPA 8015m	Fixed Gases by ASTM D1945	
								<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							<input checked="" type="checkbox"/> CO2	<input checked="" type="checkbox"/> O2
SSV-1	NA	8/15/19	1352	SS	Tedlar	NA												X	X
SSV-2			1357															X	X
SSV-3			1402															X	X
SSV-4			1430															X	X
SSV-5			1438															X	X
SSV-7			1443															X	X
SSV-6			1447															X	X

Approved/Relinquished by: <u>Bridget</u>	Company: <u>Stantec</u>	Date: <u>8/15/19</u>	Time: <u>609</u>	Received by: <u>[Signature]</u>	Company: <u>H&amp;P</u>	Date: <u>8/15/19</u>	Time: <u>1809</u>
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

Tedlar

## Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: ST081519-A1A Date: 8/15/2019  
 Site Address: 740 E 111TH PLACE Page: 1 of 1  
 Consultant: STANTEC H&P Rep(s): LOC NGO  
 Consultant Rep(s): BRIAN GOSS J. Reks

Reviewed: DB  
 Scanned: DB

<b>Equipment Info</b>	<b>Purge Volume Information</b>	<b>Leak Check Compound</b>	
Inline Gauge ID#: <u>T49</u>	PV Amount: <u>3PV</u> PV Includes: <input checked="" type="checkbox"/> Tubing	<input type="checkbox"/> 1,1-DFA	<b>Resample Key:</b> RS = Resample RD = for Dilution RL = for LCC fail
Pump ID#:	<input type="checkbox"/> Sand 40%	<input type="checkbox"/> 1,1,1,2-TFA	
	<input type="checkbox"/> Dry Bent 50%	<input type="checkbox"/> IPA	
		A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted. <input type="checkbox"/> Other: <u>NA</u>	

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 <input checked="" type="checkbox"/> Hg <input type="checkbox"/> H <sub>2</sub> O
1	Tedlar	400cc	1352	35	1	48					✓	NA	146	<200	-	<200	0
2			1357								✓		146	<200	-		0
3			1402								✓		146	<200	-		0
4			1430								✓		146	<200	-		0
5			1438								✓		146	<200	-		0
6			1443								✓		146	<200	-		0
7			1447								✓		146	<200	-		0
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):

26 August 2019

Lewis Simons  
Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

H&P Project: ST081519-A1A  
Client Project: 740 E 111th Place

Dear Lewis Simons:



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 15-Aug-19 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 La Roux  
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SSV-1	E908077-01	Vapor	15-Aug-19	15-Aug-19
SSV-2	E908077-02	Vapor	15-Aug-19	15-Aug-19
SSV-3	E908077-03	Vapor	15-Aug-19	15-Aug-19
SSV-5	E908077-04	Vapor	15-Aug-19	15-Aug-19
SSV-4	E908077-05	Vapor	15-Aug-19	15-Aug-19
SSV-7	E908077-06	Vapor	15-Aug-19	15-Aug-19
SSV-6	E908077-07	Vapor	15-Aug-19	15-Aug-19
SSV-9	E908077-08	Vapor	15-Aug-19	15-Aug-19
SSV-8	E908077-09	Vapor	15-Aug-19	15-Aug-19
SSV-8 REP	E908077-10	Vapor	15-Aug-19	15-Aug-19

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**DETECTIONS SUMMARY**

Sample ID: **SSV-1**

Laboratory ID: **E908077-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>Toluene</b>	<b>420</b>	38	ug/m3	H&P TO-15	
<b>o-Xylene</b>	<b>24</b>	22	ug/m3	H&P TO-15	

Sample ID: **SSV-2**

Laboratory ID: **E908077-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>No Detections Reported</b>					

Sample ID: **SSV-3**

Laboratory ID: **E908077-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>Tetrachloroethene</b>	<b>230</b>	34	ug/m3	H&P TO-15	

Sample ID: **SSV-5**

Laboratory ID: **E908077-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>No Detections Reported</b>					

Sample ID: **SSV-4**

Laboratory ID: **E908077-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>Tetrachloroethene</b>	<b>190</b>	34	ug/m3	H&P TO-15	

Sample ID: **SSV-7**

Laboratory ID: **E908077-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>1,1-Difluoroethane (LCC)</b>	<b>72</b>	27	ug/m3	H&P TO-15	

Sample ID: **SSV-6**

Laboratory ID: **E908077-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>No Detections Reported</b>					

Sample ID: **SSV-9**

Laboratory ID: **E908077-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
<b>No Detections Reported</b>					

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

Sample ID: **SSV-8**

Laboratory ID: **E908077-09**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
<b>Tetrachloroethene</b>	<b>91</b>	34		ug/m3	H&P TO-15	

Sample ID: **SSV-8 REP**

Laboratory ID: **E908077-10**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
<b>Tetrachloroethene</b>	<b>92</b>	34		ug/m3	H&P TO-15	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-1 (E908077-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
<b>Toluene</b>	<b>420</b>	<b>38</b>	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-1 (E908077-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
<b>o-Xylene</b>	<b>24</b>	<b>22</b>	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

111 % 67-141 " " " "  
103 % 75-125 " " " "  
91.1 % 56-127 " " " "

**SSV-2 (E908077-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19**

1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	



Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-2 (E908077-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		109 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		111 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.8 %	56-127		"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-3 (E908077-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>230</b>	<b>34</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
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Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-3 (E908077-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 108 % 67-141 " " " "

Surrogate: Toluene-d8 100 % 75-125 " " " "

Surrogate: 4-Bromofluorobenzene 98.7 % 56-127 " " " "

<b>SSV-5 (E908077-04) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-5 (E908077-04) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		108 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		109 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.2 %	56-127		"	"	"	"	

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Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-4 (E908077-05) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>190</b>	<b>34</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

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**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-4 (E908077-05) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

111 % 67-141 " " " "  
103 % 75-125 " " " "  
82.4 % 56-127 " " " "

**SSV-7 (E908077-06) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19**

<b>1,1-Difluoroethane (LCC)</b>	<b>72</b>	<b>27</b>	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	

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Reported:  
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**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-7 (E908077-06) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		101 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		108 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.5 %	56-127		"	"	"	"	

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Reported:  
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**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-6 (E908077-07) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	



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**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-6 (E908077-07) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

111 % 67-141 " " " "  
101 % 75-125 " " " "  
81.7 % 56-127 " " " "

**SSV-9 (E908077-08) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19**

1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	

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**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-9 (E908077-08) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
Tetrachloroethene	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		110 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		105 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		77.0 %	56-127		"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-8 (E908077-09) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>91</b>	<b>34</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-8 (E908077-09) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

110 % 67-141 " " " "  
101 % 75-125 " " " "  
81.6 % 56-127 " " " "

**SSV-8 REP (E908077-10) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19**

1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	

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Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-8 REP (E908077-10) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>92</b>	<b>34</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		106 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		104 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.1 %	56-127		"	"	"	"	

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Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

**Blank (EH91503-BLK1)**

Prepared & Analyzed: 15-Aug-19

1,1-Difluoroethane (LCC)	ND	27	ug/m3							
Dichlorodifluoromethane (F12)	ND	50	"							
Chloromethane	ND	21	"							
Dichlorotetrafluoroethane (F114)	ND	71	"							
Vinyl chloride	ND	13	"							
Bromomethane	ND	39	"							
Chloroethane	ND	27	"							
Trichlorofluoromethane (F11)	ND	56	"							
1,1-Dichloroethene	ND	20	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"							
Methylene chloride (Dichloromethane)	ND	35	"							
Carbon disulfide	ND	32	"							
trans-1,2-Dichloroethene	ND	40	"							
1,1-Dichloroethane	ND	41	"							
2-Butanone (MEK)	ND	60	"							
cis-1,2-Dichloroethene	ND	40	"							
Chloroform	ND	25	"							
1,1,1-Trichloroethane	ND	28	"							
1,2-Dichloroethane (EDC)	ND	21	"							
Benzene	ND	16	"							
Carbon tetrachloride	ND	13	"							
Trichloroethene	ND	27	"							
1,2-Dichloropropane	ND	47	"							
Bromodichloromethane	ND	68	"							
cis-1,3-Dichloropropene	ND	46	"							
4-Methyl-2-pentanone (MIBK)	ND	41	"							
trans-1,3-Dichloropropene	ND	46	"							
Toluene	ND	38	"							
1,1,2-Trichloroethane	ND	55	"							
2-Hexanone (MBK)	ND	41	"							
Dibromochloromethane	ND	86	"							
Tetrachloroethene	ND	34	"							
1,2-Dibromoethane (EDB)	ND	39	"							
1,1,1,2-Tetrachloroethane	ND	70	"							

Stantec - Thousand Oaks  
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Project: ST081519-A1A  
Project Number: 740 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

**Blank (EH91503-BLK1)**

Prepared & Analyzed: 15-Aug-19

Chlorobenzene	ND	23	ug/m3							
Ethylbenzene	ND	22	"							
m,p-Xylene	ND	44	"							
Styrene	ND	43	"							
o-Xylene	ND	22	"							
Bromoform	ND	100	"							
1,1,2,2-Tetrachloroethane	ND	70	"							
4-Ethyltoluene	ND	50	"							
1,3,5-Trimethylbenzene	ND	50	"							
1,2,4-Trimethylbenzene	ND	50	"							
1,3-Dichlorobenzene	ND	61	"							
1,4-Dichlorobenzene	ND	61	"							
1,2-Dichlorobenzene	ND	61	"							
1,2,4-Trichlorobenzene	ND	75	"							
Hexachlorobutadiene	ND	110	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	902		"	886		102	67-141			
<i>Surrogate: Toluene-d8</i>	809		"	864		93.6	75-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	1570		"	1540		102	56-127			

**LCS (EH91503-BS1)**

Prepared & Analyzed: 15-Aug-19

Dichlorodifluoromethane (F12)	260	50	ug/m3	250		104	65-135			
Vinyl chloride	140	13	"	130		111	65-135			
Chloroethane	170	27	"	134		128	65-135			
Trichlorofluoromethane (F11)	310	56	"	283		109	65-135			
1,1-Dichloroethene	220	20	"	202		111	65-135			
1,1,2-Trichlorotrifluoroethane (F113)	390	77	"	387		101	65-135			
Methylene chloride (Dichloromethane)	180	35	"	177		103	65-135			
trans-1,2-Dichloroethene	220	40	"	202		109	65-135			
1,1-Dichloroethane	220	41	"	206		107	65-135			
cis-1,2-Dichloroethene	220	40	"	202		109	65-135			
Chloroform	260	25	"	247		105	65-135			
1,1,1-Trichloroethane	270	28	"	276		97.8	65-135			
1,2-Dichloroethane (EDC)	200	21	"	206		98.0	65-135			

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Reported:  
26-Aug-19 11:43

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

**LCS (EH91503-BS1)**

Prepared & Analyzed: 15-Aug-19

Benzene	170	16	ug/m3	162		104	65-135			
Carbon tetrachloride	330	13	"	320		104	65-135			
Trichloroethene	300	27	"	272		111	65-135			
Toluene	190	38	"	191		99.8	65-135			
1,1,2-Trichloroethane	300	55	"	276		108	65-135			
Tetrachloroethene	330	34	"	345		96.6	65-135			
1,1,1,2-Tetrachloroethane	340	70	"	349		97.8	65-135			
Ethylbenzene	180	22	"	220		81.4	65-135			
m,p-Xylene	380	44	"	440		86.1	65-135			
o-Xylene	190	22	"	220		84.7	65-135			
1,1,2,2-Tetrachloroethane	290	70	"	349		84.0	65-135			

Surrogate: 1,2-Dichloroethane-d4	914		"	886		103	67-141			
Surrogate: Toluene-d8	927		"	864		107	75-125			
Surrogate: 4-Bromofluorobenzene	1230		"	1540		80.1	56-127			



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Reported:  
26-Aug-19 11:43

### 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

All soil results are reported in wet weight.

### Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

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](http://www.handpmg.com/about/certifications).

Lab Client and Project Information	
Lab Client/Consultant: <u>STANTEC</u>	Project Name / #: <u>185751046.200.0005.2.</u>
Lab Client Project Manager: <u>LEWIS D. SIMONS</u>	Project Location: <u>740 F 111<sup>th</sup> Place</u>
Lab Client Address: <u>290 CONESO RIDGE AV #200</u>	Report E-Mail(s): <u>LEWIS.SIMONS@STANTEC.COM</u> <u>ANIKA.MARULA@STANTEC.COM</u> <u>BRIAN.GOSS@STANTEC.COM</u>
Lab Client City, State, Zip: <u>THOUSAND OAKS CA 91361</u>	
Phone Number: <u>805-230-1266</u>	
Reporting Requirements	Turnaround Time
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____
Sampler Information	
Sampler(s): _____	
Signature: _____	
Date: _____	

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>8/15/19</u>	Control #: <u>190722001</u>
H&P Project # <u>ST081519-A1A</u>	
Lab Work Order # <u>E908077</u>	
Sample Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: _____	Temp: _____
Outside Lab: _____	
Receipt Notes/Tracking #: _____	
Lab PM Initials: _____	

**Additional Instructions to Laboratory:**

\* Preferred VOC units (please choose one):

µg/L     µg/m<sup>3</sup>     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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHV as Gas <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2
								<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							
SSV-1		8/15/19	10 <sup>55</sup>	G-V	G-S	307		X										
SSV-2		8/15/19	11 <sup>31</sup>	G-V	G-S	199		X										
SSV-3		8/15/19	12 <sup>04</sup>	G-V	G-S	299		X										
SSV-5		8/15/19	12 <sup>48</sup>	G-V	G-S	300		X										
SSV-4		8/15/19	13 <sup>14</sup>	G-V	G-S	298		X										
SSV-7		8/15/19	13 <sup>45</sup>	G-V	G-S	300		X										
SSV-6		8/15/19	14 <sup>12</sup>	G-V	G-S	305		X										
SSV-9		8/15/19	14 <sup>58</sup>	G-V	G-S	298		X										
SSV-8		8/15/19	15 <sup>06</sup>	G-V	G-S	300		X										
SSV-8 Rep		8/15/19	15 <sup>27</sup>	G-V	G-S	299		X										
Approved/Relinquished by: <u>[Signature]</u>	Company: <u>Stantec</u>	Date: <u>8/15/19</u>	Time: <u>5:13</u>	Received by: <u>LOU P N60</u>	Company: <u>H&amp;P</u>	Date: <u>8/15/19</u>	Time: <u>5:13</u>											
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

# Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: ST081519-A1A Date: 8/15/2019  
 Site Address: 740 E 111TH PLACE Page: 1 of 1  
 Consultant: STANTEC H&P Rep(s): LOC NGO  
 Consultant Rep(s): BRIAN GOSS

Reviewed: DB  
Scanned: DB

<b>Equipment Info</b> Inline Gauge ID#: <u>T23</u> Pump ID#:	<b>Purge Volume Information</b> PV Amount: 3PV PV Includes: <input checked="" type="checkbox"/> Tubing <input type="checkbox"/> Sand 40% <input type="checkbox"/> Dry Bent 50%		<b>Leak Check Compound</b> <input checked="" type="checkbox"/> 1,1-DFA <input type="checkbox"/> 1,1,1,2-TFA <input type="checkbox"/> IPA <input type="checkbox"/> Other:
	A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.		

**Resample Key:**  
 RS = Resample  
 RD = for Dilution  
 RL = for LCC fail

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)	Probe Vac <input checked="" type="checkbox"/> Hg <input type="checkbox"/> H <sub>2</sub> O
1	SSV-1	307	50	1055	SS	1	1/8	-	-	-	✓	✓	96	1200	-	<200	0
2	SSV-2	199	50	1135	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
3	SSV-3	299	50	1205	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
4	SSV-5	300	50	1248	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
5	SSV-4	298	50	1314	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
6	SSV-7	300	50	1345	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
7	SSV-6	305	50	1412	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
8	SSV-9	298	50	1435	SS	2	1/8	-	-	-	✓	✓	96	1200	-	1200	0
9	SSV-8	300	50	1505	SS	2	1/8	-	-	-	✓	✓	96	1200	-	1200	0
10	SSV-8 rep	299	50	1527	SS	1	1/8	-	-	-	✓	✓	96	1200	-	1200	0
11																	
12																	

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

26 August 2019

Lewis Simons  
Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

H&P Project: ST081519-A1B  
Client Project: 800 E 111th Place

Dear Lewis Simons:



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 15-Aug-19 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 La Roux  
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SSV-10	E908083-01	Vapor	15-Aug-19	15-Aug-19
SSV-11	E908083-02	Vapor	15-Aug-19	15-Aug-19
SSV-12	E908083-03	Vapor	15-Aug-19	15-Aug-19

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**DETECTIONS SUMMARY**

Sample ID: **SSV-10**

Laboratory ID: **E908083-01**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
<b>Tetrachloroethene</b>	<b>960</b>	34	ug/m3	H&P TO-15	

Sample ID: **SSV-11**

Laboratory ID: **E908083-02**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
<b>Tetrachloroethene</b>	<b>1000</b>	34	ug/m3	H&P TO-15	
<b>m,p-Xylene</b>	<b>49</b>	44	ug/m3	H&P TO-15	

Sample ID: **SSV-12**

Laboratory ID: **E908083-03**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
<b>Tetrachloroethene</b>	<b>1200</b>	34	ug/m3	H&P TO-15	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-10 (E908083-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>960</b>	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-10 (E908083-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 105 % 67-141 " " " "

Surrogate: Toluene-d8 108 % 75-125 " " " "

Surrogate: 4-Bromofluorobenzene 92.1 % 56-127 " " " "

<b>SSV-11 (E908083-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	



Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-11 (E908083-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Trichloroethene	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1000</b>	<b>34</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
<b>m,p-Xylene</b>	<b>49</b>	<b>44</b>	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	
o-Xylene	ND	22	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		103 %	67-141		"	"	"	"	
Surrogate: Toluene-d8		107 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.1 %	56-127		"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-12 (E908083-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
1,1-Difluoroethane (LCC)	ND	27	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Dichlorodifluoromethane (F12)	ND	50	"	"	"	"	"	"	
Chloromethane	ND	21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	71	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	39	"	"	"	"	"	"	
Chloroethane	ND	27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	35	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	41	"	"	"	"	"	"	
2-Butanone (MEK)	ND	60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	ND	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	13	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	
Bromodichloromethane	ND	68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	46	"	"	"	"	"	"	
Toluene	ND	38	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	86	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1200</b>	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	ND	22	"	"	"	"	"	"	
m,p-Xylene	ND	44	"	"	"	"	"	"	
Styrene	ND	43	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-12 (E908083-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
o-Xylene	ND	22	ug/m3	1	EH91503	15-Aug-19	15-Aug-19	H&P TO-15	
Bromoform	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	70	"	"	"	"	"	"	
4-Ethyltoluene	ND	50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	75	"	"	"	"	"	"	
Hexachlorobutadiene	ND	110	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		116 %		67-141	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.1 %		75-125	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.4 %		56-127	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

**Blank (EH91503-BLK1)**

Prepared & Analyzed: 15-Aug-19

1,1-Difluoroethane (LCC)	ND	27	ug/m3							
Dichlorodifluoromethane (F12)	ND	50	"							
Chloromethane	ND	21	"							
Dichlorotetrafluoroethane (F114)	ND	71	"							
Vinyl chloride	ND	13	"							
Bromomethane	ND	39	"							
Chloroethane	ND	27	"							
Trichlorofluoromethane (F11)	ND	56	"							
1,1-Dichloroethene	ND	20	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	77	"							
Methylene chloride (Dichloromethane)	ND	35	"							
Carbon disulfide	ND	32	"							
trans-1,2-Dichloroethene	ND	40	"							
1,1-Dichloroethane	ND	41	"							
2-Butanone (MEK)	ND	60	"							
cis-1,2-Dichloroethene	ND	40	"							
Chloroform	ND	25	"							
1,1,1-Trichloroethane	ND	28	"							
1,2-Dichloroethane (EDC)	ND	21	"							
Benzene	ND	16	"							
Carbon tetrachloride	ND	13	"							
Trichloroethene	ND	27	"							
1,2-Dichloropropane	ND	47	"							
Bromodichloromethane	ND	68	"							
cis-1,3-Dichloropropene	ND	46	"							
4-Methyl-2-pentanone (MIBK)	ND	41	"							
trans-1,3-Dichloropropene	ND	46	"							
Toluene	ND	38	"							
1,1,2-Trichloroethane	ND	55	"							
2-Hexanone (MBK)	ND	41	"							
Dibromochloromethane	ND	86	"							
Tetrachloroethene	ND	34	"							
1,2-Dibromoethane (EDB)	ND	39	"							
1,1,1,2-Tetrachloroethane	ND	70	"							

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

Prepared & Analyzed: 15-Aug-19

**Blank (EH91503-BLK1)**

Chlorobenzene	ND	23	ug/m3							
Ethylbenzene	ND	22	"							
m,p-Xylene	ND	44	"							
Styrene	ND	43	"							
o-Xylene	ND	22	"							
Bromoform	ND	100	"							
1,1,2,2-Tetrachloroethane	ND	70	"							
4-Ethyltoluene	ND	50	"							
1,3,5-Trimethylbenzene	ND	50	"							
1,2,4-Trimethylbenzene	ND	50	"							
1,3-Dichlorobenzene	ND	61	"							
1,4-Dichlorobenzene	ND	61	"							
1,2-Dichlorobenzene	ND	61	"							
1,2,4-Trichlorobenzene	ND	75	"							
Hexachlorobutadiene	ND	110	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	902		"	886		102	67-141			
<i>Surrogate: Toluene-d8</i>	809		"	864		93.6	75-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	1570		"	1540		102	56-127			

**LCS (EH91503-BS1)**

Prepared & Analyzed: 15-Aug-19

Dichlorodifluoromethane (F12)	260	50	ug/m3	250		104	65-135			
Vinyl chloride	140	13	"	130		111	65-135			
Chloroethane	170	27	"	134		128	65-135			
Trichlorofluoromethane (F11)	310	56	"	283		109	65-135			
1,1-Dichloroethene	220	20	"	202		111	65-135			
1,1,2-Trichlorotrifluoroethane (F113)	390	77	"	387		101	65-135			
Methylene chloride (Dichloromethane)	180	35	"	177		103	65-135			
trans-1,2-Dichloroethene	220	40	"	202		109	65-135			
1,1-Dichloroethane	220	41	"	206		107	65-135			
cis-1,2-Dichloroethene	220	40	"	202		109	65-135			
Chloroform	260	25	"	247		105	65-135			
1,1,1-Trichloroethane	270	28	"	276		97.8	65-135			
1,2-Dichloroethane (EDC)	200	21	"	206		98.0	65-135			

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

**Volatile Organic Compounds by H&P Method TO-15 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91503 - TO-15**

**LCS (EH91503-BS1)**

Prepared & Analyzed: 15-Aug-19

Benzene	170	16	ug/m3	162		104	65-135			
Carbon tetrachloride	330	13	"	320		104	65-135			
Trichloroethene	300	27	"	272		111	65-135			
Toluene	190	38	"	191		99.8	65-135			
1,1,2-Trichloroethane	300	55	"	276		108	65-135			
Tetrachloroethene	330	34	"	345		96.6	65-135			
1,1,1,2-Tetrachloroethane	340	70	"	349		97.8	65-135			
Ethylbenzene	180	22	"	220		81.4	65-135			
m,p-Xylene	380	44	"	440		86.1	65-135			
o-Xylene	190	22	"	220		84.7	65-135			
1,1,2,2-Tetrachloroethane	290	70	"	349		84.0	65-135			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	914		"	886		103	67-141			
<i>Surrogate: Toluene-d8</i>	927		"	864		107	75-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	1230		"	1540		80.1	56-127			

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-A1B  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:10

### 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

All soil results are reported in wet weight.

### Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

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](http://www.handpmg.com/about/certifications).

Lab Client and Project Information	
Lab Client/Consultant: <u>STANTEC</u>	Project Name / #: <u>85751046.2000005, 2</u>
Lab Client Project Manager: <u>LEWIS D. SIMONS</u>	Project Location: <u>800 E 111<sup>th</sup> Pl</u>
Lab Client Address: <u>290 CONESO RIDGE #200</u>	Report E-Mail(s): <u>LEWIS.SIMONS</u> <u>ANIKI.NARULA</u> <u>BRIAN.GOSS@STANTEC.COM</u>
Lab Client City, State, Zip: <u>THOUSAND OAKS CA 91361</u>	
Phone Number: <u>805-230-1266</u>	
Reporting Requirements	Turnaround Time
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____
Sampler Information	
Sampler(s): _____	
Signature: _____	
Date: _____	

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>8/15/19</u>	Control #: <u>190722.01</u>
H&P Project # <u>ST081519-A1B</u>	
Lab Work Order # <u>EQ08083</u>	
Sample Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: _____	Temp: _____
Outside Lab: _____	
Receipt Notes/Tracking #: _____	
Lab PM Initials: _____	

**Additional Instructions to Laboratory:**

\* Preferred VOC units (please choose one):

µg/L     µg/m<sup>3</sup>     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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHv as Gas <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2
								<input type="checkbox"/> 8260SV	<input checked="" type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							
<u>SSV-10</u>		<u>8/15/19</u>	<u>16<sup>10</sup></u>	<u>SV</u>	<u>GS</u>	<u>199</u>		<input checked="" type="checkbox"/>	<input type="checkbox"/>									
<u>SSU-11</u>		<u>8/15/19</u>	<u>16<sup>30</sup></u>	<u>SV</u>	<u>GS</u>	<u>298</u>		<input checked="" type="checkbox"/>	<input type="checkbox"/>									
<u>SSU-12</u>		<u>8/15/19</u>	<u>16<sup>57</sup></u>	<u>SV</u>	<u>GS</u>	<u>307</u>		<input type="checkbox"/>	<input type="checkbox"/>									

Approved/Relinquished by: <u>Ba M</u>	Company: <u>Stantec</u>	Date: <u>8/15/19</u>	Time: <u>5:13</u>	Received by: <u>LOC NSO</u>	Company: <u>H&amp;P</u>	Date: <u>8/15/19</u>	Time: <u>5:13</u>
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



## Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: ST081519-A1B Date: 8/15/2019  
 Site Address: 800 740 E 111TH PLACE Page: 1 of 1  
 Consultant: STANTEC H&P Rep(s): LOC NGO  
 Consultant Rep(s): BRIAN GOSS J. Reks

Reviewed: DB

Scanned: DB

<b>Equipment Info</b> Inline Gauge ID#: <u>T23</u> Pump ID#: <u>—</u>	<b>Purge Volume Information</b> PV Amount: 3PV PV Includes: <input checked="" type="checkbox"/> Tubing <input type="checkbox"/> Sand 40% <input type="checkbox"/> Dry Bent 50%		<b>Leak Check Compound</b> <input checked="" type="checkbox"/> 1,1-DFA <i>A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.</i>	<input type="checkbox"/> 1,1,1,2-TFA <input type="checkbox"/> IPA <input type="checkbox"/> Other:
	<b>Resample Key:</b> RS = Resample RD = for Dilution RL = for LCC fail			

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 <input checked="" type="checkbox"/> Hg <input type="checkbox"/> H <sub>2</sub> O
1	SSV-10	199	50	1610	55	1	Y8	—	—	—	✓	✓	96	2200	—	<200	0
2	SSV-11	298	50	1630	55	1	Y8	—	—	—	✓	✓	96	2200	—	2200	0
3	SSV-12	307	50	1657	55	1	Y8	—	—	—	✓	✓	96	2200	—	2200	0
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):

26 August 2019

Lewis Simons  
Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

H&P Project: ST081519-15  
Client Project: 800 E 111th Place

Dear Lewis Simons:

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 15-Aug-19 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 La Roux  
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.



Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SSV-10	E908085-01	Vapor	15-Aug-19	15-Aug-19
SSV-10 REP	E908085-02	Vapor	15-Aug-19	15-Aug-19
SSV-11	E908085-03	Vapor	15-Aug-19	15-Aug-19
SSV-12	E908085-04	Vapor	15-Aug-19	15-Aug-19

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

**Soil Vapor/Air Analysis by ASTM D1945**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-10 (E908085-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Carbon dioxide	7.7	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	13	0.20	"	"	"	"	"	"	
Nitrogen	80	0.20	"	"	"	"	"	"	
<b>SSV-10 REP (E908085-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Carbon dioxide	8.0	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	12	0.20	"	"	"	"	"	"	
Nitrogen	80	0.20	"	"	"	"	"	"	
<b>SSV-11 (E908085-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Carbon dioxide	5.4	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	13	0.20	"	"	"	"	"	"	
Nitrogen	82	0.20	"	"	"	"	"	"	
<b>SSV-12 (E908085-04) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Carbon dioxide	9.1	0.20	%	1	EH91915	16-Aug-19	19-Aug-19	ASTM D1945	
Oxygen	9.9	0.20	"	"	"	"	"	"	
Nitrogen	81	0.20	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

**Soil Vapor/Air Analysis by EPA 8015M**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SSV-10 (E908085-01) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-10 REP (E908085-02) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-11 (E908085-03) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	
<b>SSV-12 (E908085-04) Vapor Sampled: 15-Aug-19 Received: 15-Aug-19</b>									
Methane	ND	10	ppmv	1	EH91914	16-Aug-19	19-Aug-19	EPA 8015M	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

**Soil Vapor/Air Analysis by ASTM D1945 - Quality Control**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91915 - GC**

**Blank (EH91915-BLK1)**

Prepared & Analyzed: 16-Aug-19

Carbon dioxide	ND	0.20	%						
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**Blank (EH91915-BLK2)**

Prepared & Analyzed: 16-Aug-19

Carbon dioxide	ND	0.20	%						
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Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

**Soil Vapor/Air Analysis by EPA 8015M - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EH91914 - GC**

**Blank (EH91914-BLK1)**

Prepared & Analyzed: 16-Aug-19

Methane	ND	10	ppmv							
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**Blank (EH91914-BLK2)**

Prepared & Analyzed: 16-Aug-19

Methane	ND	10	ppmv							
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Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST081519-15  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
26-Aug-19 12:15

### 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

All soil results are reported in wet weight.

### Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138.

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](http://www.handpmg.com/about/certifications).



Lab Client and Project Information	
Lab Client/Consultant: STANTEC	Project Name / #: 185751046.200.0005.2
Lab Client Project Manager: LEWIS D. SIMONS	Project Location: 808740 E 111th place
Lab Client Address: 290 CONDERSO RIDGE AV #200	Report E-Mail(s): LEWIS.SIMONS ANIKA.NARAY Bican.Gois@stantec.com
Lab Client City, State, Zip: THOUSANDS OAKS CA 91361	
Phone Number: 805-230-1266	
Reporting Requirements	Turnaround Time
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____
Sampler Information	
Sampler(s): J. Reks	
Signature: <i>JR</i>	
Date: 8/15/19	

ST081519-15

E908085

Sample Receipt (Lab Use Only)	
Date Rec'd: 8/15/19	Control #: 190722001
H&P Project # ST081519-A+B 15	
Lab Work Order # 13908077	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID:	Temp:
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: WB	

**Additional Instructions to Laboratory:**

\* Preferred VOC units (please choose one):  
 µg/L    µg/m<sup>3</sup>    ppbv    ppmv

E908085

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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates	Naphthalene	TPHv as Gas	Aromatic/Aliphatic Fractions	Leak Check Compound	Methane by EPA 8015m	Fixed Gases by ASTM D1945
								<input type="checkbox"/> 8260SV	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> TO-15							
SSV-10	NA	08/15/19	1713	SS	Tedlar	NA		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> CO2 <input checked="" type="checkbox"/> N2
SSV-10 REP			1716															<input checked="" type="checkbox"/>
SSV-11			1736															<input checked="" type="checkbox"/>
SSV-12			1740															<input checked="" type="checkbox"/>
/																		

Approved/Relinquished by: <i>[Signature]</i>	Company: STANTEC	Date: 8/15/19	Time: 18:00	Received by: <i>[Signature]</i>	Company: H&P	Date: 8/15/19	Time: 1800
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

# Log Sheet: Soil Vapor Sampling with Syringe

*Tedlar*

H&P Project #: ST081519-A1B  
 Site Address: 800 740 E 111TH PLACE  
 Consultant: STANTEC  
 Consultant Rep(s): BRIAN GOSS

Date: 8/15/2019  
 Page: 1 of 1  
 H&P Rep(s): LOC NGO  
J. Reksa

Reviewed: DB  
 Scanned: DB

<b>Equipment Info</b>	<b>Purge Volume Information</b>	<b>Leak Check Compound</b>
Inline Gauge ID#: <u>T23</u> Pump ID#:	PV Amount: 3PV PV Includes: <input checked="" type="checkbox"/> Tubing <input type="checkbox"/> Sand 40% <input type="checkbox"/> Dry Bent 50%	<input checked="" type="checkbox"/> 1,1-DFA <input type="checkbox"/> 1,1,1,2-TFA <input type="checkbox"/> IPA <input type="checkbox"/> Other: <u>None</u>

**Resample Key:**  
 RS = Resample  
 RD = for Dilution  
 RL = for LCC fail

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 <input checked="" type="checkbox"/> Hg <input type="checkbox"/> H <sub>2</sub> O
1	<i>SSV-10</i>	<i>Tedlar</i>	<i>400cc</i>	<i>1713</i>	<i>55</i>	<i>1</i>	<i>1/8</i>				✓	<i>NA</i>	<i>146</i>	<i>2200</i>	<i>-</i>	<i>&lt;200</i>	<i>0</i>
2	<i>SSV-10 REP</i>	<i>Tedlar</i>	<i>400cc</i>	<i>1714</i>	<i>55</i>	<i>1</i>	<i>1/8</i>				✓	<i>NA</i>	<i>546</i>	<i>2200</i>	<i>-</i>	<i>2200</i>	<i>0</i>
3	<i>SSV-11</i>	<i>Tedlar</i>	<i>400cc</i>	<i>1736</i>	<i>55</i>	<i>1</i>	<i>1/8</i>				✓	<i>NA</i>	<i>146</i>	<i>2200</i>	<i>-</i>	<i>2200</i>	<i>0</i>
4	<i>SSV-12</i>	<i>Tedlar</i>	<i>400cc</i>	<i>1740</i>	<i>55</i>	<i>1</i>	<i>1/8</i>				✓	<i>NA</i>	<i>146</i>	<i>2200</i>	<i>-</i>	<i>2200</i>	<i>0</i>
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):  
*Vapor pin sub slab*

# ATTACHMENT F

16 October 2019

Lewis Simons  
Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

H&P Project: ST101019-12  
Client Project: 800 E 111th Place

Dear Lewis Simons:



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 10-Oct-19 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 La Roux  
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-1-5	E910057-01	Vapor	10-Oct-19	10-Oct-19
SV-1-15	E910057-02	Vapor	10-Oct-19	10-Oct-19
SV-1-15 Dup	E910057-03	Vapor	10-Oct-19	10-Oct-19
SV-2-5	E910057-04	Vapor	10-Oct-19	10-Oct-19
SV-2-15	E910057-05	Vapor	10-Oct-19	10-Oct-19
SV-3-5	E910057-06	Vapor	10-Oct-19	10-Oct-19
SV-3-15	E910057-07	Vapor	10-Oct-19	10-Oct-19
SV-4-5	E910057-08	Vapor	10-Oct-19	10-Oct-19
SV-9-5	E910057-09	Vapor	10-Oct-19	10-Oct-19
SV-9-30	E910057-10	Vapor	10-Oct-19	10-Oct-19
SV-5-5	E910057-11	Vapor	10-Oct-19	10-Oct-19
SV-8-5	E910057-12	Vapor	10-Oct-19	10-Oct-19
SV-8-30	E910057-13	Vapor	10-Oct-19	10-Oct-19
SV-6-5	E910057-14	Vapor	10-Oct-19	10-Oct-19
SV-10-30	E910057-15	Vapor	10-Oct-19	10-Oct-19
SV-10-5	E910057-16	Vapor	10-Oct-19	10-Oct-19
SV-7-5	E910057-17	Vapor	10-Oct-19	10-Oct-19

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**DETECTIONS SUMMARY**

Sample ID: **SV-1-5**

Laboratory ID: **E910057-01**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	23	5.6		ug/m3	EPA TO-15	
Toluene	4.2	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	120	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-1-15**

Laboratory ID: **E910057-02**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	40	5.6		ug/m3	EPA TO-15	
Tetrachloroethene	130	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-1-15 Dup**

Laboratory ID: **E910057-03**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	39	5.6		ug/m3	EPA TO-15	
Tetrachloroethene	140	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-2-5**

Laboratory ID: **E910057-04**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	11	5.6		ug/m3	EPA TO-15	
Tetrachloroethene	450	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-2-15**

Laboratory ID: **E910057-05**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1-Difluoroethane (LCC)	20	5.5		ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	19	5.6		ug/m3	EPA TO-15	
Carbon disulfide	10	6.3		ug/m3	EPA TO-15	
Bromodichloromethane	8.2	6.8		ug/m3	EPA TO-15	
Toluene	42	3.8		ug/m3	EPA TO-15	
Dibromochloromethane	9.1	8.6		ug/m3	EPA TO-15	
Tetrachloroethene	320	6.9		ug/m3	EPA TO-15	
Ethylbenzene	13	4.4		ug/m3	EPA TO-15	
m,p-Xylene	77	8.8		ug/m3	EPA TO-15	
o-Xylene	19	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	9.4	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	14	5.0		ug/m3	EPA TO-15	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

Sample ID: SV-2-15

Laboratory ID: E910057-05

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,2,4-Trimethylbenzene	43	5.0	ug/m3	EPA TO-15	

Sample ID: SV-3-5

Laboratory ID: E910057-06

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1-Difluoroethane (LCC)	6.2	5.5	ug/m3	EPA TO-15	
Dichlorodifluoromethane (F12)	5.6	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	8.2	5.6	ug/m3	EPA TO-15	
Tetrachloroethene	1100	6.9	ug/m3	EPA TO-15	

Sample ID: SV-3-15

Laboratory ID: E910057-07

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Dichlorodifluoromethane (F12)	6.8	5.0	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	8.9	5.6	ug/m3	EPA TO-15	
Toluene	14	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	1100	6.9	ug/m3	EPA TO-15	
m,p-Xylene	27	8.8	ug/m3	EPA TO-15	
o-Xylene	7.3	4.4	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	6.2	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	18	5.0	ug/m3	EPA TO-15	

Sample ID: SV-4-5

Laboratory ID: E910057-08

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichlorofluoromethane (F11)	34	5.6	ug/m3	EPA TO-15	
Tetrachloroethene	2100	6.9	ug/m3	EPA TO-15	

Sample ID: SV-9-5

Laboratory ID: E910057-09

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichlorofluoromethane (F11)	140	5.6	ug/m3	EPA TO-15	
Tetrachloroethene	1700	6.9	ug/m3	EPA TO-15	

Sample ID: SV-9-30

Laboratory ID: E910057-10

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Dichlorodifluoromethane (F12)	44	5.0	ug/m3	EPA TO-15	
Dichlorotetrafluoroethane (F114)	11	7.1	ug/m3	EPA TO-15	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

Sample ID: **SV-9-30**

Laboratory ID: **E910057-10**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	110	5.6		ug/m3	EPA TO-15	
Tetrachloroethene	1200	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-5-5**

Laboratory ID: **E910057-11**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Tetrachloroethene	11	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-8-5**

Laboratory ID: **E910057-12**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	14	5.6		ug/m3	EPA TO-15	
Toluene	11	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	92	6.9		ug/m3	EPA TO-15	
m,p-Xylene	14	8.8		ug/m3	EPA TO-15	
o-Xylene	6.3	4.4		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	6.6	5.0		ug/m3	EPA TO-15	

Sample ID: **SV-8-30**

Laboratory ID: **E910057-13**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichlorofluoromethane (F11)	60	5.6		ug/m3	EPA TO-15	
Toluene	4.2	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	160	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-6-5**

Laboratory ID: **E910057-14**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Tetrachloroethene	66	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-10-30**

Laboratory ID: **E910057-15**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Tetrachloroethene	520	6.9		ug/m3	EPA TO-15	

Sample ID: **SV-10-5**

Laboratory ID: **E910057-16**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Tetrachloroethene	370	6.9		ug/m3	EPA TO-15	



Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

Sample ID: **SV-7-5**

Laboratory ID: **E910057-17**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
<b>Dichlorodifluoromethane (F12)</b>	<b>10</b>	5.0		ug/m3	EPA TO-15	
<b>Trichlorofluoromethane (F11)</b>	<b>140</b>	5.6		ug/m3	EPA TO-15	
<b>Tetrachloroethene</b>	<b>450</b>	6.9		ug/m3	EPA TO-15	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-1-5 (E910057-01) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>23</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
<b>Toluene</b>	<b>4.2</b>	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>120</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-1-5 (E910057-01) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.8 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	94.8 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	86.2 %	77-127	"	"	"	"	"	"

<b>SV-1-15 (E910057-02) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>40</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-1-15 (E910057-02) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>130</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		99.6 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		101 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.5 %		77-127	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-1-15 Dup (E910057-03) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>39</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>140</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-1-15 Dup (E910057-03) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 102 % 76-134 " " " "

Surrogate: Toluene-d8 99.4 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 97.1 % 77-127 " " " "

**SV-2-5 (E910057-04) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19**

1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>11</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-2-5 (E910057-04) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>450</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		102 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		99.4 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.4 %		77-127	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-2-15 (E910057-05) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
<b>1,1-Difluoroethane (LCC)</b>	<b>20</b>	<b>5.5</b>	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>19</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
<b>Carbon disulfide</b>	<b>10</b>	<b>6.3</b>	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
<b>Bromodichloromethane</b>	<b>8.2</b>	<b>6.8</b>	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
<b>Toluene</b>	<b>42</b>	<b>3.8</b>	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
<b>Dibromochloromethane</b>	<b>9.1</b>	<b>8.6</b>	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>320</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>13</b>	<b>4.4</b>	"	"	"	"	"	"	
<b>m,p-Xylene</b>	<b>77</b>	<b>8.8</b>	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	



Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-2-15 (E910057-05) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
<b>o-Xylene</b>	<b>19</b>	<b>4.4</b>	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
<b>4-Ethyltoluene</b>	<b>9.4</b>	<b>5.0</b>	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>14</b>	<b>5.0</b>	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>43</b>	<b>5.0</b>	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	103 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	102 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	99.6 %	77-127	"	"	"	"	"	"

**SV-3-5 (E910057-06) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19**

<b>1,1-Difluoroethane (LCC)</b>	<b>6.2</b>	<b>5.5</b>	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
<b>Dichlorodifluoromethane (F12)</b>	<b>5.6</b>	<b>5.0</b>	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>8.2</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-3-5 (E910057-06) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1100</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		104 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		100 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.6 %		77-127	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-3-15 (E910057-07) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
<b>Dichlorodifluoromethane (F12)</b>	<b>6.8</b>	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>8.9</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
<b>Toluene</b>	<b>14</b>	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1100</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
<b>m,p-Xylene</b>	<b>27</b>	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
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Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-3-15 (E910057-07) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
<b>o-Xylene</b>	<b>7.3</b>	<b>4.4</b>	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>6.2</b>	<b>5.0</b>	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>18</b>	<b>5.0</b>	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	100 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	93.7 %	77-127	"	"	"	"	"	"

**SV-4-5 (E910057-08) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19**

1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>34</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-4-5 (E910057-08) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>2100</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		103 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		101 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %		77-127	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-9-5 (E910057-09) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>140</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1700</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-9-5 (E910057-09) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 102 % 76-134 " " " "

Surrogate: Toluene-d8 99.7 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 97.2 % 77-127 " " " "

<b>SV-9-30 (E910057-10) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
<b>Dichlorodifluoromethane (F12)</b>	<b>44</b>	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
<b>Dichlorotetrafluoroethane (F114)</b>	<b>11</b>	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>110</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-9-30 (E910057-10) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>1200</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
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Surrogate: 1,2-Dichloroethane-d4		103 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		99.8 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %		77-127	"	"	"	"	



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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-5-5 (E910057-11) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>11</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-5-5 (E910057-11) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 98.6 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 98.0 % 77-127 " " " "

<b>SV-8-5 (E910057-12) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>14</b>	<b>5.6</b>	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-8-5 (E910057-12) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
<b>Toluene</b>	<b>11</b>	<b>3.8</b>	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>92</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
<b>m,p-Xylene</b>	<b>14</b>	<b>8.8</b>	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
<b>o-Xylene</b>	<b>6.3</b>	<b>4.4</b>	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>6.6</b>	<b>5.0</b>	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
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Surrogate: 1,2-Dichloroethane-d4		101 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		100 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %		77-127	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-8-30 (E910057-13) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>60</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
<b>Toluene</b>	<b>4.2</b>	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>160</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-8-30 (E910057-13) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 103 % 76-134 " " " "

Surrogate: Toluene-d8 101 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 99.6 % 77-127 " " " "

**SV-6-5 (E910057-14) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19**

1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-6-5 (E910057-14) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>66</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
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Surrogate: 1,2-Dichloroethane-d4		101 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		99.7 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.1 %		77-127	"	"	"	"	

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**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-10-30 (E910057-15) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>520</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
290 Conejo Ridge Avenue, Suite 200  
Thousand Oaks, CA 91361

Project: ST101019-12  
Project Number: 800 E 111th Place  
Project Manager: Lewis Simons

Reported:  
16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-10-30 (E910057-15) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 102 % 76-134 " " " "

Surrogate: Toluene-d8 100 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 100 % 77-127 " " " "

<b>SV-10-5 (E910057-16) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	



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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-10-5 (E910057-16) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
Trichloroethene	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>370</b>	<b>6.9</b>	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<hr/>									
Surrogate: 1,2-Dichloroethane-d4		102 %		76-134	"	"	"	"	
Surrogate: Toluene-d8		99.8 %		78-125	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.8 %		77-127	"	"	"	"	

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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-7-5 (E910057-17) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
<b>Dichlorodifluoromethane (F12)</b>	<b>10</b>	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
<b>Trichlorofluoromethane (F11)</b>	<b>140</b>	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
<b>Tetrachloroethene</b>	<b>450</b>	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

Stantec - Thousand Oaks  
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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15**

**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
<b>SV-7-5 (E910057-17) Vapor Sampled: 10-Oct-19 Received: 10-Oct-19</b>									
o-Xylene	ND	4.4	ug/m3	1	EJ91511	15-Oct-19	15-Oct-19	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		76-134	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		102 %		78-125	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94.8 %		77-127	"	"	"	"	

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16-Oct-19 15:47

**Volatile Organic Compounds by EPA TO-15 - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EJ91511 - TO-15**

Prepared & Analyzed: 15-Oct-19

**Blank (EJ91511-BLK1)**

1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

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**Volatile Organic Compounds by EPA TO-15 - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EJ91511 - TO-15**

**Blank (EJ91511-BLK1)**

Prepared & Analyzed: 15-Oct-19

Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	203		"	214		95.3	76-134			
<i>Surrogate: Toluene-d8</i>	206		"	208		99.1	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	317		"	363		87.4	77-127			

**LCS (EJ91511-BS1)**

Prepared & Analyzed: 15-Oct-19

Dichlorodifluoromethane (F12)	86	5.0	ug/m3	101		85.7	59-128			
Vinyl chloride	52	2.6	"	52.0		101	64-127			
Chloroethane	51	8.0	"	53.6		95.1	63-127			
Trichlorofluoromethane (F11)	97	5.6	"	113		85.8	62-126			
1,1-Dichloroethene	79	4.0	"	80.8		97.3	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	140	7.7	"	155		92.4	66-126			
Methylene chloride (Dichloromethane)	64	3.5	"	70.8		90.1	62-115			
trans-1,2-Dichloroethene	78	8.0	"	80.8		97.0	67-124			
1,1-Dichloroethane	78	4.1	"	82.4		94.9	68-126			
cis-1,2-Dichloroethene	83	4.0	"	80.0		104	70-121			
Chloroform	90	4.9	"	99.2		91.1	68-123			
1,1,1-Trichloroethane	100	5.5	"	111		90.6	68-125			
1,2-Dichloroethane (EDC)	75	4.1	"	82.4		90.6	65-128			

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**Volatile Organic Compounds by EPA TO-15 - Quality Control**  
**H&P Mobile Geochemistry, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EJ91511 - TO-15**

**LCS (EJ91511-BS1)**

Prepared & Analyzed: 15-Oct-19

Benzene	67	3.2	ug/m3	64.8		103	69-119			
Carbon tetrachloride	110	6.4	"	128		85.1	68-132			
Trichloroethene	110	5.5	"	110		96.4	71-123			
Toluene	67	3.8	"	76.8		86.9	66-119			
1,1,2-Trichloroethane	100	5.5	"	111		91.2	73-119			
Tetrachloroethene	130	6.9	"	138		97.0	66-124			
1,1,1,2-Tetrachloroethane	130	7.0	"	140		95.0	67-129			
Ethylbenzene	110	4.4	"	88.4		123	70-124			
m,p-Xylene	89	8.8	"	88.4		101	61-134			
o-Xylene	92	4.4	"	88.4		104	67-125			
1,1,2,2-Tetrachloroethane	120	7.0	"	140		87.9	65-127			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	212		"	214		99.3	76-134			
<i>Surrogate: Toluene-d8</i>	207		"	208		99.6	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	375		"	363		103	77-127			

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### 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

All soil results are reported in wet weight.

### Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

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 & 2745.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

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](http://www.handpmg.com/about/certifications).

Lab Client and Project Information		
Lab Client/Consultant: <u>Stantec</u>	Project Name / #: <u>185804576.200.0003</u>	
Lab Client Project Manager: <u>Lewis D Simons</u>	Project Location: <u>800 E 111th Pl</u>	
Lab Client Address: <u>290 Conejo Ridge Ave Suite 200</u>	Report E-Mail(s): <u>lewis.simons@stantec.com</u> <u>Brian.goss@stantec.com</u>	
Lab Client City, State, Zip: <u>Thousand Oaks CA 91361</u>		
Phone Number: <u>(805) 230-1266</u>		
Reporting Requirements	Turnaround Time	Sampler Information
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> 5-7 day Std <input type="checkbox"/> 24-Hr Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Mobile Lab <input type="checkbox"/> 48-Hr Rush <input type="checkbox"/> Other: _____	Sampler(s): <u>Mike Herford</u> Signature: <u>[Signature]</u> Date: <u>10/10/19</u>

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>10-10-19</u>	Control #: <u>19088/001</u>
H&P Project #: <u>ST101019-12</u>	
Lab Work Order #: <u>E910057</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: <u>711030005</u>	Temp: <u>21°C</u>
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: <u>KB</u>	

Additional Instructions to Laboratory:																		
* Preferred VOC units (please choose one): <input type="checkbox"/> µg/L <input checked="" type="checkbox"/> µg/m <sup>3</sup> <input type="checkbox"/> ppbv <input type="checkbox"/> ppmv		<u>* Final by 10/18 if possible - KB 10/10</u>																
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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates	Naphthalene	TPHV as Gas	Aromatic/Aliphatic Fractions	Leak Check Compound	Methane by EPA 8015m	Fixed Gases by ASTM D1945
								<input checked="" type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							
SV-1-5		10/10/19	936	SV	400mL Summa	752	-0.25	X										
SV-1-15			952			755	-0.21	X										
SV-1-15 Dup			952			756	-0.17	X										
SV-2-5			626			762	-0.23	X										
SV-2-15			1040			761	-0.54	X										
SV-3-5			1119			757	-0.60	X										
SV-3-15			1133			763	-0.83	X										
SV-4-5			1206			759	-0.60	X										
SV-9-5			1248			753	-1.68	X										
SV-9-30			1241			765	-1.19	X										
Approved/Relinquished by: <u>Crystal Guan</u>		Company: <u>Stantec</u>		Date: <u>10/10</u> Time: <u>1445</u>		Received by: <u>[Signature]</u>		Company: <u>H&amp;P</u>		Date: <u>10/10</u> Time: <u>1445</u>								
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



Lab Client and Project Information		
Lab Client/Consultant: <u>Stantec</u>	Project Name / #: <u>HS804576.200.0003</u>	
Lab Client Project Manager: <u>Lewis D. Simons</u>	Project Location: <u>500 E 111th Pl</u>	
Lab Client Address: <u>290 Concho Ridge Ave Suite 200</u>	Report E-Mail(s): <u>lewis.simons@stantec.com</u> <u>bricen.gross@stantec.com</u>	
Lab Client City, State, Zip: <u>Thousand Oaks CA 91361</u>		
Phone Number: <u>(805) 230-1266</u>		
Reporting Requirements	Turnaround Time	Sampler Information
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV	<input checked="" type="checkbox"/> 5/7 day Std <input type="checkbox"/> 24-Hr Rush	Sampler(s): <u>Bobby Stang</u>
<input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____	<input type="checkbox"/> 3-day Rush <input type="checkbox"/> Mobile Lab	Signature: <u>[Signature]</u>
<input type="checkbox"/> CA Geotracker Global ID: _____	<input type="checkbox"/> 48-Hr Rush <input type="checkbox"/> Other: _____	Date: <u>10-10-19</u>

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>10-10-19</u>	Control #: <u>192881.02</u>
H&P Project # <u>ST101019-TESTS 12</u>	
Lab Work Order # <u>E 910057</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: <u>T11030005</u>	Temp: <u>21°</u>
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: <u>KB</u>	

Additional Instructions to Laboratory: SV-5 was not originally on CAC added 10/11/19

\* Preferred VOC units (please choose one):

µg/L  µg/m<sup>3</sup>  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, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHv as Gas <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Leak Check Compound <input checked="" type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2
								<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							
<u>SV-5-5</u>		<u>10-10-19</u>	<u>9:28</u>	<u>SV</u>	<u>400mL Summa</u>	<u>754</u>	<u>-1.27</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-8-5</u>			<u>6:36</u>			<u>740</u>	<u>-1.79</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-8-30</u>			<u>11:06</u>			<u>757</u>	<u>-1.72</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-6-5</u>			<u>11:45</u>			<u>743</u>	<u>-1.97</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-10-30</u>			<u>12:23</u>			<u>696</u>	<u>-1.97</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-10-5</u>			<u>13:22</u>			<u>744</u>	<u>-2.07</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>SV-7-5</u>			<u>13:24</u>			<u>761</u>	<u>-1.92</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Approved/Relinquished by: <u>Crystal Guman</u>	Company: <u>Stantec</u>	Date: <u>10/10</u>	Time: <u>12:25</u>	Received by: <u>[Signature]</u>	Company: <u>H&amp;P</u>	Date: <u>10-10-19</u>	Time: <u>14:45</u>
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: ST 101019 - Techs  
 Site Address: 800 East 111<sup>th</sup> Pl LA  
 Consultant: Stantec  
 Consultant Rep(s): Brian Goss

Date: 10-10-19  
 Page: 1 of 2  
 H&P Rep(s): M. Herriford

Reviewed: EC  
 Scanned: Y&E

**Equipment Info**  
 Inline Gauge ID#: \_\_\_\_\_  
 Pump ID#: 007

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

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

Sample and Summa Information							Probe Specs							Purge & Collection Information							
Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	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 (m.n.sec)	Sample Flow Rate (mL/min)	ProbeVac <input type="checkbox"/> Hg <input checked="" type="checkbox"/> H <sub>2</sub> O	
1	SV-1-5	752	090	932	-29	936	0	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	25:59	200	0
2	SV-1-15	755	215	948	-28	952	0	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	11:45	200	5
3	SV-1-15 - <sup>Dup</sup> <del>Rep</del>	756	242	948	-28	952	0	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	—	200	—
4	SV-2-5	762	190	1022	-28	1026	1	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	25:59	200	5
5	SV-2-15	764	054	1036	-29	1040	0	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	11:45	200	10
6	SV-3-5	757	286	1116	-27	1119	0	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	25:59	200	5
7	SV-3-15	763	316	1129	-26	1133	0	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	11:45	200	5
8	SV-4-5	759	241	1203	-27	1206	0	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	25:59	200	5
9	SV-4-15	753	276	—	—	—	—	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	11:45	200	95
10	SV-9-5	755	276	1244	-28	1248	0	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	25:59	200	30
11	SV-9-30	765	103	1237	-28	1241	0	30	31	1/4	12	2.25	12	2.25	✓	✓	2576	200	12:53	200	0
12	SV-9-15	761	162	—	—	—	—	15	16	1/4	12	2.25	12	2.25	✓	✓	2351	200	11:45	200	95

\* See note

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above)  
 (A) High vacuum. Extremely low flow - no sample

\* Techs used slightly different PV. Tubing length 3/4 I.D. off by less than 1 PV of tubing.  
 OK. by E.C.

### Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: ST 101019 - Techs  
 Site Address: 800 East 111<sup>th</sup> Pl LA  
 Consultant: Santec  
 Consultant Rep(s): Brian Goss

Date: 10/10/19  
 Page: 2 of 2  
 H&P Rep(s): M. Herriford

Reviewed: EC  
 Scanned: JSE

**Equipment Info**  
 Inline Gauge ID#: \_\_\_\_\_  
 Pump ID#: 007

**Purge Volume Information**  
 PV Amount: 5pr PV Includes:  Tubing  
 Sand 40%  
 Dry Bent 50%

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

Sample and Summa Information							Probe Specs							Purge & Collection Information							
Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	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 (m.n.sec)	Sample Flow Rate (mL/min)	ProbeVac <input type="checkbox"/> Hg <input type="checkbox"/> H <sub>2</sub> O	
1	SV-7-5	761 162	1320	-27	1324	0	5	6	1/4	12	3.5	12	3.5	✓	✓	5195	200	2559	200	0	
2																					
3																					
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)

Log Sheet: Soil Vapor Sampling with Summa

H&P Project #: ST101014 -- Texas

Date: 10/10/19

Site Address: 800 E 11th Pl

Page: 1 of 1

Consultant: Stantec

H&P Rep(s): B. Stangl

Reviewed: EC

Consultant Rep(s): Brian Cross

M. Heitford

Scanned: [Signature]

**Equipment Info**  
Inline Gauge ID#: \_\_\_\_\_  
Pump ID#: 037

**Purge Volume Information**  
PV Amount: 321  
PV Includes:  Tubing  
 Sand 40%  
 Dry Bent 50%

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

Sample and Summa Information							Probe Specs							Purge & Collection Information							
Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac (" Hg)	End / Sample Time	End Vac (" Hg)	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)	Probe Vac <input type="checkbox"/> Hg <input checked="" type="checkbox"/> H <sub>2</sub> O	
1	SV-5-5	754	269	925	26	925	0	5	7	1/4	12	3.5	12	3.5	✓	✓	5181	200	25:54	2700	0
2	SV-5-15 <sup>ⓐ</sup>	740	033	-	-	-	15	17	1/4	12	2.75	12	2.25	✓	✓	2329	200	11:39	400	100+	
3	SV-8-5	740	033	1033	30+	1036	0	5	7	1/4	12	3.5	12	3.5	✓	✓	5181	200	25:54	400	0
4	SV-8-15 <sup>ⓐ</sup>	737	132	-	-	-	15	17	1/4	12	2.25	12	2.25	✓	✓	2329	200	11:39	400	100+	
5	SV-8-30	737	132	1103	30+	1106	1	30	3/2	1/4	12	2.75	12	2.75	✓	✓	2547	200	12:44	400	0
6	SV-6-5	743	068	1142	30+	1145	0	5	7	1/4	12	3.5	12	3.5	✓	✓	5181	200	25:54	400	0
7	SV-6-15 <sup>ⓑ</sup>	-	-	-	-	-	15	17	1/4	12	2.25	12	2.25	✓	✓	2329	200	11:39	400	100+	
8	SV-10-30	696	013	1219	30+	1223	0	30	3/2	1/4	12	2.75	12	2.75	✓	✓	2547	200	12:44	400	0
9	SV-10-5	744	123	1306	28	1320	0	5	7	1/4	12	3.5	12	3.5	✓	✓	5181	200	25:54	400	0
10	SV-10-15 <sup>ⓐ</sup>	-	-	-	-	-	15	17	1/4	12	2.25	12	2.25	✓	✓	2329	200	11:39	400	0	
11	SV-7-15 <sup>ⓐ</sup>	745	002	-	-	-	15	17	1/4	12	2.75	12	2.25	✓	✓	2329	200	11:39	400	100+	
12	SV-5-15 <sup>ⓐ</sup>	-	-	-	-	-	5	7	1/4	12	2.25	12	2.25	✓	✓	2329	100	23:21	400	100+	

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

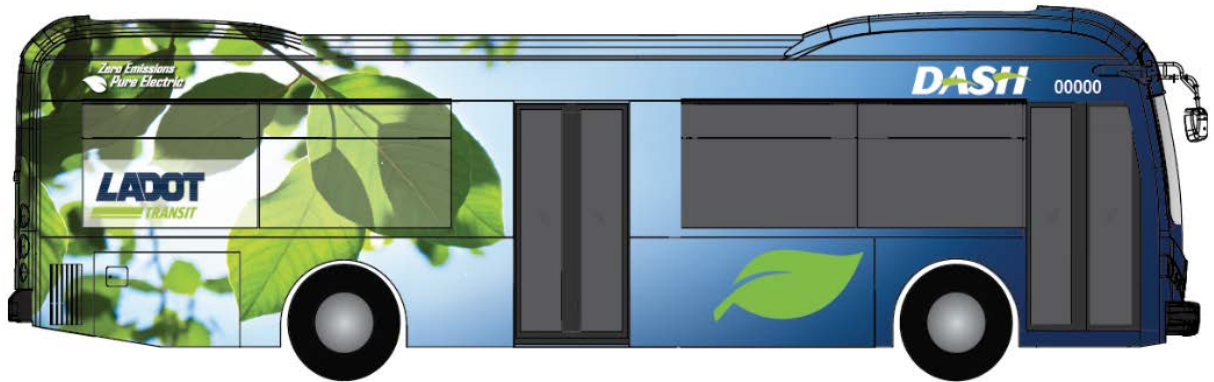
ⓐ High vacuum, no sample possible @ time  
 ⓑ High vac. No sample possible.  
 ⓒ High vac No sample possible  
 ⓓ High vac. No flow/sample possible  
 ⓔ High vac. No flow/sample possible  
 ⓕ Client requested we try SV-5-15 @ 100mL/min vac still too high

# EXHIBIT "C"

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

for the

## LADOT All-Electric Bus Maintenance Facility



SCH Number 2022090264

Prepared for:  
City of Los Angeles  
Department of Transportation  
and  
Department of Public Works  
Bureau of Engineering

Prepared by:

**PARSONS**

December 2022



**LADOT**  
*Moving Los Angeles Forward*

**CITY OF LOS ANGELES**  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
1149 S. BROADWAY, LOS ANGELES, CA 90015  
**CALIFORNIA ENVIRONMENTAL QUALITY ACT**  
**MITIGATED NEGATIVE DECLARATION**  
(Article I, City CEQA Guidelines)

<b>LEAD AGENCY AND ADDRESS:</b>	City of Los Angeles c/o Bureau of Engineering 1149 S. Broadway, Suite 600 Los Angeles, CA 90015-2213	<b>COUNCIL DISTRICT</b> 8
<b>PROJECT TITLE: LADOT All-Electric Bus Maintenance Facility</b>		
<b>PROJECT LOCATION:</b> 740-780 and 800 East 111 <sup>th</sup> Place, Los Angeles, CA 90059		
<p><b>DESCRIPTION:</b> The City of Los Angeles is planning to build a new Electric Bus Maintenance Facility (EBMF or the proposed project) to support a larger and cleaner zero-emissions bus fleet. The project will be implemented by the Los Angeles Department of Transportation (LADOT). LADOT has identified the 5.5-acre site at 740-780 and 800 East 111<sup>th</sup> Place in South Los Angeles as a potential site for this facility. The subject site is currently developed with two industrial buildings that are being utilized as a logistics warehouse for solar panels. To build the new EBMF, the existing buildings would be demolished, and the site would be cleaned up. The proposed EBMF would be composed of a two-story operations and maintenance building, 11 bus maintenance bays, a service building, a bus wash building, a bus parking/charging area, and a second-story parking deck with a canopy, and a photo-voltaic (PV) system. Electrification equipment, including electrical transformers, switch cabinets, and bus chargers would also be installed.</p> <p>The project would enable LADOT to provide maintenance services, parking, charging, and inspection functions to approximately 130 Battery-Electric Buses (BEBs) to be used for the DASH and Commuter Express (CE) services provided by LADOT Transit. It would also be used to store and dispatch the electric buses for daily service. Approximately 312 employees would be working on-site and the facility would be open 24 hours per day, 7 days a week.</p> <p>The proposed facility would eliminate the need to use the existing South Los Angeles Bus Maintenance Facility at 14011 South Central Avenue in the City of Compton, which is located approximately 2 miles to the south.</p>		
<b>NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY: N/A</b>		
<b>FINDING:</b> The proposed Project will not have a significant effect on the environment with mitigation measures incorporated. See attached Initial Study.		
<b>SEE THE ATTACHED PAGES FOR ANY MITIGATION MEASURES IMPOSED</b>		
<b>Any written comments received during the public review period will be attached, together with the responses of the lead City agency.</b>		
<b>THE INITIAL STUDY PREPARED FOR THIS PROJECT IS ATTACHED</b>		
<b>PERSON PREPARING THIS FORM:</b> Lauren Rhodes Environmental Specialist II	<b>ADDRESS:</b> 1149 S. Broadway, Suite 600 M/S 939 Los Angeles, CA 90015	<b>TELEPHONE NUMBER:</b> (213) 485-5753
<b>SIGNATURE (Official):</b> Maria Martin, Environmental Affairs Officer Environmental Management Group		<b>DATE:</b>

## **LADOT All-Electric Bus Maintenance Facility Mitigation Measures**

### **Biological Resources**

**MM-BIO-1:** To avoid impacts to migratory birds, the vegetation removal, demolition, and site clearing activities shall occur during the non-breeding season (e.g., between September 1 and February 15). If such activities would have to be scheduled during this period, a qualified biologist shall conduct a preconstruction nesting bird survey to determine if any nesting birds are present within the site. This survey should be conducted no more than 7 days before the start of vegetation removal. If nesting birds are found, an exclusionary buffer would be set up and clearly marked around each active nest site. Construction or clearing shall not be conducted within this zone until the qualified biologist determines that nesting birds have fledged or the nest is no longer active.

### **Cultural Resources**

**MM-PAL-1:** A qualified paleontological monitor (i.e., one who meets the qualification standards established by the Society of Vertebrate Paleontology [SVP, 2010]) shall be retained prior to construction and shall remain on call during all ground disturbing activities. Worker Environmental Awareness Program (WEAP) training shall be provided to all construction and managerial personnel involved with the project's ground disturbing activities. The WEAP training shall provide an overview of paleontological resources and outline the regulatory requirements for their protection. The WEAP shall also cover the proper procedures to be followed in the event of a fossil discovery during construction. The WEAP training may be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.

**MM-PAL-2:** The qualified paleontological monitor will monitor project-related excavation activities in high paleontological deposits, if encountered in the subsurface. Project-related excavation activities greater than 5 feet depth shall be monitored on a part-time (i.e., spot-checking) basis to check for the presence of underlying paleontologically sensitive sediments. If paleontologically sensitive deposits are observed, full-time monitoring will be implemented in those areas. Excavations determined to be entirely within previously disturbed sediments or late Holocene-age deposits do not require paleontological monitoring or continued spot-checking.

**MM-PAL-3:** In the unanticipated event that fossil resources are discovered, they shall be protected from further excavation, destruction, or removal. Work will be halted within 25 feet of the discovery until they can be evaluated by a qualified paleontologist (i.e., one who meets the SVP professional

standards for Principal Investigator or Project Paleontologist). If determined to be scientifically important, the paleontological resources will be recovered, prepared to the point of curation, identified, and curated at the Natural History Museum of Los Angeles County or another accredited repository along with associated field data.

**MM-PAL-4:** After ground-disturbing activities are completed, a memo report documenting the methods and results of paleontological monitoring will be prepared by the qualified paleontologist and submitted to the City of Los Angeles.

### **Hazards and Hazardous Materials**

**MM-HAZ-1:** Additional site characterization to identify the lateral and vertical extents of PCE-impacted soil vapor and assess if groundwater beneath the site has been impacted shall be conducted. Following completion of site characterization, the City of Los Angeles shall report the “unauthorized release” to the appropriate agency for regulatory oversight. Once a case is opened, the City of Los Angeles shall comply with any additional characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency to protect construction workers, facility workers, and neighboring residences from exposure to impacted media (i.e., soil, groundwater, and/or soil vapor).

**MM-HAZ-2:** Before construction, a Soil Management Plan (SMP) shall be developed to provide construction workers with guidelines from a health and safety perspective (e.g., use of personal protective equipment, action levels, etc.) on handling impacted media that is encountered during any subsurface disturbance activities. The SMP shall describe site- and project-specific protocol to be followed in the event of encountering chemically impacted soil. The SMP shall also facilitate excavation activities by having a structured plan in place for the handling, characterization, and disposal of impacted soil wastes.

**MM-HAZ-3:** Additional measures, as recommended in the Phase II Environmental Site Assessment (ESA) and/or the additional Site Characterization to be performed for the project site, shall be taken to protect the proposed facility's workers. These measures may include, but are not limited to:

- All stored chemicals, equipment, underground storage tanks (USTs), and waste/debris shall be removed from both properties before purchase. Once removed, a pre-acquisition inspection should be performed to confirm the removal of all hazardous materials and other solid and liquid wastes stored on the properties.
- Due to the contaminant plume potentially extending offsite, consultation with legal counsel is needed to determine if notification to the Los Angeles Regional Water Quality Control Board (LARWQCB) of the



potential unauthorized release is warranted. Should a case be opened with the LARWQCB, additional action may likely be required, including detailed site characterization, active remediation, and the designation of a responsible party.

- Measures (i.e., engineering controls such as vapor barriers) shall be installed within new construction, to address residual impacts of tetrachloroethene (PCE) in soil vapor in the event remediation is not pursued or completed. These measures typically consist of the installation of either an active or passive venting system and/or the application of a vapor barrier that is chemically resistant to chlorinated solvents.

## Noise

**MM-NOI-1:** To minimize noise impacts to area residents during project construction, the Contractor shall install a temporary noise barrier, which includes noise barrier fences, moveable noise barriers, and/or noise control curtains, with an effective height of 12 feet around the perimeter of the construction site. Temporary noise barriers may be made, for example, of concrete jersey barriers with 0.75-inch plywood attached to fence posts, or the noise control curtain material may be mounted or hung over perimeter chain-link fences.

## Tribal Cultural Resources

**MM-TCR-1:** Due to the potential for tribal cultural resources to exist on the project site, prior to the commencement of any ground-disturbing activity at the project site, the City of Los Angeles (the City) shall retain a tribal monitor that is qualified to identify, record, and evaluate the significance of any archaeological and/or tribal cultural finds during construction. The qualified tribal monitor shall be from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (the Tribe). Ground-disturbing activities shall include removing pavement, potholing, auguring, grubbing, removing trees, boring, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or similar activity at the project site. The executed monitoring service agreement shall be submitted by the qualified tribal monitor to the City prior to any ground-disturbing activity. The qualified tribal monitor will complete logs describing each day's construction activities, locations, soil, and any cultural materials, human remains, and/or burial goods discovered. Tribal monitoring shall conclude when ground-disturbing activities on the project site have been completed, or when the qualified tribal monitor indicates any additional construction activity at the project site has little or no potential to impact tribal cultural resources. In accordance with PDF-CUL-1, prior to commencing any ground disturbing activities, the qualified archaeologist and the qualified tribal monitor shall provide Worker Environmental Awareness Program (WEAP) training to construction crews involved in ground-disturbing activities that provides

information on regulatory requirements for the protection of tribal cultural resources. As part of the WEAP training, construction crews shall be briefed on proper procedures to follow should a crew member discover tribal cultural resources during ground-disturbing activities. In addition, workers will be shown examples of the types of resources that would require notification to the archaeological monitor and tribal monitor.

Upon discovery of any subsurface object or artifact that may be a tribal cultural resource during the course of any ground-disturbing activity, procedures to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:

- All such ground-disturbing activities shall cease in the immediate vicinity of the discovery, the radius of which will be determined by the qualified tribal monitor or the qualified archaeological monitor, until the qualified tribal monitor has evaluated the find in accordance with federal, state, and local guidelines.
- The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribe and the tribal monitor, and in accordance with federal, state, and local guidelines.
- Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials or publish the location of tribal cultural resources.
- If the resources are Native American in origin, the tribal monitor will make recommendations to the City regarding the monitoring of future ground-disturbing activities, as well as the treatment and disposition of any discovered tribal cultural resources, which may include but not limited to the preservation in place or recovery and retention of them in the form and/or manner which the tribal monitor and the Tribe deem appropriate for educational, cultural, and/or historic purposes. Until a recommendation is made, the discovery should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information form and about the resource and this determination is documented by a qualified archaeologist or tribal monitor.
- The City shall implement the tribal monitor and Tribe's recommendations if the City can reasonably conclude that the recommendations are reasonable and feasible to mitigate or avoid any significant impacts to the identified tribal cultural resources. If the City does not accept a particular recommendation determined to be reasonable and feasible by the qualified tribal monitor, the City may request mediation by a mediator agreed to by the tribal monitor, the Tribe, and the City who has the requisite professional qualifications and experience to mediate such a

dispute. The City shall pay any costs associated with the mediation. After making a reasonable effort to mediate this particular dispute, the City may (1) require the recommendation be implemented as originally proposed by the archaeologist or tribal monitor; (2) require the recommendation, as modified by the City, be implemented as it is at least as equally effective to mitigate a potentially significant impact; (3) require a substitute recommendation be implemented that is at least as equally effective to mitigate a potentially significant impact to a tribal cultural resource; or (4) not require the recommendation be implemented because it is not necessary to mitigate an significant impacts to tribal cultural resources.

- The ground-disturbing activities may recommence outside of a specified radius of the discovery site, so long as this radius has been cleared by both the qualified archaeologist and qualified tribal monitor and determined to be reasonable and appropriate.
- The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, qualified tribal monitor, and the Tribe.
- If the resources consist of non-Native American historic archaeological materials, a qualified archaeologist will apply National Register of Historic Places Criterion D to determine their significance. Artifacts will be curated per the Code of Federal Regulations 36 Part 79, as applicable, or be offered to a local historical society museum or educational facility, as deemed appropriate by the City.

SC-CUL-1 shall be implemented should human remains be inadvertently discovered at the project site. If the Gabrieleño Band of Mission Indians – Kizh Nation is designated Most Likely Descendant (MLD) by the Native American Heritage Commission (NAHC), the Koo-nas-gna Burial Policy shall be implemented. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be prepared by the MLD. Associated funerary objects reasonably believed to have been placed with individual human remains either at the time of death or later and made exclusively for burial purposes are to be treated with utmost respect and dignity. The prepared soil and cremation soils are to be treated in the same manner as intact bone fragments. Cremations will either be removed in bulk or by means necessary to ensure the complete recovery of all sacred materials.

In such cases where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate which can only be moved by heavy equipment. If this type of steel plate is unavailable, a 24-hour guard should be posted outside of working hours. The City will make every effort to divert project activities and keep the remains in situ and protected. If the project

cannot be diverted, it may be determined that the burials will be removed. The MLD will work closely with the City's designated qualified archaeologist and tribal monitor to ensure that the excavation is treated carefully, ethically, and respectfully. Each occurrence of human remains and associated funerary objects, sacred objects, and objects of cultural patrimony will be retained and reburied within six months of recovery in a secure container. If preservation in place is not possible despite good faith efforts, a site located within the project parcel footprint, as agreed to by the City and the Tribe, and to be protected in perpetuity, shall be designated for the respectful reburial of the human remains and/or ceremonial objects. There shall be no publicity regarding any cultural materials recovered.

Any data recovery plans shall require approval by the Tribe; such documentation will include detailed descriptive notes and sketches, at a minimum. Additional documentation as outlined in a treatment plan should also be approved by the Tribe. If additional data recovery is conducted, a final report will be submitted to the Tribe, Native American Heritage Commission, and South Central Coastal Information Center. No invasive and/or destructive diagnostics on human remains shall be conducted.

### **Cumulative Impacts**

**MM-CUM-1:** The construction schedules of other projects in the vicinity should be coordinated with each other through communication among City departments and staff to avoid cumulatively affecting vehicle traffic, pedestrians, and bicyclists on Avalon Boulevard and East 111th Place.

## MITIGATED NEGATIVE DECLARATION

Pursuant to California Environmental Quality Act (Division 12, Public Resources Code), the City of Los Angeles has made the following determination:

### ***Proposed Project***

The City of Los Angeles (City) is planning to purchase a 5.5-acre property at 740 and 800 E. 111th Place in South Los Angeles for the construction of a new electric bus maintenance facility (EBMF). The proposed project would support the City's larger and cleaner zero-emissions bus fleet. The project will be implemented by the Los Angeles Department of Transportation (LADOT). The site is currently developed with two industrial buildings that are being utilized as a logistics warehouse for solar panels. To build the new EBMF, the existing buildings would be demolished, and the site would be cleaned up. The proposed EBMF would be composed of a two-story operations and maintenance building, 11 bus maintenance bays, a service building, a bus wash building, a bus parking/charging area, and a second-story parking deck with a canopy, and a photo-voltaic system. Electrification equipment, including electrical transformers, switch cabinets, and bus chargers would also be installed.

The project would enable LADOT to provide maintenance services, parking, charging, and inspection functions to approximately 130 Battery-Electric Buses (BEBs) to be used for the DASH and Commuter Express (CE) services provided by LADOT Transit. It would also be used to store and dispatch the electric buses for daily service. Approximately 312 employees would be working on-site and the facility would be open 24 hours per day, 7 days a week.

The proposed facility would eliminate the need to use the existing South Los Angeles Bus Maintenance Facility at 14011 South Central Avenue in the City of Compton, which is located approximately 2 miles to the south.

### ***Determination***

Based on the analysis provided in the Initial Study prepared for this project, the City of Los Angeles Bureau of Engineering (LABOE) and LADOT find that with the incorporation of project design features, compliance with existing regulations or standard conditions, and implementation of mitigation measures, the project would not have a significant effect on the environment.

## **ORGANIZATION OF THE FINAL INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION**

This Final Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] 21000 et. seq.) and the CEQA Guidelines (California Code of Regulations [CCR] 15000 et. seq.).

This IS/MND is organized into two parts:

***PART I: Response to Comments:*** This part contains the comment received on the Draft IS/ MND during the public review period, including a copy of the written comment and the City's response to the comment.

***PART II: Revised IS/MND:*** This part of the document includes the Draft IS/MND in its entirety, as circulated during the public review period from September 16 through October 17, 2022, with technical appendices.

Please note that some minor modifications and clarifications have been included in this section. Revisions have also been made to Section 1.3 to reflect the public review and outreach process. No changes to the analysis in the IS/MND were made in response to the comment received. All revisions are minor and are identified by underlined or strikethrough text.

**PART I**  
**RESPONSE TO COMMENTS**

During the public review period extending from September 16 through October 17, 2022, one comment letter/email was received from Jessica Santellanes Garceran on September 29, 2022, as shown below.

On Thu, Sep 29, 2022 at 8:58 AM Jessica Santellanes Garceran <[santellanesj@yahoo.com](mailto:santellanesj@yahoo.com)> wrote:  
Good Morning Ms. Rhodes,

I am emailing you concerning the EBMF Draft or the 111th Place LADOT Maintenance Facility Project. My parents received a letter because their property seems to be in the area this project is intended to be built. We have few questions and would appreciate some feedback if you could. If the project is approved do they have to sell to the city? My parents are elderly and have owned this home for many many years. Moving is not something they intended on doing before passing away. They are very concerned over this project as they do not want to move or have to sell their property anytime soon. In these situations what happens to owners like them who do not want to sell? I understand this project is still in the works and has yet to be approved, but if approved what happens next? Are they forced to sell? Do they have any rights or options? What would the timeline look like? Some more information would be greatly appreciated. I have tried calling in and have not been able to get a response from anyone. I have emailed before and have not received an email back either. Please help. My phone number is (626) 485-4360 or you can respond to my email as well. Thank you.

Sincerely,

*Jessica Santellanes Garceran*

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LOS ANGELES DEPARTMENT OF TRANSPORTATION

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The City responded to the email on October 4, 2022, as follows:

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**Lauren Rhodes** <lauren.rhodes@lacity.org> Tue, Oct 4, 2022 at 2:38 PM  
To: Jessica Santellanes Garceran <santellanesj@yahoo.com>  
Cc: Hugo Garceran <hgarceran@yahoo.com>, Jan Green Rebstock <Jan.Green.Rebstock@lacity.org>, Maria Martin <maria.martin@lacity.org>, Clare Lahey <Clare.lahey@lacity.org>, Lauren Ballard <Lauren.Ballard@lacity.org>, Jorge Lopez <jorge.x.lopez@lacity.org>

Hi Jessica,

Thank you for your email. The City of Los Angeles would only purchase the properties at 740 and 800 E. 111th Place and the City is not planning to acquire any residences as part of this Project.

If you are interested, the City will be hosting a virtual public meeting Thursday, October 6, 2022, at 6:00 P.M. and you could learn more about the proposed project and the findings of the draft Initial Study/Mitigated Negative Declaration (IS/MND). Individuals will have the opportunity to make verbal comments about the Draft IS/MND during the meeting. You can find more information about the Project and the link for the public meeting at this website: [bit.ly/111EBMF](https://bit.ly/111EBMF).

Please let me know if you have any other project comments, questions or concerns.

Thank you,  
Lauren Rhodes  
Environmental Management Group | Environmental Specialist II  
Bureau of Engineering | Department of Public Works  
1149 S. Broadway, Suite 600, Los Angeles, CA 90015  
Mail Stop 939  
O: (213) 485 - 5733 | C: (213) 564 - 7941

[lauren.rhodes@lacity.org](mailto:lauren.rhodes@lacity.org)



Since the issue raised by the commenter does not directly relate to the environmental analysis, no change or clarification to the IS/MND is necessary.



**PART II**  
**REVISED INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

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## **1.0 INTRODUCTION**

### **1.1 Purpose of an Initial Study**

The California Environmental Quality Act (CEQA) was enacted in 1970 to provide decision-makers and the public with information about the environmental effects of proposed projects, as well as avoidance and minimization measures. The Bureau of Engineering Environmental Management Group (EMG), on behalf of the City of Los Angeles (the City), which is serving as the CEQA Lead Agency, has determined the proposed All-Electric Bus Maintenance Facility Project (project) is subject to CEQA and no exemptions apply. Therefore, the preparation of an Initial Study (IS) is required.

An IS contains a preliminary analysis, which is conducted by the lead agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, with mitigation, may have a significant effect on the environment, an Environmental Impact Report (EIR) should be prepared; otherwise, the lead agency may adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND).

This IS has been prepared pursuant to the CEQA (Public Resources Code §21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.), and the L.A. CEQA Thresholds Guide, 2006.

### **1.2 Document Format**

This document is organized into seven sections and appendices, as follows:

Section 1, Introduction: provides an overview of the project and the CEQA environmental documentation process.

Section 2, Project Description: describes the project location, project background, and project components. Standard Conditions, Project Design Features, and Mitigation Measures that would be implemented to ensure that potential adverse impacts of the proposed project would be reduced to a less than significant level are also identified in this section.

Section 3, Environmental Impact Analysis and Initial Study Checklist: provides a detailed discussion of the environmental factors that would be potentially affected by this project.

Section 4, Determination – Recommended Environmental Documentation: provides a summary of the environmental analysis and the recommended environmental documentation for the proposed project.-

Section 5, Preparation and Consultation: provides a list of key personnel involved in the preparation of this report and key personnel consulted; and

Section 6, References: provides a list of reference materials used during the preparation of this report.

Appendices: Technical studies prepared in support of this IS include the following:

- Aesthetics and Visual Impact Analysis
- Air Quality Impact Assessment
- Cultural Resources Studies
- Energy Analysis
- Soil and Geological Technical Memo
- Greenhouse Gas Analysis
- Hazardous Material Technical Memo
- Community Impact Assessment
- Noise and Vibration Analysis
- Transportation/Traffic Impact Assessment

### **1.3 CEQA Process**

Upon selection of the preferred site for the EBMF, the City initiated the CEQA process through the preparation of this Initial Study IS/MND and supporting technical memos.

Public outreach was also conducted in the project area. ~~through an invitation to attend a virtual community meeting that was held on September 1, 2021, from 6:00 to 6:40 p.m.~~ In August 2021, a bilingual meeting invitation flyer was posted on the City's website for the project at: <https://bit.ly/111EBMF>. A total of 1,264 meeting flyers in English and Spanish and 23 electronic notices (e-blasts) were also mailed out to inform stakeholders, residents, and property owners within 0.25-mile of the project site. The virtual community meeting was held on September 1, 2021, from 6:00 to 8:00 PM. The meeting discussed the purpose and objectives of the project, the project timeline, and the ongoing environmental review, and it provided an opportunity to answer questions and obtain comments from participants, stakeholders, and other interested members of the public. Simultaneous Spanish translation was provided during the meeting. A few questions were asked by the attendees. The meeting was adjourned at about 6:40 PM due to no additional questions. A recording of the meeting has been uploaded to the City's website.

The Los Angeles Council District 8 office was informed about the project in late August 2021, and regular briefings will be provided by LADOT and Los Angeles Bureau of Engineering (LABOE) on project progress. Native American tribes that are traditionally and culturally affiliated with the project area were also informed about the project at the start of the CEQA process and were provided an opportunity to consult, in compliance with Assembly Bill (AB) 52.

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~~Upon completion of the Initial Study and technical memos and once the adoption of the Once a Draft IS/MND has been proposed-prepared, a public comment period of no less than twenty (20) days, or thirty (30) days if there is state agency involvement is required under CEQA. The 30-day public review and comment period for the EBMF Draft IS/Draft MND was set to start on September 16, 2022, and ended on October 17, 2022. The purpose of this comment period is to provide public agencies and the general public an opportunity to review the IS and comment on the adequacy of the analysis and the findings of the Lead Agency regarding potential environmental impacts of the proposed project. If a reviewer believes the project may have a significant effect on the environment, the reviewer should (1) identify the specific effect, (2) explain why it is believed the effect would occur, and (3) explain why it is believed the effect would be significant. Facts or expert opinions supported by facts should be provided as the basis of such comments.~~

~~A second virtual public meeting will be held on October 6, 2022, from 6:00 PM – 7:30 PM to discuss the project and the findings of the Initial Study. The Notice of Availability and Notice of Intent (NOA/NOI) to adopt an IS/MND for the LADOT All-Electric Bus Maintenance Facility (EBMF) project was circulated by the City of Los Angeles (City) on September 16, 2022, initiating a 30-day public review period for the Draft IS/MND for the project, pursuant to the CEQA and its implementing guidelines. The NOA/NOI was prepared in English and Spanish, and it was distributed to relevant agencies, organizations, and interested parties. The NOA/NOI in English was also published in the LA Times on September 15, 2022, and in Spanish in the La Opinion newspaper on September 15, 2022. The NOA/NOI, Draft IS/MND, and technical memos were also made available for review online at the LABOE website at <https://eng.lacity.org/about/divisions/environmental-management/projects/111th-place-ladot-all-electric-bus-maintenance-facility-project> or <https://bit.ly/111EBMF>. Additionally, hard copies of the document were made available for review at the EMG office at 1149 S. Broadway, Los Angeles, California 90015 and the Alma Reaves Woods - Watts Branch Library at 10205 Compton Avenue, Los Angeles, CA 90002.~~

~~In addition, a meeting invitation flyer was circulated with the NOA/NOI and posted on the City's website, mailed to residents, businesses, and organizations within 0.25 mile of the site, and an electronic meeting invitation (Eblast) was sent two times to local organizations. The second virtual public meeting was held on October 6, 2022, from 6:00 PM – 8:00 PM to discuss the project and the findings of the Draft IS/MND. It also provided the attendees with an opportunity to provide comments and ask questions, and next steps. The presentation at the virtual meeting (in English and Spanish) and a recording of the meeting have been uploaded to the City's website. Because there were no questions or comments raised by the attendees, the meeting was adjourned at 6:40 PM.~~

~~After the close of the public review period, the Transportation Municipal Facilities Committee will consider the IS/MND, together with any comments received during the public review process, and make a recommendation to the City Council on whether to approve the project. One or more City Council committees may then review the proposal and documents and make their recommendation to the ~~full~~ City Council. The~~



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City Council is the decision-making body and considers the IS/MND, together with any comments received during the public review process, in the final decision to approve or disapprove the project.

During the project approval process, persons and/or agencies may address either the ~~Transportation~~ City Council ~~Committees~~ or the City Council regarding the project. Public notification of agenda items for the ~~Transportation Committee~~, City Council committees, and City Council is posted 72 hours before the public meeting. The City Council agenda can be obtained by visiting the Council and Public Services Division of the Office of the City Clerk at City Hall, 200 North Spring Street, Suite 395; by calling (213) 978-1073, (213) 978-1137, or via the internet at: <https://clerk.lacity.org/calendar>

If the project is approved, the City will file a Notice of Determination (NOD) with the County Clerk within 5 days. The NOD will be posted by the County Clerk within 24 hours of receipt. This begins the 30-day statute of limitations on legal challenges to the approval under CEQA. The ability to challenge the approval in court may be limited to those persons who objected to the approval of the project, and to issues that were presented to the lead agency by any person, either orally or in writing, during the public comment period.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services, and activities.

## **2.0 PROJECT DESCRIPTION**

### **2.1 Project Location and Setting**

#### **2.1.1 Location**

The City of Los Angeles is planning to build a new Electric Bus Maintenance Facility (EBMF or the proposed project) to support a larger and cleaner zero-emission bus fleet. The project would be implemented by the City of Los Angeles Department of Transportation (LADOT). LADOT has identified a two-parcel site of approximately 5.5 acres at 740-780 and 800 East 111<sup>th</sup> Place in South Los Angeles (APNs 6071-022-009 and 6071-022-013) as a potential site for this facility. The proposed site has been developed with two buildings that are being utilized as a logistics warehouse for solar panels. The proposed EBMF would eliminate the need to lease the existing South Los Angeles Bus Maintenance Facility at 14011 South Central Avenue in the City of Compton, which is located approximately 2 miles to the south.

The project site is situated within Council District 8 jurisdiction in the Southeast Los Angeles Community Planning Area of the City of Los Angeles (Figures 2-1 and 2-2). The project site is on the Inglewood 7.5-minute U.S. Geological Survey (USGS) quadrangle (California-Los Angeles County 7.5-minute topographic map series).

#### **2.1.2 Setting**

The project site is located between East 111<sup>th</sup> Place and East Lanzit Avenue, east of South Avalon Boulevard, and has relatively flat topography. Small clusters of light-industry land uses can be found near the project site along the railroad tracks, with adjacent land uses surrounding the project site comprised mostly of multi-family and single-family residences, but also encompassing land supporting other activities, including commercial, and community-oriented social services, such as education and health facilities. The area is largely urbanized and nearly completely built-out, with limited vacant land. There are no natural features or major land formations, surface water bodies, or waterways near the project site, except for Compton Creek, a concrete-lined drainage channel located approximately 0.2-mile north and 0.3-mile east of the project site.

Access to the site is provided by two driveways off East 111<sup>th</sup> Place, a street that is designated as a local collector with two lanes in each direction with on-street parking on each side. An existing Union Pacific Railroad (UPRR) rail line runs parallel to East Lanzit Avenue south of the project site. Imperial Highway and Interstate 105 (I-105) are located approximately three and seven blocks south of the project site, respectively.

Figure 2-3 presents an aerial view of the proposed site and its general vicinity.



Figure 2-2: Project Location Map

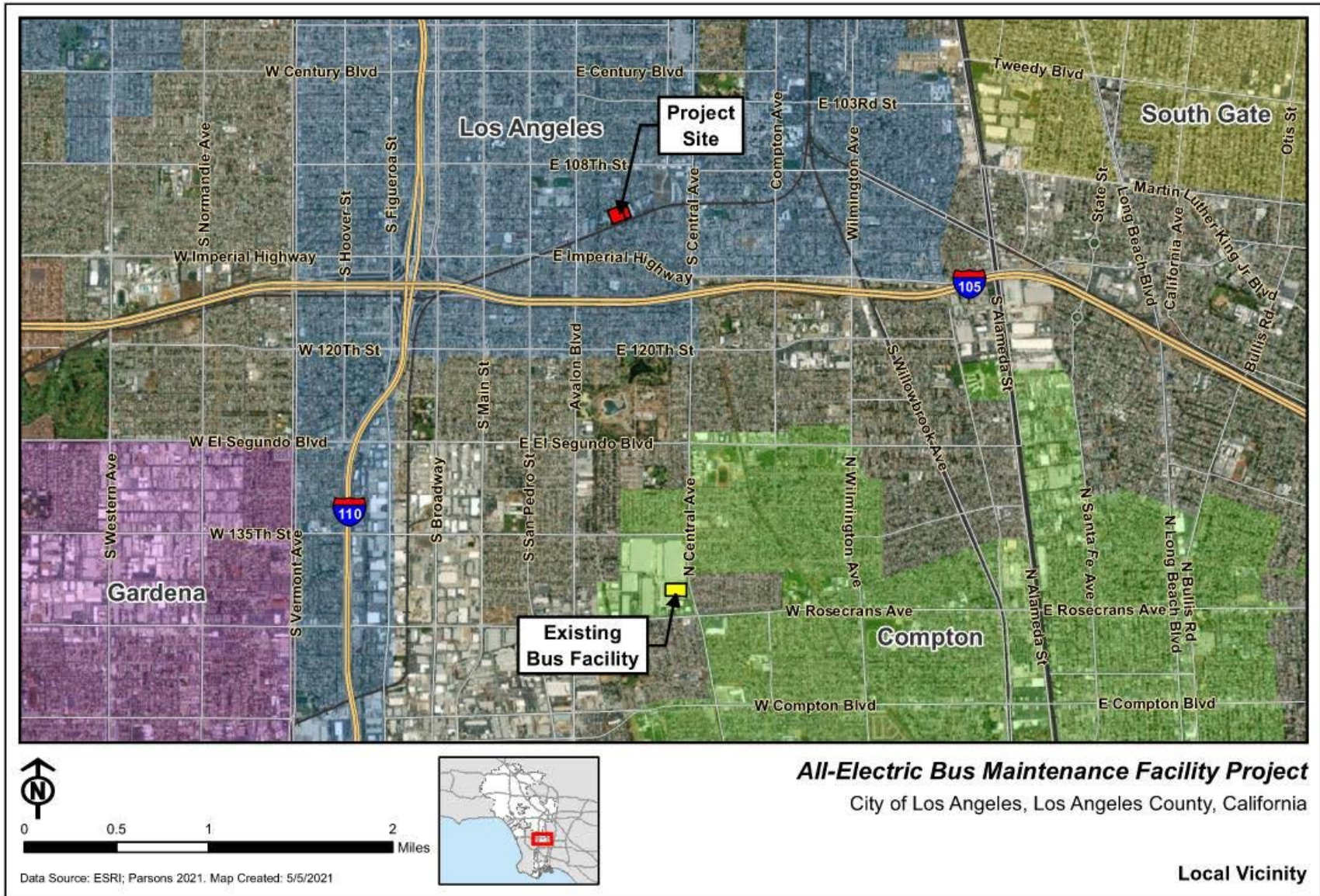


Figure 2-3: Aerial View of Project Site and its Immediate Vicinity



## **2.2 Project Objectives**

In accordance with the California Air Resource Board (CARB) Innovative Clean Transit (ICT) regulation, the City has committed to the transition of its bus fleet to 100 percent zero-emissions buses by 2030, which is 10 years sooner than the ICT requirement.

LADOT currently operates and maintains some of its existing bus fleet at the South Los Angeles Bus Maintenance Facility located at 14011 South Central Avenue in the City of Compton (to be referred to as the Compton facility), about 2 miles to the south of the proposed EBMF site. This Compton facility is not owned by the City and is leased through LADOT's operations services contractor. The Compton facility does not have sufficient capacity to accommodate the additional maintenance and storage requirements of the proposed transition to electric buses and the expanded charging needs of an electric bus fleet.

The main goal of the proposed project is to build a modern maintenance facility to support a larger and cleaner zero-emission bus fleet. The project would enable LADOT to provide maintenance services, parking, charging, and inspection functions to approximately 130 Battery-Electric Buses (BEBs) to be used for the DASH and Commuter Express (CE) services provided by LADOT Transit. It would also be used to store and dispatch the electric buses for daily service. The proposed EBMF would eventually eliminate the need to use the Compton facility.

## **2.3 Project Description**

In 2019, LADOT commissioned a study to assess the feasibility of constructing a new all-electric bus maintenance facility that will house up to 130 DASH and CE buses within the next 20 years. That study presented conceptual designs, cost estimates, and financial feasibility analysis that provided the specifications for the facility. The approximately 5.5-acre property covering two parcels of land on 740-780 and 800 East 111<sup>th</sup> Place has been identified as a potential site for the proposed maintenance facility.

The existing buildings on the site were previously used as a logistics warehouse and recycling center. They then remained vacant for two years but were recently leased for use as a logistics warehouse for solar panels. To use this property, a site clean-up and demolition of the existing buildings on site would be required before the construction of the buildings and structures needed for operation and maintenance of the LADOT bus fleet.

LADOT identified Concept A.2 from the 2019 Feasibility Report as the selected proposal to go forward for environmental analysis. The conceptual plan showing the first/ground level of the facility is shown in Figure 2-4 and the facility's second level in Figure 2-5. The material and construction of the buildings will reflect an industrial architectural design aesthetic consisting of exposed steel, masonry, and concrete, as shown in the conceptual site elevation in Figure 2-6.

Figure 2-4: Conceptual Ground Level Floor Plan



Source: Feasibility Study for an All-Electric Bus Facility, 2019.

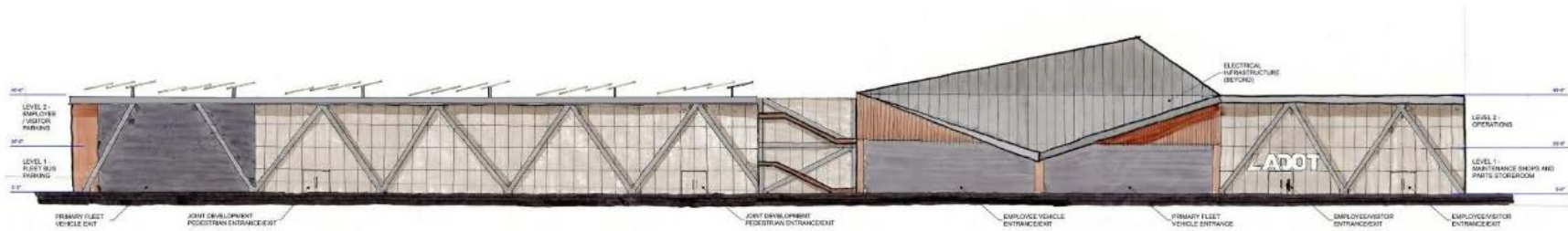
Figure 2-5: Conceptual Second Level Floor Plan



Source: Feasibility Study for an All-Electric Bus Facility, 2019.

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Figure 2-6: Conceptual Front Elevation



Source: Feasibility Study for an All-Electric Bus Facility, 2019.



## 2.3.1 Facility Components

### Buildings and Structures

The new EBMF would be comprised of several buildings and structures, including a two-story operations and maintenance building to provide dispatch, parts storage, and administrative functions, 11 bus maintenance bays, a service building, a bus wash building, BEB parking/charging area, and a second-story parking deck for up to 360 employee/visitor vehicles, with the canopy above the parking deck topped with a 2000-kilowatt photo-voltaic (PV) system. Electrification equipment, including electrical transformers, switch cabinets, and bus chargers will also be included.

The new EBMF would provide preventative maintenance inspections, BEB charging, light maintenance and repair, emergency maintenance, interior vehicle cleaning, and exterior vehicle washing. It would also accommodate administrative and operations functions and would be used as a report base for bus operators. The facility would include space for employee parking, conference meeting rooms, operations and maintenance staff offices, dispatcher workstations, employee report and recreation rooms, and areas with lockers, showers, and restrooms for operators and maintenance personnel. Table 2-1 lists the main facility components.

**Table 2-1: Proposed Electric Bus Maintenance Facility Components**

Major Buildings/Areas	Size	Uses
Maintenance Building	35,912 SF	11 bus bays for repair/inspection; drive in/back out configuration
Operations Building (on 2nd level of Maintenance Building)	12,234 SF	Administration and Dispatch
Service Building	8,150 SF	Office and support areas; Storage areas; 3 service lanes; utility room
Bus Wash Building	4,120 SF	1 wash bay with drive-through configuration; equipment room; utility room
Bus Fleet Parking and Charging Area	Below parking deck	130 stacked spaces for DASH and Commuter Express buses
Employee/Visitor Parking Deck (360 Stalls on 2nd floor of bus parking)	196,560 SF	20 spaces for non-revenue fleet and 340 stalls for employees and visitors; stair enclosure; electrical infrastructure; lobby; offices; meeting areas
Canopy over Parking Deck	118,530 SF	2000 KW photo-voltaic capacity
SF = Square feet; KW = kilowatts Source: Feasibility Study for an All-Electric Bus Facility, 2019.		

**Walls and Fences**

The proposed facility would be fenced by a perimeter wall, which would include a minimum of 6-foot-high block walls on the eastern, southern, and western boundaries of the site and a combination block wall and steel mesh fence, with steel mesh gates, along the site frontage on East 111<sup>th</sup> Place (northern boundary).

**Bus Fleet Composition**

The proposed facility would accommodate a total of 130 BEBs, including 70 of the 30-foot-long DASH buses and 60 of the 45-foot-long CE buses.

**2.3.2 Facility Operations**

**Transfer of Operations**

LADOT is anticipating the delivery of 10 BEBs each month starting in July 2021 for approximately 13 months for a total of 130 BEBs. These BEBs would initially be parked at the existing Compton facility and other LADOT maintenance yards/parking areas.

Once the construction of the project is completed, the City would terminate the lease at the Compton facility through its contractor, and the current employees and BEBs would then be relocated to the new facility. The existing 95 propane and compressed natural gas (CNG) buses operating out of the Compton facility would be phased out and would not be transferred to the new facility.

**Staffing**

Approximately 312 employees would be working on-site and the facility would be open 24 hours per day, 7 days a week. Staff would be stationed at the site on 2 or 3 shifts, which would be staggered depending on their work responsibilities. Table 2-2 provides the staffing breakdown.

**Table 2-2: Proposed Staffing**

Work Responsibility	Staff	Number of Staff	Shift Schedule
Operations	Managers, Clerks, Supervisors, Receptionist, Bus Operators*, Dispatchers, and On-time Performance Monitors	258	3 AM to 11:30 AM 11 AM to 7:30 PM 7 PM to 3:00 AM or 5 AM to 1:30 PM 3:30 PM to 12 AM or 6 AM to 2:30 PM

**Table 2-2: Proposed Staffing**

<b>Work Responsibility</b>	<b>Staff</b>	<b>Number of Staff</b>	<b>Shift Schedule</b>
Fleet Maintenance	Maintenance Manager, Assistant Managers, Mechanics	33	3 AM to 11:30 AM 11 AM to 7:30 PM 7 PM to 3 AM
Parts Storeroom	Parts Manager and Clerks	3	3 AM to 11:30 AM 11 AM to 7:30 PM 7 PM to 3 AM
Service and Clean	Utility Workers	16	3 AM to 11:30 AM 11 AM to 7:30 PM 7 PM to 3 AM
Facility Maintenance	Facility Maintenance Staff	2	6 AM to 2:30 PM
	<b>Total</b>	312	
Note: * Bus operator schedules would depend on route assignments and the length of bus route times. Source: Feasibility Study for an All-Electric Bus Facility, 2019.			

### **Onsite Activities**

The project would provide BEB servicing and inspection, washing and charging, interior cleaning, fare collection, and repair and maintenance 24 hours per day, 7 days a week. It is assumed that an average of six buses would be cleaned, washed, and/or provided preventive maintenance and repairs in a given hour. These maintenance activities would likely occur at night between 10:00 p.m. and 6:00 a.m.

The lithium iron-phosphate batteries for use by each BEB would require charging for a period of 2 to 3 hours on the combined charging system and 80-kilowatt alternative current (AC) charging system. A portion of the electrical consumption at the site would be provided by the 2000-kilowatt PV system to be installed on the canopy of the parking deck. With 38 BEBs charging simultaneously overnight, approximately 3,856 kilowatts would be used by 76 BEBs.

### **Bus Routes**

The DASH buses provide frequent bus service in downtown Los Angeles (5 Downtown routes) and in 27 neighborhoods across the City (26 community routes). The CE buses provide 14 peak period service routes between downtown Los Angeles and major centers in the City and surrounding areas, with limited stops. As currently in operation, the DASH buses that would be stationed at the proposed facility would be serving Chesterfield Square, Pueblo del Rio, San Pedro, Southeast, Vermont/Main, Watts, and Wilmington areas. The CE buses would serve CE Routes 142, 430, 437, 438, 448, 534, and the Union Station/Bunker Hill shuttle.

No specific change in existing DASH and Commuter Bus routes and schedules is proposed with the use of the new facility. Therefore, based on the current bus schedules, the DASH and CE buses would be in service from 2.5 to 8 hours each day

and would have staggered departure and arrival times at the EBMF. It is anticipated that the majority of the BEBs would be leaving the facility from 4 a.m. to 8 a.m. and from 2 p.m. to 4 p.m. on weekdays and from 8 a.m. to 10 a.m. on weekends. The majority of the BEBs would also be returning from 8 a.m. to 10 a.m. and from 6 p.m. to 10 p.m. on weekdays and from 6 p.m. to 8 p.m. on weekends, with limited service on holidays.

### **Site Access**

Buses coming to and leaving the proposed facility would largely use nearby South Avalon Boulevard (to the west of the site) to get to East 111th Place and the site. BEBs running easterly from Avalon Boulevard would enter the site through the western entrance driveway on East 111th Place and check in with the onsite security guard and proceed into the site to the southern section for service and washing. Otherwise, BEBs requiring repairs would park at the bus bays along the western section. Other BEBs may directly run in a counterclockwise direction toward the surface parking/charging spaces to be located in the central area of the site. BEBs would leave the site through the eastern exit driveway and run westerly on East 111th Place to Avalon Boulevard. Vehicles driven by facility employees, including bus operators, and visitors would enter and exit the facility through the center driveway (east of the bus entry driveway) that connects to a ramp leading to the second-level parking deck.

### **Parking**

All buses assigned to the proposed facility, including the employee and visitor vehicles would be parked within the facility and would not use the on-street parking along the nearby existing streets. The parking/charging area for BEBs (at the center of the site) would include 130 stacked spaces and the second-story parking deck would provide 360 stalls for the facility’s non-revenue fleet and employee and visitor vehicles.

Construction of the EBMF would require the construction of the new driveways, reconstruction of the sidewalks in front of the project site, and restriping of East 111<sup>th</sup> Place. This would result in a loss of some on-street parking slots on East 111<sup>th</sup> Place in front of the project site.

## **2.4 Project Schedule**

The construction and operation schedule for the proposed project has not yet been finalized. For environmental analysis purposes, the potential timelines as shown in Table 2-3 have been assumed.

**Table 2-3: Tentative Project Timeline**

<b>Activity Description</b>	<b>Start</b>	<b>Complete</b>
Property acquisition	June 2021	March 2023

**Table 2-3: Tentative Project Timeline**

<b>Activity Description</b>	<b>Start</b>	<b>Complete</b>
Federal grant funding application and environmental review process pursuant to the federal requirement	January 2023	December 2023
Final design	March 2023	March 2024
Construction	June 2024	June 2026
Start of operation	July 2026	

### **2.4.1 Property Acquisition**

The City is currently in negotiations with the property owner for the acquisition of the two parcels (APNs 6071-022-009 and 6071-022-013) and anticipates the Los Angeles City Council to approve project site acquisition in early 2023, after the completion of the CEQA documentation.

### **2.4.2 Funding**

Funding for the project is anticipated to include funds from the City’s Bus Facility Purchase Program, Federal Transit Administration’s (FTA) Urbanized Area Formula Program Grants (49 U.S.C. Chapter 53, Sections 5307 & 5340), and other State and federal grant programs that may become available. Federal funding from the FTA would trigger a requirement to comply with the National Environmental Policy Act (NEPA), in addition to compliance with the CEQA. A separate NEPA document would be prepared as part of the grant funding application. It is assumed that the funding application and the NEPA review process would occur in 2023.

### **2.4.3 Construction**

While the construction schedule for the proposed project has not yet been set, it is assumed that construction would be completed in 24 months following the final engineering design and bidding process in 2023. Any required soil remediation would be completed prior to the start of construction activities. Assuming no or limited remediation is necessary, project construction is tentatively scheduled to begin in mid-2024 and would be completed by mid-2026.

During the 24-month construction period, on-site activities would include:

- Mobilization
- Demolition and site clearing
- Excavation, grading, and paving
- Facility construction and equipment installation
- Finish work

Construction activities would be confined to the site, including equipment and material staging. However, roadway, sidewalk, and driveway improvements may require short-term sidewalk and lane closures. The maximum excavation depth for utility lines is

estimated at 8 feet and the maximum excavation depth for building foundations is estimated at 15 feet. No extensive backfill or grading is expected given the relatively flat topography of the site.

Finish work would include the installation of final facility features and interior furnishings, including charging equipment, trash receptacles, lighting, and signage. Parking area striping and final cleanup would also occur during this stage.

#### **2.4.4 Operation**

LADOT anticipates BEBs to utilize the proposed facility starting in mid-2026.

### **2.5 Mitigation Measures, Standard Conditions, and Project Design Features**

Where it is determined that that project would generate potentially significant impacts, mitigation measures are recommended that would reduce the level of those potential impacts. The section summarizes the standard conditions (SCs), project design features (PDFs), and mitigation measures that would avoid or reduce the impacts of the project.

CEQA Guidelines, Section 15126.4(A), states “The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed...which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project.” This IS distinguishes between PDFs which are features incorporated into the design of the project to minimize or avoid adverse impacts, and SCs, which are existing regulations and conditions imposed by the City and other regulatory agencies. PDFs and SCs, as used herein, are defined more specifically as follows:

- Standard Conditions - SCs are existing requirements based on applicable federal, State, regional, and City regulations, and generally consists of regulatory compliance measures, and standard construction conditions and procedures. The SCs will be identified in the discussion, incorporated into the Mitigation Monitoring Program, and implemented as a part of the project to ensure compliance and that potential impacts would remain less than significant.
- Project Design Features - PDFs are specific design and/or operational measures proposed by, or agreed to by, the project applicant and are incorporated into the project to avoid or reduce its potential environmental effects. Because PDFs are incorporated into the project, they do not constitute mitigation measures. Even so, PDFs are incorporated into the Mitigation Monitoring Program to ensure that they are implemented as a part of the project.

When significant adverse impacts would occur after the implementation of PDFs and project compliance with SCs, mitigation measures have been developed to reduce project impacts to less than significant levels.

## **2.5.1 Summary of Standard Conditions, Project Design Features, and Mitigation Measures**

This section summarizes the standard conditions, project design features, and mitigation measures to be implemented to minimize impacts as a result of project construction and implementation.

### **Aesthetics**

**PDF-V-1:** The project shall be designed to provide vegetative screening along the east and west sides of the site to minimize the views into the proposed facility from the two community assets - Animo James B. Taylor Charter Middle School on the east and Kedren Health Community Center on the west.

**PDF-V-2:** The project shall be designed to set back the proposed building along East 111<sup>th</sup> Place to allow for landscaping along the street to soften the height of the building on the streetscape.

**PDF-V-3:** Where feasible, the project shall be designed to allow for vine plantings along the inside of the wall along the railroad tracks and provide vine portals to allow the vines to grow over the backside of the wall to minimize the surface area for graffiti.

### **Agriculture and Forestry**

No impacts would occur and no mitigation is required.

### **Air Quality**

**SC-AQ-1:** The construction and operation of the project shall comply with applicable California Air Resource Board (CARB) and South Coast Air Quality Management District (SCAQMD) Rules and Regulations, including but not limited to CARB ATCM 2485 and SCAQMD Rules 401 through 403 and 1403.

### **Biological Resources**

**MM-BIO-1:** To avoid impacts to migratory birds, the vegetation removal, demolition, and site clearing activities shall occur during the non-breeding season (e.g., between September 1 and February 15). If such activities would have to be scheduled during this period, a qualified biologist shall conduct a preconstruction nesting bird survey to determine if any nesting birds are present within the site. This survey should be conducted no

more than 7 days before the start of vegetation removal. If nesting birds are found, an exclusionary buffer would be set up and clearly marked around each active nest site. Construction or clearing shall not be conducted within this zone until the qualified biologist determines that nesting birds have fledged or the nest is no longer active.

### **Cultural Resources**

**SC-CUL-1:** In the event of the inadvertent discovery of human remains, the Contractor shall immediately notify the County Coroner and the City of Los Angeles. If the County Coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission in accordance with Health and Safety Code (HSC) Section 7050.5 subdivision c, and Public Resources Code (PRC) Section 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate the most likely descendant (MLD) for the remains per PRC 5097.98. Under PRC 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations, if applicable. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California HSC Section 7100 37 et seq. directing identification of the next-of-kin will apply.

**SC-CUL-2:** In compliance with Section 6.6-2 of the Greenbook (*Standard Specifications for Public Works Construction*) regarding archaeological and paleontological discoveries, if a discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

**PDF-CUL-1:** A qualified archeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall be retained before the project construction and shall remain on-call during all ground-disturbing activities. The qualified archaeologist shall ensure that a Worker Environmental Awareness Protection (WEAP) training, presented by the qualified archaeologist and Native American representative, is provided to all construction and managerial personnel involved with the project. The WEAP training shall provide an overview of cultural (prehistoric and historic) and tribal cultural resources and outline regulatory requirements for the protection of cultural resources. The WEAP shall also cover the proper procedures to be followed in the



event of an unanticipated cultural resource discovery during construction. The WEAP training can be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.

**PDF-CUL-2:** In the event of an inadvertent discovery of archaeological materials, the resource shall be fully documented by the qualified archaeologist or designee and a Department of Parks and Recreation (DPR) 523 record shall be prepared. If prehistoric or potential tribal cultural resources are identified, the consulting Native American Tribes shall be notified.

The qualified archaeologist, in consultation with consulting Native American Tribes and the City of Los Angeles, shall determine whether the resource is potentially significant as per CEQA (i.e., whether it is a historical resource, a unique archaeological resource, or tribal cultural resources). If preservation in place or avoidance is not feasible, the qualified archaeologist, in consultation with the City, shall prepare and implement a detailed treatment plan. Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code (PRC) Section 21083.2. Treatment for most resources would consist of, but would not be limited to, in-field documentation, archival research, subsurface testing, excavation, and preparation of a final report and DPR 523 record. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of the final report and DPR 523 record(s) to the City of Los Angeles and South Central Coastal Information Center.

**MM-PAL-1:** A qualified paleontological monitor (i.e., one who meets the qualification standards established by the Society of Vertebrate Paleontology [SVP, 2010]) shall be retained prior to construction and shall remain on call during all ground disturbing activities. Worker Environmental Awareness Program (WEAP) training shall be provided to all construction and managerial personnel involved with the project's ground disturbing activities. The WEAP training shall provide an overview of paleontological resources and outline the regulatory requirements for their protection. The WEAP shall also cover the proper procedures to be followed in the event of a fossil discovery during construction. The WEAP training may be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.

**MM-PAL-2:** The qualified paleontological monitor will monitor project-related excavation activities in high paleontological deposits if encountered in

the subsurface. Project-related excavation activities greater than 5 feet depth shall be monitored on a part-time (i.e., spot-checking) basis to check for the presence of underlying paleontologically sensitive sediments. If paleontologically sensitive deposits are observed, full-time monitoring shall be implemented in those areas. Excavations determined to be entirely within previously disturbed sediments or late Holocene-age deposits do not require paleontological monitoring or continued spot-checking.

**MM-PAL-3:** In the unanticipated event that fossil resources are discovered, they shall be protected from further excavation, destruction, or removal. Work shall be halted within 25 feet of the discovery until it can be evaluated by a qualified paleontologist (i.e., one who meets the SVP professional standards for Principal Investigator or Project Paleontologist). If determined to be scientifically important, the paleontological resources shall be recovered, prepared to the point of curation, identified, and curated at the Natural History Museum of Los Angeles County or another accredited repository along with associated field data.

**MM-PAL-4:** After ground-disturbing activities are completed, a memo report documenting the methods and results of paleontological monitoring will be prepared by the qualified paleontologist and submitted to the City of Los Angeles.

## Energy

Impacts would be less than significant and no mitigation is required.

## Geology and Soils

**SC-GEO-1:** In accordance with the Los Angeles Municipal Code (LAMC) and Los Angeles Building Code (LABC), a geotechnical investigation shall be prepared to assess site-specific geologic conditions, including the potential for liquefaction, soil expansion, and other geologic hazards at the project site. Applicable standards in the LABC and the recommendations of the geotechnical investigation shall be incorporated into the design and construction of the project.

**SC-GEO-2:** The project plans and specifications shall be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes. Additionally, all grading, excavation, and earthwork activity should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages:

- Site grading
- Excavation activities
- Any other ground-disturbing activities

- When any unusual or unexpected geotechnical conditions are encountered.

### **Greenhouse Gas Emissions**

Impacts would be less than significant and no mitigation is required.

### **Hazards and Hazardous Materials**

- SC-HAZ-1:** All hazardous materials and wastes shall be handled and disposed of in accordance with applicable regulations, including South Coast Air Quality Management District (SCAQMD) Regulations.
- SC-HAZ-2:** Workers exposed to or handling contaminated soils shall have sufficient health and safety training, consistent with Occupational Safety and Health Administration (OSHA) Hazardous Waste Operation Standards (29 CFR 1910.120), and Cal-OSHA "Hazardous Waste Operations & Emergency Response" (HAZWOPER) (8 CCR 5192). The Contractor, qualified subcontractor, or an industrial hygienist shall prepare a site-specific health and safety plan. The plan shall appoint a site safety officer and establish responses to contaminants, including methane gas, known to exist in the area based on the site knowledge and the Phase II Environmental Site Assessment (ESA) and Additional Site Assessment Report.
- SC-HAZ-3:** Soils that have visible staining or an odor shall be tested in the field by the Contractor or qualified environmental subcontractor with an organic vapor analyzer (OVA) for volatile components, which require additional considerations in their handling and disposal. Soil with OVA readings exceeding 50 parts per million (ppm) volatile organic compounds (probe held 3 inches from the excavated soil face), or which is visibly stained or has a detectable petrochemical odor shall be stockpiled by the Contractor separately from non-contaminated soils. If volatile compounds are present at concentrations exceeding 50 ppm, the South Coast Air Quality Management District (SCAQMD) Rule 1166 permit will be required, which most likely will require control of vapor, such as covering the stockpiles with plastic sheeting or wetting with water or a soap solution.
- SC-HAZ-4:** Any contaminated material (i.e., soil, asphalt, concrete, railroad ballast, trash fill, or debris) that is to be hauled off the site is considered a "waste product" and must be classified as hazardous or non-hazardous waste under all criteria by both State and Federal Codes before disposal. If the waste soil or other material is determined hazardous, a hazardous waste manifest will be prepared by the Contractor or its qualified representative, and the material transported to an appropriate class of facility for recycling or landfill disposal by a registered hazardous material transporter. If the soil is nonhazardous but still exceeds levels

that can be returned to the excavation or is not needed on the site, a less costly nonhazardous transporter and soil recycling facility shall be used if no hazardous constituents are present above their respective action levels.

**SC-HAZ-5:** In accordance with South Coast Air Quality Management District (SCAQMD) Rule 1403, a pre-demolition building survey for asbestos-containing materials (ACMs) is required before demolition. Therefore, a pre-demolition survey is recommended for ACMs, lead-based paint, polychlorinated biphenyl (PCB), and other hazardous materials before any on-site demolition.

**MM-HAZ-1:** Additional site characterization to identify the lateral and vertical extents of tetrachloroethene (PCE) impacted soil vapor and assess if groundwater beneath the site has been impacted shall be conducted. Following completion of site characterization, the City of Los Angeles shall report the “unauthorized release” to the appropriate agency for regulatory oversight. Once a case is opened, the City of Los Angeles shall comply with any additional characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency to protect construction workers, facility workers, and neighboring residences from exposure to impacted media (i.e., soil, groundwater, and/or soil vapor).

**MM-HAZ-2:** Before construction, a Soil Management Plan (SMP) shall be developed to provide construction workers with guidelines from a health and safety perspective (e.g., use of personal protective equipment, action levels, etc.) on handling impacted media that is encountered during any subsurface disturbance activities. The SMP shall describe site- and project-specific protocol to be followed in the event of encountering chemically impacted soil. The SMP shall also facilitate excavation activities by having a structured plan in place for the handling, characterization, and disposal of impacted soil wastes.

**MM-HAZ-3:** Additional measures, as recommended in the Phase II Environmental Site Assessment (ESA) and/or the additional Site Characterization to be performed for the project site, shall be taken to protect the proposed facility's workers. These measures may include, but are not limited to:

- All stored chemicals, equipment, underground storage tanks (USTs), and waste/debris shall be removed from both properties before purchase. Once removed, a pre-acquisition inspection should be performed to confirm the removal of all hazardous materials and other solid and liquid wastes stored on the properties.
- Due to the contaminant plume potentially extending offsite, consultation with legal counsel is needed to determine if notification to the Los Angeles Regional Water Quality Control Board (LARWQCB) of the potential unauthorized release is warranted.

Should a case be opened with the LARWQCB, additional action may likely be required, including detailed site characterization, active remediation, and the designation of a responsible party.

- Measures (i.e., engineering controls such as vapor barriers) shall be installed within new construction, to address residual impacts of tetrachloroethene (PCE) in soil vapor in the event remediation is not pursued or completed. These measures typically consist of the installation of either an active or passive venting system and/or the application of a vapor barrier that is chemically resistant to chlorinated solvents.

### **Hydrology and Water Quality**

**SC-HYD-1:** In compliance with National Pollutant Discharge Elimination System (NPDES) No. CAS000002, the Contractor shall obtain coverage under the NPDES Construction General Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during construction activities. The SWPPP shall include appropriate Best Management Practices (BMPs) from the City's Reference Guide for Stormwater Best Management Practices. In addition, the Contractor shall comply with Order No. 2003-003-DWQ, including the terms and conditions of the general Waste Discharge Requirements of this order. Any groundwater extracted during excavation activities will be disposed of in accordance with the General Waste Discharge Requirements for discharges to land with a low threat to water quality.

**SC-HYD-2:** In compliance with National Pollutant Discharge Elimination System (NPDES) No. CAS000001, the City shall obtain coverage under the NPDES General Industrial Activity Storm Water Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during project operations. In addition, the on-site storm drainage shall be designed in compliance with LAMC Section 64.30 for requirements on the disposal of industrial wastewater and with the City's Low-Impact Development Ordinance for permanent site Best Management Practices (BMPs) that would allow the beneficial use of rainwater and urban runoff; reduce stormwater/urban runoff while improving water quality; promote rainwater harvesting; reduce off-site runoff and provide increased groundwater recharge; and reduce erosion and hydrologic impacts downstream.

### **Land Use and Planning and Community Impacts**

**SC-LU-1:** The proposed project shall be designed and constructed in compliance with applicable design guidelines and development standards in the Southeast Los Angeles Community Plan, Southeast Los Angeles Community Plan Implementation Overlay (CPIO) District, and the City's Zoning Regulations.

- SC-CC-1:** In compliance with Section 601-1 of the Greenbook (*Standard Specifications for Public Works Construction*), the Contractor shall prepare a Transportation Management Plan (TMP) in consultation with the City of Los Angeles before construction. The TMP will be submitted with the construction plans and schedule to the Los Angeles Police and Fire Departments before the commencement of construction activities. The TMP will outline necessary street/lane closures and detours. In addition, detours around construction areas will be identified for bicyclists and pedestrians. Signs will be posted to direct bicyclists and pedestrians to sidewalks and intersections where they may safely cross. A restriction on large-size trucks shall also be imposed to confine travel to and from the construction site during off-peak commute times.
- SC-CC-2:** In compliance with Section 600 of the Greenbook (*Standard Specifications for Public Works Construction*), roadway and driveway access for adjacent land uses shall be maintained at all times during construction, and work shall be scheduled to avoid unnecessary inconvenience to residents, students, and users of abutting properties. Undue delays in construction activities shall be avoided to reduce the public's exposure to construction-related impacts.
- SC-CC-3:** In compliance with Section 5-7, Safety, of the Brownbook (*Additions and Amendments to the 2021 Edition of the Standard Specifications for Public Works Construction*), the contractor shall provide all safety measures necessary to protect the public and workers within the Work area. Particular attention is directed to the possibility of children playing or going to or from school in the Work area. The Contractor shall take all necessary precautions to ensure that its operations will not create a safety hazard for children. Crossing guards shall be placed at the project site driveways and the intersections of East 111<sup>th</sup> Place with McKinley Avenue and Stanford Avenue, leading to the nearby schools, when construction activities (e.g., sidewalk improvements and haul truck traffic) occur during school start and end times.
- SC-CC-4:** In compliance with the City of Los Angeles Building Regulations Ordinance No. 178,048 (LAMC Section 91.106.4.8), a construction site notice to be provided that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public. A public liaison shall be appointed for project construction and shall be responsible for addressing public concerns about construction activities, including, but not limited to, access, excessive noise, dust, or odor. As needed, the liaison shall determine the cause of the concern (e.g., starting too early,

bad muffler, blocked driveway) and implement measures, in consultation with the Contractor, to address the concern. Notices detailing the dates and hours of construction shall be sent to properties within 500 feet of the construction site. A project information sign shall be posted at the construction site and shall display the telephone number for the public liaison.

### **Mineral Resources**

Impacts would be less than significant and no mitigation is required.

### **Noise**

**MM-NOI-1:** To minimize noise impacts to area residents during project construction, the Contractor shall install a temporary noise barrier, which includes noise barrier fences, moveable noise barriers, and/or noise control curtains, with an effective height of 12 feet around the perimeter of the construction site. Temporary noise barriers may be made, for example, of concrete jersey barriers with 0.75-inch plywood attached to fence posts, or the noise control curtain material may be mounted or hung over perimeter chain-link fences.

### **Population and Housing**

Impacts would be less than significant and no mitigation is required.

### **Public Services**

**SC-PS-1:** The project shall be designed, constructed, and operated in accordance with the Los Angeles Fire Code and other applicable requirements in the Los Angeles Municipal Code (LAMC), Los Angeles Building Code (LABC), and other State and City regulations to prevent the creation of fire hazards, to reduce the potential for property damage and personal injury in the event of a fire, and to facilitate evacuation and emergency response.

### **Recreation**

No impacts were identified and no mitigation is required.

### **Transportation**

**SC-TR-1:** The proposed project shall be designed in accordance with City of Los Angeles standards for streets, sidewalks, driveways, and other street improvements to prevent the creation of traffic hazards.

**PDF-TR-1:** The proposed project shall quantify the operational performance for primary site access points, unsignalized intersections integral to the

project's site access, and signalized intersections in the vicinity of the project site after the project is fully operational. If it is determined that the project exceeds the travel volume screening criteria for Boulevards and Avenues as defined in the Los Angeles Department of Transportation's (LADOT) Transportation Assessment Guidelines (TAG), further analysis is required to estimate the travel delay at each major signalized intersection where the capacity would be altered by the projects and to estimate how the project would be expected to improve or reduce safety for vulnerable road users. Potential corrective actions for the project access and circulation constraints could include:

- Provide an additional left-turn lane pocket for the westbound approach at the S. Avalon Blvd. and E. 111th Place intersection.
- Improving the segment of E. 111th Place from the eastern end of the site frontage to Avalon Boulevard to two lanes each direction to provide additional roadway capacity.
- Transportation Demand Management (TDM) Strategies that reduce trips above and beyond those required in Section 2.2 of the LADOT TAG.
- Installation of a traffic signal or stop signs or electronic warning devices at site access points.
- Redesign and/or relocation of project access points.
- Redesign of the internal access and circulation system.
- Installation of stop signs and pavement markings internal to the site.
- Restrict or prohibit turns at site access points.
- Repurpose existing curb space to better accommodate passenger loading.
- New traffic signal installation, left-turn signal phasing, or other vehicle flow enhancements (e.g., Automated Traffic Surveillance and Control [ATSAC] system upgrades) at nearby intersections.
- Intersection reconfiguration that reduces gridlock and unsafe conflict points.
- Provide continuous paved sidewalks, walkways, or shared-use paths to off-site pedestrians and bicyclists to adjacent or nearby transit facilities.
- Fair share contribution to planned LADOT capital project that accomplishes one or more of the above.

### **Tribal Cultural Resources**

**MM-TCR-1:** Due to the potential for tribal cultural resources to exist on the project site, prior to the commencement of any ground-disturbing activity at the project site, the City of Los Angeles (the City) shall retain a tribal monitor that is qualified to identify, record, and evaluate the significance of any archaeological and/or tribal cultural finds during construction. The qualified tribal monitor shall be from or approved by the Gabrieleño Band



of Mission Indians – Kizh Nation (the Tribe). Ground-disturbing activities shall include removing pavement, potholing, auguring, grubbing, removing trees, boring, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or similar activity at the project site. The executed monitoring service agreement shall be submitted by the qualified tribal monitor to the City prior to any ground-disturbing activity. The qualified tribal monitor will complete logs describing each day's construction activities, locations, soil, and any cultural materials, human remains, and/or burial goods discovered. Tribal monitoring shall conclude when ground-disturbing activities on the project site have been completed, or when the qualified tribal monitor indicates any additional construction activity at the project site has little or no potential to impact tribal cultural resources. In accordance with PDF-CUL-1, prior to commencing any ground disturbing activities, the qualified archaeologist and the qualified tribal monitor shall provide Worker Environmental Awareness Program (WEAP) training to construction crews involved in ground-disturbing activities that provides information on regulatory requirements for the protection of tribal cultural resources. As part of the WEAP training, construction crews shall be briefed on proper procedures to follow should a crew member discover tribal cultural resources during ground-disturbing activities. In addition, workers will be shown examples of the types of resources that would require notification to the archaeological monitor and tribal monitor.

Upon discovery of any subsurface object or artifact that may be a tribal cultural resource during the course of any ground-disturbing activity, procedures to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:

- All such ground-disturbing activities shall cease in the immediate vicinity of the discovery, the radius of which will be determined by the qualified tribal monitor or the qualified archaeological monitor, until the qualified tribal monitor has evaluated the find in accordance with federal, state, and local guidelines.
- The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribe and the tribal monitor, and in accordance with federal, state, and local guidelines.
- Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials or publish the location of tribal cultural resources.
- If the resources are Native American in origin, the tribal monitor will make recommendations to the City regarding the monitoring of future ground-disturbing activities, as well as the treatment and disposition of any discovered tribal cultural resources, which may include but not limited to the preservation in place or recovery and retention of them

in the form and/or manner which the tribal monitor and the Tribe deem appropriate for educational, cultural, and/or historic purposes. Until a recommendation is made, the discovery should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information form and about the resource and this determination is documented by a qualified archaeologist or tribal monitor.

- The City shall implement the tribal monitor and Tribe's recommendations if the City can reasonably conclude that the recommendations are reasonable and feasible to mitigate or avoid any significant impacts to the identified tribal cultural resources. If the City does not accept a particular recommendation determined to be reasonable and feasible by the qualified tribal monitor, the City may request mediation by a mediator agreed to by the tribal monitor, the Tribe, and the City who has the requisite professional qualifications and experience to mediate such a dispute. The City shall pay any costs associated with the mediation. After making a reasonable effort to mediate this particular dispute, the City may (1) require the recommendation be implemented as originally proposed by the archaeologist or tribal monitor; (2) require the recommendation, as modified by the City, be implemented as it is at least as equally effective to mitigate a potentially significant impact; (3) require a substitute recommendation be implemented that is at least as equally effective to mitigate a potentially significant impact to a tribal cultural resource; or (4) not require the recommendation be implemented because it is not necessary to mitigate an significant impacts to tribal cultural resources.
- The ground-disturbing activities may recommence outside of a specified radius of the discovery site, so long as this radius has been cleared by both the qualified archaeologist and qualified tribal monitor and determined to be reasonable and appropriate.
- The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, qualified tribal monitor, and the Tribe.
- If the resources consist of non-Native American historic archaeological materials, a qualified archaeologist will apply National Register of Historic Places Criterion D to determine their significance. Artifacts will be curated per the Code of Federal Regulations 36 Part 79, as applicable, or be offered to a local historical society museum or educational facility, as deemed appropriate by the City.

SC-CUL-1 shall be implemented should human remains be inadvertently discovered at the project site. If the Gabrieleño Band of Mission Indians – Kizh Nation is designated Most Likely Descendant

(MLD) by the Native American Heritage Commission (NAHC), the Koonas-gna Burial Policy shall be implemented. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be prepared by the MLD. Associated funerary objects reasonably believed to have been placed with individual human remains either at the time of death or later and made exclusively for burial purposes are to be treated with utmost respect and dignity. The prepared soil and cremation soils are to be treated in the same manner as intact bone fragments. Cremations will either be removed in bulk or by means necessary to ensure the complete recovery of all sacred materials.

In such cases where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate which can only be moved by heavy equipment. If this type of steel plate is unavailable, a 24-hour guard should be posted outside of working hours. The City will make every effort to divert project activities and keep the remains in situ and protected. If the project cannot be diverted, it may be determined that the burials will be removed. The MLD will work closely with the City's designated qualified archaeologist and tribal monitor to ensure that the excavation is treated carefully, ethically, and respectfully. Each occurrence of human remains and associated funerary objects, sacred objects, and objects of cultural patrimony will be retained and reburied within six months of recovery in a secure container. If preservation in place is not possible despite good faith efforts, a site located within the project parcel footprint, as agreed to by the City and the Tribe, and to be protected in perpetuity, shall be designated for the respectful reburial of the human remains and/or ceremonial objects. There shall be no publicity regarding any cultural materials recovered.

Any data recovery plans shall require approval by the Tribe; such documentation will include detailed descriptive notes and sketches, at a minimum. Additional documentation as outlined in a treatment plan should also be approved by the Tribe. If additional data recovery is conducted, a final report will be submitted to the Tribe, Native American Heritage Commission, and South Central Coastal Information Center. No invasive and/or destructive diagnostics on human remains shall be conducted.

### **Utilities and Service Systems**

**SC-CF-1:** Before starting construction, the City of Los Angeles will notify and coordinate with affected utility providers to avoid service interruptions during peak periods or provide temporary backup services for interruptions during peak periods, as well as notify customers of scheduled service interruptions.

**SC-UT-1:** The Contractor shall comply with the City's Construction and Demolition Waste Recycling Ordinance by obtaining a permit before transporting construction and demolition waste, and transporting the wastes to City-certified construction and demolition waste-processing facilities.

**SC-UT-2:** In accordance with the City's Zero Waste Plan, the City shall implement recycling programs at the EBMF, which may include but not be limited to the phasing out expanded polystyrene foam takeout containers and single-use water bottles and the placement of recycling containers for a variety of materials such as beverage containers, newspaper, mixed paper, and other materials.

### **Wildfire**

No impacts would occur and no mitigation is required.

### **Cumulative Impacts**

**MM-CUM-1:** The construction schedules of other projects in the vicinity should be coordinated with one another through communication among City departments and staff ~~so~~ as to avoid cumulatively affecting vehicle traffic, pedestrians, and bicyclists on Avalon Boulevard and East 111th Place.

### **Summary Findings**

With project compliance with Standard Conditions and the implementation of the Project Design Features and Mitigation Measures listed above, project impacts would be less than significant.

In addition to the above measures, the analysis in this document assumes that, unless otherwise stated, the project would be designed, constructed, and operated following all applicable laws, regulations, ordinances, and formally adopted City standards, including but not limited to:

- City of Los Angeles, City Council. Municipal Code. [LAMC] Available online at [https://codelibrary.amlegal.com/codes/los\\_angeles/latest/overview](https://codelibrary.amlegal.com/codes/los_angeles/latest/overview)
- City of Los Angeles, Department of Public Works, Bureau of Engineering. Standard Plans. [Standard Plans] Available online at <https://eng2.lacity.org/techdocs/stdplans/index.htm>
- American Public Works Association. Standard Specifications for Public Works Construction. [Green Book]
- American Public Works Association. Work Area Traffic Control Handbook. [WATCH]

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- City of Los Angeles, Department of Public Works, Bureau of Engineering. City's Additions and Amendments to the Green Book. [Brown Book] Available online at <https://eng2.lacity.org/brownbook/frame.cfm>
- City of Los Angeles, Department of Public Works, Bureau of Engineering. Part M, Construction. [Construction Manual] Available online at <https://eng2.lacity.org/techdocs/cons-man/>
- City of Los Angeles, Southeast Los Angeles Community Plan. Available online at [https://planning.lacity.org/odocument/2953d47a-2fa6-4774-9853-d2fe5c46d9bd/Southeast\\_Community\\_Plan.pdf](https://planning.lacity.org/odocument/2953d47a-2fa6-4774-9853-d2fe5c46d9bd/Southeast_Community_Plan.pdf)
- City of Los Angeles, Southeast Los Angeles Community Plan Implementation Overlay District [Ordinance 185925]. Available online at <https://planning.lacity.org/plans-policies/overlays/southeast-los-angeles>

### **3.0 ENVIRONMENTAL IMPACT ANALYSIS AND INITIAL STUDY CHECKLIST**

This section documents the screening process used to identify and focus upon environmental impacts that could result from the proposed project. The IS Checklist below closely follows Appendix G of the State CEQA Guidelines, as prepared by the Governor's Office of Planning and Research, and was used in conjunction with the City's 2006 L.A. CEQA Thresholds Guide and other sources to screen and focus on the potential environmental impacts resulting from the project.

#### **3.1 Analysis Section Format**

Each topical analysis section is organized and defined as provided below.

##### **3.1.1 IS Checklist**

The IS Checklist closely follows Appendix G of the State CEQA Guidelines and is presented as a table of the questions used to screen and focus on the potential environmental impacts resulting from the project.

##### **3.1.2 Environmental Conditions**

The environmental conditions provide an overview of the existing conditions and define the baseline relevant to the scope of the environmental topic. The environmental conditions include regulatory setting and existing environment as defined in the following:

###### **Regulatory Setting**

The regulatory setting provides information about policies, procedures, regulations, and requirements that were in effect at the time that the decision was made by the project applicant to undergo environmental review.

###### **Existing Environment**

The existing environment discussion describes the applicable physical conditions at the project site and surrounding area and may include information related to existing land uses, structures, and operational characteristics of the existing developments.

##### **3.1.3 Environmental Impact Analysis**

The impact analysis discussion responds to the questions listed in the IS Checklist for each environmental resource and discusses the potential impacts of the project. The section may discuss the methods, procedures, and techniques used to estimate the project impacts. The section identifies and explains the thresholds of significance and any additional criteria used to determine the significance of the project impacts. Impacts are separated into the following categories:

- **No Impact.** This category applies when the project would not create an impact in the specific environmental issue area. A “No Impact” finding does not require an explanation when the finding is adequately supported by the cited information sources (e.g., exposure to a tsunami is not a risk for projects not near the coast). A finding of “No Impact” is explained where the finding is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- **Less Than Significant Impact.** This category is used when the project would result in impacts below the threshold of significance and would therefore have less than significant impacts.
- **Less Than Significant Impact with Mitigation Incorporated.** This category applies where the incorporation of mitigation measures would reduce a project’s “Potentially Significant Impact” to a “Less Than Significant Impact.” The mitigation measures are described briefly along with a brief explanation of how they would reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be incorporated by reference.
- **Potentially Significant Impact.** This category is applicable if there is substantial evidence that a significant adverse effect might occur, and no feasible mitigation measures could be identified to reduce impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.

Sources of information that adequately support these findings are referenced with each question. All sources are available for review at the offices of the City of Los Angeles Bureau of Engineering, 1149 South Broadway, Suite 600, Los Angeles, California 90015. Please contact Lauren Rhodes at [lauren.rhodes@lacity.org](mailto:lauren.rhodes@lacity.org) for an appointment.

### 3.2 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) In non-urbanized areas, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Visual Impacts Assessment Technical Memorandum (Parsons, 2022) was prepared for the project and is provided in Appendix A. The findings of the study are summarized below.

#### 3.2.1 Regulatory Setting

This section describes existing laws and regulations related to visual quality and aesthetics that apply to the project.

##### 3.2.1.1 Federal

There are no federal regulations that specifically address impacts related to aesthetics although the National Scenic Byways Program designates roads with one or more archeological, cultural, historic, natural, recreational, and scenic qualities as All-American Roads or National Scenic Byways. There are no All-American Roads or National Scenic Byways within five miles of the site.

##### 3.2.1.2 State

There are no state regulations that specifically address impacts related to aesthetics although California's Scenic Highway Program was created to protect and enhance



the natural scenic beauty of California highways and adjacent corridors. There are no officially designated or eligible State Scenic Highways within 10 miles of the project site.

### **3.2.1.3 Local**

#### **City of Los Angeles General Plan Framework Element**

The City's General Plan Framework Element establishes the broad overall policy and direction for the entire General Plan. The Framework Element states that scenic resources are intended to improve community and neighborhood livability in the City. The Framework Element's open space and conservation policies seek to conserve significant resources and use open space to enhance community and neighborhood character in the City.

#### **City of Los Angeles General Plan Conservation Element**

The City's General Plan Conservation Element includes a discussion of the existing landforms and scenic vistas in the City. Objectives, policies, and programs included in this element are intended to ensure the protection of the natural terrain and landforms, unique site features, scenic highways, and panoramic public views as City staff and decision-makers consider future land use development and infrastructure projects.

#### **City of Los Angeles General Plan Mobility Plan**

The City's General Plan Mobility Element or Mobility Plan 2035 provides an inventory of City-designated scenic highways and includes special controls for the protection and enhancement of scenic resources. The Mobility Plan 2035 includes Scenic Highway Guidelines for those designated scenic highways for which there is no adopted scenic corridor plan. There is no City Scenic Highway on or near the site. There is also no streetscape plan or scenic corridor plan that encompasses the site or surrounding streets.

#### **Southeast Los Angeles Community Plan**

The Southeast Los Angeles Community Plan serves as the Land Use Element of the City's General Plan and articulates the vision for long-term physical and economic development and community enhancement of the Southeast Los Angeles community. This Community Plan includes goals and policies addressing land use and urban design, mobility, community facilities, and infrastructure issues in the community, with the intent of encouraging responsible development that would enhance the quality of life for residents; create healthy and sustainable neighborhoods; and promote business development that serves the needs of the community.

#### **Southeast Los Angeles Community Plan Implementation Overlay**

The Southeast Los Angeles Community Plan Implementation Overlay (CPIO) District implements the goals and policies of the Southeast Los Angeles Community Plan and contains supplemental development regulations. The project site is located within this CPIO and is part of Subarea K – Compatible Industrial. This subarea applies to industrial uses located adjacent to residential neighborhoods and allows light industrial and commercial uses, while restricting noxious and other incompatible uses. One of

the purposes of the CPIO is to protect residential uses from adjacent industrial uses through appropriate screening, buffering, and use compatibility. Subarea K seeks to preserve and revitalize industrial land in the Southeast Los Angeles community and improve the aesthetics of industrial buildings and the quality of life for neighborhoods next to industrial uses.

Community facilities, warehouse and storage buildings, and auto-related uses are allowed in Subarea K. The CPIO also includes development standards for building height, density/floor area ratio, building disposition, building design, parking, signs, equipment, fencing and walls, utilities, lighting, and open storage, in addition to the zoning regulations in the LAMC.

### **Zoning Regulations**

The site is zoned M1-1-CPIO (Limited Industrial-Height District 1-CPIO). Section 12.17.6 of the LAMC contains the development standards for the M1 zone. The standards include permitted uses, restrictions, and required lot areas, yard widths, and loading space. Requirements for off-street parking, building heights, landscaping, signs, and other overlay zones and building regulations are also outlined in the LAMC.

### **3.2.2 Existing Environment**

The existing visual character of the site is typical for an older industrial/warehouse site with large, metal-sheathed, or concrete warehouse-type structures, and large paved areas with little buffering or landscaping. Given the type of structures on the site, the structures' ages are apparent and the graffiti and other maintenance issues can be seen. Figure 3.2-1 is the photograph of the existing buildings at the project site as viewed from East 111th Place looking west. Figure 3.2-2 shows the existing backside of the site, along the railroad tracks, from East Lanzit Avenue.

The existing buildings reflect the industrial nature of warehouses from the 1950s. In addition, the existing perimeter fencing is an open iron rail picket fence allowing views into the site from the adjacent East 111<sup>th</sup> Place and the residential units that face the site (at least where the existing buildings do not fall along the edge of the property). Similar to the north side of the site, the south side along East Lanzit Avenue and the UPRR tracks has a similar fence along the edge of the site (between the site and the UPRR tracks) with an additional existing chain-link fence along the outside edge of the UPRR tracks (between the tracks and East Lanzit Avenue).

**Figure 3.2-1: Existing Views of the project site from East 111th Place**



**Looking West**



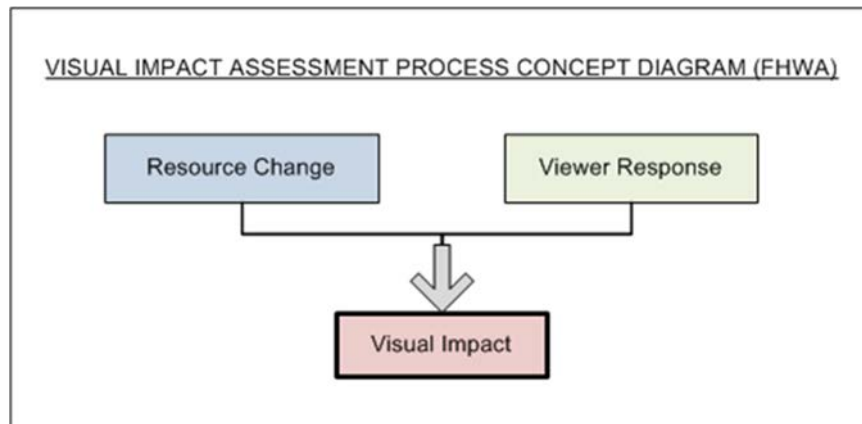
**Looking East**

**Figure 3.2-2: Existing View of the project site from East Lanzit Avenue**



### 3.2.3 Visual Impact Analysis

The analysis of the project's visual impacts generally follows the guidance outlined in the *Visual Impact Assessment for Highway Projects*, as published by the Federal Highway Administration (FHWA). The methodology includes the analysis of the resource change and the viewer response, as shown in the following diagram.



### 3.2.3.1 Viewer Response Analysis

#### Viewer Groups

The population affected by the project could also be called viewers of the project. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed. Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the proposed project.

In evaluating viewer response to visual resource changes, based on the existing and proposed visual character of the site, two viewer groups were identified, including:

- **Neighbors:** Neighbors are people who have views of the site from their home or office and therefore have longer-term views of the site for a typical day. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, or educational, land uses may include neighbors or viewer groups with distinct reasons for being around the project site and therefore having distinct responses to changes in visual resources. For this project, this group of viewers includes community residents and business/facility owners, employees, and customers.
- **Roadway users:** Roadway users are people who have views from the road. This group is divided into two categories – automobile drivers, which would also include delivery or other roadway drivers, pedestrians, and bicyclists. This division is due in large part to the speed of travel along the roadways. For this project, this group of viewers includes automobile drivers/riders and pedestrians/ and bicyclists.

#### Viewer Response

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions, viewer exposure, and viewer sensitivity.

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Location relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. Quantity refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. Duration refers to how long a viewer can keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. Activity relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings? The more they are observing their surroundings, the more sensitivity viewers will have of changes to visual resources.

Awareness relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, viewers will likely be more sensitive to visible changes.

**Viewer Sensitivity**

Community residents in the vicinity of the proposed facility are considered highly sensitive to changes in their visual environment because they have long-term, frequent and multiple views of this site. Commercial and institutional workers and visitors are considered moderately sensitive to changes in their visual environment because they are generally familiar with the existing visual environment. Local commuters are also considered moderately sensitive to changes in their visual environment because they have passing views of the project site. Occasional motorists are not considered sensitive to changes in the visual environment, as they would not be familiar with the existing visual environment.

In general, most viewers traveling along the roadway would have a moderate awareness of the surroundings, since their primary focus is on traffic and the roadway, or on finding the location they are looking for. This could also be expected of bicyclists, since they, in addition to these concerns, have the added concern of avoiding cars and pedestrians while traveling along the roadway. However, pedestrians would have a much greater potential for awareness since they are traveling slower. Similarly, due to their frequent travel in the area, pedestrian residents would likely have a greater awareness. Business/facilities owners and employees might be expected to have a higher awareness due to the frequency of views, while their customers would likely have a lower awareness

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group. The results are illustrated in Table 3.2-1.

**Table 3.2-1: Viewer Group Response Summary**

Viewer Group	Exposure			Sensitivity			Total
	Location	Duration	Quantity	Activity	Aware	Values	
<b>Community Residents</b>	Mod	Mod	Mod	Mod	High	High	<b>Mod High</b>
<b>Business/Facility Owners, Employees, and Customers</b>	Mod	Mod Low	Mod Low	Mod	Mod	High	<b>Mod</b>
<b>Local Street Users – Automobiles</b>	Mod	Low	Low	Mod	Mod	Mod	<b>Mod</b>
<b>Local Street Users – Pedestrians and Bicyclists</b>	Mod	Low	Low	Mod	Mod	High	<b>Mod</b>

Note: Responses follow the guidance in FHWA's 1981 Visual Impact Assessment for Highway Projects.

### **Resource Change (Key Viewpoint) Analysis**

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project site before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts.

- Visual character includes attributes such as form, line, color, texture, and is used to describe the visual environment, not evaluate; in that these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer's response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator.
- Visual quality is evaluated by considering the vividness, intactness, and unity present in the visual environment. These three criteria are defined below:
  - Vividness is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.
  - Intactness is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
  - Unity is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

Public attitudes validate the assessed level of quality and predict how changes to the view can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project.

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select some key views associated with visual assessment units that would most clearly demonstrate the change in the project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. For this analysis, two key viewpoints were analyzed for impacts on the visual environment. For each key viewpoint, there is descriptive text of the orientation, existing visual character/quality, proposed project features, anticipated changes to the visual environment, anticipated viewer response, and the resulting visual impact anticipated in each view. Detailed analysis is presented in the Visual Impact Assessment Technical Memorandum (Parsons 2021).

#### ***Key Viewpoint 1***

Figure 3.2-3 shows an existing view along with a photo simulation of the anticipated changes to the visual environment of Key Viewpoint #1.

**Figure 3.2-3: Existing and Simulated Views of the EBMF on East 111th Place**

**Viewpoint Location**



**EXISTING VIEW**



**SIMULATED VIEW**



Note: The post-construction simulation shows the potential conceptual building design based on similar facilities constructed by the City. However, the final appearance will be developed as part of the final design process.



**Orientation:** The photograph is taken from a point along the sidewalk of East 111<sup>th</sup> Place looking east toward the project site. The perspective is from the view of a pedestrian on the north side of the street.

**Existing Visual Character/Quality:** The existing visual character of this view is typical of older commercial/warehouse developments with an older concrete warehouse structure and the majority of the site paved. Street elements include street signs, light poles, and overhead power lines.

Overall, the visual quality of the existing view is estimated to be low, with low vividness and unity, and moderate intactness.

**Proposed Project Features:** The proposed project features in this view include the placement of a new two-story structure within the site and a decorative fence and landscaping along East 111<sup>th</sup> Place.

**Changes to Visual Character:** The biggest change to the view will be the removal of the existing building and construction of the new facility structures, along with the softening elements along the roadway.

**Anticipated Viewer Response:** It is anticipated that viewers would have a moderate to moderately high sensitivity to any changes in the visual environment. Residents, pedestrians, and bicyclists would have a higher degree of sensitivity than drivers and travelers on the roadway. Within this view, the groups most affected are anticipated to be residents, particularly those that face the facility along, with pedestrians, and sidewalk users, with automobile traffic less affected due to the shorter duration of their views.

**Resulting Visual Impact:** The resulting changes to the views of the project site are not expected to be substantial due to the nature of the changes. The replacement of the old warehouse structure with a new building may increase the visual acceptance of the facility, given the conceptual design provides more interest to the façade. The addition of the decorative fence and landscaping along East 111<sup>th</sup> Place would also enhance the current low aesthetic appeal of the streetscape along the road.

Table 3.2-2 rates the anticipated changes in visual character and quality, as well as their effects on the viewers of Key Viewpoint #1.

**Table 3.2-2: Key Viewpoint #1  
Anticipated Changes in Visual Character & Quality, and Their Effect on Viewers**

	Attribute	Ratings <sup>7</sup>		Remarks (Anticipated changes are shown in the blue rows)
		Existing Condition	Proposed Condition <sup>5</sup>	
<b>Visual Quality<sup>1</sup></b>	Vividness/Memorability	1.80	3.00	
	Intactness	2.70	2.90	
	Unity	1.75	2.75	

**Table 3.2-2: Key Viewpoint #1  
Anticipated Changes in Visual Character & Quality, and Their Effect on Viewers**

	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>2.08</b>	<b>2.88</b>	Percent Change = +38%
<b>Visual Character<sup>2</sup></b>	Scale	2.30	2.40	
	Diversity	1.50	2.25	
	Continuity	2.35	2.75	
	Dominance	2.25	2.30	
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>2.10</b>	<b>2.42</b>	Percent Change = +15%
<b>Viewer Exposure<sup>3</sup></b>	Location of Views	4.25		
	Number of Viewers	2.00		
	Duration of Views	3.80		
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>3.35</b>		Moderate Exposure
<b>Viewer Sensitivity<sup>4</sup></b>	Attention of Viewer	4.00		
	Viewer Awareness	4.00		
	Local Values and Goals	3.80		
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>3.93</b>		Moderately High Sensitivity

1 – Vividness = memorable, striking (5) to plain (1); Intactness = free of encroaching elements (5) to cluttered/lacking integrity (1); and Unity = coherent/harmonious (5) to disjointed/jarring (1). A rating below 1 would only be used for an extremely low rating.

2 – Scale = small (5) to monumental (1); Diversity = complex (5) to monolithic (1); Continuity = harmonious (5) to dissonant (1); and Dominance = balanced (5) to prominent/unbalanced (1). A rating below 1 would only be used for an extremely low rating.

3 – Location = foreground (5) to distant views (1); Number = over 100,000 (5) to 20 or less (1); Duration = over 4 hours (5) to less than 1 minute (1). A rating below 1 would only be used for an extremely low rating.

4 – Activity = attention on views (5) to attention focused away (1); Awareness = High (5) to Low (1); and Values = High (5) to Low expectations (1). A rating below 1 would only be used for an extremely low rating.

5 – Proposed (post-construction condition) with avoidance and minimization measures in place. Avoidance and minimization measures are described in Section 11 of this report.

6 – Total = sum of attributes divided by number of attributes – e.g. Overall Visual Quality = (vividness+intactness+unity)/3.

7 – Ratings: 1 = Low, 3 = Moderate, 5 = High

Note: Ratings made by California Registered Landscape Architect based on guidance in FHWA's 1981 Visual Impact Assessment for Highway Projects.

Note that the rating table was prepared based on the assumption that the following features would be included in the project design:

**PDF-V-1:** The project shall be designed to provide vegetative screening along the east and west sides of the site to minimize the views into the proposed facility from the two community assets - Animo James B. Taylor Charter Middle School on the east and Kedren Health Community Center on the west.

**PDF-V-2:** The project shall be designed to set back the proposed building along East 111<sup>th</sup> Place to allow for landscaping along the street to soften the height of the building on the streetscape.

**PDF-V-3:** Where feasible, the project shall be designed to allow for vine plantings along the inside of the wall along the railroad tracks and provide vine portals to allow the vines to grow over the backside of the wall to minimize the surface area for graffiti.

### ***Key Viewpoint 2***

Figure 3.2-3 shows the location of Key Viewpoint 1 and an existing view along with a photo simulation of the anticipated changes to the visual environment of Key Viewpoint #2.

**Orientation:** The photograph is taken from the south side of the sidewalk along East Lanzit Avenue looking northeast across the existing railroad tracks towards the project site. The perspective is from the view of a pedestrian.

**Existing Visual Character/Quality:** The existing visual character of this site shows the back wall to the existing warehouse on the site. The site is located across a set of existing railroad tracks that will not be affected or altered by the proposed project. Overall, the visual quality of the existing view is estimated to be low, with low vividness, intactness, and unity.

**Proposed Project Features:** The proposed project features in this view include the placement of a perimeter wall along the edge of the existing railroad tracks. In addition, the roofline of the proposed service center structure may be visible above the wall.

**Changes to Visual Character:** The biggest change to the view will be the removal of the old wall and the construction of the new wall, with elements of the proposed maintenance facility visible above portions of the wall.

**Anticipated Viewer Response:** It is anticipated that viewers would have a moderately low to moderate sensitivity to any changes in the visual environment. Residents, pedestrians, and bicyclists would have a higher degree of sensitivity than drivers and travelers on the roadway. Within this view, the groups most affected are anticipated to be residents, particularly those that face the facility along, with pedestrians, and sidewalk users, with automobile traffic less affected due to the shorter duration of their views.

**Resulting Visual Impact:** The resulting changes to the view are not expected to be substantial due to the nature of the changes. The replacement of the old wall with the new one would not substantially alter the overall view of the site.

Table 3.2-3 rates the anticipated changes in visual character and quality, as well as their effect on the viewers of Key Viewpoint #2.

**Figure 3.2-4: Existing and Simulated Views of the EBMF on East Lanzit Avenue**

**Viewpoint Location**



**EXISTING VIEW**



**SIMULATED VIEW**



Note: The post-construction simulation shows the potential wall design based on similar facilities constructed by the City. However, the final appearance will be developed as part of the final design process. In addition, the posts and chain-link along the railroad are not part of the proposed project and there will be no change to the existing railroad right-of-way.

**Table 3.2-3: Key Viewpoint #2  
Anticipated Changes in Visual Character & Quality, and Their Effect on Viewers**

	Attribute	Ratings <sup>7</sup>		Remarks (Anticipated changes are shown in the blue rows)
		Existing Condition	Proposed Condition <sup>5</sup>	
<b>Visual Quality<sup>1</sup></b>	Vividness/Memorability	1.00	2.00	
	Intactness	1.25	2.00	
	Unity	1.50	2.00	
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>1.25</b>	<b>2.00</b>	Percent Change = +60%
<b>Visual Character<sup>2</sup></b>	Scale	1.75	2.00	
	Diversity	1.00	2.25	
	Continuity	1.00	1.85	
	Dominance	1.50	1.75	
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>1.31</b>	<b>1.96</b>	Percent Change = +49%
<b>Viewer Exposure<sup>3</sup></b>	Location of Views	4.25		
	Number of Viewers	2.00		
	Duration of Views	3.80		
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>3.35</b>		Moderate Exposure
<b>Viewer Sensitivity<sup>4</sup></b>	Attention of Viewer	4.00		
	Viewer Awareness	4.00		
	Local Values and Goals	3.80		
	<b>TOTAL AVERAGE<sup>6</sup></b>	<b>3.93</b>		Moderately High Sensitivity

1 – Vividness = memorable, striking (5) to plain (1); Intactness = free of encroaching elements (5) to cluttered/lacking integrity (1); and Unity = coherent/harmonious (5) to disjointed/jarring (1). A rating below 1 would only be used for an extremely low rating.

2 – Scale = small (5) to monumental (1); Diversity = complex (5) to monolithic (1); Continuity = harmonious (5) to dissonant (1); and Dominance = balanced (5) to prominent/unbalanced (1). A rating below 1 would only be used for an extremely low rating.

3 – Location = foreground (5) to distant views (1); Number = over 100,000 (5) to 20 or less (1); Duration = over 4 hours (5) to less than 1 minute (1). A rating below 1 would only be used for an extremely low rating.

4 – Activity = attention on views (5) to attention focused away (1); Awareness = High (5) to Low (1); and Values = High (5) to Low expectations (1). A rating below 1 would only be used for an extremely low rating.

5 – Proposed (post-construction condition) with avoidance and minimization measures in place. Avoidance and minimization measures are described in Section 11 of this report.

6 – Total = sum of attributes divided by number of attributes – e.g. Overall Visual Quality = (vividness+intactness+unity)/3.

7 – Ratings: 1 = Low, 3 = Moderate, 5 = High

Note: Ratings made by California Registered Landscape Architect based on guidance in FHWA's 1981 Visual Impact Assessment for Highway Projects.

### 3.2.4 CEQA Checklist

This section presents the responses to Appendix G of the CEQA Checklist under Aesthetics.

*a) Would the project have a substantial adverse effect on scenic vista?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections A.1 and A.2); City of Los Angeles General Plan; Caltrans SER, Chapter 27; Visual Impact Assessment (Parsons, 2022).

**Comment:** A scenic vista provides focal views of objects, settings, or features of visual interest; or panoramic views of large geographic areas of scenic quality, primarily from a given vantage point. A significant impact may occur if the project either introduced incompatible visual elements within a public field of view containing a scenic vista or substantially altered a view of a scenic vista.

**No impact.** No scenic vistas or scenic resources have been identified within the immediate areas surrounding the proposed site. Thus, no impact on scenic vistas would occur with the project.

*b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section A.1 and E.3); City of Los Angeles General Plan; Caltrans SER; California Scenic Highway System List; Visual Impact Assessment (Parsons, 2022).

**Comment:** A significant impact may occur where scenic resources within a State Scenic Highway would be damaged by or removed for the project. For purposes of this analysis, scenic resources include trees, rock outcrops, and historic buildings.

**No impact.** There is no All-American Road, National Scenic Byway, California State Scenic Highway, or City Scenic Highway near the site or visible from the site. There is also no streetscape plan or scenic corridor plan that encompasses the site or surrounding streets. No impacts on a State-designated or City-designated Scenic Highway would occur.

*c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

**Reference:** L.A. CEQA Thresholds Guide (Sections A.1 and A.3); City of Los Angeles General Plan; Caltrans SER, Chapter 27; Aesthetics; Visual Impact Assessment (Parsons, 2022).

**Comment:** A significant impact may occur if the project introduces incompatible visual elements to the project site or visual elements that would be incompatible with the character of the area surrounding the project site or conflict with applicable zoning and other regulations governing scenic quality.

**Less than significant impact.** The existing site is developed with warehouses and the buildings reflect the industrial nature of warehouses from the 1950s, as shown partly in Figure 3.2-1. In addition, the existing perimeter fencing is an open iron rail picket fence allowing views into the site from East 111<sup>th</sup> Place and the residential units that face the site (at least where the existing buildings do not fall along the edge of the property). Similar to the north side of the site, the south side along East Lanzit and the UPRR has a similar fence along the edge of the site (between the site and the UPRR tracks) with an additional existing chain-link fence along the outside edge of the UPRR tracks (between the tracks and East Lanzit Avenue), as shown in Figure 3.2-2.

The proposed facility would include a new 2-story building with maintenance facilities on the first floor and offices and crew parking on the second floor, as illustrated in Figures 2-4 and 2-5.

The proposed facility would be surrounded by a perimeter wall and fence similar to the LADOT downtown facility at 454 East Commercial Street in Los Angeles. This will include a minimum of 6-foot-high block walls on the eastern, southern, and western boundaries of the project site and a combination block wall and steel mesh fence, with steel mesh gates, along the site frontage on 111<sup>th</sup> Place (northern boundary). The material and construction of the buildings will reflect an industrial architectural design aesthetic consisting of exposed steel, masonry, and concrete, as shown in the conceptual site elevation in Figure 2-6.

Given that the existing site is developed industrial-style buildings from the 1950s that have limited architectural character, the proposed structures would appear as a visual improvement to the character of the site and the adjacent neighborhood.

In addition, the project would be designed to comply with applicable development standards and design guidelines in the Southeast Los Angeles Community Plan, Southeast Los Angeles CPIO District, and the City's Zoning Regulations (SC-LU-1), as discussed in the Community Impact Assessment Report (Parsons, 2022) for the project. These standards include allowable floor area ratios, massing, building height, architectural elements/building design, parking, signs, lighting, open space and setbacks, landscaping, sustainability features, equipment, fencing and walls, utilities, and industrial design guidelines. Impacts related to changes in visual quality would be less than significant.

*d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**Reference:** L.A. CEQA Thresholds Guide (Section A.4); City of Los Angeles General Plan; Caltrans SER, Chapter 27; Aesthetics; Visual Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project caused a substantial increase in ambient illumination levels beyond the property line or caused new lighting to spill over onto light-sensitive land uses such as residential, some commercial, and institutional uses that require minimum illumination for proper function, and natural areas.

Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare can be either a daytime or nighttime occurrence caused by the reflection of sunlight or artificial light from reflective surfaces, such as window glass. Daytime glare is common in urban areas and is typically associated with mid-to high-rise buildings with exterior façades that are largely or entirely comprised of highly-reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point-source lighting that contrasts with existing low ambient light conditions.

**Less than significant impact.** Given the industrial/warehouse use of the site for over 60 years, the presence of building lights and outdoor area lighting for security and safety, and the existing streetlights on East 111th Place and Lanzit Avenue, the anticipated lighting levels from the proposed use would be comparable to existing lighting levels on the site. One advantage of modern fixtures vs. older lighting fixtures is that modern lights contain cut-off characteristics that reduce light spillover into adjacent properties. In addition, the project would be designed to be in compliance with the design guidelines in the Southeast Los Angeles Community Plan's Appendix B (Southeast Los Angeles Design Guidelines) regarding lighting for security purposes and avoiding overspill into adjacent properties, in accordance with SC-LU-1. Impacts on light and glare would be less than significant and no mitigation is required.



### 3.3 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation</b>	<b>Less Than Significant</b>	<b>No Impact</b>
<b>Would the project</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
agricultural use or conversion of forest land to non-forest use?			

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### **3.3.1 Regulatory Setting**

This section describes existing laws and regulations related to agriculture and forestry resources that apply to the project.

#### **3.3.1.1 Federal**

There are no federal regulations that specifically address impacts related to agriculture, although there are designated National Forests near the City designated for permanent preservation as open space.

#### **3.3.1.2 State**

##### **Farmland Mapping and Monitoring Program**

The California Farmland Mapping and Monitoring Program (FMMP) tracks California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status, with the best quality land designated as Prime Farmland. Other farmland designations include Farmland of Statewide Importance, Unique Farmland, Grazing Land, Farmland of Local Importance, and Farmland of Local Potential. Urban and Built-Up land includes land occupied by structures at a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

##### **California Land Conservation Act/Williamson Act**

The California Land Conservation Act of 1965 or Williamson Act allows local governments to enter into contracts with private landowners restricting the conversion of agricultural land or open space use to urban land uses within a set time frame. In turn, landowners pay lower property tax assessments (based on farming and open space uses as opposed to full market value).

#### **3.3.1.3 Local**

##### **City of Los Angeles Zoning Regulations**

Chapter 1, Article 2 of the LAMC contains the City's Zoning Regulations. Areas zoned as A1 and A2 Agricultural Zones allow farming, nurseries, aviaries, and apiaries, as well as the keeping of livestock.

### 3.3.2 Existing Environment

The site is developed with two industrial buildings and does not support agricultural uses. Under the FMMP, the project site and surrounding areas are designated as Urban and Built-Up land, except for the linear SCE transmission line right-of-way, which is designated as Farmland of Statewide Importance. This Farmland of Statewide Importance area is located approximately 250 feet west of the site and consists of plant nurseries and small gardens under high-voltage power transmission lines that run west of and parallel to Stanford Avenue. These gardens and nurseries are not under Williamson Act contracts.

The nearest forest to the site is the Angeles National Forest, which is located at the San Gabriel Mountains, approximately 20 miles to the north.

### 3.3.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**Reference:** California Farmland Mapping and Monitoring Program.

**Comment:** A significant impact may occur if the proposed project will result in the conversion of state-designated agricultural land from agricultural use to non-agricultural use.

**No impact.** The proposed EBMF would be located on developed parcels designated as Urban and Built-Up land and would not affect adjacent plant nurseries and gardens on land designated as Farmland of Statewide Importance. No conversion of Farmland to other uses would occur with the EBMF. The project would have no impact on designated Farmlands. No mitigation is required.

*b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**Reference:** City of Los Angeles Zoning Regulations and Zoning Map; California Department of Conservation Williamson Act Program.

**Comment:** A significant impact may occur if the proposed project were to result in the conversion of land zoned for agricultural use or land subject to a Williamson Act contract, from agricultural use to non-agricultural use.

**No impact.** The proposed EBMF site is located on the land zoned as M1-1-CPIO (Limited Industrial-Height District 1-CPIO) and there are no lands with A1 or A2 zoning

near the site. The site is not zoned for agricultural uses and would not convert the existing on-site industrial use to a different land use. In addition, the project would not convert adjacent lands that are zoned as M1-1, R2 (Multiple Family Residential), or PF (Public Facilities) to other uses. Also, no agricultural land under a Williamson Act contract would be affected by the project. No conflict with the zoning or agricultural use of adjacent lands would occur. The EBMF would have no impact on an agricultural zone or a Williamson Act contract. No mitigation is required.

*c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**Reference:** US Forest Service National Forest Locator Map.

**Comment:** A significant impact would occur if the project would conflict with existing zoning or causes the rezoning of forest land or timberland.

**No impact.** The proposed EBMF is not located in or near the Angeles National Forest, which is the nearest forest to the site. There is no timberland on or near the site. The project would not conflict with the zoning of land within the National Forest nor have any effect on timberland. No impact would occur and no mitigation is required.

*d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

**Reference:** US Forest Service National Forest Locator Map.

**Comment:** See comment above.

**No impact.** The proposed EBMF site is not located in forest land. No conversion of forest land to other uses would occur with the project. No impact to forest land would occur and no mitigation is required.

*e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land non-forest use?*

**Reference:** California Farmland Mapping and Monitoring Program; US Forest Service National Forest Locator Map.

**Comment:** See comment above.

**No impact.** The EBMF would retain the existing industrial use of the project site and would not lead to the conversion of adjacent lands to other uses. As there are no agricultural uses or forests near the site, no impacts on agriculture and forest resources related to land conversion are expected, and no mitigation is required.

### 3.4 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations:

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An Air Quality Impact Assessment Technical Memorandum (TAHA, 2021) was prepared for the project and is provided in Appendix B. The findings of the assessment are summarized below.

#### 3.4.1 Regulatory Setting

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of an overall endeavor to prevent further deterioration and to facilitate improvement in air quality. This section describes existing laws and regulations related to air quality that apply to the project.

##### 3.4.1.1 Federal

###### Clean Air Act

The federal Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions to protect public health and welfare. The United States Environmental Protection Agency (USEPA) is responsible for the implementation and enforcement of the CAA, which establishes federal National Ambient Air Quality Standards (NAAQS), specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also

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mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS.

The six principal pollutants for which NAAQS have been promulgated include ozone O<sub>3</sub>, respirable and fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>, respectively), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). These pollutants are referred to as “criteria air pollutants” as a result of the specific standards, or criteria, which have been adopted for them. The NAAQS are listed in Table 3.4-1.

**Table 3.4-1: Ambient Air Quality Standards**

Pollutant	Averaging Period	Federal Standard <sup>a,b</sup>	California Standard <sup>a,b</sup>	South Coast Air Basin Attainment Status <sup>c</sup>	
				Federal Standard <sup>d</sup>	California Standard <sup>d</sup>
Ozone (O <sub>3</sub> )	1-hour	—	0.09 ppm (180 µg/m <sup>3</sup> )	—	Non-Attainment
	8-hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.07 ppm (137 µg/m <sup>3</sup> )	Non-Attainment (Extreme)	Non-Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	24-hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>	Attainment	Non-Attainment
	Annual	—	20 µg/m <sup>3</sup>		
Fine Particulate Matter (PM <sub>2.5</sub> )	24-hour	35 µg/m <sup>3</sup>	—	Non-Attainment (Serious)	Non-Attainment
	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	1-hour	35 ppm (40 mg/m <sup>3</sup> )	20 ppm (23 mg/m <sup>3</sup> )	Attainment	Attainment
	8-hour	9 ppm (10 mg/m <sup>3</sup> )	9.0 ppm (10 mg/m <sup>3</sup> )		
Nitrogen Dioxide (NO <sub>2</sub> )	1-hour	0.10 ppm (188 µg/m <sup>3</sup> )	0.18 ppm (339 µg/m <sup>3</sup> )	Unclassified/ Attainment	Attainment
	Annual	0.053 ppm (100 µg/m <sup>3</sup> )	0.030 ppm (57 µg/m <sup>3</sup> )		
Sulfur Dioxide (SO <sub>2</sub> )	1-hour	0.075 ppm (196 µg/m <sup>3</sup> )	0.25 ppm (655 µg/m <sup>3</sup> )	Unclassified/ Attainment	Attainment
	3-hour	0.5 ppm (1,300 µg/m <sup>3</sup> )	—		
	24-hour	0.14 ppm (365 µg/m <sup>3</sup> )	0.04 ppm (105 µg/m <sup>3</sup> )		
	Annual	0.03 ppm (80 µg/m <sup>3</sup> )	—		

**Table 3.4-1: Ambient Air Quality Standards**

Pollutant	Averaging Period	Federal Standard <sup>a,b</sup>	California Standard <sup>a,b</sup>	South Coast Air Basin Attainment Status <sup>c</sup>	
				Federal Standard <sup>d</sup>	California Standard <sup>d</sup>
Lead (Pb)	30-day average	—	1.5 µg/m <sup>3</sup>	Partial Non-Attainment <sup>e</sup>	Attainment
	Rolling 3-month average	0.15 µg/m <sup>3</sup>	—		
Sulfates	24-hour	—	25 µg/m <sup>3</sup>	—	Attainment
Hydrogen Sulfide (H <sub>2</sub> S)	1-hour	—	0.03 ppm (42 µg/m <sup>3</sup> )	—	Unclassified

ppm = parts per million by volume  
µg/m<sup>3</sup> = micrograms per cubic meter

<sup>a</sup> An ambient air quality standard is a concentration level expressed in either parts per million or micrograms per cubic meter and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are expressed as a concentration that is not to be equaled or exceeded.

<sup>b</sup> Ambient Air Quality Standards based on the 2016 AQMP.

<sup>c</sup> "Attainment" means that the regulatory agency has determined based on established criteria, that the Air Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Air Basin does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.

<sup>d</sup> California and Federal standard attainment status based on SCAQMD's 2016 AQMP and 2018 updates from CARB. <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>.

<sup>e</sup> An attainment re-designation request is pending.

Sources: USEPA, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

CARB, Ambient Air Quality Standards May 4, 2016, <https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf>.

### 3.4.1.2 State

#### California Clean Air Act

The California Clean Air Act (CCAA) requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The California Air Resources Board (CARB) is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table 3.4-1 above includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the state.

### **California Code of Regulations**

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended, or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes of any location. In addition, Section 93115 in Title 17 of the CCR states that the operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

### **CARB Diesel Regulations**

CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. Statewide regulations designed to further reduce DPM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed by State agencies. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

### **California Air Toxics Program**

The California Air Toxics Program was established to address potential health effects from exposure to toxic substances in the air. CARB has promulgated a number of Airborne Toxic Control Measures (ATCMs), both for stationary and mobile sources, including On-Road and Off-Road Vehicle Rules. These ATCMs include measures such as limits on heavy-duty diesel motor vehicle idling and emission standards for off-road diesel construction equipment to reduce public exposure to diesel particulate matter (DPM) and other toxic air contaminants (TACs). The California Air Toxics Program is supplemented by the Assembly Bill (AB) 2588 Air Toxics “Hot Spots” program and Senate Bill (SB) 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce the risks through the implementation of a risk management plan.

#### **3.4.1.3 Regional**

##### **South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan**

The SCAQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside, and San Bernardino Counties, including the Coachella Valley. The SCAQMD, together with the Southern California Association of Governments (SCAG), has the responsibility for ensuring that national and state ambient air quality standards are achieved and maintained for the SCAB.

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of Air Quality Management Plans (AQMP), which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with



the NAAQS and CAAQS in a timely manner. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for O<sub>3</sub> and PM<sub>2.5</sub> are met and that public health is protected to the maximum extent feasible. It is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies, and reductions from federal sources, which include aircraft, locomotives, and ocean-going vessels. These strategies are to be implemented in partnership with the CARB and USEPA. The AQMP also incorporates the transportation strategy and transportation control measures from the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies.

SCAG is required by law to ensure that transportation activities “conform” to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2016 AQMP for the SCAB, are based on the 2016-2040 RTP/SCS. On September 3, 2020, SCAG’s Regional Council adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS was determined to conform to the federally-mandated SIP, for the attainment and maintenance of NAAQS standards. CARB accepted SCAG’s determination that the SCS met the applicable State GHG emissions targets. The 2020-2045 RTP/SCS will be incorporated into the forthcoming 2022 AQMP.

### **SCAQMD Air Quality Guidance Documents**

The SCAQMD published the CEQA Air Quality Handbook (approved by the SCAQMD Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses. However, the SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.

The SCAQMD has published a guidance document called the Final Localized Significance Threshold Methodology for CEQA evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during the construction or operation of a project. The SCAQMD adopted additional guidance regarding PM<sub>2.5</sub> emissions in a document called Final Methodology to Calculate Particulate Matter (PM)<sub>2.5</sub> and PM<sub>2.5</sub> Significance Thresholds. The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Final Localized Significance Threshold Methodology.

### **SCAQMD Rules and Regulations**

The SCAQMD has published a Rule Book to regulate sources of air pollution in the SCAB and to help achieve air quality standards for land use development projects, which include, but are not limited to the following:

- Regulation IV – Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions, and breakdown events. The following is a list of rules which apply to the project:
  - Rule 401 – Visible Emissions: This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
  - Rule 402 – Nuisance: This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
  - Rule 403 – Fugitive Dust: This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM<sub>10</sub> emissions to less than 50 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Measures include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, a contingency plan may be required if deemed necessary.
- Regulation XIV – Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units that emit toxic air contaminants or other non-criteria pollutants. The following is a list of rules which may apply to the project:
  - Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities: This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

#### **3.4.1.4 Local**

##### **City of Los Angeles General Plan Air Quality Element**

The City's General Plan Air Quality Element sets forth the goals, objectives, and policies which guide the City in the implementation of its air quality improvement programs and strategies. A number of these goals, objectives, and policies related to land use development and traffic mobility, minimizing particulate emissions from construction activities, discouraging single-occupancy vehicle trips, managing traffic congestion during peak hours, and increasing energy efficiency in City facilities and private developments.

##### **Plan for a Healthy Los Angeles**

The Plan for a Healthy Los Angeles lays the foundation to create healthier communities for all residents in the City. As an element of the General Plan, it provides a high-level policy vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. With a focus on public health and safety, the Plan for a Healthy Los Angeles provides a roadmap for addressing the most basic and essential quality-of-life issues: safe neighborhoods, a clean environment (i.e., improved ambient and indoor air quality), the opportunity to thrive, and access to health services, affordable housing, and healthy and sustainably produced food.

##### **Transportation Control Measures**

The City is responsible for the implementation of transportation control measures as outlined in the AQMP. The City can fund infrastructure that contributes to improved air quality through capital improvement programs. Following CEQA requirements and the CEQA review process, the City assesses the air quality impacts of projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces the implementation of such mitigation measures.

#### **3.4.2 Existing Environment**

##### **3.4.2.1 Existing Local Air Quality**

The City of Los Angeles is located within the South Coast Air Basin (SCAB), which is known to have high concentrations of air pollution. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California. However, the SCAB still fails to meet the State and/or national standards for O<sub>3</sub>, particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). In addition, Los Angeles County still fails to meet the national standard for Pb. The Los Angeles County portion of the SCAB is designated as attainment or maintenance of the ambient air quality standards for CO, NO<sub>2</sub>, and SO<sub>2</sub>.

SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin and has divided the SCAB into 38 source receptor areas (SRAs) in which 31 monitoring stations operate. The proposed project site is located in SRA 12 (South Central Los Angeles County). The monitoring station that collects ambient air quality

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data to represent air quality conditions in SRA 12 is the Compton-700 North Bullis Road Monitoring Station, which measures ambient concentrations of O<sub>3</sub>, NO<sub>2</sub>, CO, and PM<sub>2.5</sub>. As the Compton monitoring station is not equipped to measure concentrations of PM<sub>10</sub>, data has been supplemented from the Central Los Angeles County monitoring station at 1630 North Main Street in downtown Los Angeles. Table 3.4-2 presents the air quality data statistics during the time period 2018–2020. As shown, ambient concentrations of O<sub>3</sub> and PM<sub>2.5</sub> exceeded the associated NAAQS and CAAQS numerous times over the three-year period. Additionally, concentrations of PM<sub>10</sub> measured at the North Main Street station exceeded the CAAQS in all three years. Concentrations measured at the Compton and North Main Street monitoring stations reflect the nonattainment status of the Los Angeles County portion of the SCAB.

**Table 3.4-2: Local Ambient Air Quality Data – South Central Los Angeles County**

Pollutant	Air Quality Standards	Statistics	2018	2019	2020
Ozone (O <sub>3</sub> )	<u>1-hr. Average (ppm)</u> State Standard: 0.090 ppm	Maximum 1-hr. Concentration Frequency Std. Exceeded	0.075 0	0.100 1	0.152 3
	<u>8-hr. Average (ppm)</u> State/Nat Standard: 0.070 ppm	Maximum 8-hr. Concentration Frequency Std. Exceeded	0.063 0	0.079 1	0.115 4
Nitrogen Dioxide (NO <sub>2</sub> )	<u>1-hr. Average (ppm)</u> State Standard: 0.18 ppm National Standard: 0.10 ppm	Maximum 1-hr. Concentration Frequency Std. Exceeded Frequency Std. Exceeded	0.068 0 0	0.070 0 0	0.073 0 0
	Carbon Monoxide (CO)	<u>1-hr. Average (ppm)</u> State Standard: 20.0 ppm National Standard: 35.0 ppm	Maximum 1-hr. Concentration Frequency Std. Exceeded Frequency Std. Exceeded	4.7 0 0	3.8 0 0
		<u>8-hr. Average (ppm)</u> State Standard: 9.0 ppm National Standard: 9.0 ppm	Maximum 8-hr. Concentration Frequency Std. Exceeded Frequency Std. Exceeded	3.5 0 0	3.2 0 0
Respirable Particulate Matter (PM <sub>10</sub> )	<u>24-hr. Average (µg/m<sup>3</sup>)</u> State Standard: 50 µg/m <sup>3</sup> National Standard: 150 µg/m <sup>3</sup>	Maximum 24-hr. Concentration Frequency Std. Exceeded Frequency Std. Exceeded	68.2 31 0	62.4 15 0	83.7 34 0
	<u>Annual Average (µg/m<sup>3</sup>)</u> State Standard: 20 µg/m <sup>3</sup>	Annual Avg. Concentration Annual Std. Exceeded?	34.0 Yes	- -	33.9 Yes
Fine Particulate Matter (PM <sub>2.5</sub> )	<u>24-hr. Average (µg/m<sup>3</sup>)</u> National Standard: 35 µg/m <sup>3</sup>	Maximum 24-hr. Concentration Frequency Std. Exceeded	49.4 2	39.5 1	67.5 19
	<u>Annual Average (µg/m<sup>3</sup>)</u> State Standard: 12 µg/m <sup>3</sup> National Standard: 12 µg/m <sup>3</sup>	Annual Avg. Concentration Annual Std. Exceeded? Annual Std. Exceeded?	13.2 Yes Yes	10.8 No No	14.6 Yes Yes
<b>SOURCE:</b> SCAQMD, Historical Data by Year – Air Quality Data Tables 2018–2020, Available at: <a href="https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year">https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year</a> . Accessed November 2021.					

### **3.4.2.2 Existing Ambient Health Risk**

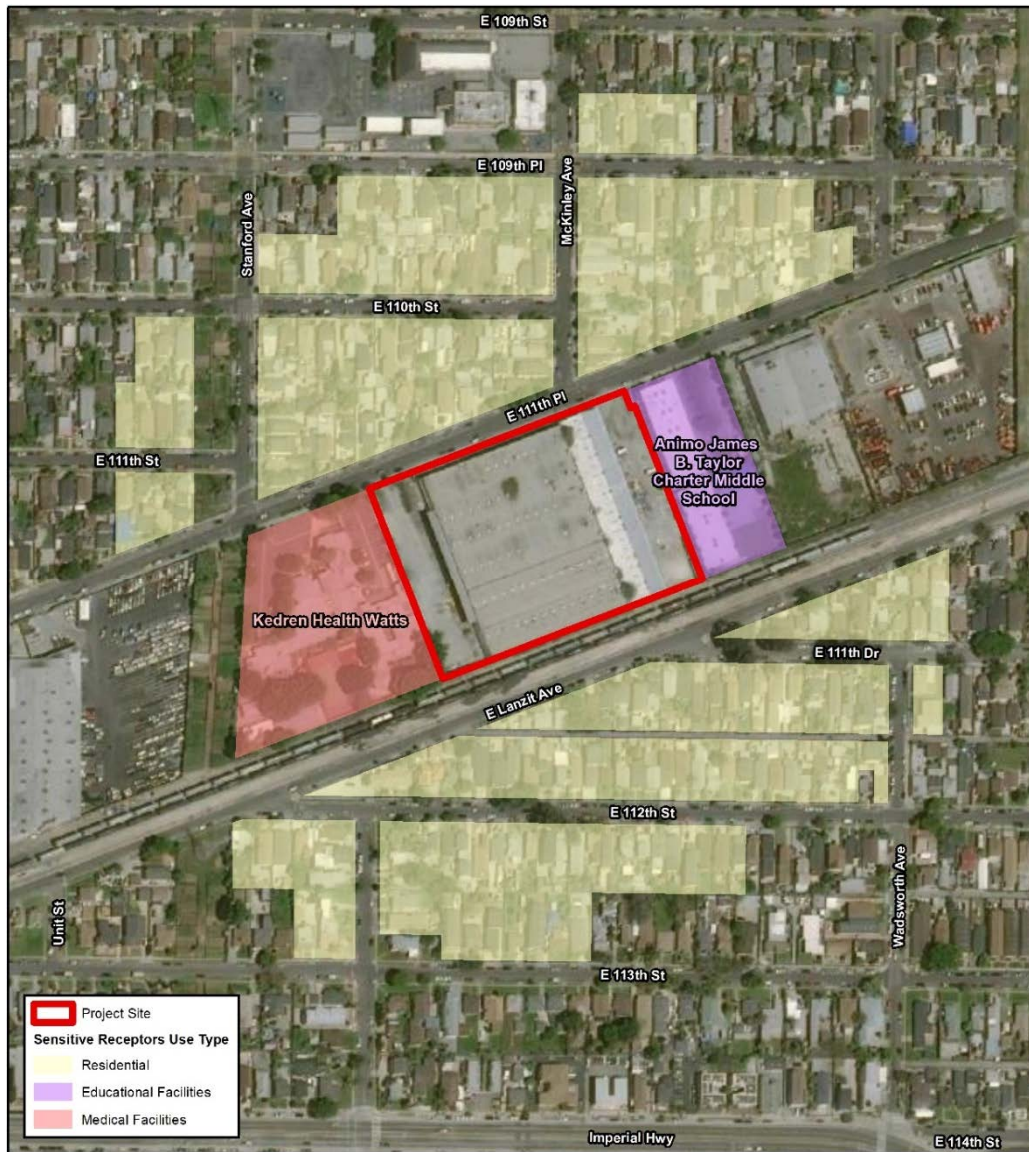
The SCAQMD's Multiple Air Toxics Exposure Study (MATES-IV) revealed that the estimated cancer risk for the vast majority of the urbanized area within the SCAB ranges from 200 to over 1,200 cancers per million people over a 70-year duration. Approximately 50 percent of the risk in ambient air is attributed to diesel particulate matter (diesel PM), approximately 38 percent to other toxics associated with mobile sources (including benzene, butadiene, and carbonyls), and approximately 12 percent of all carcinogenic risk is attributed to stationary sources (which include large industrial operations such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating). The risk at the proposed project site based on the regional emissions inventory and interpolated analysis is estimated to be approximately 520 excess cancers per million people, which ranks in the 84<sup>th</sup> percentile of risk throughout the SCAB.

### **3.4.2.3 Sensitive Receptors**

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups as the most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. The SCAQMD and CARB guidance recommends sensitive receptor locations to consider, including residences, schools, playgrounds, child-care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors (see Figure 3.4-1) near the site include:

- Animo James B. Taylor Charter Middle School located adjacent to the proposed project site on the eastern side;
- Kedren Health Community Center and Head Start Preschool located adjacent to the proposed project site on the western side;
- Residential uses located to the northwest, north, and northeast across E. 111th Place, approximately 60 feet from the site boundary; and,
- Residential uses located to the southwest, south, and southeast beyond the railroad tracks and E. Lanzit Avenue, approximately 125 feet from the site boundary.

**Figure 3.4-1. Sensitive Receptors Surrounding the Proposed Project Site**



### 3.4.3 Impact Analysis

#### 3.4.3.1 Methodology

The air quality impact analysis focuses on the potential changes in the air quality environment due to the implementation of the project. The analysis of potential air quality impacts was prepared following guidance from the SCAQMD CEQA Air Quality Handbook and the L.A. CEQA Thresholds Guide. Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with projects within the SCAB, such as the proposed project. Instead, SCAQMD published the CEQA Air Quality Handbook to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the SCAB.

The City's L.A. CEQA Thresholds Guide was published in 2006 and incorporates elements of the SCAQMD CEQA Air Quality Handbook in the section on Air Quality.

The assessment of potential impacts to regional and local air quality as a result of project implementation addresses both temporary emissions associated with construction activities, as well as long-term operational emissions. Emissions are generally quantified daily and expressed in terms of pounds per day (lbs/day) for comparison to the SCAQMD mass daily thresholds and LST screening values. Also addressed are TAC emissions in accordance with the L.A. CEQA Thresholds Guide. The detailed methodology and model results are documented in the Air Quality Technical Memorandum (TAHA, 2021).

### **Construction**

The construction of the proposed project is tentatively anticipated to begin no earlier than the summer of 2024 and would take approximately two years to complete. The project's "regional" emissions refer to emissions that will be evaluated based on regional significance thresholds established by SCAQMD. Daily regional emissions during construction are estimated by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying mobile source and fugitive dust emissions factors compiled from the available USEPA and CARB emission estimation tools. The emissions are quantified using CalEEMod (Version 2020.4.0) software, an emissions inventory software program recommended by the SCAQMD. The CalEEMod model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with SCAQMD and received input from other California air districts and is currently used by numerous lead agencies in the Los Angeles area and within the state for quantifying the emissions associated with development projects undergoing environmental review, including by the City of Los Angeles.

### **Operations**

Analysis of the proposed project's impact on regional air quality during long-term operations (i.e., after construction is complete) takes into consideration four types of sources: (1) area; (2) energy; (3) mobile; and (4) stationary. Area source emissions are generated by, among other things, landscaping and other equipment and the use of chemically formulated consumer products. Energy source emissions are generated as a result of activities in buildings for which natural gas is used (e.g., heating). Mobile source emissions are generated by the increase in motor vehicle trips to and from the proposed project site associated with routine operations. The Transportation/Traffic Impact Analysis for the proposed project (Parsons, 2022) determined that daily operations would generate approximately 759 vehicle trips at the new EBMF location and that existing operations at the LADOT Compton Facility produce 669 vehicle trips. For the purposes of satisfying CEQA requirements, operational emissions were quantified and compared to a baseline of zero as there are no active uses currently existing on the project site.

CalEEMod (Version 2020.4.0) was used to estimate the mass daily emissions that would occur during the future operation of the proposed project following the completion of construction activities. Proposed project facilities were generally characterized as an industrial park, and default mobile vehicle trip rates were replaced with the trip generation estimated by the Transportation/Traffic Impact Analysis. Area source emissions are based on natural gas (building heating and water heaters), landscaping equipment, and consumer product usage (including paints) rates provided in CalEEMod. Consumer products are chemically formulated products used by household and institutional consumers—such as detergents, cleaning compounds, polishes, floor finishes, personal care products, disinfectants, and sanitizers—but do not include other paint products, furniture coatings, or architectural coatings. Natural gas usage factors in CalEEMod are based on the California Energy Commission *California Commercial End Use Survey* data set, which provides energy demand by building type and climate zone.

### **Toxic Air Contaminant Emissions**

In addition to criteria pollutants and O<sub>3</sub> precursors, the Air Quality impacts assessment evaluated potential exposures of sensitive receptors surrounding the project site to TAC emissions that would be generated during the construction and operation of the proposed project.

Construction of the proposed project would produce TAC emissions in the exhaust of diesel-fueled internal combustion engines that power heavy-duty off-road equipment and on-road material hauling trucks, predominantly in the form of diesel PM. Due to the proximity of sensitive land uses that are practically adjacent to the boundary of the proposed project site, a construction health risk assessment (HRA) was prepared to assess potential exposures of nearby residential and school receptors to diesel PM concentrations generated by the exhaust of heavy-duty off-road diesel equipment that would be used to construct the proposed project.

The HRA is prepared using a two-step methodology that first involves the simulation of pollutant concentrations in ambient air resulting from emissions generated by the construction of the proposed project. Following preferred industry practice, the HRA used the Gaussian-plume air dispersion model AERMOD to simulate diesel PM concentrations that would result at surrounding sensitive receptor locations from the use of off-road equipment during the proposed project construction. A grid array of 192 cubic volume sources was organized using side lengths of 10 meters to cover the approximate area that equipment would be operating within during construction activities, as shown in Figure 3.4-2.



**Figure 3.4-2. Health Risk Assessment AERMOD Sources and Receptors**



The second step of the HRA involves the dose and risk calculations based on concentrations of pollutants modeled in AERMOD. Results of the air dispersion modeling portion of the construction HRA—expressed in concentration units of micrograms per cubic meter ( $\text{g}/\text{m}^3$ ) for diesel PM—were used to estimate the incremental increase in ambient carcinogenic risk resulting from continuous exposure at the maximally exposed individual receptor (MEIR) location, as well as recurring exposure to school receptors.

Cumulative carcinogenic exposures during the two-year construction period for the proposed project were conservatively estimated for residential and school receptors assuming continuous exposure at the receptor location with the highest modeled concentration of diesel PM. This approach likely overestimated potential exposures by a substantial margin; however, it is also the most protective of public health and consistent with preferred regulatory methodologies.

Regarding operational TAC emissions, the implementation of the proposed project would not introduce a substantial source of TAC emissions to the project area. CARB published the *Air Quality and Land Use Handbook* (CARB Handbook) on April 28, 2005, to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The goal of the guidance

document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center; and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines. The operation of the proposed project would not constitute a significant risk facility, examples of which include landfills, paint booths, refineries, and oil production facilities, among others.

### 3.4.4 Responses to CEQA Checklist

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines and the City's Thresholds supplemented by the SCAQMD Air Quality Significance Thresholds, Project impacts are analyzed for significance as follows:

*a) Would the project conflict with or obstruct implementation of the applicable air quality plan?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections B.1 to B.3); Los Angeles General Plan Air Quality Element; Southeast Los Angeles Community Plan; SCAQMD's CEQA Air Quality Handbook (1993); SCAQMD AQMP; SCAG 2016-2040 RTP/SCS and 2020-2045 RTP/SCS; Air Quality Impact Assessment (TAHA, 2022).

**Comment:** A significant impact may occur if the project is inconsistent with or would obstruct implementation of the Air Quality Element of the City's General Plan, the SCAQMD's AQMP, and SCAG's RTP/SCS.

**Less than significant impact.** In accordance with the procedures established in SCAQMD's CEQA Air Quality Handbook, the impact discussion should address the following criteria to determine whether the project is consistent with applicable SCAQMD and SCAG planning objectives:

- 1) Would the project create any impacts related to air quality violations, such as:
  - An increase in the frequency or severity of existing air quality violations;
  - Causing or contributing to new air quality violations; or,
  - Delaying timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- 2) Would the project exceed the assumptions utilized in preparing the AQMP:
  - Is the project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the project incorporate mitigation measures to reduce potentially significant impacts; and/or
  - To what extent is project development consistent with the AQMP land use policies and control measures?

Criterion 1: Air Quality Violations

Air quality violations occur when facilities are out of compliance with applicable SCAQMD rule requirements, permit conditions, or legal requirements, or with applicable state or federal air pollution regulations. Implementation of the project would not introduce a new permanent, stationary source of air pollutant emissions that would constitute a facility capable of contributing to air quality violations.

**Construction**

Air quality violations are determined by an SCAQMD Air Quality Inspector when a business is out of compliance with applicable SCAQMD rule requirements, permit conditions, or legal requirements, or with applicable state or federal air pollution regulations. Air quality violations typically involve large industrial facilities that emit vast quantities of regulated pollutants and are not common among typical land use development projects. Construction of the proposed project would be conducted in accordance with SCAQMD Regulation IV, Rule 401 (Visible Emissions) and Rule 403 (Fugitive Dust), and CARB ATCM 2485 (Vehicle and Equipment Idling) (SC-AQ-1). The application of water as a dust suppressant to material stockpiles and disturbed ground areas would reduce fugitive dust emissions during construction activities by approximately 61 percent. All construction equipment and vehicles would be maintained and operated within manufacturer specifications to limit unnecessary emissions during use, limit engine idling, and any vehicles traveling on unpaved surfaces would be required to limit their speed to 15 miles per hour or less. The construction of the proposed project would not have the potential to obstruct or conflict with the implementation of the 2016 AQMP in the context of SCAQMD rule requirements.

Table 3.4-3 presents the maximum daily emissions that would be generated by sources involved in each phase of construction of the proposed project. The results of the mass daily emissions analysis demonstrate that the construction of the proposed project would not have the potential to exacerbate the frequency or severity of air quality violations occurring within the City or the SCAB. Therefore, the construction of the proposed project would result in a less than significant impact and would not conflict with or obstruct the implementation of the AQMP with regard to air quality violations.

**Table 3.4-3: Proposed Project Construction Emissions**

Construction Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>DEMOLITION &amp; DEBRIS REMOVAL</b>						
On-Site Emissions	0.8	6.7	11.9	<0.1	1.6	0.5
Off-Site Emissions	0.1	3.3	1.5	<0.1	0.7	0.2
<b>Daily Total</b>	<b>0.9</b>	<b>10.0</b>	<b>13.4</b>	<b>&lt;0.1</b>	<b>2.3</b>	<b>0.7</b>
<b>SITE PREPARATION</b>						
On-Site Emissions	1.1	10.2	10.9	<0.1	1.8	1.1

**Table 3.4-3: Proposed Project Construction Emissions**

Construction Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Off-Site Emissions	0.1	0.1	1.2	<0.1	0.5	0.1
<b>Daily Total</b>	<b>1.2</b>	<b>10.3</b>	<b>12.2</b>	<b>&lt;0.1</b>	<b>2.3</b>	<b>1.2</b>
<b>GRADING</b>						
On-Site Emissions	1.0	9.9	10.6	<0.1	1.8	1.1
Off-Site Emissions	0.1	0.1	1.2	<0.1	0.5	0.1
<b>Daily Total</b>	<b>1.1</b>	<b>10.0</b>	<b>11.9</b>	<b>&lt;0.1</b>	<b>2.3</b>	<b>1.2</b>
<b>PAVING</b>						
On-Site Emissions	1.0	7.1	11.0	<0.1	0.4	0.3
Off-Site Emissions	0.1	0.5	1.4	<0.1	0.5	0.1
<b>Daily Total</b>	<b>1.1</b>	<b>7.6</b>	<b>12.4</b>	<b>&lt;0.1</b>	<b>0.9</b>	<b>0.5</b>
<b>BUILDING CONSTRUCTION + FINISHING + LANDSCAPING</b>						
On-Site Emissions	14.7	12.9	19.5	<0.1	0.5	0.5
Off-Site Emissions	0.3	0.8	3.0	<0.1	1.2	0.3
<b>Daily Total</b>	<b>15.0</b>	<b>13.8</b>	<b>22.5</b>	<b>&lt;0.1</b>	<b>1.7</b>	<b>0.8</b>
<b>REGIONAL ANALYSIS</b>						
<b>Maximum Regional Emissions</b>	<b>15.0</b>	<b>13.8</b>	<b>22.5</b>	<b>&lt;0.1</b>	<b>2.3</b>	<b>1.2</b>
SCAQMD Regional Threshold	75	100	550	150	150	55
<b>Regional Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>LOCALIZED ANALYSIS</b>						
<b>Maximum Localized Emissions</b>	<b>14.7</b>	<b>12.9</b>	<b>19.5</b>	<b>&lt;0.1</b>	<b>1.8</b>	<b>1.1</b>
Localized Significance Threshold <sup>/a/</sup>	-	46	231	-	4	3
<b>Localized Threshold Exceeded?</b>	<b>-</b>	<b>No</b>	<b>No</b>	<b>-</b>	<b>No</b>	<b>No</b>
/a/ LST screening values correspond to an SRA 12 construction site with one acre daily disturbance and receptors within 25 meters.						
Source: TAHA, 2021.						

## Operations

Future long-term operation of the proposed project would involve similar activities to those presently occurring at the LADOT South Los Angeles Bus Maintenance Facility, with the exception that the planned bus fleet would be entirely electric whereas the existing bus fleet is predominately comprised of vehicles powered by compressed natural gas (CNG) and propane. Table 3.4-4 presents the daily air pollutant emissions that would be generated by the operation of the proposed project and compares them to the SCAQMD mass daily screening thresholds. As shown, operational emissions of criteria pollutants and O<sub>3</sub> precursors would remain substantially below all applicable SCAQMD screening values. Therefore, the operation of the proposed project would not conflict with the implementation of the 2016 AQMP and would result in a less than significant impact related to air quality violations.

**Table 3.4-4: Proposed Project Operations Emissions**

Operational Source	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Sources	1.5	<0.1	<0.1	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.2	0.2	<0.1	<0.1	<0.1
Mobile Sources	2.0	2.1	19.3	<0.1	4.8	1.3
REGIONAL ANALYSIS						
<b>Daily Operational Emissions</b>	<b>3.5</b>	<b>2.3</b>	<b>19.5</b>	<b>&lt;0.1</b>	<b>4.9</b>	<b>1.3</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Regional Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
LOCALIZED ANALYSIS						
<b>Daily On-Site Emissions</b>	<b>1.5</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
SCAQMD Localized Threshold	-	630	98	-	4	2
<b>Localized Threshold Exceeded?</b>	<b>-</b>	<b>No</b>	<b>No</b>	<b>-</b>	<b>No</b>	<b>No</b>
Emissions modeling files can be found in Attachment B. <b>Source:</b> TAHA, 2021.						

### Criterion 2: AQMP Assumptions

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG’s 2016–2040 RTP/SCS regarding population, housing, and growth trends. A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG’s 2016–2040 RTP/SCS. The SCAQMD Air Quality Handbook recognizes that if a project is consistent with the local General Plan, then it would not conflict with the implementation of the AQMP.

### **Construction**

The construction of the proposed project would result in increased employment opportunities in the construction industry. However, it is not likely that construction workers would relocate their households as a result of their employment associated with construction. The construction industry differs from other employment sectors in that many construction workers are highly specialized and move from job site to job site as dictated by the demand for their skills, and they remain at a job site for only the timeframe in which their specific skills are needed to complete a particular phase of the construction process. Furthermore, the construction workers employed for construction would likely be taken from the labor pool currently residing in the City and the surrounding communities. Thus, the construction phase of the project would be temporary, lasting for approximately 24 months, and would not create permanent growth in population, housing, or employment within the City or SCAQMD jurisdiction.

Therefore, the construction of the Project would have no impact on regional growth projections accounted for in SCAQMD and SCAG plans.

Additionally, construction activities to implement the proposed project would comply with all applicable regulatory standards (e.g., SCAQMD Rule 403, CARB ATCM 2485, etc.) and best management practices (BMPs) as required by CARB and SCAQMD (SC-AQ-1). Emissions generated during construction would not pose concerns related to air quality violations, and no project-specific mitigation measures have been identified to reduce potentially significant impacts. Therefore, the construction of the proposed project would not conflict with or obstruct the implementation of the 2016 AQMP and would result in less than significant impacts.

### **Operations**

Operation of the proposed project would involve similar activities to those that are ongoing at the Compton Facility, although the new facility would provide additional employment opportunities. Approximately 312 employees would be working onsite in staggered shifts. With the existing 203 employees at the Compton Facility to be transferred to the proposed project, an additional 109 new employees generated by the project would not compromise the SCAG Connect SoCal growth projections for the City, which forecasts an employment increase of 287,600 jobs between 2016 and 2045. Therefore, the operation of the proposed project would not render the underlying assumptions of the AQMP invalid.

Impacts associated with project implementation (i.e., construction and operations) would be less than significant with compliance with applicable CARB and SCAQMD Rules and Regulations (SC-AQ-1), and no mitigation is required.

### **Standard Conditions**

**SC-AQ-1:** The construction and operation of the project shall comply with applicable California Air Resource Board (CARB) and South Coast Air Quality Management District (SCAQMD) Rules and Regulations, including but not limited to CARB ATCM 2485 and SCAQMD Rules 401 through 403 and 1403.

*b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections B.1 and B.2); SCAQMD AQMP; SCAQMD's CEQA Air Quality Handbook (1993); SCAQMD Air Quality Significance Thresholds; SCAQMD Regulations; Air Quality Impact Assessment (TAHA, 2022).

**Comment:** A significant impact would occur if project activities resulted in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality

standard. Potential sources that may produce substantial pollutant concentrations include equipment and vehicle exhaust and earthwork activities.

**Less than significant impact.** The City of Los Angeles lies within an area that is presently designated nonattainment of the NAAQS for O<sub>3</sub>, PM<sub>2.5</sub>, and Pb (pending possible reclassification to attainment) and is designated nonattainment of the CAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

The SCAQMD published guidance that asserts that if construction or operation of a project would produce maximum daily emissions exceeding the applicable project-specific thresholds, those emissions would also be considered cumulatively significant. For this reason, the SCAQMD applies the same project-level thresholds to cumulative assessments. Conversely, if the construction and operation of a project would not generate emissions of sufficient quantity to exceed any of the applicable mass daily thresholds, then that project and its associated emissions would be considered less than significant in the cumulative context.

### **Construction**

Construction of the proposed project has the potential to create air quality impacts through O<sub>3</sub>-precursor and particulate matter emissions generated using off-road diesel-fueled construction equipment and through vehicle trips associated with construction crews and trucks traveling to and from the construction site. As shown in Table 3.4-3, daily emissions of O<sub>3</sub> precursors and particulate matter would remain substantially below the applicable SCAQMD regional and LST screening values during all phases of construction. Contractors would be required to comply with the provisions of SCAQMD Regulation IV and employ BMPs to reduce fugitive dust and prevent the occurrence of visible dust plumes, and vehicle and equipment idling shall comply with CARB regulations (SC-AQ-1). Emissions of VOC, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would remain below the project-level thresholds, and thus would not be considered cumulatively considerable based on SCAQMD guidance.

### **Operations**

As shown in Table 3.4-4, the operation of the proposed project would not generate emissions of O<sub>3</sub> precursors, PM<sub>10</sub>, or PM<sub>2.5</sub> in excess of any applicable SCAQMD regional or LST screening value. Implementation of the proposed project would not introduce a new stationary source of air pollutant emissions for which there is an ongoing cumulative air quality impact through nonattainment. Therefore, the operation of the proposed project would not result in cumulatively considerable emissions of any nonattainment pollutant or atmospheric precursor.

Impacts during construction and operations would be less than significant with compliance with applicable CARB and SCAQMD Rules and Regulations (SC-AQ-1), and no mitigation is required.

*c) Would the project expose sensitive receptors to substantial pollutant concentrations?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections B.1 to B.3); SCAQMD Air Quality Handbook; CARB Regulations; SCAQMD Regulations; OEHHA Risk Assessment Guidance; Air Quality Impact Assessment (TAHA, 2022).

**Comment:** A significant impact would occur if project activities would expose sensitive receptors to substantial pollutant concentrations. Potential sources that may produce substantial pollutant concentrations include equipment and vehicle exhaust.

**Less than significant impact.** Sensitive receptors surrounding the project site include the adjacent Animo James B. Taylor Charter Middle School to the east, Kedren Community Center to the west; residential uses across E. 111th Place to the west, northwest, north, and northeast, and residential uses across the UPRR rail line and E. Lanzit Avenue to the southwest, south, and southeast. Analysis of potential sensitive receptor exposures to substantial pollutant concentrations was based on the SCAQMD LST methodology and the OEHHA risk assessment guidelines for emissions generated during short-term construction activities and long-term operations.

SCAQMD has established quantitative thresholds for exposure to TAC emissions. A significant air quality impact may occur if TAC emissions from construction or operation of a project were to result in a sensitive receptor being subjected to an increased carcinogenic risk of greater than 10 excess cancers per million or a Hazard Index (HI) greater than 1.0.

### **Construction**

Construction of the proposed project would last for approximately 24 months beginning in the summer of 2024. Sources of air pollutant emissions involved in the construction of the proposed project would include off-road equipment exhaust and fugitive dust and on-road vehicles exhaust and fugitive (evaporative and dust) emissions. Sensitive receptors surrounding the proposed project site would predominantly be exposed to pollutant levels emanating from sources located onsite, which comprise off-road equipment exhaust and fugitive dust generation. The estimated maximum daily emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> produced by sources on the project site would remain substantially below the applicable SCAQMD LST screening values (see Table 3.4-3), which were derived to prevent the occurrence of substantial criteria pollutant concentrations.

Additionally, the off-road equipment fleet involved in construction activities was assumed to be comprised entirely of diesel-fueled units, which release diesel PM to the atmosphere through the exhaust stacks. An inhalation-pathway HRA was prepared to analyze possible exposures of nearby sensitive receptors to diesel PM concentrations that would be generated by the use of diesel-fueled construction equipment. The HRA assessed the maximum potential exposures and associated carcinogenic risks to sensitive receptors that would be located at the adjacent middle school as well as throughout the surrounding residential communities. Table 3.4-5



presents the results of the construction HRA and the applicable SCAQMD incremental risk threshold. As shown, the incremental excess cancer risk at both school and residential receptors during the construction of the proposed project would remain below the applicable SCAQMD threshold of 10 excess cancers per million. Therefore, the construction of the proposed project would not expose nearby sensitive receptors to levels of TAC concentrations that would exceed the SCAQMD screening threshold.

**Table 3.4-5: Construction Health Risk Assessment**

Parameter	Middle School Receptors		Residential Receptors		Kedren Center & Headstart Preschool Receptors	
	Adult	Student	Adult	Child	Adult	Student
Average Concentration [ $\mu\text{g}/\text{m}^3$ ]	0.10626	0.10626	0.04145	0.04145	0.04626	0.04626
Breathing Rate [L/kg/day]	240	460	335	861	240	640
Exposure Frequency	0.50	0.50	0.96	0.96	0.50	0.50
Age Sensitivity Factor	1	3	1	3	1	3
Adjustment Factor	4.2	4.2	1.0	1.0	4.2	4.2
Fraction of Day Exposed	1.0	1.0	0.73	0.72	1.0	1.0
Exposure Duration [Years]	2.0	2.0	2.0	2.0	2.0	2.0
<b>Incremental Excess Risk</b>	<b>1.68</b>	<b>9.68</b>	<b>0.31</b>	<b>2.32</b>	<b>0.73</b>	<b>5.86</b>
SCAQMD Risk Threshold	10	10	10	10	10	10
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>SOURCE:</b> TAHA, 2021.						

### Operations

Implementation of the proposed EBMF would provide critical support infrastructure to the LADOT all-electric transit fleet and would generally involve charging, maintenance, and servicing activities on the project site. Long-term daily emissions of  $\text{NO}_x$ , CO,  $\text{PM}_{10}$ , and  $\text{PM}_{2.5}$  would remain substantially below the applicable SCAQMD LST screening thresholds and would not have the potential to produce concentrations near or exceeding the localized concentration thresholds. Furthermore, implementation of the proposed project would not site a land use typically known to be associated with substantial TAC emissions close to sensitive receptors. The proposed project would be generally consistent with the surrounding land use patterns and would not introduce a new stationary source of TAC emissions to the project area. The BEBs would not consume petroleum-based fuels that produce emissions of TACs as a result of internal combustion engines. Therefore, the operation of the proposed project would

not have the potential to expose sensitive receptors to substantial pollutant concentrations.

Impacts during construction and operations would be less than significant and no mitigation is required.

*d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**Reference:** L.A. CEQA Thresholds Guide (Section B.2); SCAQMD CEQA Air Quality Handbook; SCAQMD Rule Book (Regulation IV); Air Quality Impact Assessment (TAHA, 2022).

**Comment:** A significant impact would occur if the project created objectionable odors during construction or operation that would affect a substantial number of people. A significant impact may also occur if the proposed project generated emissions that could cause or contribute to a public nuisance affecting the surrounding community. A public nuisance could occur if emissions generated by proposed project activities during construction or operation produced visible dust plumes in violation of SCAQMD Rule 401 or Rule 403, or noxious odors in violation of SCAQMD Rule 402.

**Less than significant impact.** The analysis of potential impacts related to nuisance odors and other emissions that could adversely affect a substantial number of people was prepared to address both short-term construction and the future long-term operation of the proposed project.

### **Construction**

Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site, would be temporary, and would not persist beyond the termination of construction activities. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and would be temporary. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Construction of the proposed project would comply with the provisions of CARB ATCM 2485 to reduce vehicle and equipment exhaust emissions and with SCAQMD Rule 401 and Rule 403 to prevent the occurrence of visible dust plumes (SC-AQ-1). Additionally, a public liaison would be appointed to address public concerns related to construction activities including excessive noise, dust, or odor (SC-CC-4). Therefore, the construction of the proposed project would result in a less than significant impact related to emissions of odors and other potential nuisance conditions.

### **Operations**

According to the SCAQMD *CEQA Air Quality Handbook*, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting,

refineries, landfills, dairies, and fiberglass molding. The proposed project would not include a land use typically associated with odor impacts. Operation of the EBMF would comply with City codes and regulations pertaining to waste collection and disposal. Operational impacts would be less than significant related to the emissions of odors and other potential nuisance conditions.

Impacts associated with project implementation (i.e., construction and operations) would be less than significant, with compliance with applicable CARB and SCAQMD Rules and Regulations (SC-AQ-1), and no mitigation is required.

### 3.5 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>Would the project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands, including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.5.1 Regulatory Setting

This section describes existing laws and regulations related to biological resources that apply to the project.

### **3.5.1.1 Federal**

#### **Endangered Species Act of 1973**

Section 9 of the federal *Endangered Species Act* (ESA) protects species listed as Endangered and/or Threatened by the U.S. Fish and Wildlife Service (USFWS) and forbids any person to “take” an Endangered or Threatened species. Take is defined in the ESA as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct.” Sections 7 and 10 of the Act may authorize incidental take for an otherwise lawful activity if it is determined that the activity would not jeopardize the survival or recovery of the species.

#### **Migratory Bird Treaty Act of 1918**

The *Migratory Bird Treaty Act* (MBTA) prohibits the killing or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. Permits from USFWS and authorization for potential take under the MBTA are part of the ESA Section 7 consultation process.

### **3.5.1.2 State**

#### **California Endangered Species Act**

The *California Endangered Species Act* (CESA) serves to conserve, protect, restore, and enhance Threatened or Endangered species and their habitats. It mandates state agencies to not approve projects that would jeopardize the continued existence of Threatened or Endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that affect both a state- and federally listed Threatened or Endangered species, compliance with the federal ESA will satisfy the CESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the CESA under Section 2080.1 of the California Fish and Game Code.

#### **California Fish and Game Code**

The California Fish and Game Code establishes the Fish and Game Commission, which regulates the take of fish and game, not including the taking, processing, or use of fish, mollusks, crustaceans, kelp, or other aquatic plants for commercial purposes. The Commission’s responsibilities include setting seasons, bag and size limits, and methods and areas of take, as well as prescribing the terms and conditions under which permits or licenses may be issued or revoked by CDFW. The Commission also oversees the establishment of wildlife areas and ecological reserves and regulates their use.

Sections 3503, 3503.5, 3505, 3800, and 3801.6 of the Fish and Game Code protect all native birds, birds of prey, and all nongame birds, including their eggs and nests, that are not already listed as fully protected under CESA and that occur naturally within the State. CDFW also manages native fish, wildlife, plant species, and natural communities and oversees the management of marine species in coordination with the National Marine Fisheries Services (NMFS) and other agencies.

### 3.5.1.3 Local

#### **City of Los Angeles General Plan Conservation Element and Open Space Element**

The City's General Plan Conservation Element addresses the need to conserve and protect natural resources and open space in the City. Natural resources addressed in this element include water and hydraulic force, forests, soils, rivers, and other waters, harbors, fisheries, wildlife, and minerals. The Open Space Element addresses the preservation, conservation, and acquisition of open space in the City, including lands used for water supply, water recharge, water quality protection, wastewater disposal, solid waste disposal, air quality protection, energy production, and noise prevention.

#### **City of Los Angeles Environmentally Sensitive Areas**

LAMC Section 64.70.01 defines Environmentally Sensitive Areas (ESAs) as: "...any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments. ESAs include, but are not limited to, areas designated as Significant Ecological Areas (SEAs) by the County of Los Angeles, areas designated as Significant Natural Areas by the California Department of Fish and Game's Significant Natural Areas Program and field verified by the Department of Fish and Game, and areas listed in the Los Angeles RWQCB's Basin Plan as supporting the 'Rare, Threatened, or Endangered Species (RARE)' beneficial use."

#### **Preservation of Protected Trees Ordinance**

The City's ordinance for the Preservation of Protected Trees (Ordinance No. 177,404), as provided in LAMC Section 46.00 et seq., protects the following tree species that measure 4.0 inches or more in cumulative diameter, 4.5 feet above the ground level at the base of the tree:

- Oak trees, including Valley oak (*Quercus lobata*) and California Live Oak (*Quercus agrifolia*), or any other tree of the oak genus indigenous to California but excluding the Scrub Oak (*Quercus dumosa*).
- Western Sycamore (*Platanus racemosa*)
- California Bay (*Umbellularia californica*)
- Southern California Black Walnut (*Juglans californica* var. *californica*)

These trees may not be relocated or removed, including acts that damage the root system or other parts of the tree by fire, application of toxic substances, operation of equipment or machinery, or by changing the natural grade of land by excavation or filling the drip line area around the trunk, unless a permit from the Board of Public Works is acquired. As a condition of the permit, at least two trees of a protected variety shall be planted within the same property and each replacement tree shall be at least a 15-gallon, or larger, specimen, measuring 1.0 inch or more in diameter 1.0 foot above the base, and be not less than 7.0 feet in height measured from the base.

### **Board of Public Works Street Tree Removal Permit and Tree Replacement Condition Policies**

LAMC Sections 62.161 through 62.176 authorize the Board of Public Works and its officers and employees to control the planting, maintenance, and care of trees, plants, and shrubs in all public rights-of-way in the City. The Board adopted the Street Tree Removal Permit and Tree Replacement Condition Policies to formalize existing City practices and designate the Bureau of Street Services, Chief Forester, as the authorized officer and employee to issue street tree removal permits; require public notification of the proposed removal of three or more street trees; require a Board of Public Works public hearing for consideration of the removal of three or more street trees at a specific address; and require as a condition of a street tree removal permit that replacement street trees be provided on a 2:1 basis with 24-inch box size tree stock to be watered for a minimum 3-year period.

### **City of Los Angeles Tree Planting Ordinance**

Ordinance No. 183474 amended Sections 61.162, 62.163, and 62.169 of the LAMC to clarify that the responsibility for planting and maintaining street trees and vegetation within City streets rests with the City, and further clarifies that a property owner in a residential zone may remove and plant vegetation within a parkway, but that street trees may not be removed without a permit.

## **3.5.2 Existing Environment**

A site visit was conducted by Emile Fiesler, Parsons biologist, on June 2, 2021 to identify biological resources at the project site. The project site is highly disturbed and developed with two industrial buildings and paved driveways and parking areas, with vegetation limited to the edges of the site plus a narrow, vegetated street-front area along 111<sup>th</sup> Place. The vegetated strip along the east edge of the site contains the majority of the site's vegetation and is planted predominantly with yew trees (*Afrocarpus* cf. *falcatus*). Large varnish trees (*Ailanthus altissima*) grow in a narrow strip between the two buildings and along the southern section of the west edge of the site. Many varnish tree sprouts and saplings have also appeared at various locations on the property. The west edge of the site is lined with pear trees (*Pyrus calleryana*), ash trees (*Fraxinus* cf. *uhdei*), and a tree that looks like a non-native black walnut (*Juglans nigra*). Most of these trees are rooted on the west side of the property fence. The remainder of the vegetation appears to have sprouted from seed.

Of the 42 plant species observed on the site, only 2 are locally native species: mat amaranth (*Amaranthus blitoides*) and fringed willow-herb (*Epilobium ciliatum ciliatum*). Both appear to have sprouted from seed. The remainder of the vegetation consists of exotic ornamentals and weedy non-native species, many of which are invasive species.

The most invasive are the non-native annual grasses, including hairy crabgrass (*Digitaria sanguinalis*), dallisgrass (*Paspalum dilatatum*), and knotgrass (*Paspalum distichum*), followed by other invasive herbs including common sowthistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), bristly ox-tongue (*Helminthotheca*

*echioides*), horseweed (*Erigeron cf. bonariensis*), radium-plant (*Euphorbia peplus*), cheeseweed mallow (*Malva parviflora*), and black-medic (*Medicago lupulina*). Among the trees, the varnish tree (*Ailanthus altissima*) and Mexican fan palm (*Washingtonia robusta*) are the most invasive.

The majority of wildlife observed at the site consisted of non-native rock pigeons (*Columba livia*) that are nesting profusely inside the eastern building. Other birds observed are the Northern mockingbird (*Mimus polyglottos*) and American crow (*Corvus brachyrhynchos*). No mammals, reptiles, or amphibians were observed, but common urban and urbanized mammal species like the raccoon, black rat, house mouse, Virginia opossum, striped skunk, and fox squirrel are expected in the area. A few invertebrate animals were observed, including jumping spiders, wall spiders, hover flies, aphids, psyllids, and an immature katydid.

No sensitive species, listed species, or other species of concern were found within the project site. In addition, the project site is surrounded by urban development, streets, and railroad tracks and is not located in or near a City-designated ESA or a USFWS-designated Critical Habitat for Threatened & Endangered Species. Similarly, the site does not serve as a wildlife corridor due to the lack of large open spaces and parks on the site and in the surrounding area. In addition, there is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP) in the City or near the site.

### 3.5.3 Impact Analysis

*Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:*

*a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C); City of Los Angeles General Plan; CNDDDB; USFWS IPaC; NMFS database; CNPS database; USFWS Critical Habitat for Threatened & Endangered Species.

**Comment:** A significant impact may occur if the project would remove or modify habitat for any species identified or designated as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the state or federal regulatory agencies cited.

**Less than significant impact with mitigation incorporated.** Review of the CDFW's California Natural Diversity Database (CNDDDB), the USFWS' Information for Planning and Consultation (IPaC), NMFS database, and California Native Plant Society (CNPS) database identified sensitive plant and animal species that are likely to be present in the project area (i.e., those previously found in the Inglewood USGS quadrangle).



None of these sensitive species were observed on the site and no suitable habitat for these species is present at the site.

While there are no sensitive vegetation communities, ESAs, or designated Critical Habitats on the site that may support candidate, sensitive, or special status species, the project would disturb the entire site during demolition and construction activities, including the removal of existing vegetation on the site. While the site does not contain a habitat for sensitive biological resources, the existing trees and buildings may support nesting birds, and thus, construction activities could inadvertently disturb occupied/active nests. MM-BIO-1 requires the timing of construction activities outside the bird nesting season or to conduct bird nesting surveys before the start of vegetation clearing and demolition activities to identify and protect active nests. This mitigation measure would avoid adverse impacts on migratory birds. As such, impacts on sensitive species and migratory birds would be less than significant after mitigation.

*b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C); City of Los Angeles General Plan; USFWS Critical Habitat for Threatened & Endangered Species; USFWS National Wetlands Inventory Wetlands Mapper.

**Comment:** A significant impact may occur if riparian habitat or any other sensitive natural community were to be adversely modified.

**No impact.** The EBMF would be located on a developed site and highly urbanized area. There are no natural streams, riparian areas, unlined drainage channels, coastal areas, sand dunes, or other sensitive natural communities and habitats in or near the site. No direct impacts to riparian areas and natural communities would occur with the project. Runoff during construction would enter the underground storm drain system on East 111<sup>th</sup> Place and would not directly affect any riparian habitat or other sensitive natural community. Stormwater best management practices (BMPs) would be implemented as part of the project's Stormwater Pollution Prevention Plan (SWPPP) during construction (SC-HYD-1) and operations (SC-HYD-2) to avoid impacts to downstream water bodies, such as Compton Creek. No impacts would occur and no mitigation is required.

*c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C)); City of Los Angeles General Plan; USFWS National Wetlands Inventory Wetlands Mapper.

**Comment:** A significant impact may occur if federally protected wetlands, as defined by Section 404 of the Clean Water Act, would be modified or removed.

**No impact.** There are no natural drainages, open channels, or wetland areas, including lakes, ponds, rivers, creeks, streams, or coastal areas, on or near the project site. The nearest water body is Compton Creek, a concrete-lined drainage channel located approximately 0.2-mile north and 0.3-mile east of the site. No direct impacts to this creek would occur. There would be no impacts on wetlands and no mitigation is required.

*d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C); City of Los Angeles General Plan.

**Comment:** A significant impact may occur if the project interferes or removes access to a migratory wildlife corridor or impedes the use of native wildlife nursery sites.

**No impact.** The site is not located on the City's hillside areas or in large open spaces, which serve as wildlife corridors. The site is developed and does not serve as a wildlife corridor nor does it support wildlife movement and wildlife nursery sites. Thus, no impact on wildlife movement would occur and no mitigation is required.

*e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C); City of Los Angeles General Plan; Preservation of Protected Trees Ordinance; Street Tree Removal Permit and Tree Replacement Condition Policies; Tree Planting Ordinance.

**Comment:** A significant impact would occur if the project caused an impact that was inconsistent with local regulations pertaining to biological resources.

**No impact.** The project would remove existing trees on the site but these trees are not considered California native trees nor are they one of the City's Protected Trees. Thus, the project would not conflict with the City's Preservation of Protected Trees Ordinance. There are no street trees on East 111<sup>th</sup> Place along the site frontage and the project would not require a Street Tree Removal Permit or compliance with the City's Tree Replacement Condition Policies, and Tree Planting Ordinance. The project would not conflict with the City's tree preservation policies and ordinances. No impact would occur and no mitigation is required.

*f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section C); City of Los Angeles General Plan; CDFW NCCP Plan Summaries.

**Comment:** A significant impact may occur if the project would cause an impact that is inconsistent with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or local regulations pertaining to biological resources. A significant impact may occur if the project would be inconsistent with mapping or policies in any conservation plans.

**No impact.** There is no HCP or NCCP in the City and the site is highly disturbed and is not located in or near an HCP or NCCP. Thus, no conflict with an HCP or NCCP is expected with the project. No impact would occur and no mitigation is required.

### **3.5.4 Mitigation Measures**

**MM-BIO-1:** To avoid impacts to migratory birds, the vegetation removal, demolition, and site clearing activities shall occur during the non-breeding season (e.g., between September 1 and February 15). If such activities would have to be scheduled during this period, a qualified biologist shall conduct a preconstruction nesting bird survey to determine if any nesting birds are present within the site. This survey should be conducted no more than 7 days before the start of vegetation removal. If nesting birds are found, an exclusionary buffer would be set up and clearly marked around each active nest site. Construction or clearing shall not be conducted within this zone until the qualified biologist determines that nesting birds have fledged or the nest is no longer active.

### 3.6 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An Archaeological Resources Assessment (ARA) (Parsons, 2022), Historic Resources Evaluation Report (HRER) (Parsons, 2022), and Paleontological Resources Analysis (PRA) (Paleo Solutions, 2022) were prepared for the project and are provided in Appendices C1, C2, and C3, respectively. The findings of the memos are summarized below.

#### 3.6.1 Regulatory Setting

This section describes existing laws and regulations related to cultural resources that apply to the project.

##### 3.6.1.1 Federal

###### National Historic Preservation Act

The National Historic Preservation Act established the National Register of Historic Places (NRHP) to recognize resources associated with the country's history and heritage. Criteria for listing on the NRHP pursuant to Title 26, Part 63 of the *Code of Federal Regulations* are significant in American history, architecture, archaeology, engineering, and culture as presented in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that are either:

- (A) Associated with events that have made a significant contribution to the broad patterns of our history
- (B) Associated with the lives of persons significant in our past

- (C) Embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction or
- (D) Have yielded, or may be likely to yield, information important to history or prehistory

Criterion D is usually reserved for archaeological resources. Properties eligible for the NRHP must be of sufficient age, be proven through scholarship to meet at least one of the significance criteria, and exhibit integrity of the features, elements, and/or informational value that provides the property its documented historical or archaeological significance.

### **3.6.1.2 State**

#### **California Register of Historical Resources**

The California Register of Historical Resources (CRHR) was created to identify historical resources deemed worthy of preservation on a State level and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP but focus on resources of statewide, rather than national, significance. The CRHR automatically includes any resource listed, or formally designated as eligible for listing, on the NRHP. The State Historic Preservation Office (SHPO) maintains the CRHR, which may also include properties designated under local ordinances or identified through local historical resources surveys that meet CRHR eligibility criteria.

#### **California Public Resources Code Section 5024.5**

California Public Resources Code (PRC) Section 5024.5 states: “(a) No state agency shall alter the original or significant historical features or fabric, or transfer, relocate, or demolish historical resources on the [agency’s] master list...” This law also obligates State agencies to adopt prudent and feasible measures that will eliminate or mitigate any potential adverse effects a project may have upon a listed historical resource.

#### **California Public Resources Code Sections 5097.5 and 5097.7**

PRC Section 5097.5, as amended, and PRC Section 5097.7 strengthen existing State law regarding criminal penalties and restitution for crimes of archaeological site vandalism, theft of archaeological materials or artifacts in curation facilities, and damages to historic buildings and other cultural properties on State and local government land. The amendment and new section closely follow federal law, specifically the Archaeological Resources Protection Act, which regulates the excavation of archaeological sites and the removal and disposition of archaeological resources on federal and Indian lands.

PRC Chapter 1.7, Sections 5097 and 30244 include additional State-level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts to paleontological resources from developments on State lands and define the excavation, destruction, or removal of paleontological “sites” or “features” from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097,

“state lands” refers to lands owned by, or under the jurisdiction of, the State or any State agency. “Public lands” is defined as lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or any agency thereof.

**California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097**

California *Health and Safety Code* Section 7050.5, and PRC Sections 5097.94 and 5097.98 outline procedures to be followed in the event human remains are discovered during development and other projects. If human remains are encountered, all work must stop at that location and the County Coroner must be immediately notified and advised of the finding. The County Coroner would investigate “the manner and cause of any death” and make recommendations concerning the treatment of the human remains. The County Coroner must make their determination within 2 working days of being notified. If the human remains are determined to be Native American, the County Coroner shall contact the California Native American Heritage Commission (NAHC). The Commission would in turn “...immediately notify those persons it believes to be most likely descended from the deceased Native American.” The descendants would then inspect the site and make recommendations for the disposition of the discovered human remains. This recommendation from the most likely descendants may include the scientific analysis of the remains and associated items.

**3.6.1.3 Local**

**City of Los Angeles General Plan Framework Element**

The City’s General Plan Framework Element addresses cultural resources, including significant archaeological, paleontological, and historical resources in the City, and proposes a means for avoiding potential impacts to known or potential cultural resources. Existing cultural resources were mapped and presented in the Final EIR for the Framework Element, which shows that there are no prehistoric or historic archaeological sites on or near the project site. In addition, there are no vertebrate paleontological resources on or near the site. The area east of Avalon Boulevard, including the site, is identified as having surface sediments with unknown fossils potential.

**City of Los Angeles General Plan Conservation Element**

The City’s General Plan Conservation Element includes goals, objectives, and policies requiring measures be taken to protect the City’s historical, archaeological and paleontological resources for historical, cultural, research, and/or educational purposes. A policy requires that the City continue to identify and protect significant archaeological and paleontological sites and resources known to exist or that are identified during land development, demolition, or property modification activities.

**City of Los Angeles Historic-Monument Ordinance**

The City’s Historic-Monument Ordinance (Los Angeles Administrative Code [LAAC] Section 22.171) defines a Historic-Cultural Monument (HCM) as any site, building, or structure of a particular historic or cultural significance. A resource is eligible for listing

as an HCM if it meets specific criteria, as outlined in Article 4, Section 22.130 of the LAAC.

### **City of Los Angeles Cultural Heritage Ordinance**

The City maintains a list of all sites, buildings, and structures that have been designated through the City of Los Angeles Cultural Heritage Ordinance No. 185472 as HCMs. The Cultural Heritage Ordinance has designated more than 1,000 buildings and sites as individual local landmarks or HCMs. A five-member Cultural Heritage Commission oversees the designation and protection of local landmarks, and the Office of Historic Resources (OHR) provides staff support to that Commission. A City HCM is presumed to be a significant historical resource under CEQA, triggering the requirement to perform an environmental review (that could lead to the preparation of an EIR before demolition could occur).

## **3.6.2 Existing Environment**

### **3.6.2.1 Prehistory**

The three major periods of prehistory for the greater Los Angeles Basin region have been refined by recent research using radiocarbon dates from archaeological sites in coastal southern California. These are:

- Millingstone Period (6,000–1,000 B.C., or about 8,000–3,000 years ago);
- Intermediate Period (1,000 B.C.–A.D. 650, or 3,000–1,350 years ago); and
- Late Prehistoric Period (A.D. 650–about A.D. 1800, or 1,350–200 years ago).

Different patterns and types of material culture define each of these periods.

### **3.6.2.2 Ethnography**

The project site is located in the traditional native lands of the Gabrielino of the Shoshonean language stock. Generally, the territory of the Gabrielino covered the Los Angeles Basin, the San Gabriel Valley, the Santa Monica and Santa Ana mountains, the coast from Aliso Creek to Topanga Creek, and the islands of San Clemente, San Nicholas, and Santa Catalina. The Los Angeles Basin was known to include many major Gabrielino villages with a total population estimated at over 10,000 at the time of the Spanish arrival in 1769. Villages included Saar, near Santa Monica, Siba and Akura near San Gabriel, Engva at Redondo, and Ohowi near San Pedro. Gabrielino villages were politically autonomous and were organized along lines of kinship.

During the 18th and 19th centuries, aboriginal Gabrielino society was greatly affected by Spanish colonization. Smallpox, measles, influenza, and other non-endemic diseases rapidly destroyed large segments of the population, leading to the abandonment of many villages and towns. Nevertheless, many Gabrielino survived, working first as laborers at the missions and later as vaqueros (cowboys) on ranches and farms.

### **3.6.2.3 Historic Overview**

The history of Los Angeles can be broken down into four periods: the Early Explorer Period, the Spanish Mission Period, the Mexican Ranch Period, and the Anglo-American Period. The Early Explorer Period is defined by the first European contact with the Gabrielino and subsequent explorations. The Spanish Mission Period is defined by the Franciscan friars who under the sponsorship and administration of the Spanish monarchy initiated mission programs focused on the conversion of aboriginal peoples to Christianity and the establishment of cattle ranches, farms, building projects, and other activities designed to consolidate and secure the western frontier of the Spanish empire. The Mexican Ranch Period is defined by increased secularization resulting from the Mexican Revolution in 1821, which isolated California from the Spanish political capital. The American conquest of the Los Angeles area and its occupation by military forces during the California gold rush period heralded the beginning of the Anglo-American Period.

The project area was originally part of Rancho La Tajauta, a 3,560-acre land area granted by Mexican Governor Manuel Micheltoarena to Anastasio Avila in 1843. As with all such land grants in Southern California, the land was primarily devoted to raising livestock, i.e., cattle, sheep, and horses. By about 1875, a rural area several miles south of downtown, and considered outside of the City limits, began to be referred to as Green Meadows, with a store, dairy, and post office bearing that place name before the end of the century. Citizens of the Green Meadows community sought annexation to the City of Los Angeles, and the City accepted the petition in March 1926.

The parcels located between East 111th Place and the railroad tracks and East Lanzit Avenue formed an empty land belt that remained largely vacant and undeveloped until the 1950s, or even later, except for a factory built in the 1920s. The residential neighborhood which rose south of the railroad tracks, leapfrogged over the industrially-zoned land and the march of residential construction continued.

The historic aerial images and historic topographic maps show that the parcels encompassing the site were not utilized during the earlier part of the 20<sup>th</sup> century. Beginning in the 1930s, development began in areas surrounding the site, and railroad tracks appear on the southern boundary (originally Pacific Electric Railway, now UPRR, along East Lanzit Avenue). Structures in the project area are evident from 1937 onward, with as many as three to six buildings northeast of the project site. However, the development of the site only occurred in the mid-1950s. Based on a review of aerial photography, the project site has remained largely unchanged since that time.

### **3.6.2.4 Cultural Resources**

Archival research focused on the identification of previously recorded cultural resources within a 0.5-mile radius of the proposed Project footprint. The archival research included a review of previously recorded archaeological site records and reports, historic site and property inventories, and historic maps. Inventories of the



NRHP, the CRHR, the California State Historic Resources Inventory (HRI), California Historical Landmarks and Points of Interest, Los Angeles Office of Historic Resources Historic Preservation Overlay Zones (HPOZ), the Survey LA Southeast Los Angeles Community Plan Area, and the list of City of Los Angeles' HCMs were also reviewed to identify cultural resources near the project site.

Three previously recorded historic-age cultural resources were identified within a 0.50-mile radius of the project site, all of them built environment resources. None of these resources are within the project site. No prehistoric archaeological or historic archaeological resources were identified by the records search.

***National Register of Historic Places***

Two resources within a 0.5-mile radius of the project site have been determined NRHP eligible but no listed or previously determined eligible NRHP properties are located on or immediately adjacent to the site.

***California Register of Historical Resources***

There are no CRHR-listed resources within a 0.5-mile radius of the project site. No listed or previously-determined eligible CRHR properties are located on or immediately adjacent to the site.

***Los Angeles Office of Historic Resources Historic Preservation Overlay Zones***

There are no Los Angeles Office of Historic Resources HPOZ within a 0.5-mile radius of the project site.

***Survey LA Southeast Los Angeles Community Plan Area***

There are no resources listed in Survey LA for the Southeast Los Angeles Community Plan Area for the project site or within the 0.5-mile buffer zone.

***Los Angeles Historic-Cultural Monuments***

There is one Historic-Cultural Monument within a 0.5-mile radius of the project site that has been designated by the Los Angeles Cultural Heritage Commission: Number 513, Southern California Edison Service Yard Structure, 615 E. 108th Street. This HCM is located approximately 0.28-mile northwest of the project site.

***California Historical Landmarks***

California Historical Landmarks (CHL) are buildings, structures, sites, or places that have been determined to have statewide historical interest. The Watts Towers at 1765 E. 107th Street, approximately 1.6 miles northeast of the project site, is the closest CHL.

**3.6.2.5 Paleontological Resources**

The project area is entirely underlain by Holocene-age alluvial gravel, sand, and clay. While not mapped within the project area, Pleistocene-age older alluvium is mapped within a half-mile of the project site and is likely present in the project site at depth. Additionally, artificial fill is also likely present at the surface in previously disturbed portions of the site.

Late Holocene-age younger surficial sediments have a low potential for producing significant paleontological resources and middle and early Holocene-age sediments at depth have a high potential. Various fossil specimens have been recovered from Pleistocene-age sediments in Los Angeles County. Thus, Pleistocene-age surficial sediments are considered to have a high potential for producing significant paleontological resources. Artificial fill comprises recent deposits of previously disturbed sediments and is considered to have a low potential for producing significant paleontological resources.

According to the Natural History Museum of Los Angeles County (NHMLA), there are no previously recorded fossil localities within the project area. However, there are several localities nearby from Pleistocene-age sediments similar to the Pleistocene-age older alluvium that is likely present at depth within the project area. Several sites in the project area (e.g., on 103rd Street and 99th Street, in Compton and the community of Athens, and near the intersection of West Athens Boulevard and Menlo Avenue and the intersection of Artesia Boulevard and Williams Avenue) produced fossil invertebrates such as snails, bivalves, barnacle, scaphopod, and sand dollar, a fossil mammoth, vertebrate fossils, oysters, and pecten from depths of 5 to 735 feet.

#### **3.6.2.6 Field Survey**

On June 7, 2021, senior archaeologist Kristina Lindgren, RPA, accompanied by architectural historian Dean Reed, of Paleo Solutions Inc, completed an intensive pedestrian survey of the project site for cultural resources. The pedestrian survey used standard archaeological procedures and techniques meeting the Secretary of the Interior's Standards and Guidelines for a cultural resources survey. No archaeological resources were observed.

#### **3.6.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations Section 15064.5?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section D.3); City of Los Angeles General Plan Conservation Element; Southeast Los Angeles Community Plan; HCM List; NRHP; CRHR; HRER (Parsons, 2022).

**Comment:** A significant impact would result if the project caused a substantial adverse change to the significance of a historical resource, as defined in PRC Section 15064.5. For historical resources, thresholds for a significant impact include the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance

and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of the evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

**No impact.** Historic resources are usually 50 years old or older and must meet at least one of the criteria for listing in the CRHR (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity (CEQA Guidelines Section 15064.5[a][3]).

Due to their dates of construction, 21 parcels with buildings on and near the site were evaluated for their historical or architectural significance in the HRER (Appendix C2). The findings of the HRER indicate that none of these parcels were found eligible for listing in the NRHP and the CRHR. Also, none are considered to be historical resources under CEQA, per CEQA Guidelines §15065.5, because they do not meet the CRHR criteria outlined in PRC §5024.1.

Thus, demolition of the existing structures on the site and construction of the project would have no impact on historical resources.

*b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?*

**Reference:** L.A. CEQA Thresholds Guide (Section D.2); City of Los Angeles General Plan; HCM List; NRHP; CRHR; ARA (Parsons, 2022).

**Comment:** A significant impact would occur if the project caused a substantial adverse change in the significance of an archaeological resource, which falls under the CEQA Guidelines Section 15064.5. A substantial adverse change disturbs, damages, or degrades an archaeological resource or its setting.

**Less than significant impact.** Based on the ARA (Appendix C1), no archaeological sites or resources were identified within the project site as part of the records search and field survey undertaken for the project. While the maximum extent of anticipated ground disturbance may be up to 15 feet, most of the proposed ground disturbance will be shallow and limited to utility trenching and preparing the new building foundations. Although archaeological sensitivity potential is considered low in the project area, if cultural materials are unearthed during construction, work must be

halted in that area until a qualified archaeologist can assess the significance of the find. If such resources are encountered during ground-disturbing activities, the contractor shall cease excavation and the City of Los Angeles will contact a qualified archaeologist to evaluate and determine the appropriate treatment for the resource in accordance with PRC Section 21083.2(i) (SC-CUL-2, PDF-CUL-1 and PDF-CUL-2). As such, impacts on archaeological resources would be ensured to be less than significant with the implementation of SC-CUL-2, PDF-CUL-1 and PDF-CUL-2, as necessary.

*c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Reference:** L.A. CEQA Thresholds Guide (Sections D.1 and E.3); City of Los Angeles General Plan Conservation Element; USGS topographic map for the Inglewood quadrangle; Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources; PRA (Paleo Solutions, 2022).

**Comment:** A significant impact could occur if grading or excavation activities associated with the project disturb unique paleontological resources or unique geologic features that presently exist within the project site.

**Less than significant impact with mitigation incorporated.** Based on the PRA (Appendix C3), the project site is located within an area mapped as late Holocene-age deposits that have been subject to disturbances from development activities and it has low paleontological sensitivity. However, the paleontological sensitivity within the project area increases with depth as the sediments transition to middle to early Holocene- and Pleistocene-age deposits. The proposed depths of excavation are 8 feet below ground surface for utility relocations and 15 feet below ground surface for building foundations, and fossils have been reported in the project vicinity at depths as shallow as 5 feet. Therefore, ground-disturbing activities during project construction could impact subsurface paleontological resources if native (i.e., previously undisturbed) sediments belonging to geologic units with high paleontological potential are encountered during construction. Disturbance of subsurface paleontological resources would be less than significant impact with the implementation of MM-PAL-1 through MM-PAL-4. As such, impacts on paleontological resources would be less than significant after mitigation.

*d) Would the project disturb any human remains, including those interred outside of formal cemeteries?*

**Reference:** L.A. CEQA Thresholds Guide (Section D.2); HCM List; NRHP; CRHR; ARA (Parsons, 2022).

**Comment:** A significant impact would occur if grading or excavation activities associated with the proposed project disturbed interred human remains.

**Less than significant impact.** No cemeteries or burial locations are located on or near the site. In accordance with 14 CCR Section 15064.5(e), in the event of

accidental discovery or recognition of any human remains, work in the immediate vicinity will be suspended and the Los Angeles County Coroner will be notified (California Health and Safety Code Section 7050.5). If the Coroner determines that the remains are not recent and of Native American origin, the Coroner will notify the NAHC in Sacramento within 24 hours to identify the most likely descendant (MLD). The designated MLD may make recommendations to the City of Los Angeles for means of treating or reassigning the human remains and any associated grave goods with appropriate dignity, as provided in PRC Section 5097.98. Compliance with these regulations as SC-CUL-1 would avoid adverse impacts to any discovered human remains. As such, impacts on human remains would be less than significant, which would be ensured by compliance with SC-CUL-1.

### **3.6.4 Standard Conditions**

**SC-CUL-1:** In the event of the inadvertent discovery of human remains, the Contractor shall immediately notify the County Coroner and the City of Los Angeles. If the County Coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission in accordance with Health and Safety Code (HSC) Section 7050.5 subdivision c, and Public Resources Code (PRC) Section 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate the most likely descendant (MLD) for the remains per PRC 5097.98. Under PRC 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations, if applicable. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California HSC Section 7100 37 et seq. directing identification of the next-of-kin will apply.

**SC-CUL-2:** In compliance with Section 6.6-2 of the Greenbook (*Standard Specifications for Public Works Construction*) regarding archaeological and paleontological discoveries, if a discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.

### **3.6.5 Project Design Features**

**PDF-CUL-1:** A qualified archeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall be retained before the project construction and shall remain on-call during all

ground-disturbing activities. The qualified archaeologist shall ensure that a Worker Environmental Awareness Protection (WEAP) training, presented by the qualified archaeologist and Native American representative, is provided to all construction and managerial personnel involved with the project. The WEAP training shall provide an overview of cultural (prehistoric and historic) and tribal cultural resources and outline regulatory requirements for the protection of cultural resources. The WEAP shall also cover the proper procedures to be followed in the event of an unanticipated cultural resource discovery during construction. The WEAP training can be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.

**PDF-CUL-2:** In the event of an inadvertent discovery of archaeological materials, the resource shall be fully documented by the qualified archaeologist or designee and a Department of Parks and Recreation (DPR) 523 record shall be prepared. If prehistoric or potential tribal cultural resources are identified, the consulting Native American Tribes shall be notified.

The qualified archaeologist, in consultation with consulting Native American Tribes and the City of Los Angeles, shall determine whether the resource is potentially significant as per CEQA (i.e., whether it is a historical resource, a unique archaeological resource, or tribal cultural resources). If preservation in place or avoidance is not feasible, the qualified archaeologist, in consultation with the City, shall prepare and implement a detailed treatment plan. Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code (PRC) Section 21083.2. Treatment for most resources would consist of, but would not be limited to, in-field documentation, archival research, subsurface testing, excavation, and preparation of a final report and DPR 523 record. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of the final report and DPR 523 record(s) to the City of Los Angeles and South Central Coastal Information Center.

### **3.6.6 Mitigation Measures**

**MM-PAL-1:** A qualified paleontological monitor (i.e., one who meets the qualification standards established by the Society of Vertebrate Paleontology [SVP, 2010]) shall be retained prior to construction and shall remain on call during all ground disturbing activities. Worker Environmental Awareness Program (WEAP) training shall be provided to all construction and managerial personnel involved with the project's ground disturbing activities. The WEAP training shall provide an overview of

paleontological resources and outline the regulatory requirements for their protection. The WEAP shall also cover the proper procedures to be followed in the event of a fossil discovery during construction. The WEAP training may be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.

**MM-PAL-2:** The qualified paleontological monitor will monitor project-related excavation activities in high paleontological deposits if encountered in the subsurface. Project-related excavation activities greater than 5 feet depth shall be monitored on a part-time (i.e., spot-checking) basis to check for the presence of underlying paleontologically sensitive sediments. If paleontologically sensitive deposits are observed, full-time monitoring shall be implemented in those areas. Excavations determined to be entirely within previously disturbed sediments or late Holocene-age deposits do not require paleontological monitoring or continued spot-checking.

**MM-PAL-3:** In the unanticipated event that fossil resources are discovered, they shall be protected from further excavation, destruction, or removal. Work shall be halted within 25 feet of the discovery until it can be evaluated by a qualified paleontologist (i.e., one who meets the SVP professional standards for Principal Investigator or Project Paleontologist). If determined to be scientifically important, the paleontological resources shall be recovered, prepared to the point of curation, identified, and curated at the Natural History Museum of Los Angeles County or another accredited repository along with associated field data.

**MM-PAL-4:** After ground-disturbing activities are completed, a memo report documenting the methods and results of paleontological monitoring shall be prepared by the qualified paleontologist and submitted to the City of Los Angeles.

As such, impacts on cultural resources would be less than significant with compliance with SCs, implementation of PDFs, and the incorporation of mitigation measures.

### 3.7 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An Energy Impact Assessment Technical Memorandum (TAHA, 2022) was prepared for the project and is provided in Appendix D. The findings of the memo are summarized below.

#### 3.7.1 Regulatory Setting

This section describes existing laws and regulations related to energy that apply to the project.

##### 3.7.1.1 Federal

###### Energy Policy and Conservation Act

The Energy Policy and Conservation Act was enacted to serve the nation's energy demands and promote conservation methods when feasibly obtainable. This Act mandated vehicle economy standards, extended oil price controls to 1979, and directed the creation of a strategic petroleum reserve.

###### Alternative Motor Fuels Act of 1988

The Alternative Motor Fuels Act amended a portion of the Energy Policy and Conservation Act to encourage the use of alternative fuels, including electricity. This Act directed the Secretary of Energy to ensure that the maximum practicable number of federal passenger automobiles and light-duty trucks be alcohol-powered vehicles, dual-energy vehicles, natural gas-powered vehicles, or natural gas dual-energy vehicles. This Act also directed the Secretary of Energy to conduct a study regarding such vehicles' performance, fuel economy, safety, and maintenance costs and report to Congress the results of a feasibility study concerning the disposal of such alternative-fueled federal vehicles.

###### Energy Policy Act

The Energy Policy Act reduces dependence on imported petroleum and improves air quality by addressing all aspects of energy supply and demand, including alternative



fuels, renewable energy, and energy efficiency. This Act encourages the use of alternative fuels through both regulatory and voluntary activities and the approaches carried out by the U.S. Department of Energy. It requires federal, state, and alternative fuel provider fleets to acquire alternative fuel vehicles. The Department of Energy's Clean Cities Initiative was established in response to the Energy Policy Act of 1992 to implement voluntary alternative fuel vehicle deployment activities.

The Energy Policy Act (2005) necessitated the development of grant programs, demonstration and testing initiatives, and tax incentives that promote alternative fuels and advanced vehicles production and use. This Act also amends existing regulations, including fuel economy testing procedures and Energy Policy Act of 1992 requirements for federal, state, and alternative fuel provider fleets.

### **Energy Independence and Security Act**

The Energy Independence and Security Act consists of provisions designed to increase energy efficiency and the availability of renewable energy. Key provisions of this Act include:

- The Corporate Average Fuel Economy (CAFE), which sets a target of 54.5 miles per gallon for the combined fleet of cars and light trucks by the model year 2025.
- The Renewable Fuels Standard, which sets a modified standard that starts at 9.0 billion gallons in 2008 and rises to 36 billion gallons by 2022.
- The Energy Efficiency Equipment Standards, which includes a variety of new standards for lighting and residential and commercial appliance equipment.
- The Repeal of Oil and Gas Tax Incentives, which includes the repeal of two tax subsidies to offset the estimated cost to implement the CAFE provision.

#### **3.7.1.2 State**

##### **Senate Bills 1078**

Senate Bill (SB) 1078 (Public Utilities Code [PUC] Chapter 2.3, Sections 387, 390.1, and 399.25) implemented a California Renewable Portfolio Standard, which established a goal that 20 percent of the energy sold to customers be generated by renewable resources by 2017. The goal was accelerated in 2006 under SB 107 and expanded in 2011 under SB 2, which required electric service providers and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

##### **Senate Bill 1389**

The California Energy Commission (CEC) is responsible for, among other things, forecasting future energy needs for the state and developing renewable energy resources and alternative renewable energy technologies for buildings, industry, and transportation. SB 1389 (PRC Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report, assessing major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors. The

report is also intended to provide policy recommendations to conserve resources, protect the environment, and ensure reliable, secure, and diverse energy supplies. The 2019 Integrated Energy Policy Report, required under SB 1389, was adopted on February 20, 2020.

### **Assembly Bill 2076, Reducing Dependence on Petroleum**

The CEC and CARB are directed by Assembly Bill (AB) 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal in AB 2076 is to reduce petroleum demand to 15 percent less than 2003 demand by 2020.

### **Senate Bill 375**

SB 375 was adopted with the goal of reducing greenhouse gas (GHG) emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of its regional transportation plan (RTP) to meet the region's GHG emissions reduction target. The 2020–2045 RTP/SCS prepared by the SCAG includes commitments to reduce emissions from transportation sources to comply with SB 375. This is anticipated to indirectly reduce fuel energy consumption.

### **California Buildings Standard Code – Title 24 Standards**

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The standards require that enforcement agencies determine compliance with CCR Title 24, Part 6 before issuing building permits for any construction.

### **California Buildings Standard Code – Green Building Standards**

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to improve public health by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings, including energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

### **Innovative Clean Transit Regulation**

The Innovative Clean Transit (ICT) regulation was adopted in December 2018 and requires all public transit agencies to gradually transition to a 100 percent zero-emission bus (ZEB) fleet. Beginning in 2029, 100% of new purchases by transit agencies must be ZEBs, with a goal for the full transition by 2040. It applies to all

transit agencies that own, operate, or lease buses with a gross vehicle weight rating (GVWR) greater than 14,000 lbs. It includes standard, articulated, over-the-road, double-decker, and cutaway buses. A ZEB Rollout Plan is required from each transit agency, approved by its Board, to show how it is planning to achieve a full transition to zero-emission technologies by 2040. LADOT Transit published its Rollout Plan in October 2020.

### **3.7.1.3 Local**

#### **GreenLA – An Action Plan to Lead the Nation in Fighting Global Warming**

On May 15, 2007, Los Angeles Mayor Antonio Villaraigosa released the GreenLA Plan that has an overall goal of reducing the City of Los Angeles' GHG emissions by 35 percent below 1990 levels by 2030. This goal exceeds the targets set by both California and the Kyoto Protocol and is the greatest reduction target of any large United States city. The cornerstone of the GreenLA Plan is increasing the City's use of renewable energy to 35 percent by 2020.

#### **City of Los Angeles Sustainability pLAN**

On April 8, 2015, Mayor Eric Garcetti released the Los Angeles Sustainability pLAN, a roadmap to achieve back-to-basics short-term results while setting the path to strengthen and transform the City. The pLAN is made up of short-term (by 2017) and longer-term (by 2025 and 2035) targets in 14 categories to advance the City's environment, economy, and equity. In 2019, Mayor Eric Garcetti released an update to the pLAN (LA's Green New Deal), which accelerates previous sustainability targets and looks even further out to 2050. One provision of L.A.'s Green New Deal is the achievement of an entirely zero-emission bus fleet by the year 2030, which was adopted by the Los Angeles City Council in November 2017 (Council File 17-0739).

L.A.'s Green New Deal is an expanded vision for the Sustainability pLAN for achieving clean air and water and a stable climate in the City (through a zero-carbon grid, zero-carbon transportation, zero-carbon buildings, zero waste, and zero wasted water). It is intended to serve as a guide for creating an equitable and abundant economy in the City, powered by 100% renewable energy. It seeks to build the country's largest, cleanest, and most reliable urban electrical grid to power the next generation of green transportation and clean buildings; educate and train Angelenos to participate in the new green economy; and enact sustainable policies that prioritize economic opportunity.

#### **Los Angeles Green Building Code**

The City's Green Building Code applies to new buildings and alterations with building valuations over \$200,000 (residential and non-residential). The Green Building Code is based on the 2010 California Green Building Standards Code Title 24, Part 11, commonly known as CalGreen, that was developed and mandated by the state to attain consistency among the various jurisdictions within the state, reduce the building's energy and water use, and reduce waste.

### **LADWP Power Strategic Long-Term Resource Plan**

The 2017 Power Strategic Long-Term Resource Plan (SLTRP) is a 20-year roadmap that guides the LADWP power system in its efforts to supply reliable electricity in an environmentally responsible and cost-effective manner. One of the main focuses of the SLTRP is to reduce GHG emissions while maintaining cost-competitive rates and reliable electric service. The SLTRP examines multiple strategies to reduce GHG emissions, including early coal replacement, accelerated renewable portfolio standard, energy efficiency, local solar, energy storage, and transportation electrification.

As LADWP starts to investigate, study, and determine the investments needed for a 100 percent clean energy portfolio, the 2017 SLTRP provides a path towards this goal with a combination of GHG reduction strategies, including early coal replacement two years ahead of schedule by 2025; accelerating renewable portfolio standard (RPS) to 50 percent by 2025, 55 percent by 2030, and 65 percent by 2036; doubling of energy efficiency from 2017 through 2027; repowering coastal in-basin generating units with new, highly efficient potential clean energy projects by 2029 to provide grid reliability and critical ramping capability, accelerating electric transportation to absorb GHG emissions from the transportation sector, and investing in the Power System Reliability Program to maintain a robust and reliable power system.

## **3.7.2 Existing Environment**

### **Electricity**

Existing power and electrical services in the City are provided by the Los Angeles Department of Water and Power (LADWP), which supplies more than 26 million megawatt hours (MWh) of electricity per year for its 1.54 million residential and business customers (Los Angeles Department of Water and Power 2021). LADWP has more than 8,009 megawatts of net dependable generation capacity. Of LADWP's total power resources, about 34 percent are from renewable sources, 27 percent from natural gas, 14 percent from nuclear, 21 percent from coal, and 3 percent from large hydroelectric. About 70 percent of the electricity in the City is consumed by business and industry, with the remaining 30 percent of residents averaging about 500 kilowatt hours of usage per month.

### **Transportation Fuels**

In California, the transportation sector is the state's largest energy consumer, due to high demand from California's many motorists, major airports, and military bases. The majority of transportation energy is currently derived from a wide variety of petroleum products. Automobiles and trucks consume gasoline and diesel fuel. The transportation sector consumes relatively minor amounts of natural gas or electricity but propelled mainly by air quality laws and regulations, technological innovations in transportation are expected to increasingly rely on compressed natural gas and electricity as energy sources. Energy consumption by on-road motor vehicles reflects the types and numbers of vehicles, the extent of their use (typically described in terms of VMT), and their fuel economy (typically described in terms of miles per gallon [mpg]).

Although California's population and economy are expected to continue to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 and 12.7 billion gallons in 2030, a reduction of 20 to 22 percent (California Energy Commission 2017). This decline is due to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles.

### 3.7.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section M.4); LADWP Power Facts and Figures; CalEEMod; California Energy Consumption Database; Energy Impact Assessment (TAHA 2022).

**Comment:** A significant impact would occur if the project construction or operation required wasteful, inefficient, or unnecessary consumption of energy resources.

**Less than significant impact.** The project would involve the construction and operational energy consumption of electricity and transportation fuels. The proposed project would not use natural gas for construction or operations.

#### **Construction**

Regarding electricity, the proposed project would use small pieces of equipment powered by diesel-powered generators that are accounted for in the petroleum-based fuels analysis for construction. Equipment would not be plugged into the electric grid. Construction activities would not require the consumption of electricity.

Transportation fuels would be consumed for construction equipment, worker trips to and from construction sites, material delivery and disposal trips, and loading demolition debris into trucks. Off-road equipment diesel fuel consumption was estimated based on fuel consumption factors in the CARB OFFROAD model and on-road vehicle fuel consumption was estimated using CO<sub>2</sub> emissions from CalEEMod output and fuel carbon content conversion factors from the USEPA GHG inventory emission factor database.

The analysis determined that off-road equipment would consume approximately 50,447 gallons of diesel fuel and that on-road diesel trucks would consume approximately 7,860 gallons of diesel fuel during the two-year construction period, averaging approximately 29,153 gallons per year for the combined end uses. Additionally, construction worker commuting would require approximately 16,884 gallons of motor gasoline over the two-year period, or 8,442 gallons annually on average.

The CEC estimates that the overall consumption of transportation fuel in California was 15.8 billion gallons in 2017 and would be between 12.3 and 12.7 billion gallons by 2030. According to CEC data, in 2019 Los Angeles County retail sales of petroleum fuels were approximately 3,559 million gallons of motor gasoline and 276 million gallons of diesel fuel. Therefore, the construction of the proposed project would increase countywide motor gasoline consumption by approximately 0.0002 percent and countywide diesel fuel consumption by approximately 0.01 percent for two years. These incremental increases in fuel consumption would be practically negligible and would not disproportionately burden the commercially available fuel reserves within Los Angeles County such that additional fuels would need to be refined.

The selected construction contractors would use a fleet of fuel-efficient vehicles compliant with state regulations for all work that would be required under the proposed project, which would minimize the demand for transportation fuels. As such, equipment and vehicles utilized in construction activities would also be subject to compliance with all statewide and local regulations on the efficient use of transportation fuels (such as the CARB Airborne Toxics Control Measure [Title 13, California Code of Regulations, Section 2485] and Off-Road Diesel Regulation).

Therefore, the proposed project would not result in a wasteful, inefficient, and unnecessary usage of energy; result in a substantial increase in energy demand that would affect local or regional energy supplies; or require additional capacity or infrastructure to meet increased demand. As a result, transportation fuel impacts during construction would be less than significant.

### **Operations**

Operation of the proposed project is anticipated to begin in mid-2026 and the primary end uses of energy resources would include petroleum-based transportation fuels consumption for vehicle trips to and from the EBMF and electricity consumption associated with standard building operations as well as BEB charging. The CARB EMFAC model was used to derive aggregate fleet average fuel consumption factors for Los Angeles County vehicles in 2026. According to the Transportation/Traffic Impact Analysis (Parsons, 2022), the proposed project would generate approximately 759 daily vehicle trips and 6,271 daily VMT attributed to employee commuting. Extrapolating the daily VMT over an entire year, annual EBMF operations would produce approximately 2,288,915 VMT and consume approximately 63,673 gallons of motor gasoline and 2,836 gallons of diesel fuel. These fuel consumption rates would represent an increase of approximately 0.002 percent of countywide motor gasoline consumption and 0.001 percent of countywide diesel fuel consumption.

Electricity to the project site would be provided by LADWP. The CalEEMod output and BEB charging analysis determined that typical facility lighting and power would require approximately 1,095 MWh and BEB charging would require approximately 6,935 MWh per year. The proposed project's peak electricity demand would be no more than 8 MW, and the LADWP capacity is approximately 8,000 MW with an instantaneous peak demand of 6,502 MW experience in August 2017. There is more than sufficient capacity within the existing LADWP infrastructure to support the implementation of the

proposed project and its peak and sustained electricity requirements. Additionally, an on-site solar PV renewable energy installation would offset some of the EBMF electricity demands.

Reductions in energy use at the site would also occur with the cessation of industrial activities due to the proposed demolition of the existing warehouse buildings on-site. Additionally, LADOT Transit operations at the Compton Facility would no longer occur once the proposed project is fully operational, eliminating energy resource consumption from 669 daily vehicle trips commuting to the South Yard as well as building energy use. Eventually, implementation of the proposed project would indirectly reduce regional CNG and propane demands associated with the existing Compton Facility fleet bus travel. Operation of the proposed project would not result in wasteful or inefficient use of transportation fuels and would not place a disproportionate burden on existing commercially available reserves.

Therefore, the proposed project would not result in the wasteful, inefficient, and unnecessary usage of energy or a substantial increase in energy demand that would affect local or regional energy supplies. Impacts would be less than significant and no mitigation is required.

*b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section M.4); LA's Green New Deal; SLTRP; Final 2019 Integrated Energy Policy Report; GreenLA Plan; Energy Impact Assessment (TAHA 2022).

**Comment:** A significant impact would occur if the project conflicted with or obstructed a state or local plan for renewable energy or energy efficiency.

**Less than significant impact.** Energy legislation, policies, and standards adopted by California and local governments were enacted and promulgated to reduce energy consumption and improve efficiency (i.e., reducing the wasteful and inefficient use of energy). Therefore, for this analysis, wasteful, inefficient, or unnecessary are defined as circumstances in which the proposed project would conflict with applicable State or local energy legislation, policies, and standards or result in increased per capita energy consumption. Accordingly, inconsistency with legislation, policies, or standards designed to avoid wasteful, inefficient, and current citywide average, is used to evaluate whether the proposed project would result in a significant impact related to energy resources and conservation.

As discussed above, the implementation of the proposed project would not produce a peak electricity demand that would overburden the existing capacity of LADWP's infrastructure. In addition, the implementation of the proposed project would not place an undue burden on the existing petroleum-based transportation fuel supply. Although the proposed project would utilize electricity and transportation fuels, the project would support the LADOT conversion to an all-electric bus fleet in accordance with CARB's ICT regulation and would reduce City reliance on nonrenewable energy sources,

consistent with the goals of the City's Green LA and Sustainable City pLAn. The project would also be built in compliance with the City's Green Building Code and CALGreen and would provide an on-site PV installation to reduce the demand for energy resources from LADWP.

Furthermore, the operation of the proposed project would eventually displace the existing Compton Facility operations, which would lower the net electricity demand and nonrenewable petroleum-based fuels consumption. Thus, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant and no mitigation is required.



### 3.8 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A Soils and Geology Technical Memorandum (Parsons, 2022) was prepared for the project and is provided in Appendix E. The findings of the memo are summarized below.

### **3.8.1 Regulatory Setting**

This section describes existing laws and regulations related to geology and soils that apply to the project.

#### **3.8.1.1 Federal**

The Historic Sites Act of 1935 establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.”. The project site is not included in a Historic Site registry and there are no major geologic features on the site. No federal regulations that specifically address impacts related to geology and soils and apply to the project.

#### **3.8.1.2 State**

##### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (California Public Resources Code, Division 2, Chapter 7.5) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The main purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. Through the facilitation of seismic retrofitting to strengthen existing buildings, including historical buildings, against ground shaking, policies and criteria are also intended to provide citizens with increased safety and to minimize the loss of life during and immediately following earthquakes.

##### **Seismic Hazards Mapping Act**

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 to address non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The purpose of SHMA is to reduce threats to public health and safety and to minimize property damage caused by earthquakes, strong ground shaking, liquefaction, landslides, or other hazards caused by earthquakes. This Act requires the State Geologist to delineate various seismic hazard zones, and cities, counties, and other local permitting agencies to regulate certain development projects within these zones. The State Geologist has established regulatory zones (Zones of Required Investigation) and issued appropriate maps (Seismic Hazard Zone maps).

##### **California Building Code**

CCR Title 24 is the California Building Code (CBC), which is a compilation of building standards for the design, construction, quality of materials, use occupancy, location, and maintenance of all buildings and structures. The CBC serves as the basis for the design, construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California, except for modifications to the standards, as adopted by State agencies and local governing bodies.

The CBC requires the preparation of engineering geologic reports, supplemental ground-response reports, and/or geotechnical reports for all new construction; new structures on existing sites; and alterations to existing buildings. It also includes seismic

design criteria and requirements for use in the structural design of buildings (i.e., based on seismic hazard maps and the seismic design category) and specifies building components that require special seismic certification.

### **3.8.1.3 Local**

#### **City of Los Angeles General Plan Safety Element**

The City's General Plan Safety Element, which was adopted in 1996, addresses public safety risks due to natural disasters, including seismic events and geologic conditions; and sets forth guidance for emergency response during such disasters. The Safety Element also provides generalized maps of areas within the City of Los Angeles that are considered susceptible to earthquake-induced hazards, such as fault rupture and liquefaction.

#### **Los Angeles Building Code**

Chapter XI of the Los Angeles Municipal Code (LAMC) is the Los Angeles Building Code, which adopts by reference the California Building Standards Code. It requires compliance with the Code regulations and the recommendations of an approved geotechnical report to address site-specific soil conditions, fill placement, load-bearing requirements, foundations, and other geologic and seismic factors to ensure structural integrity.

## **3.8.2 Existing Environment**

### **Regional Geology**

The project site is located within the Los Angeles Coastal Plain, which is bounded by mountain ranges to the north and east, by the Palos Verdes Hills to the southwest, and by the Pacific Ocean to the south and west. Specifically, the project site lies within the Rosecrans Hills physiographic region in the central portion of the Los Angeles Coastal Plain, between the Baldwin Hills to the north and the Dominguez Hills to the south.

According to the United States Geological Survey (USGS) topographic map for the Inglewood quadrangle, the topographic gradient in the vicinity of the project site is generally flat with a slight slope toward the northeast. The project site is approximately 107 feet above mean sea level (ft amsl). The site is within the Rosecrans Hills region, which is underlain by Upper Pleistocene sediments. Based on the Natural Resources Conservation Service (NRCS) soil survey data, the dominant soil composition in the project area is Urban Land-Biscailuz-Hueneme. Loam, clay loam, and sand may also be present in the general area of the site.

### **On-Site Geology**

The project area is located in the northern section of the Peninsular Ranges Geomorphic Province, which consists of northwest-southeast-trending, fault-bounded discrete blocks, with mountain ranges, broad intervening valleys, and low-lying coastal plains that extend approximately 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican border, extending southward approximately 775 miles to the tip of Baja California.

Geologic mapping shows the project area is entirely underlain by Holocene-age alluvial gravel, sand, and clay. While not mapped within the project area, Pleistocene-age older alluvium is mapped within a half-mile of the project site and thus, is likely present in the project site at depth. Additionally, the site is developed, and artificial fill is likely present near the surface in previously disturbed portions of the site.

As part of the Phase II ESA and Additional Site Assessment fieldwork, 26 soil borings were advanced at the project site to depths ranging from 15 to 30.5 feet below ground surface (bgs). The boring logs show the upper 10 to 25 feet of soil beneath the project site consists of fine-grained, loose, dry, poorly-graded sands. This is underlain by 5 to 15 feet of medium dense, moist, low plasticity silty sand. The final 5-15 feet of soils observed consisted of fine-grained, loose to very loose, dry to moist, poorly graded sands. The actual thicknesses of these three primary soil types varied throughout the project site, however, the least amount of silty sand was observed in the center of the project site. In several of the borings on the northern portion of the project site, an approximately 5-foot interval of soft, medium plasticity silt, with clay, was observed between 7.5 and 12.5 feet bgs. This silt layer was not observed in any of the central and southern borings.

### 3.8.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.1); Zone Information and Map Access System (ZIMAS); California Geological Survey Special Publication 42 (DOC, 2018); NavigateLA; Earthquake Zones of Required Investigation for the Inglewood Quadrangle; Southeast Los Angeles Community Plan; Geology and Soils Analysis (Parsons, 2022).

**Comment:** Based on the criteria established in the L.A. CEQA Thresholds Guide, a significant impact may occur if the project were located within a State-designated Alquist-Priolo Zone or another designated fault zone.

**Less than significant impact.** Based on the most recently available studies and past fault mapping, the project site is not located within a designated Earthquake Fault Zone (Alquist-Priolo Special Studies Zone). No surface faults are known to pass through or project towards the site. The closest known active fault with a mappable surface expression is the Avalon-Compton fault of the Newport-Inglewood-Rose Canyon fault zone, which is located approximately 1.3 miles southwest of the site.

All new structures are required to adhere to the most current building standards of the LAMC and Los Angeles Building Code (LABC), which adopts California Building Code (CBC) standards by reference, with local amendments (SC-GEO-1). Adherence to the LAMC and LABC requirements, including the use of LABC seismic standards as the minimum seismic-resistant criteria, would ensure the structural integrity of all structures.

The project would not directly or indirectly lead to the risk of loss, injury, or death involving the rupture of a known earthquake fault as the project site is not located within a designated fault zone. Thus, hazards due to ground surface rupture are considered low and impacts related to surface rupture would be less than significant.

*ii) Strong seismic ground shaking?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.1); ZIMAS; California Geological Survey Special Publication 42 (DOC, 2018); NavigateLA; Earthquake Zones of Required Investigation for the Inglewood Quadrangle; Southeast Los Angeles Community Plan; Geology and Soils Analysis (Parsons, 2022).

**Comment:** A significant impact could occur if the project were to result in an increased risk to public safety or destruction of property by exposing people, property, or infrastructure due to seismically induced ground-shaking hazards that are greater than the average risk associated with other locations in Southern California. The intensity of ground shaking depends primarily on the earthquake's magnitude, the distance from the source, and the site response characteristics.

**Less than significant impact.** The project site is located within the seismically active Southern California region and therefore, could be subject to seismic ground motion. While the project site is not located in a designated earthquake fault zone, there is a potential for hazards associated with strong seismic ground shaking during earthquake events throughout the region. The proposed buildings would be subject to ground shaking and potential risk of injury to users due to strong seismic ground shaking.

The demolition of the existing buildings and the construction of new buildings and structures would be required to adhere to all current building code requirements, including the LABC. The proposed project would be designed and constructed in accordance with state and local codes and the recommendations of the geotechnical investigation for the project, as outlined in SC-GEO-1. The project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes, as stated in SC-GEO-2. The project design and adherence to the regulatory requirements and federal, state, and local regulations would ensure that impacts related to seismic ground shaking would be less than significant.

### **Standard Conditions**

The following Standard Conditions shall be implemented, as standard measures for compliance with existing regulations:

**SC-GEO-1:** In accordance with the Los Angeles Municipal Code (LAMC) and Los Angeles Building Code (LABC), a geotechnical investigation shall be prepared to assess site-specific geologic conditions, including the potential for liquefaction, soil expansion, and other geologic hazards at the project site. Applicable standards in the LABC and the recommendations of the geotechnical investigation shall be incorporated into the design and construction of the project.

**SC-GEO-2:** The project plans and specifications shall be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes. Additionally, all grading, excavation, and earthwork activity should be performed under the observation and testing of a qualified Geotechnical Engineer during the following stages:

- Site grading
- Excavation activities
- Any other ground-disturbing activities
- When any unusual or unexpected geotechnical conditions are encountered.

As such, impacts related to seismic ground shaking would be less than significant, which would be ensured by compliance with SC-GEO-1 and SC-GEO-2. No mitigation is required.

*iii) Seismic-related ground failure, including liquefaction?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.1); ZIMAS; California Geological Survey Special Publication 42 (DOC, 2018); NavigateLA; Earthquake Zones of Required Investigation for the Inglewood Quadrangle; Southeast Los Angeles Community Plan; Geology and Soils Analysis (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project were in an area identified as having a high risk of liquefaction and appropriate design measures required within such designated areas were not incorporated into the project.

**Less Than Significant Impact.** Liquefaction zones are areas that have a historical occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions that indicate a potential for permanent ground displacements to occur. Liquefaction occurs when water-saturated sediments are subjected to extended periods of shaking. Pressure increases in the soil pores temporarily alter the soil state from solid to liquid. Liquefied sediments lose strength, in turn causing the failure of adjacent infrastructure, including bridges and buildings. Whether a soil would resist

liquefaction depends on many factors, including grain size, compaction and cementation, saturation and drainage, characteristics of the vibration, and the occurrence of past liquefaction. Granular, unconsolidated, saturated sediments are the most likely to liquefy, while dry, dense, or cohesive soils tend to resist liquefaction. Liquefaction is generally considered to be a hazard where the groundwater is within 40 to 30 feet of the ground surface. Without proper soil drainage, the pore pressure, which builds up when ground motion shakes unconsolidated soil, would be more easily dissipated; thus, soils with proper drainage are less likely to liquefy.

The project site is located within a potential liquefaction hazard zone per the Earthquake Zones of Required Investigation for the Inglewood Quadrangle (CGS, 1999) and is within a City-designated liquefaction area. However, the project site has a low potential for liquefaction due to the absence of groundwater at 40 feet or less bgs (i.e., groundwater is estimated at approximately 60 feet bgs or lower at the site) and the presence of non-liquefiable clayey soils at some depths beneath the site.

The proposed demolition and construction activities would be required to adhere to all current building code requirements, including the LABC. As stated in SC-GEO-1, a geotechnical investigation, including liquefaction and seismic settlement analyses, would be performed before construction activities to assess the potential for liquefaction based on soil types beneath the project site and the project would incorporate geotechnical recommendations to address potential geologic hazards at the site, including liquefaction. The project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes, as stated in SC-GEO-2.

The project would not exacerbate existing environmental conditions and would not directly or indirectly cause substantial adverse effects involving seismic-related ground failure, including liquefaction. The project design and adherence to the regulatory requirements and state and local regulations would ensure that impacts related to ground failure and liquefaction would be less than significant. No mitigation is required.

*iv) Landslides?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.1); ZIMAS; California Geological Survey Special Publication 42 (DOC, 2018); City of Los Angeles General Plan Safety Element Exhibit C; Southeast Los Angeles Community Plan; USGS Topographic Map for the Inglewood Quadrangle; Geology and Soils Analysis (Parsons, 2022).

**Comment:** A significant impact could occur if the project site is in an area identified as having a high risk of landslides.

**No impact.** Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. Landslide zones are areas where landslide movement has previously occurred, or where local topographic, geological, geotechnical, and subsurface water conditions indicate the potential for permanent

ground displacement. The project site is located on relatively flat terrain. There are no historic occurrences of landslides in the project site's vicinity, according to the California Landslide Inventory maintained by the Department of Conservation. According to the Earthquake Zones of Required Investigation for the Inglewood Quadrangle, the project site is outside of mapped Earthquake-Induced Landslide Zones. Thus, the probability of landslides occurring within or near the project site is very low due to the general lack of elevation difference in slope geometry across or adjacent to those portions of the project site. Additionally, the project site is not identified within a City-designated hillside area or earthquake-induced hillside area. Also, project construction and operation are not anticipated to exacerbate existing or future potential for landslides to occur. Therefore, the project would not increase the risk of loss, injury, or death involving landslides. No impacts related to landslides would occur and no mitigation is required.

*b) Result in substantial soil erosion or the loss of topsoil?*

**Reference:** L.A. CEQA Thresholds Guide (Section E.2); USGS Topographic Map for the Inglewood Quadrangle; Geology and Soils Analysis (Parsons, 2022).

**Comment:** The project could have significant sedimentation or erosion impacts if it were to (a) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (b) accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled on the project site.

**Less than significant impact.** The proposed project would include ground-disturbing activities, such as excavation, grading, compaction of soil, and paving. These activities could result in the potential for erosion to occur at the project site, although soil exposure would be temporary and short-term in nature. During construction, BMPs would be implemented to minimize soil erosion and runoff, as required under the NPDES Construction General Permit (SC-HYD-1). As stated in SC-GEO-2, all grading, excavation, and earthwork activity would be performed under the observation and testing of a qualified Geotechnical Engineer during ground-disturbing activities. The project design and the adherence to state and local regulations would ensure impacts related to soil erosion would be less than significant.

Additionally, the project site would be largely covered by pavement and buildings after construction. No large areas of exposed soil would exist that would be exposed to the effects of erosion by wind or water. Due to the implementation of standard engineering practices, BMPs, and paved areas at the project site, the project would not have significant sedimentation or erosion impacts which would constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or would accelerate natural processes of wind and water erosion and sedimentation resulting in sediment runoff or deposition that would not be contained or controlled on the project site. As such, the proposed project would have less than significant impact on erosion and loss of topsoil. No mitigation is required.



*c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

**Reference:** L.A. CEQA Thresholds Guide (Section E.1); Phase I ESA, Phase II ESA and Additional Site Assessment Report (Stantec, 2019) 'Geology and Soils Analysis (Parsons, 2022).

**Comment:** The project could have a significant impact if it is built in an unstable area without proper site preparation, or were to cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or if it were to expose people to a substantial risk of injury.

**Less than significant impact.** One of the major types of liquefaction-induced ground failure is the lateral spreading of mildly sloping ground. Lateral spreading involves primarily the side-to-side movement of earth materials due to ground shaking and is evidenced by near-vertical cracks to the predominately horizontal movement of the soil mass involved. As discussed above in Section 3.7.3 question (a)(iii.), the project site is located within potential liquefaction hazard zones per the Earthquake Zones of Required Investigation for the Inglewood Quadrangle (CGS, 1999) and per the City-designated liquefaction area. The project site appears to have a low potential for liquefaction due to the absence of groundwater at 40 feet or less bgs (i.e., groundwater is estimated at approximately 60 feet bgs or lower at the site) and the presence of non-liquefiable clayey soils at some depths. However, under SC-GEO-1, a geotechnical investigation, including liquefaction and seismic settlement analyses, would be performed before construction activities to further assess the potential for on-site geologic hazards (e.g., liquefaction) based on soil types beneath the project site. The demolition and construction activities would be required to adhere to all current building code requirements, including the LABC, which incorporates current seismic design provisions from the CBC (SC-GEO-1). The project plans and specifications shall also be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes, as stated in SC-GEO-2. The project's design, adherence to the regulatory requirements, and federal, state, and local regulations would ensure impacts related to liquefaction would be less than significant.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as the extraction of large amounts of groundwater, oil, or gas. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. However, the project does not anticipate the extraction of groundwater, oil, or gas from the project site nor is the project site located in an area where that extraction is occurring. Therefore, no impacts related to subsidence would occur.

Collapsible soils consist of loose dry materials that collapse and compact under the addition of water or excessive loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Soil collapse

occurs when the land surface is saturated at depths greater than those reached by typical rain events. According to the Phase I ESA and Phase II ESA and Additional Site Assessment Report, the subsurface conditions at the project site generally consists of existing urban fill soils placed during previous site grading operations over poorly graded sands and silty sands, as encountered in the borings drilled to the maximum depth explored of approximately 30.5 feet bgs. The observed fill soils consist primarily of silty sands, clayey sands, and sandy clays. The depths of the fills were approximately 5 feet bgs. Under SC-GEO-2, all grading, excavation, and earthwork activity would be performed under the observation and testing of a qualified Geotechnical Engineer during the ground-disturbing activities. The project design and the adherence to state and local regulations would ensure impacts related to collapsible soils would be less than significant.

Additionally, the proposed project would be constructed in accordance with the latest version of the LABC and other applicable state and local codes relative to site-specific geologic and seismic hazards (SC-GEO-1). As such, impacts associated with on- or off-site landslides, lateral spreading, subsidence, and collapses would be less than significant.

*d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

**Reference:** Phase I ESA, Phase II ESA, and Additional Site Assessment Report (Stantec, 2019); Geology and Soils Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the project were built on expansive soils without proper site preparation or design features, thereby posing a hazard to life and property.

**Less than significant impact.** Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away. Foundations constructed on expansive soils are subject to uplifting forces caused by the swelling. Without proper management, heaving and cracking of both building foundations and slabs on grade could result.

Soils encountered during the Phase II ESA and Additional Site Assessment activities consisted of sands and silty sands; however, no geotechnical investigation has been completed for the project site. Under SC-GEO-1, a geotechnical investigation should be completed at the project site to assess the potential need for mitigation of expansive soil. While expansive soils are not anticipated, if expansive soils are encountered at the excavation depth, as standard practice, on-site soils with an expansion index exceeding 20 should not be re-used for compaction within 5 feet below the planned finish grade or for retaining wall backfill. Soils containing organic materials should not be used as structural fill. The extent of removal should be determined by the Geotechnical Engineer based on soil observations made during grading. Any proposed import fill should have an expansion index of less than 20 and should be evaluated and approved by the Geotechnical Engineer before importing to the site (SC-GEO-2).

The project would construct several buildings and structures on the proposed site. Construction of the EBMF would be required to comply with the LABC, LAMC, and other applicable building codes (SC-GEO-1). Compliance with these existing regulations would ensure that the project would not exacerbate any existing soil conditions. Impacts would be less than significant, and no mitigation measures would be required.

*e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**Reference:** L.A. CEQA Thresholds Guide (Section E.3); Geology and Soils Analysis (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project were built on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems if such systems were proposed.

**No impact.** The construction and operation of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Infrastructure for the disposal of wastewater already exists at the project site as the existing buildings have active sanitary connections to the 8-inch sewer line on East 111<sup>th</sup> Place that is part of the City's public sewer system. The project would not use septic tanks or an on-site wastewater disposal system but would be connected to the same sewer line and public sewer system. Therefore, no impact associated with the use of alternative wastewater treatment systems would occur. No mitigation is required.

*f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Reference:** L.A. CEQA Thresholds Guide (Sections D.1 and E.3); City of Los Angeles General Plan Conservation Element; USGS Topographic Map for the Inglewood Quadrangle.

**Comment:** Based on the criteria established in the L.A. CEQA Thresholds Guide, a significant impact could occur if grading or excavation activities associated with the project were to disturb unique paleontological resources or unique geologic features that presently exist within the project site.

**Less than significant impact with mitigation incorporated.** The project site is within an urbanized area of the City. According to the Phase II ESA and Additional Site Assessment, the subsurface conditions at the project site generally consist of existing fill soils placed during previous site grading operations over sands and silty sands, as encountered in the borings drilled to the maximum depth explored of approximately 30.5 feet bgs. Native soils underlying the project site have the potential to contain sensitive paleontological resources that may be disturbed during excavation activities, as discussed in Section 3.6.3 checklist question d. Impacts on

paleontological resources would be less than significant with the implementation of MM-PAL-1 through MM-PAL-4.

The site has a relatively flat topography and there are no unique geologic features at the project site. Project excavation activities include shallow excavations for the installation of the EBMF building footings and supporting structures. No impact on unique geologic features would occur from the construction and operation of the project.

### 3.9 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Greenhouse Gas Emissions Impact Assessment Technical Memorandum (TAHA, 2021) was prepared for the project and is provided in Appendix F. The findings of the memo are summarized below.

#### 3.9.1 Regulatory Setting

This section describes existing laws and regulations related to greenhouse gas emissions that apply to the project.

##### 3.9.1.1 Federal

##### **Massachusetts v. Environmental Protection Agency**

The United States Supreme Court (Supreme Court) ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO<sub>2</sub> and other GHGs are pollutants under the federal CAA, which the USEPA must regulate if it determines they pose an endangerment to public health or welfare. On April 17, 2009, the USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. The USEPA stated that high atmospheric levels of GHGs “are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes.” The USEPA further found that “atmospheric concentrations of greenhouse gases endanger public health and welfare within the meaning of Section 202 of the Clean Air Act.” The findings were signed by the USEPA Administrator on December 7, 2009.

##### **Final Endangerment Finding**

The USEPA adopted a Final Endangerment Finding for defined GHGs, as required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA. USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not themselves impose any requirements on industry or

other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

### **Energy Independence and Security Act**

The Energy Independence and Security Act (EISA) of 2007 facilitates the reduction of national GHG emissions by increasing the supply of alternative fuel sources, strengthening standards for energy conservation, and requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs. Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.” A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserves natural resources.

#### **3.9.1.2 State**

California has adopted many regulations to reduce statewide GHG emissions. The following provides a brief overview of regulations most relevant to the proposed project.

#### **California Greenhouse Gas Reduction Targets**

Executive Order (EO) S-3-05 created GHG emission reduction targets in California. The targets included reducing GHG emissions to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The California Climate Action Team (CAT) was created to collectively and efficiently reduce GHG emissions. The CAT provides periodic reports to the Governor and Legislature on the status of GHG reductions in the State, as well as strategies for mitigating and adapting to climate change. The first CAT Report to the Governor and the Legislature in 2006 contained recommendations and strategies to help meet the targets in EO S-3-05. The CAT stated that smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors.

EO B-30-15 directed State agencies to establish a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030. It also ordered State agencies to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets and directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

EO B-55-18 establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Based on this executive order, CARB worked with relevant agencies to develop a framework for implementation and accounting that tracks progress towards this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

### **Assembly Bill 32 and Senate Bill 32**

In 2006, the California State Legislature adopted Assembly Bill (AB) 32, which focuses on reducing GHG emissions in California to 1990 levels by 2020. It represents the first enforceable Statewide program to limit emissions of these GHGs from all major industries, with penalties for noncompliance. CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 Statewide levels by 2020.

To achieve these goals, which are consistent with the California CAT GHG targets for 2010 and 2020, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources consistent with the CAT strategies, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. To achieve the reduction targets, AB 32 requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill, AB 197. SB 32 and AB 197 established a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and included provisions to ensure that the benefits of State climate policies reach disadvantaged communities. The new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

### **Climate Change Scoping Plan**

AB 32 requires CARB to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. The 2008 Climate Change Scoping Plan proposes a “comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health.”

In the 2008 Climate Change Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations). CARB originally used an average of the State’s GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO<sub>2e</sub>. Therefore, under the original projections, the State would have had to reduce its 2020 BAU emissions by 28.4 percent to meet the 1990 target of 427 MMTCO<sub>2e</sub>.

Subsequent to the adoption of the 2008 Climate Change Scoping Plan, a lawsuit was filed challenging CARB’s approval of the Climate Change Scoping Plan Functional Equivalent Document. CARB updated the projected 2020 BAU emissions inventory

based on current economic forecasts and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from BAU conditions. When the 2020 emissions level projection was also updated to account for newly implemented regulatory measures discussed above, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.

The First Update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations. CARB revised the target and determined the 1990 GHG emissions inventory and 2020 GHG emissions limit to be 431 MMTCO<sub>2e</sub>. CARB also updated the State's 2020 BAU emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulations that had recently been adopted for motor vehicles and renewable energy. Under the first update to the Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 MMTCO<sub>2e</sub> would have been 78.4 MMTCO<sub>2e</sub>, or a reduction of GHG emissions by approximately 15.4 percent.

In response to the passage of SB 32 and the identification of the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan. The 2017 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and the First Update while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health. The 2017 Update includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade program, which constrain and reduce emissions at covered sources. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the Scoping Plan, the State's long-term goals, and state-of-the-science.

### **Senate Bill 375—Sustainable Communities Strategy**

SB 375 was adopted with the goal of reducing GHG emissions from cars and light trucks. Under SB 375, the reduction target must be incorporated within that region's RTP, which is used for long-term transportation planning, in a SCS. Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

### **California Buildings Standard Code – Title 24 Standards**

The California Energy Commission first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards



are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The standards require that enforcement agencies determine compliance with the CCR, Title 24, Part 6 before issuing building permits for any construction.

### **Green Building Standards Code**

Part 11 of CCR Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CalGreen) Code. The purpose of the CalGreen Code is to improve public health by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CalGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CalGreen Code establishes mandatory measures for new residential and non-residential buildings, including energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

### **3.9.1.3 Regional**

#### **SCAG 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy**

On September 3, 2020, SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), or Connect SoCal, as an update to the previous 2016–2040 RTP/SCS. Connect SoCal incorporates a range of best practices for increasing transportation choices, reducing dependence on personal automobiles, further improving air quality and reducing GHG emissions, and encouraging growth in walkable, mixed-use communities with convenient access to transit infrastructure and employment. SCAG, in conjunction with CARB, determined that implementation of Connect SoCal would achieve regional GHG reductions relative to 2005 SCAG areawide levels of approximately 8 percent in 2020 and approximately 19 percent by 2045. The regional GHG emissions reductions achieved through the Connect SoCal Growth Vision are consistent with the regional targets set forth by CARB through SB 375.

#### **SCAQMD Policies**

In 2008, the SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds. The SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 MTCO<sub>2e</sub> per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO<sub>2e</sub> per year would be assumed to have a less than significant impact on climate change.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO<sub>2e</sub> per year for stationary source/industrial projects where the SCAQMD is the lead agency. However, the

SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects); therefore, the commercial/residential thresholds were not formally adopted. The aforementioned Working Group has been inactive since 2011, however, and SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

#### **3.9.1.4 Local**

##### **GreenLA Action Plan**

On May 15, 2007, Mayor Antonio Villaraigosa released the GreenLA Plan Climate Action Plan (GreenLA) that established an overall goal of reducing the City of Los Angeles' GHG emissions by 35 percent below 1990 levels by 2030. This goal exceeds the targets set by both California and the Kyoto Protocol and is the greatest reduction target of any large United States city. The cornerstone of the GreenLA Plan is increasing the City's use of renewable energy to 35 percent by 2020.

##### **Sustainability pLAN/LA's Green New Deal**

On April 8, 2015, Mayor Eric Garcetti released the Sustainability pLAN, a roadmap to achieve back-to-basics short-term results while setting the path to strengthen and transform the City. The pLAN is made up of short-term (by 2017) and longer-term (by 2025 and 2035) targets in 14 categories to advance the City's environment, economy, and equity. In 2019, Mayor Eric Garcetti released an update to the pLAN (L.A.'s Green New Deal), which accelerates previous sustainability targets and looks even further out to 2050. One provision of L.A.'s Green New Deal is the achievement of an entirely zero-emission bus fleet by the year 2030, which was adopted by the Los Angeles City Council in November 2017 (Council File 17-0739).

##### **Los Angeles City Green Building Code**

The City adopted the Green Building Code to reduce the City's carbon footprint. The Green Building Code applies to new buildings and alterations with building valuations over \$200,000 (residential and non-residential). The Green Building Code is based on the 2019 CALGreen Code within Title 24, Part 11, commonly known as CalGreen, that was developed and mandated by the State to attain consistency among the various jurisdictions within the State; reduce the building's energy and water use; and reduce waste.

#### **3.9.2 Existing Environment**

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and severe weather events. Global warming, a related concept, is the observed increase in the average temperature of the Earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere.

GHGs are those compounds in Earth's atmosphere that play a critical role in determining Earth's surface temperature. GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and other gases that are not pertinent to the project.

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Table 3.9-1 displays the statewide GHG emissions from 2010 to 2019 by economic sectors categorized in the 2008 Scoping Plan. Generally, California’s GHG emissions have followed a declining trend over the past decade. In 2019, emissions from routine GHG emitting activities statewide were approximately 29.7 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e) (6.6 percent) lower than 2010 levels, and approximately 13 MMTCO<sub>2</sub>e below the 1990 level (431 MMTCO<sub>2</sub>e), which is the State’s 2020 GHG target.

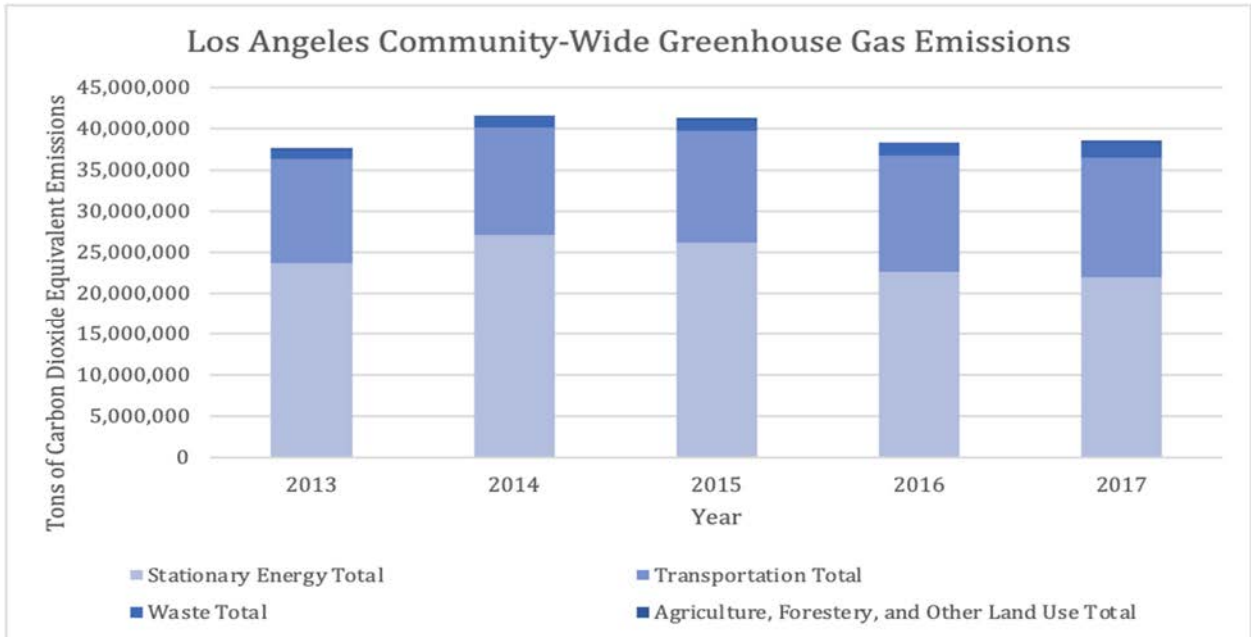
**Table 3.9-1: California GHG Emissions Inventory Trend**

Sector	CO <sub>2</sub> e Emissions (Million Metric Tons)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transportation	165.1	161.8	161.4	161.3	162.6	166.2	169.8	171.2	169.6	166.1
Industrial	91.1	89.4	88.9	91.7	92.5	90.3	89.0	88.8	89.2	88.2
Electric Power	90.3	89.2	98.2	91.4	88.9	84.8	68.6	62.1	63.1	58.8
Commercial/ Residential	45.9	46.0	43.5	44.2	38.2	38.8	40.6	41.3	41.4	43.8
Agriculture	33.7	34.4	35.5	33.8	34.7	33.5	33.3	32.5	32.7	31.8
High GWP	13.5	14.5	15.5	16.8	17.7	18.6	19.2	20.0	20.4	20.6
Recycling and Waste	8.3	8.4	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.9
<b>Emissions Total</b>	<b>447.9</b>	<b>443.7</b>	<b>451.3</b>	<b>447.6</b>	<b>443.0</b>	<b>440.7</b>	<b>429.1</b>	<b>424.6</b>	<b>425.1</b>	<b>418.2</b>
<b>Source:</b> CARB, California Greenhouse Gas Emission Inventory – 2021 Edition, available at <a href="https://ww2.arb.ca.gov/ghg-inventory-data">https://ww2.arb.ca.gov/ghg-inventory-data</a> .										

Figure 3.9-1 displays the total annual emissions for the City between 2013–2017 and the contributions by sector.<sup>1</sup>

<sup>1</sup> City of Los Angeles, *Los Angeles Open Data Portal – Community-Wide Greenhouse Gas Emissions*, 2020.

**Figure 3.9-1: Los Angeles Community-Wide Greenhouse Gas Emissions**



Within the City, the combination of stationary (i.e., building operations energy) and transportation sources comprise approximately 95 percent of total GHG emissions. The City is also currently striving to improve from being 50 percent energy-reliant on coal power to coal-free by 2025 and to expand its existing power mix of 30 percent renewable energy to 100 percent by 2045.

The project site is currently developed with two industrial buildings that have been left vacant for a period of time but are currently used as a logistics warehouse for solar panels temporarily while in escrow with the City. GHG emissions are currently generated by on-site industrial activities.

### 3.9.3 Impact Analysis

#### 3.9.3.1 Methodology

CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess GHG emissions quantitatively or qualitatively. GHG emissions that would be generated by the project were estimated using the California Emissions Estimator Model (CalEEMod, Version 2020.4.0), which is the preferred regulatory tool recommended by SCAQMD for estimating GHG emissions from proposed CEQA projects. CalEEMod relies on an emissions factors database compiled from the CARB EMFAC on-road mobile source emissions inventory model and the CARB OFFROAD off-road equipment model, as well as regional survey data for energy resource consumption, water use, and solid waste generation, to produce estimates of GHG emissions.

The GHG emissions analysis quantified total GHG emissions that would be generated by off-road equipment and on-road vehicle sources during each phase of the proposed project construction. GHG emissions that would be generated by the construction of the project were estimated and amortized over a 30-year operational lifetime. The GHG emissions analysis for proposed project operations involved two elements: estimating direct and indirect GHG emissions generated by EBMF routine operations in CalEEMod and estimating indirect GHG emissions associated with the BEB fleet charging.

The detailed calculation assumptions, model input, and output can be found in the GHG Impact Assessment Technical Memorandum (TAHA, 2021).

### **3.9.3.2 Responses to CEQA Checklist**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Reference:** CalEEMod; Senate Bill 100; GHG Emissions Impact Assessment (TAHA, 2022).

**Comment:** A significant impact may occur if the proposed project would generate GHG emissions that would have a significant impact on the environment. Direct sources of GHG emissions involved in the proposed project include equipment operations, commuting vehicle trips, energy (natural gas combustion), and area (landscaping) sources. Indirect GHG emissions would be associated with solid waste disposal, water and wastewater distribution, and electricity generation.

**Less than significant impact.** Direct sources of GHG emissions involved in proposed project construction and operations include construction equipment and vehicles, as well as operational mobile (commuting vehicle trips), energy (natural gas combustion), and area (landscaping) sources. Indirect GHG emissions would be associated with solid waste disposal, water and wastewater distribution, and electricity generation.

### **Construction**

Construction of the proposed project is anticipated to begin in mid-2024 and last for approximately two years. CalEEMod was used to quantify the total amount of GHG emissions that would be generated by construction activities, and the construction emissions were amortized over a 30-year operational lifetime in accordance with SCAQMD methodologies. Construction of the proposed project would generate a short-term total of 688.4 MTCO<sub>2e</sub>, which converts to approximately 22.9 MTCO<sub>2e</sub> when amortized over 30 years.

### **Operations**

CalEEMod was used to estimate annual GHG emissions associated with the standard building operations of the proposed project, including emissions associated with

employee commuting, energy use, property landscaping and maintenance, water and wastewater, and solid waste disposal. In addition to typical building operations, BEB charging would result in indirect emissions associated with the generation of electricity for BEB propulsion. Electricity at the project site for BEB charging would be provided by the LADWP, which reported an existing carbon intensity of its delivered power mix of 579 pounds of CO<sub>2e</sub> per megawatt-hour (lbs.CO<sub>2e</sub>/MWh) in 2020. Estimates of annual GHG emissions by the project are provided in Table 3.9-2.

**Table 3.9-2: Estimated Annual GHG Emissions**

<b>Emissions Source</b>	<b>Source Type</b>	<b>Annual Emissions (MTCO<sub>2e</sub>)</b>
Amortized Construction	Direct	22.9
Area (i.e., Landscaping)	Direct	<0.1
Building Energy	Direct/Indirect	394.6
Net Mobile Vehicle Trips	Direct	87.9
Waste Disposal	Indirect	89.6
Water Distribution	Indirect	53.9
BEB Charging	Indirect	1,821.3
<b>Total Annual Emissions</b>		<b>2,470.3</b>
SCAQMD Annual Threshold (Industrial Uses)		10,000
<b>On-Site Renewable Energy Analysis</b>		
<b>Fraction of Power Provided</b>	<b>Electricity Emission Reduction (MTCO<sub>2e</sub>)</b>	<b>Net Annual Emissions (MTCO<sub>2e</sub>)</b>
5%	108.3	2,339.1
10%	216.6	2,230.8
15%	324.9	2,122.5
20%	433.2	2,014.2
25%	541.5	1,905.9
Source: TAHA, 2021.		

When combined with operational emissions, the total annual proposed project GHG emissions would be approximately 2,470.3 MTCO<sub>2e</sub> per year. This value represents a conservative estimate based on the assumption that bus charging would require approximately 19 MWh daily to charge 76 BEBs for 2.5 hours at 100 kW, and also does not factor into account the amount of electricity that would be supplied by the 2,000-kW PV system. The demolition of the existing buildings and their discontinued use as a warehouse for solar panels would result in an additional reduction in GHG emissions that would be generated at the site. Furthermore, the project would be constructed in accordance with the City's Green Building Code, which would reduce the building's energy and water use and waste disposal needs, and associated GHG emissions.

Table 3.9-2 also provides a demonstrative analysis of the GHG emission reductions that would occur annually with the implementation of the proposed project, assuming a range of proportions of electrical power provided by the on-site renewable PV installation. As shown above, for every 5 percent of the total required electricity produced for proposed project operations, the on-site PV installation would provide an emissions benefit of approximately 108.3 MTCO<sub>2e</sub> annually.

Additionally, the carbon intensity of the LADWP power mix would be reduced in future years to comply with SB100, which requires all electricity service providers within the State to obtain 44 percent of supplied power from renewable resources by the end of 2024 and 52 percent of supplied renewable power by the end of 2027, with the ultimate goal of reaching 60 percent renewable by the end of 2030. Annual indirect GHG emissions associated with the provision of LADWP electricity would gradually decline in future years as the power mix expands its renewable portfolio. Regardless of expected GHG emissions reductions associated with on-site renewable energy and the expansion of LADWP's renewable power mix, implementation of the proposed project would generate no more than 2,470 MTCO<sub>2e</sub> annually, which would be substantially below the SCAQMD's annual mass threshold for industrial uses.

The GHG emissions estimates do not account for existing Compton Facility operations, where 95 LADOT buses are currently stored and maintained. Once the proposed project is fully implemented, LADOT operations at the Compton Facility would eventually cease as they are replaced by the EBMF. The net increase in GHG emissions would be lower than shown in Table 3.9-2, above, after accounting for the cessation of energy, utility, and area source GHG emissions attributed to the existing facility. Thus, the implementation of the proposed project would result in a less than significant impact related to the magnitude of direct and indirect GHG emissions that it would produce. No mitigation is required.

*b) Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

**Reference:** SCAG RTP/SCS; Climate Change Scoping Plan; L.A.'s Green New Deal; GHG Emissions Impact Assessment (TAHA, 2022).

**Comment:** A significant impact may occur if the implementation of the proposed project would impede the achievement of goals, targets, or objectives officially adopted by plans and regulations for the purpose of reducing GHG emissions. Applicable regulatory actions promulgated to reduce GHG emissions include Executive Order S-3-05, the AB 32 Climate Change Scoping Plan, EO B-30-15, SB 32, and the SCAG 2020–2045 RTP/SCS.

**Less than significant impact.** Electrification of transit services is a core component of GHG emission reduction planning initiatives at the state, regional, and local levels. The following analysis describes the extent to which the project complies with or does not conflict with adopted plans and policies to reduce GHG emissions. As the effects of GHG emissions on the environment are fundamentally cumulative, the assessment of potential impacts evaluated the combined emissions from short-term construction

activities and long-term EBMF operations in the context of applicable plans and policies.

At the State level, EO S-3-05 and B-30-15 are orders from the State's Executive Branch designed to reduce GHG emissions. The goal of EO S-3-05 to reduce GHG emissions to 1990 levels by 2020 was adopted by the Legislature as the 2006 Global Warming Solutions Act (AB 32) and codified into law in HSC division 25.5. The goal of EO B-30-15 to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030 was adopted by the Legislature in SB 32 and also codified into law in Health and Safety Code (HSC) Division 25.5. In support of HSC Division 25.5, the State has promulgated a robust framework of laws and strategies to reduce GHG emissions in the *Climate Change Scoping Plan*.

The *Climate Change Scoping Plan* and subsequent updates in 2014 and 2017 contain a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The GHG Emissions Impact Assessment (Appendix F) provides an evaluation of project consistency with relevant measures in the 2008 and 2017 Climate Change Scoping Plans and RTP/SCS. No conflict with these plans would occur with the project.

Although *L.A.'s Green New Deal* does not represent an approved Climate Action Plan under CEQA, it includes the proposed project as necessary to achieve its goals. Implementation of the project is essential to achieving City initiatives to adapt to the effects of climate change. The 2020 LADOT Transit Rollout Plan recognized that the EBMF is needed to meet the City's goal of 100 percent BEBs by 2030, as adopted through City Council Motion 17-0739 that was incorporated into *L.A.'s Green New Deal*. Thus, the proposed project would provide direct benefits towards meeting the objectives of *L.A.'s Green New Deal*. Therefore, the implementation of the project would be consistent with all applicable GHG reduction plans and policies, and its impact would be less than significant. No mitigation is required.



### 3.10 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Hazardous Materials Technical Memorandum (Parsons, 2022) was prepared for the project and is provided in Appendix G. The findings of the study are summarized below.

#### 3.10.1 Regulatory Setting

This section describes existing laws and regulations related to hazards and hazardous materials that apply to the project.

### **3.10.1.1 Federal**

#### **Toxic Substances Control Act/ Resource Conservation and Recovery Act/ Hazardous and Solid Waste Act**

The Toxic Substances Control Act (TSCA) of 1976 and the Resources Conservation and Recovery Act (RCRA) of 1976 established the U.S. Environmental Protection Agency (U.S. EPA)-administered program to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. TSCA authorized the U.S. EPA to secure information on new and existing chemical substances, and to control the substances that were determined to cause unreasonable risk to public health or the environment. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” systems of regulating hazardous wastes.

#### **Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 provides a Federal “Superfund” to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the U.S. EPA is given the power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The U.S. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, U.S. EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. U.S. EPA also recovers costs from financially viable individuals and companies once a response action has been completed.

#### **Superfund Amendments and Reauthorization Act**

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA reflected the U.S. EPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased State involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to \$8.5 billion.

SARA also required U.S. EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List (NPL).

### **Clean Water Act**

The Clean Water Act (CWA) of 1977 (33 U.S.C. 1251 et seq.), which amended the Federal Water Pollution Control Act of 1972, established the basic structure for regulating discharges of pollutants into the waters of the United States (not including groundwater) and was designed to restore and maintain the chemical, physical and biological integrity of the waters of the United States. The CWA delegates authority to the U.S. Environmental Protection Agency (U.S. EPA) to implement pollution control programs. Under the CWA, it is unlawful for any person to discharge any pollutant from a point source into navigable waters.

Section 303(d) of the CWA requires each state to identify and list impaired surface waters that do not meet, or that the state expects will not meet, state water quality standards. This is a subset of the 305(b) list, which contains information on all water bodies. It also requires each state to develop total maximum daily loads (TMDLs) from the pollution sources for such impaired water bodies. The water quality standards are promulgated under the National Toxics Rule (NTR) or the California Toxics Rule (CTR) after minimum technology-based effluent limitations have been implemented for point sources.

Section 401 of the CWA requires the protection of the physical, chemical, and biological integrity of waters. Section 401 requires that when applying for a federal permit for proposed activities that may discharge into waters of the United States, the applicant is required to obtain certification from the state that the discharge will comply with the provisions of the CWA. Applicants are required to meet the effluent limitations and monitoring requirements necessary to ensure compliance with the federal license or permit.

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate all point source discharges to waters of the United States, including stormwater associated with construction activities, industrial operations, and municipal drainage systems, to protect surface water quality. The NPDES permit program controls, minimizes, or reduces surface water impacts. Two types of the NPDES program stormwater permits would be relevant to the project, the Municipal General Permit and Construction General Permit.

### **Occupational Safety and Health Administration Standards**

The Occupational Safety and Health Administration's (OSHA) mission is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR 1910.

### **3.10.1.2 State**

#### **California Environmental Protection Agency**

The California Environmental Protection Agency (CalEPA) was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), State Water Resources Control Board (SWRCB), RWQCB, CalRecycle, Department of Toxic Substances Control, Office of Environmental Health Hazard Assessment, and Department of Pesticide Regulation under one agency. These agencies were placed under the CalEPA "umbrella" for the protection of human health and the environment to ensure the coordinated deployment of state resources. Their mission is to restore, protect, and enhance the environment and ensure public health, environmental quality, and economic vitality.

#### **California Department of Toxic Substances Control**

The Department of Toxic Substances Control (DTSC) is the primary state agency with jurisdiction over hazardous chemical materials management. Through the enforcement of hazardous waste laws and regulations, DTSC is committed to protecting residents and their environment from exposure to hazardous waste (DTSC, 2020). The DTSC takes enforcement action against violators; oversees cleanup of hazardous wastes on contaminated properties; makes decisions on permit applications from companies that want to store, treat or dispose of hazardous waste; and protects consumers against toxic ingredients in everyday products. The DTSC is committed to engaging the public in a way that gives those most affected by its decisions opportunities to voice their concerns and ask questions.

#### **Cortese List**

Government Code 65962.5 requires CalEPA to develop a hazardous waste and substances site list (Cortese List), which includes: hazardous waste sites according to DTSC and the Health and Safety Code; contaminated public drinking water wells sites listed by the State Department of Health Services; Underground Storage Tank (UST) leaks, solid waste facilities, and hazardous waste sites listed by the SWRCB; and other sites as designated by various other state and local governments. Section 6592.5 requires that the Cortese list be at least annually updated. The Cortese List complies with the CEQA requirements in providing information about the location of hazardous materials release sites.

#### **Porter-Cologne Water Quality Control Act**

The Porter-Cologne Water Quality Control Act restricts the disposal of wastes or any other activity that may degrade the waters of the state. The Porter-Cologne Water Quality Control Act requires cleanup of wastes that are below hazardous concentrations but could impact ground and surface water quality (Section 13002). The Porter-Cologne Water Quality Control Act established nine Region and State Water Boards, which are primarily responsible for protecting water quality in California. The Regional Water Boards regulate discharges by issuing permits through NPDES for waste discharge requirements for non-point source discharges. Anyone discharging materials or proposing to discharge materials that could affect water

quality must file a report of waste discharge unless the discharge would be into a community sewer system (SWRCB, 2019).

### **Unified Hazardous Waste and Hazardous Materials Management Regulatory Program**

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9) provides authority to the Certified Unified Program Agency (CUPA). The CUPA for the City is the Los Angeles Fire Department (LAFD) Haz Mat Program.

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following hazardous materials programs: Site Mitigation Unit (SMU), Hazardous Materials Business Plan (HMBP) Program, California Accidental Release Prevention (CalARP) Program, UST Program, Above ground Storage Tank (AST) Program, Hazardous Waste Generator Program, and Hazardous Waste Tiered-Permitting Program.

### **California Code of Regulations, Title 8—Industrial Relations**

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal OSHA) and the federal OSHA are the agencies responsible for assuring worker safety in the workplace. Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would apply to construction activities.

### **California Labor Code (Division 5, Parts 1, 6, 7, and 7.5)**

The California Labor Code is a collection of regulations that include regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who oversee handling hazardous materials are appropriately trained and informed with respect to the materials they handle. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

#### **3.10.1.3 Regional**

##### **South Coast Air Quality Management District Rules**

The SCAQMD has also established various rules to manage and improve air quality in the South Coast Air Basin (SCAB). The proposed project shall comply with all applicable SCAQMD Rules and Regulations pertaining to construction activities, including, but not limited to:

- **Rule 402 (Nuisance)** states that a person should not emit air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the

comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- **Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil** was adopted by the SCAQMD on August 5, 1988, and subsequently amended in 1995 and 2001. The rule sets requirements to control the emission of Volatile Organic Compounds (VOC) during the excavating, grading, handling, and/or treating of VOC- contaminated soil. Before these activities, an approved mitigation plan must be obtained from SCAQMD.
- **Rule 1403 - Asbestos Emissions from Demolition/Renovation Activities** specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM), such as underground utility pipes, which may be applicable in some instances on the project site. The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures, and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings. Applicability of this rule, in whole or in part, applies to owners and operators of any demolition or renovation activity, and the associated disturbance of asbestos.

#### **3.10.1.4 Local**

##### **City of Los Angeles General Plan Safety Element**

The City's General Plan Safety Element (Safety Element), which was adopted in 1996, addresses public safety risks due to natural disasters, including seismic events and geologic conditions; and sets forth guidance for emergency response during such disasters. The Hazard Mitigation section of the Safety Element includes a goal to minimize "...injury, loss of life, property damage and disruption of the social and economic life due to fire, water-related hazard, seismic event, geologic conditions or release of hazardous materials disasters...". It also includes a policy to "...protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation."

##### **Los Angeles Fire Department (LAFD) Haz Mat Program**

The LAFD provides emergency response and guidance to hazardous materials incidents within the City. The LAFD Haz Mat Program utilizes a unified approach with allied agencies (i.e. Los Angeles County Fire Department or LACFD) and many stakeholders to provide preparedness, prevention, response, mitigation, and resiliency to hazardous materials emergencies. The LAFD is an all-hazards response organization, and the Haz Mat Program is designed to address the natural,

technological, or purposeful response challenges, including chemical, biological, radiological, nuclear, and explosive (CBRNE) threats to our community and national security. As the Certified Unified Program Agency (CUPA), the LAFD implements the Haz Mat Program and uses the *Hazardous Materials Incident Contingency Plan* protocol by the California Office of Emergency Services for the notification process and handling of emergencies related to hazardous material incidents.

### **City of Los Angeles Emergency Operations Organization and Hazard Mitigation Plan**

The Department of Emergency Operations Organization (EEO) within the City is responsible for the City's emergency preparations (planning, training, and mitigation), response and recovery operations. The EEO is comprised of all agencies of the City's government and centralizes command and information coordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources.

The 2018 Hazard Mitigation Plan (HMP) is prepared to lessen the vulnerability to disasters and to reduce risks from natural hazards. An HMP serves as a guide for decision makers as they commit City resources to minimize the effects of natural hazards. The HMP integrates with existing planning mechanisms such as building and zoning regulations, long-range planning mechanisms, and environmental planning. The planning process includes conducting a thorough hazard vulnerability analysis, creating community disaster mitigation priorities, and developing subsequent mitigation strategies and projects.

## **3.10.2 Existing Environment**

### **Phase I ESA**

The Phase I ESA for the project site states that the 740-780 East 111<sup>th</sup> Place property (APN 6071-022-009) is developed with an approximately 118,800-square-foot single-story warehouse building (circa 1956), which is partitioned into two storage areas separated by a solid wall and an office space in the northwestern corner. Two 350-gallon polyethylene totes with unknown contents were observed in the driveway. Small oil-like stains were observed in the southern warehouse. Most of the floor space in the active warehouse was obscured by merchandise stacked on pallets, making it impossible to identify staining in these areas. Two electrical transformers were located inside the existing structures; however, it is unknown if these units contain polychlorinated biphenyl (PCB). A sump that potentially captures surface water runoff was also identified on the northwest corner of the warehouse, near the loading dock. Numerous asphalt patches were observed in the exterior, some of which, appeared large enough to potentially indicate former soil excavations. The areas were large enough for an underground storage tank (UST) to have been previously present.

The 800 East 111<sup>th</sup> Place property (APN 6071-022-013) is developed with an approximately 32,250-square-foot single-story warehouse building (circa 1957), which is divided into three portions. An electrical transformer owned by LADWP was observed in the northeast corner of the driveway, however, it is unknown if it contains

PCBs. The granular sorbent was spread out over a large area in the driveway; however, it was unclear what had spilled. Most of the parking areas were being utilized for miscellaneous storage, however, the visible areas were generally oil-stained. The miscellaneous storage at this parcel included the following wastes:

- Roll-off bins containing soil and/or items to be segregated for recycling
- 55-gallon drums and 5-gallon buckets filled with used transmission fluid, used motor oil, other automotive lubricants, and used oil filters
- 350-gallon totes (some were empty) containing unknown liquid material
- Used metal fuel tanks
- Universal waste
- Obsolete set lighting (unknown if they contain PCBs)
- Inoperable vehicles and trailers at various states of decay

The Phase I ESA identified the following recognized environmental conditions (RECs) associated with the site:

- The historic presence of USTs used for fuels with a documented release, as well as the current use of the site for chemical storage with evidence of spills.
- Two environmental cases have previously been opened for 740-780 East 111<sup>th</sup> Place (Formerly Bell Industries Reliable Steel), both relating to unauthorized releases from on-site diesel USTs. The impacts to soil were identified during the removal of both USTs; first, the 7,000-gallon diesel UST tank in 1988, followed by the removal of the 10,000-gallon diesel UST in 1994. Remedial action (excavation) was completed for both cases. No record of a 'No Further Action' designation for the case related to the 7,000-gallon UST was found. However, the Phase I ESA concluded that this was related to incomplete records rather than a continued violation. The case related to the removal of the 10,000-gallon UST did receive a 'No Further Action' notice from the City of Los Angeles Fire Department following the completion of excavation activities in 1994. These two former cases were identified as RECs due to the potential for residual contamination to remain in the soil and the potential to have created a potential vapor intrusion issue.
- Records identified several fuel USTs as having been present at 800 East 111<sup>th</sup> Place (formerly Aircraft & Component Equipment Suppliers). Based on these records, the potential exists for at least two of the USTs to remain in place.
- Chemical and waste storage were identified at both properties during the site reconnaissance visit, including, but not limited to, totes with unidentified liquids, soil bins, vessels with petroleum hydrocarbons, and various solvents. Additionally, distressed asphalt, as well as evidence of surface releases (staining, sorbent materials, etc.) were observed throughout the exteriors of both properties. The presence of this combination of chemicals and the stained, distressed asphalt were identified as a REC. The distressed surfacing presents a potential pathway for those chemicals to migrate into the underlying soil.

Based on these RECs, the Phase I ESA recommended the completion of a Phase II ESA, including the collection of soil and sub-slab soil vapor samples for laboratory



analyses, to assess the presence of any subsurface impacts from potential chemicals of concern (PCOCs). Additionally, it recommended that a geophysical survey be completed to evaluate if any of the USTs remained at the two properties.

Also, based on the years of construction (1956-1957), both buildings on the two properties have a higher risk of containing asbestos-containing materials (ACMs), PCBs in caulk, transformers, and other old electrical equipment, and/or lead-based paint. In accordance with SCAQMD Rule 1403, a pre-demolition building survey for ACM is required before demolition. Therefore, a pre-demolition survey is recommended for ACMs, lead-based paint, PCBs, and other hazardous materials before any on-site demolition.

### **Phase II ESA and Additional Site Assessment**

A Phase II ESA was completed for the 740-780 and 800 East 111<sup>th</sup> Place properties, including soil and sub-slab soil vapor sampling, to evaluate the potential for impacts to the subsurface from volatile organic compounds (VOCs), metals, and total petroleum hydrocarbons (TPH). As part of the Phase II ESA, 16 soil borings were drilled to a maximum terminal depth of 25 feet (ft.) bgs. A total of 49 soil samples were submitted for laboratory analysis for VOCs, TPH, and total metals. Additionally, 13 sub-slab soil vapor samples were collected from 12 Cox-Colvin Vapor Pins™ that were installed in the slabs of both the existing buildings. The 13 sub-slab soil vapor samples were analyzed for VOCs, fixed gases, and methane.

TPH in both the diesel (DRO) and waste oil (ORO) ranges, as well as four VOCs (acetone, benzene, toluene, and tetrachloroethene [PCE]), were detected in soil samples. However, all concentrations were below regulatory screening levels. Several metals were also detected in the soil samples that were analyzed. Arsenic was the only metal with concentrations that exceeded screening levels. All detected concentrations were below background levels (12 mg/kg) typical of southern California as accepted by the DTSC. All other metal detections were below their corresponding regulatory screening levels.

The soil vapor analytical results were compared to screening levels published by the DTSC HERO Note Number 3 – Modified Screening Levels for Ambient Air. The commercial use screening levels were calculated by applying the DTSC recommended attenuation factor of 0.03 for sub-slab soil gas and ‘near-source’ exterior soil gas (DTSC 2019) to the ambient air screening level. Several VOCs were detected in the 13 sub-slab soil vapor samples. Apart from PCE, all were below their corresponding screening levels. PCE was detected in seven of the sub-slab soil vapor samples submitted for laboratory analysis at concentrations ranging from 91 to 1,200 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). All seven of these detected concentrations of PCE exceeded the calculated (commercial) soil vapor screening level of  $66.7 \mu\text{g}/\text{m}^3$ . The highest concentrations of PCE were observed beneath the 800 East 111<sup>th</sup> Place building.

Based on the concentrations of PCE in sub-slab soil vapor along with the age and condition of the buildings, the Phase II ESA concluded that the potential exists for

impacted soil vapor to be intruding into the buildings. As such, an additional site assessment at the 800 East 111<sup>th</sup> Place property is recommended to further characterize the extent of PCE impacts to the project site.

The Additional Site Assessment included the drilling of 10 soil borings on the 800 East 111<sup>th</sup> Place property for the collection of soil and soil vapor samples. A total of 59 soil samples were submitted for laboratory analysis of VOCs. Borings SV-1 through SV-7 were drilled to 15.5 ft. bgs and completed as dual-nested soil vapor probes. Borings SV-8 through SV-10 were drilled to 30.5 ft. bgs and completed as triple-nested soil vapor probes. A total of 17 soil vapor samples were collected from the newly installed vapor probes and analyzed for VOCs.

Four VOCs (acetone, benzene, toluene, and PCE) were detected in the soil samples analyzed as part of the Additional Site Assessment, however, all at concentrations below regulatory screening levels.

Several VOCs were detected in the 17 soil vapor samples, however, apart from PCE, all were below their corresponding screening levels. PCE was detected in all 17 of the soil vapor samples submitted for laboratory analysis at concentrations ranging from 11 to 2,100  $\mu\text{g}/\text{m}^3$ . Fifteen of these detected concentrations of PCE exceeded the calculated soil vapor screening level of 66.7  $\mu\text{g}/\text{m}^3$ . Elevated PCE concentrations were observed at all depth intervals that were sampled. The highest PCE concentrations were observed along the central southern boundary of 800 East 111<sup>th</sup> Place. The plume of impacted soil vapor appears to extend north beneath the on-site building, west beneath the 740-780 East 111<sup>th</sup> Place building, and east beneath the Animo James B. Taylor Charter Middle School.

Based on the combined investigations, the Phase II ESA made the following conclusions:

- While VOCs, TPH, and metals were identified in soil, all concentrations were below regulatory screening and/or established background levels. As such, the soil does not appear to pose a risk to human health at the project site.
- Soil vapor beneath the site is impacted with PCE at concentrations above the screening level of 66.7  $\mu\text{g}/\text{m}^3$ , which poses a potential risk to human health. Impacts extend vertically to at least 30 ft. bgs and laterally beneath the building located on 740-780 East 111<sup>th</sup> Place and potentially beneath the eastern-adjacent building of the Animo James B. Taylor Charter Middle School.
- Neither the lateral nor the vertical extents of the PCE plume were identified during these two investigations.
- Based on the historic use of 800 East 111<sup>th</sup> Place as an aircraft component and equipment supplier, and the (then) current use as a waste storage facility, the PCE impacts are likely a result of undocumented release(s) of chemicals into the soil.
- The potential exists for the PCE impacts to have migrated vertically into groundwater. If this is the case, there is also the potential for the PCE impacts to have comeled with a solvent-impacted groundwater plume that was

- generated at a site approximately 1,000 feet east of the property, known as the Lanzit Project.
- The solvent-impacted groundwater was likely the source of the PCE impacts in soil vapor.
  - Other impacts to soil may exist beneath the site, but the current storage of waste, equipment, and other debris prevented these areas from being tested.

### 3.10.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections F.1 and F.2); Phase I ESA, Phase II ESA and Additional Site Assessment; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the project utilizes substantial amounts of hazardous materials as part of its routine operations and could potentially pose a hazard to the public under accidental or upset conditions.

**Less than significant impact with mitigation incorporated.** Project construction would include the demolition of the existing buildings on the site, followed by the construction of several buildings and structures, including a two-story operations building to provide dispatch and administrative functions, a maintenance building with 10 bus maintenance bays, a service building, a bus wash building, BEB parking/charging area, and a second-story parking deck for up to 360 employee/visitor vehicles, with the canopy above the parking deck topped with a 200-kilowatt photovoltaic system. The project would not introduce new land uses that would involve or require the routine transport, use, or disposal of large quantities of hazardous materials. Lithium iron phosphate batteries would be present on the electric buses, but additional batteries would not be stored on-site. Instead, they would be replaced, as needed, with new ones brought to the site and old ones hauled away (anticipated to be every 12 years). Solvents, oil, grease, and other cleaning products would also be needed for bus maintenance and repair activities but would be used, stored, and disposed of in accordance with current regulations.

The 800 East 111<sup>th</sup> Place property is listed as having up to two 7,500-gallon USTs and an unknown quantity of 2,000-gallon USTs containing regular unleaded fuel installed in 1975. The CA FID UST status is reported as “Active” and there is no indication that the USTs have been removed. Although there were no reported violations or releases, the storage, use, and disposal of petroleum hydrocarbons, as well as the potential presence of fuel USTs on-site was identified as a recognized environmental concern (REC) in the Phase I ESA. As presented in the Phase I ESA,

several other containers containing potentially hazardous material and/or wastes are currently located on the property.

The 740-780 East 111<sup>th</sup> Place property is listed as generating and recycling approximately 12.51 tons of waste oil and mixed oil in 1994. This facility is also listed as having had two 9,940-gallon USTs containing regular unleaded fuel and an unknown quantity of 7,000-gallon USTs containing diesel fuel installed in 1956. The CA FID UST status is reported as 'Inactive'. A review of UST information collected from local UST databases (Los Angeles Fire Department) indicates multiple releases of diesel from the former on-site USTs. The documented unauthorized release of two former USTs with potential for residual impacts to remain was identified as a REC in the Phase I ESA.

Based on these RECs, two subsequent subsurface investigations were completed at the site. Samples of soil and soil vapor were collected and analyzed for potential chemicals of concern (PCOCs). VOCs and TPH were identified in the soil at a concentration below human health risk (HHR) screening levels. However, the extent of impacts to soil was not delineated due to access issues. PCE was identified in soil vapor at concentrations exceeding HHR screening levels. Concentrations of PCE in soil vapor beneath both properties are considered hazardous to human health. Therefore, while the properties are not currently listed as hazardous waste/material cleanup sites, they likely will be once this data is reported to a regulatory agency in accordance with the state and federal related to reporting unauthorized releases. Once reported, additional characterization and subsequent remedial and/or mitigation measures will fall under the oversight of state or local agencies, such as the RWQCB, DTSC, and LAFD. While the City was not responsible for any unauthorized releases on or near the site, the City would comply with any measures to be put in place by the designated oversight agency as part of the proposed project. It is anticipated that all hazardous wastes currently located on the project site would be removed before the construction of the proposed facility (MM-HAZ-1 through MM-HAZ-3). These measures would limit the exposure of the underlying contamination to the public, and therefore, reduce potential impacts to less than significant levels after mitigation.

During project construction and post-construction operation would involve the transportation, use, storage, and disposal of limited quantities of hazardous materials such as paints, solvents, adhesives, fuel, lubricants, grease, asphalt, and concrete materials. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the DTSC, the U.S. EPA, the OSHA, the LAFD, and the Los Angeles County Department of Public Health. Additionally, the project would comply with applicable federal, state, and local regulations related to hazardous materials (SC-HAZ-1 through SC-HAZ-5). The potential for the release of hazardous materials during project construction is considered low, and if a release was to occur, it would not result in a significant hazard to the public, surrounding land uses, or the environment due to the small quantities of materials being used at the site. Impacts would be less than significant during project operations.

### **Standard Conditions**

The following Standard Conditions shall be implemented, as standard measures for compliance with existing regulations:

- SC-HAZ-1:** All hazardous materials and wastes shall be handled and disposed of in accordance with applicable regulations, including South Coast Air Quality Management District (SCAQMD) Regulations.
- SC-HAZ-2:** Workers exposed to or handling contaminated soils shall have sufficient health and safety training, consistent with Occupational Safety and Health Administration (OSHA) Hazardous Waste Operation Standards (29 CFR 1910.120), and Cal-OSHA "Hazardous Waste Operations & Emergency Response" (HAZWOPER) (8 CCR 5192). The Contractor, qualified subcontractor, or an industrial hygienist shall prepare a site-specific health and safety plan. The plan shall appoint a site safety officer and establish responses to contaminants, including methane gas, known to exist in the area based on the site knowledge and the Phase II Environmental Site Assessment (ESA) and Additional Site Assessment Report.
- SC-HAZ-3:** Soils that have visible staining or an odor shall be tested in the field by the Contractor or qualified environmental subcontractor with an organic vapor analyzer (OVA) for volatile components, which require additional considerations in their handling and disposal. Soil with OVA readings exceeding 50 parts per million (ppm) volatile organic compounds (probe held 3 inches from the excavated soil face), or which is visibly stained or has a detectable petrochemical odor shall be stockpiled by the Contractor separately from non-contaminated soils. If volatile compounds are present at concentrations exceeding 50 ppm, the South Coast Air Quality Management District (SCAQMD) Rule 1166 permit will be required, which most likely will require control of vapor, such as covering the stockpiles with plastic sheeting or wetting with water or a soap solution.
- SC-HAZ-4:** Any contaminated material (i.e., soil, asphalt, concrete, railroad ballast, trash fill, or debris) that is to be hauled off the site is considered a "waste product" and must be classified as hazardous or non-hazardous waste under all criteria by both State and Federal Codes before disposal. If the waste soil or other material is determined hazardous, a hazardous waste manifest will be prepared by the Contractor or its qualified representative, and the material transported to an appropriate class of facility for recycling or landfill disposal by a registered hazardous material transporter. If the soil is nonhazardous but still exceeds levels that can be returned to the excavation or is not needed on the site, a less costly nonhazardous transporter and soil recycling facility shall be

used if no hazardous constituents are present above their respective action levels.

**SC-HAZ-5:** In accordance with South Coast Air Quality Management District (SCAQMD) Rule 1403, a pre-demolition building survey for asbestos-containing materials (ACMs) is required before demolition. Therefore, a pre-demolition survey is recommended for ACMs, lead-based paint, polychlorinated biphenyl (PCB), and other hazardous materials before any on-site demolition.

*b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Reference:** L.A. CEQA Thresholds Guide (Sections F.1 and F.2); DTSC EnviroStor Data Management System; SWRCB Geotracker; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project involved a risk of accidental explosion or used substantial amounts of hazardous materials as part of its routine operations that could pose a hazard to the public under accidental or upset conditions.

**Less than significant impact.** As discussed above, the construction and operation of the project would involve the transportation, use, and disposal of limited quantities of hazardous material such as paints, solvents, adhesives, fuels, lubricants, grease, and asphalt. Employees may be exposed to hazardous materials during construction. Exposure of construction/operational workers, the public, or the environment to contaminated materials can be minimized by implementing the measures required by federal, state, and local laws and regulations including, but not limited to the regulatory requirements listed in SC-HAZ-1 through SC-HAZ-5. The potential impacts to the public or environment would be less than significant. The potential for the release of hazardous materials during project construction is considered low, and if a release was to occur, it would not result in a significant hazard to the public, surrounding land uses, or the environment due to the small quantities of materials being used at the site. Therefore, the short-term construction impact would be less than significant.

According to DTSC's EnviroStor and SWRCB's GeoTracker, the project site is not a hazardous materials site. The project would not be located on a site included on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5. Additionally, it is anticipated that all potentially hazardous materials that are currently being stored at the properties will be removed before the construction of the EBMF (SC-HAZ-1). Therefore, the impacts related to the foreseeable or accidental release of hazardous materials would be less than significant. No mitigation would be required.

*c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Reference:** L.A. CEQA Thresholds Guide (Section F.2); NavigateLA; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project were located within one-quarter mile of an existing or proposed school site and were projected to release toxic emissions which pose a hazard beyond regulatory thresholds.

**Less than significant impact.** There are existing schools within a one-quarter mile (0.25-mile) of the project site, including:

- Animo James B. Taylor Charter Middle School, located immediately east of the project site
- Kedren Health Community Center and Head Start Preschool, located immediately west of the project site
- 109<sup>th</sup> Street Elementary School (10915 McKinley Avenue), located 0.11-mile to the north
- Animo Locke College Preparatory Academy Blue and Dot Green Public Schools (both at 325 East 111<sup>th</sup> Street), located 0.25-mile to the west

As discussed above, both the construction and post-construction operations would involve the transportation, use, and disposal of limited quantities of hazardous material such as paints, solvents, adhesives, fuels, lubricants, grease, and asphalt. The project would not involve the transportation, emission, or handling of hazardous or acutely hazardous materials that could result in a danger to a nearby school because such activities would comply with applicable federal, state, and local regulations, including SC-HAZ-1 through SC-HAZ-5. The potential project impacts to nearby schools would be less than significant. Thus, no mitigation would be required.

*d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**Reference:** L.A. CEQA Thresholds Guide (Section F.2); DTSC EnviroStor; SWRCB's GeoTracker; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project were included on an agency list of un-remediated hazardous or contaminated sites.

**Less than significant impact.** The site is not listed on the Cortese List but there are nearby facilities that are on the Cortese List. Construction near a site on the Cortese List is not necessarily an impact that would create a significant hazard to the public or the environment. Due to the nature of the proposed construction, only soils adjacent to possibly contaminated soils would be disturbed although these soils are not necessarily contaminated because of their vicinity to a contaminated site. The

following sites are located close to the project site and are listed on the Cortese List according to CalEPA, the LA RWQCB, and the DTSC:

- **WR Admin & Truck Yard:** According to SWRCB's Geotracker, this site, located at 850 East 111<sup>th</sup> Place, approximately 647 feet east-northeast of the project site, has an active permit for a UST. The permitting agency is the LACFD (Permit #FA0038754). The facility is identified as a generator/hauler of solid waste and as an active industrial facility that treats and/or disposes of liquid or semisolid waste. The type of waste is not reported. Construction of the EBMF is not anticipated to affect this UST site, nor pose an environmental hazard related to hazardous materials used at this facility.
- **Lanzit Project:** According to SWRCB's Geotracker, Lanzit Project (former Caltrans Site) is listed as a WDR site (WDR100001910) located at 930 East 111<sup>th</sup> Place, approximately 787 feet east-northeast of the EBMF project site. The Lanzit Project site operated as a Caltrans facility between 1947 and 1991. Since 1991, several subsurface investigations and subsequent remedial actions have been completed. The site has been identified to have soil, groundwater, and soil vapor impacted with TPH and several VOCs, including trichloroethylene. Several sources were identified, including a 550-gallon UST. The facility remained listed as a Leaking UST (LUST) cleanup site with an 'Open-Case Begin Date' status as of September 1990 and an 'Open-Remediation' status as of August 2011. In October 2011, a general WDR permit was issued by the Executive Officer of this Regional Board (Order No. R4-2007-0019, CI No. 9760, Series No. 176) to inject 30 Microemulsion (3DMe) and a hydrogen release compound (HRC) primer solution to mitigate VOCs contamination in the groundwater. Between November 2011 and August 2012, two injection events were conducted at the site. The last injection was completed in August 2012. A total of 78,400 pounds of 3DMe solution and 10,135 pounds of HRC primer were injected into the subsurface. Groundwater near the Lanzit Project site is approximately 60 to 65 ft. bgs with a gradient of 0.001 feet per foot to the north-northwest, putting the EBMF project site cross gradient. Additionally, construction of the EBMF is not anticipated to involve soil excavation that will expose contaminated groundwater. Construction of the EBMF project is not anticipated to affect this WDR site, nor will the construction of the project pose an environmental hazard related to hazardous materials on the public or environment.

Exposure of construction and operational workers to contaminated materials can be minimized by implementing the measures required by federal, state, and local laws and regulations, including, but not limited to SC-HAZ-1 through SC-HAZ-5. As such, potential impacts associated with the excavation of contaminated materials would be less than significant. Therefore, the implementation of regulatory requirements and adherence to federal, state, and local laws regarding hazardous materials sites would ensure that the project's impact would be less than significant.

*e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the*



*project result in a safety hazard or excessive noise for people residing or working in the project area?*

**Reference:** L.A. CEQA Thresholds Guide (Sections F.1 and K.2); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; Los Angeles County, Department of Regional Planning, Airport Land Use Commission (ALUC); Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project site were located within a public airport land use plan area, or within 2 miles of a public airport, and would create a safety hazard or excessive noise.

**No impact.** The nearest public airport is Hawthorne Municipal Airport (also known as Jack Northrop Field) located at 12101 South Crenshaw Boulevard in Hawthorne, California (approximately 3.9 miles to the west/southwest of the EBMF project site). Additionally, the Los Angeles International Airport (LAX), located at 1 World Way in Los Angeles, California is 8.4 miles west of the EBMF project site. The project site is not located within the Airport Planning Boundary or Influence Area for these airports (ALUC, 2003, 2015). The closest private airstrips are Compton/Woodley Airport in Los Angeles, approximately 3.3 miles south of the project site, and the Prairie Gate at the Hawthorne Airport in Hawthorne, approximately 3.9 miles east of the project site. The site is not located within the Airport Planning Boundary or Influence Area for these private airstrips. As such, no impact would occur, and no mitigation is required.

*f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Reference:** L.A. CEQA Thresholds Guide (Sections F.1 and K.2); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project were to substantially interfere with roadway operations used in conjunction with an emergency response plan or evacuation plan or would generate sufficient traffic to create traffic congestion that would interfere with the execution of such a plan.

**Less than significant impact.** The City's Safety Element has identified disaster routes used to bring in emergency personnel, equipment, and supplies to impacted areas. Disaster routes are used during times of crisis to save lives, protect property, and minimize the impact on the environment. The project site is not located on disaster routes, which include Avalon Boulevard, Imperial Highway, and Central Avenue, and do not include East 111<sup>th</sup> Place, East Lanzit Avenue, or McKinley Avenue.

The construction and operation of the project would not impact permanent access to emergency response or evacuation routes. The construction of the EBMF is not anticipated to take place on roadways mapped as disaster routes. Only temporary lane closures and traffic pattern modifications are anticipated on East 111<sup>th</sup> Place for lane restriping and sidewalk and driveway reconstruction but most of the construction

will occur along the project site boundaries on East 111<sup>th</sup> Place. Improvements on East 111<sup>th</sup> Place would be conducted in accordance with the Traffic Management Plan (TMP) that would maintain access to all properties and provide detours for lane closures (SC-CC-1 through SC-CC-3), as discussed in Section 3.11 and the Community Impact Assessment. Emergency access and evacuation routes would be maintained and provided during both construction and operations.

The LAFD and other City agencies are implementing emergency procedures outlined in the City's Hazard Mitigation Plan to reduce risks from disasters to people, property, the economy, and the environment within the City. As the project site is not located on a public right-of-way and limited improvements are proposed on the public right-of-way, the project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, no impacts are anticipated and no mitigation is required.

*g) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.2); General Plan Safety Element; CalFire Fire Hazard Severity Zones; Los Angeles Hazard Mitigation Plan; NavigateLA; ZIMAS; Hazardous Materials Analysis (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project were in a wildland area and poses a significant fire hazard, which could affect persons or structures in the area in the event of a fire.

**No impact.** The project site is located within a highly urbanized area of the City and does not include wildlands or high fire hazard terrain or vegetation. The site is not identified by the City as being located in an area susceptible to fire hazards and according to ZIMAS, the project site is not within Very High Fires Hazard Severity Zones (VHFHSZ). The project involves the demolition of the existing buildings, followed by the construction of several new buildings and structures, and does not propose any improvement that would exacerbate the risk of wildfire. Furthermore, the project does not involve the construction of structures in which people would reside or recreate. Therefore, the project would not subject people or structures to a significant risk of loss, injury, or death because of exposure to wildland fires. No impacts would occur, and no mitigation is required.

### **3.10.4 Mitigation Measures**

Based on the Phase II ESA and Additional Site Assessment, the following mitigation measures shall be implemented to reduce the significant adverse impacts pertaining to past use of hazardous materials at the site:

**MM-HAZ-1:** Additional site characterization to identify the lateral and vertical extents of tetrachloroethene (PCE) impacted soil vapor and assess if groundwater beneath the site has been impacted shall be conducted.

Following completion of site characterization, the City of Los Angeles shall report the “unauthorized release” to the appropriate agency for regulatory oversight. Once a case is opened, the City of Los Angeles shall comply with any additional characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency to protect construction workers, facility workers, and neighboring residences from exposure to impacted media (i.e., soil, groundwater, and/or soil vapor).

**MM-HAZ-2:** Before construction, a Soil Management Plan (SMP) shall be developed to provide construction workers with guidelines from a health and safety perspective (e.g., use of personal protective equipment, action levels, etc.) on handling impacted media that is encountered during any subsurface disturbance activities. The SMP shall describe site- and project-specific protocol to be followed in the event of encountering chemically impacted soil. The SMP shall also facilitate excavation activities by having a structured plan in place for the handling, characterization, and disposal of impacted soil wastes.

**MM-HAZ-3:** Additional measures, as recommended in the Phase II Environmental Site Assessment (ESA) and/or the additional Site Characterization to be performed for the project site, shall be taken to protect the proposed facility's workers. These measures may include, but are not limited to:

- All stored chemicals, equipment, underground storage tanks (USTs), and waste/debris shall be removed from both properties before purchase. Once removed, a pre-acquisition inspection should be performed to confirm the removal of all hazardous materials and other solid and liquid wastes stored on the properties.
- Due to the contaminant plume potentially extending offsite, consultation with legal counsel is needed to determine if notification to the Los Angeles Regional Water Quality Control Board (LARWQCB) of the potential unauthorized release is warranted. Should a case be opened with the LARWQCB, additional action may likely be required, including detailed site characterization, active remediation, and the designation of a responsible party.
- Measures (i.e., engineering controls such as vapor barriers) shall be installed within new construction, to address residual impacts of tetrachloroethene (PCE) in soil vapor in the event remediation is not pursued or completed. These measures typically consist of the installation of either an active or passive venting system and/or the application of a vapor barrier that is chemically resistant to chlorinated solvents.

Impacts would be less than significant after mitigation.

### 3.11 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.11.1 Regulatory Setting

This section describes existing laws and regulations related to hydrology and water quality that apply to the project.

### **3.11.1.1 Federal**

#### **Clean Water Act**

The Clean Water Act (CWA) is the primary federal law protecting the nation's surface waters, including lakes, rivers, and coastal wetlands. A brief description of the CWA is provided under Section 3.9, Hazards and Hazardous Materials (Section 3.9.1 – Regulatory Setting).

#### **National Pollutant Discharge Elimination System (NPDES) Permits**

Stormwater discharges from construction sites are permitted under NPDES No. CAS000002, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ), adopted on September 2, 2009, and amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ (Construction General Permit) (CGP). Facilities discharging stormwater from construction projects with a disturbed soil area (DSA) of 1 acre or more are required to be covered by the CGP by completing and filing a Notice of Intent (NOI) with the SWRCB and requires implementation of a Stormwater Pollution Prevention Plan (SWPPP).

NPDES No. CAS000001, General Industrial Activity Storm Water Permit [IGP]), Order No. 2014-0057-DWQ, was adopted on April 1, 2014, and amended in 2015 and 2018. Facilities discharging stormwater associated with industrial activities are required to obtain individual NPDES permits for stormwater discharges or to be covered by a statewide general permit by completing and filing an NOI with SWRCB. Facilities requiring an IGP include transportation facilities, such as vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility involved in vehicle maintenance, including vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, or other operations identified in the IGP that are associated with industrial activity, would require coverage.

#### **National Flood Insurance Act and Flood Disaster Protection Act**

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 were enacted to reduce the need for flood protection structures and limit disaster relief costs by restricting development in floodplains. The Federal Emergency Management Agency (FEMA) administers programs associated with these acts. One of FEMA's duties is to administer the National Floodplain Insurance Program (NFIP) and develop standards for fluvial and coastal floodplain delineation. The NFIP is a federal program that enables property owners in participating communities to purchase insurance to protect against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

### **3.11.1.2 State**

#### **Porter-Cologne Water Quality Control Act**

The Porter-Cologne Act grants ultimate authority to the SWRCB over state water rights and water quality policy and authorizes the nine RWQCBs to oversee water quality on a day-to-day basis at the regional and local levels. The Porter-Cologne Act is the basic water quality control law for California and works in coordination with the

CWA. The Porter-Cologne Act states that a RWQCB may include water discharge prohibitions applicable to conditions, areas, or types of waste within its regional plan. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative.

### **Sustainable Groundwater Management Act**

The Sustainable Groundwater Management Act (SGMA) was enacted in 2014 to require local agencies to adopt sustainability plans for groundwater basins identified by the California Department of Water Resources as high- and medium-priority. The SGMA intends to require sustainable groundwater management practices statewide and ensure reliable water supplies through drought and climate change.

#### **3.11.1.3 Regional**

##### **Water Quality Control Plan (Basin Plan)**

The Los Angeles RWQCB's Basin Plan identifies 24 beneficial uses for surface and groundwater in the Los Angeles region and the water quality objectives that must be attained or maintained to protect those designated beneficial uses. The Basin Plan contains the water quality regulations set by the Los Angeles RWQCB and describes the implementation programs and other actions necessary to achieve the water quality objectives. In cases where the Basin Plan does not contain a water quality objective for a pollutant, other criteria are used to establish a standard. Other criteria may be applied from SWRCB documents or water quality criteria developed under the CWA Section 304(a). Permits are issued to control pollution (i.e., water quality standards) while taking into consideration beneficial uses to be protected.

##### **Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality**

Discharges of treated or untreated groundwater generated by wells or borings, water system testing or flushing, commercial and public swimming pools, dewatering during excavations for construction, inert solid waste disposal, and cooling discharge operations are currently regulated under the General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality (Order No. 2003-003-DWQ). Dischargers are required to apply for coverage by filing an NOI and complying with the terms and conditions of the General Waste Discharge Requirements.

##### **Los Angeles County Municipal Stormwater NPDES Permit (MS4 Permit)**

The Los Angeles RWQCB has issued a Municipal Separate Storm Sewer (MS4) NPDES permit (Order No. R4-2012-0175, NPDES No. CAS004001) to regulate discharges of stormwater and non-stormwater from the Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County which convey pollutants to surface waters throughout the Los Angeles Region. The Los Angeles County MS4 NPDES Permit covers 86 permittees, which include the City.

The purpose of this NPDES permit is to prohibit non-stormwater discharges and to reduce pollutants the discharge of pollutants in stormwater to the MS4 to the "maximum extent practicable" to maintain or attain water quality objectives (WQOs) that are protective of beneficial uses or receiving waters. The MS4 Permit contains

effluent limitations, receiving water limitations (RWLs), minimum control measures (MCMs), and TMDL provisions, and outlines the process for developing watershed management programs.

Per the NPDES permit, the City of Los Angeles would work cooperatively with the permittees to manage urban runoff. Provisions of the permit require the implementation of management practices to address stormwater runoff quality. The management practices represent the best practicable treatment and control of urban runoff discharges. The NPDES permits promote the implementation of low impact development (LID) BMPs, where feasible. LID BMPs reduce stormwater pollutant discharges by intercepting rainfall on vegetative canopies. LID BMPs can also reduce stormwater runoff by capturing and infiltrating runoff into existing or amended soils.

#### **3.11.1.4 Local**

##### **City of Los Angeles Low-Impact Development Ordinance and Manual**

The City's Stormwater LID Ordinance (Ordinance No. 181899, LAMC Section 64.70) requires the use of LID standards and practices in future developments and redevelopments to encourage the beneficial use of rainwater and urban runoff; reduce stormwater/urban runoff while improving water quality; promote rainwater harvesting; reduce off-site runoff and provide increased groundwater recharge; and reduce erosion and hydrologic impacts downstream.

##### **City of Los Angeles Reference Guide for Stormwater Best Management Practices**

The City's Reference Guide for Stormwater BMPs assists city engineers and managers in identifying, assessing, planning, developing, and selecting the appropriate BMPs. BMPs for construction, source control, and treatment control, including erosion and sedimentation control measures, site management practices, materials and waste management, and general preventive maintenance and inspection, are listed with targeted pollutants, project applications, implementation requirements, and costs to facilitate BMP selection.

##### **City of Los Angeles Floodplain Management Plan**

The City's Floodplain Management Plan (FMP) was originally established by Ordinance No. 154,405 and amended in 2012 and updated in 2020. It serves as the City's overall strategy for the protection of human life and property and minimizing flood hazards to businesses and infrastructure. The FMP identifies flood-related hazards in the City and sets goals for reducing flood hazards. It identifies the City's codes, standards, and ordinances that regulate the development of structures within the 100-year floodplain; seeks to retrofit, purchase or relocate structures in flood hazard areas; and establishes City programs for emergency response and evacuation.

##### **City of Los Angeles Municipal Code**

The City of Los Angeles Municipal Code (LAMC), Chapter VI, Article 4 outlines the requirements for public works and property as it relates to sewers, watercourses, and drains. Section 64.30 prescribes the requirements for the disposal of industrial

wastewater. The intent is to regulate industrial dischargers to protect the Publicly Owned Treatment Works (POTW). Specific discharge requirements for industrial facilities are defined in the issuance of Industrial Wastewater Permits. Additional prohibitions related to controlling the discharge of stormwater pollutants and urban runoff are found in Section 64.70.02 (Stormwater and Urban Runoff Pollution Control Ordinance).

### **3.11.2 Existing Environment**

The project site is located within the Los Angeles Region of the RWQCB (Region 4), which encompasses the watersheds and drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County. There are numerous watersheds within the region, with four primary watersheds encompassing the city of Los Angeles: Los Angeles River (Hydrologic Unit Code [HUC] 18070105); Santa Monica Bay/Ballona Creek (HUC 18070104), Dominguez Channel LA/Long Beach Harbors (HUC 18070104); and San Gabriel River (HUC 18070106).

The site lies with the Los Angeles River watershed, which covers approximately 824 square miles. Approximately 324 square miles of this watershed is open space or forested and the remainder is highly developed and urban. The Los Angeles River is 51 miles long, originating in the San Fernando Valley and flowing the central portion of the city to its terminus with the Pacific Ocean in Long Beach. The Los Angeles River is almost 5 miles east of the project site. Compton Creek, which is a tributary to the Los Angeles River, flows within a concrete-lined channel running approximately 8.5 miles from Main Street between 107th and 108th Streets to the confluence with the Los Angeles River in Rancho Dominguez. Compton Creek is located approximately 1,000 feet (0.2-mile) north and 1,500 feet (0.3-mile) east of the project site.

Both the Los Angeles River and Compton Creek are listed as impaired water bodies on the CWA Section 303(d) List, as a Category 5 waterbody. The criteria for a Category 5 waterbody include: 1) a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.

#### **Floodplain**

The project site is located over 9 miles inland from the Pacific Ocean and based on FEMA's Flood Insurance Rate Maps and the City of Los Angeles General Plan Safety Element, the site is not located within the 100- or 500-year floodplains. There are no open or enclosed water bodies located near the project site.

#### **Groundwater**

The coastal plain of Los Angeles County is underlain by two major basins, the Central Basin and West Coast Basin. The project site is located on the western edge of the Central Basin. The shallowest main aquifer in this area is the Gardena Aquifer, found at depths of approximately 80 to 125 ft. bgs. The deeper Lynwood, Silverado, and Sunnyside Aquifers occur at depths of 175, 225, and 350 ft. bgs, respectively.



No site-specific assessment of groundwater depth or gradient direction was obtained during the Phase I ESA or the combined Phase II ESA and Additional Site Assessment for the site. Based on groundwater data obtained on December 10, 2018, from a site located approximately 1,300 ft. east-northeast of the project site, the depth to groundwater was approximately 60-65 ft. bgs, with a groundwater gradient of approximately 0.001 foot deep per foot of ground surface to the north-northwest. Based on the topography and existing surface conditions, general surface water flow near the project site is generally toward the northeast.

### **3.11.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section G.2); City of Los Angeles General Plan; City Stormwater Drainage Map Images; LADWP UWMP; NPDES Construction General Permit and Industrial General Permit.

**Comment:** A significant impact would occur if the project discharges water that does not meet the quality standards of the RWQCB, which regulates surface water quality and water discharge into stormwater drainage systems. A significant impact also may occur if a project includes potential sources of water pollutants and has the potential to substantially degrade water quality.

**Less than significant impact.** The proposed project would generate pollutants that may enter the stormwater.

#### **Construction**

Potential sources of stormwater quality degradation during construction of the proposed facility include loose soils during excavation and ground disturbance, demolition debris, construction equipment, and vehicles, building materials used for construction, and other on-site activities. During construction, all applicable stormwater management requirements for pollution prevention would be adhered to including the Stormwater and Urban Runoff Pollution Control Ordinance of the LAMC (Chapter VI Article 4.4). This includes the implementation of erosion control measures, spill prevention and control, solid and hazardous waste management, and dust control to reduce the transport of pollutants and sediment from construction areas to the stormwater system. In compliance with the NPDES Construction General Permit, a SWPPP will be prepared for the project, submitted to the SWRCB, and the construction BMPs in the SWPPP implemented during construction activities. In addition, any groundwater extracted during excavation activities will be disposed of in accordance with the SWRCB's General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality. Compliance with these regulations (SC-HYD-1) will reduce stormwater pollutants from entering the storm

drain system serving the site. Less than significant impacts on surface water quality would occur during construction and no mitigation measures are required.

### **Operations**

After construction is complete, the operation of the EBMF would result in stormwater quality similar to other industrial land uses. Pollutants would mainly come from vehicles and buses parked at the site and resulting from maintenance and bus washing activities. In compliance with the NPDES General Industrial Activity Storm Water Permit, a SWPPP would be prepared that identifies permanent BMPs that would be implemented at the site, including source control, treatment control, and management practices that would reduce pollutants in the stormwater. In addition, wastewater from the bus wash area would be directed into the sewer system (SC-HYD-2). Implementation of the proposed project would have less than significant impacts on water quality. No mitigation measures are required.

### **Standard Conditions**

The following Standard Conditions would be incorporated into the project, as part of its compliance with existing regulations:

**SC-HYD-1:** In compliance with National Pollutant Discharge Elimination System (NPDES) No. CAS000002, the Contractor shall obtain coverage under the NPDES Construction General Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during construction activities. The SWPPP shall include appropriate Best Management Practices (BMPs) from the City's Reference Guide for Stormwater Best Management Practices. In addition, the Contractor shall comply with Order No. 2003-003-DWQ, including the terms and conditions of the general Waste Discharge Requirements of this order. Any groundwater extracted during excavation activities will be disposed of in accordance with the General Waste Discharge Requirements for discharges to land with a low threat to water quality.

**SC-HYD-2:** In compliance with National Pollutant Discharge Elimination System (NPDES) No. CAS000001, the City shall obtain coverage under the NPDES General Industrial Activity Storm Water Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during project operations. In addition, the on-site storm drainage shall be designed in compliance with LAMC Section 64.30 for requirements on the disposal of industrial wastewater and with the City's Low-Impact Development Ordinance for permanent site Best Management Practices (BMPs) that would allow the beneficial use of rainwater and urban runoff; reduce stormwater/urban runoff while improving water quality; promote rainwater harvesting; reduce off-site runoff and provide increased groundwater recharge; and reduce erosion and hydrologic impacts downstream.

Impacts would be less than significant with compliance with SC-HYD-1 and SC-HYD-2. No mitigation is required.

*b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

**Reference:** L.A. CEQA Thresholds Guide (Sections G.2, G.3 and G.4); LADWP 2020 UWMP; Department of Water Resources (DWR) Basin Prioritization.

**Comment:** A project would normally have a significant impact on groundwater supplies if it were to result in a demonstrable and sustained reduction of groundwater recharge capacity or change the potable water levels sufficiently that it would reduce the ability of a water utility to use the groundwater basin for public water supplies or storage of imported water, reduce the yields of adjacent wells or well fields, or adversely change the rate or direction of groundwater flow.

**Less than significant impact.** Water required for the operation of the proposed bus maintenance facility would be provided through the existing LADWP municipal water supply. Water demand from the project would be a minor amount when the project site is compared to the area of industrial developments in the City and the total citywide industrial water use (17,855 acre-feet (AF), which in turn, represents only 3 percent of the LADWP's total water demand (i.e., an average of about 495,685 AF of water annually from 2016-2020). In addition, the operation of the new EBMF would cease the requirement for water usage at the Compton Facility to maintain the LADOT bus fleet. Thus, the project would not create such a demand for water as to result in a depletion of existing groundwater supplies. The location of the maintenance facility on an existing developed and largely paved parcel within an established urban environment would not be used for groundwater recharge and would not interfere with groundwater recharge at off-site locations.

Impacts on groundwater resources would be less than significant and no mitigation is required.

*c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:*

*i) Result in substantial erosion or siltation on- or off-site?*

**Reference:** L.A. CEQA Thresholds Guide (Sections G.1 and G.2); City of Los Angeles General Plan; City Stormwater Drainage Map Images.

**Comment:** A significant impact may occur if the project resulted in a substantial alteration of drainage patterns that resulted in a substantial increase in erosion or siltation during the construction or operation of the project.

**Less than significant impact.** The proposed maintenance facility would not alter the existing drainage pattern of the site or surrounding area. The facility would be constructed on previously developed parcels within an established urban setting and would maintain the existing drainage patterns, where runoff from the site flows into adjacent curbs and gutters toward the underground drainage line on East 111<sup>th</sup> Place that connects to Compton Creek. There are no streams or rivers present within the project limits.

Construction of the maintenance facility would result in temporary soil disturbance during which time a SWPPP for the control of soil erosion and sediment runoff would be implemented (SC-HYD-1). The project would be constructed in accordance with applicable requirements of the municipal code, including grading requirements. Impacts related to erosion would be less than significant, and no mitigation measure is required.

- ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

**Reference:** L.A. CEQA Thresholds Guide (Section G.1); City of Los Angeles General Plan; City Stormwater Drainage Map Images; FEMA's National Flood Hazard Layer (NFHL) Viewer.

**Comment:** A significant impact would occur if the proposed project resulted in increased runoff volumes during construction or operation of the proposed project that would result in flooding conditions affecting the project site or nearby properties.

**Less than significant impact.** The proposed bus maintenance facility would be constructed within an established urban environment on an existing developed parcel that is largely covered with impervious surfaces. The new facility would not increase impervious surfaces nor would it alter the existing drainage pattern of the site or area. Implementation of SC-HYD-1 would include LID features that would reduce runoff from the site. The runoff will continue to be directed towards curbs and gutters on East 111<sup>th</sup> Place toward the underground line that connects to Compton Creek. Additionally, based on the General Plan Safety Element Exhibit F (100-Year & 500-Year Flood Plains), the site is not located within a 100- or 500-year flood zone. No significant impacts would occur, and no mitigation measure is required.

- iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Reference:** L.A. CEQA Thresholds Guide (Sections G.1 and G.2); City Stormwater Drainage Map Images; FEMA's NFHL Viewer.

**Comment:** A significant impact would occur if the volume of runoff increased to a level, which exceeded the capacity of the storm drain system serving a project site. A significant impact would also occur if the proposed project substantially increased the probability that polluted runoff would reach the storm drain system.

**Less than significant impact.** The facility site is in a built-out area of the City on parcels that are largely paved and impermeable. The proposed project would retain the largely paved conditions at the site. Thus, the project would not increase the volume of stormwater runoff. With no major increase in impervious area, the proposed facility would not increase the amount of surface runoff nor provide an additional source of polluted runoff above the existing conditions. Also, compliance with SC-HYD-1 requires the project to include LID features that would reduce runoff from the site and improve stormwater quality. Runoff from the project site would be directed towards the existing storm drain on East 111<sup>th</sup> Place. No significant impacts on the capacity of the existing storm drainage system serving the site would occur, and no mitigation measure is required.

*iv) Impede or redirect flood flows?*

**Reference:** L.A. CEQA Thresholds Guide (Section G.1); City of Los Angeles General Plan; City Stormwater Drainage Map Images; FEMA's NFHL Viewer.

**Comment:** A significant impact would occur if the proposed project were placed within a 100-year flood hazard area or has structures that would impede or redirect flood flows.

**No impact.** The proposed facility would be constructed within an established urban environment on an existing parcel that is largely covered with impervious surfaces. Per the General Plan Safety Element Exhibit F (100-Year & 500-Year Flood Plains), the site is not located within a 100- or 500-year flood zone and therefore would not impede or redirect flood flows. With no increase in stormwater runoff from the site, no impact would occur, and no mitigation measure is required.

*d) In flood hazard, tsunami, or seiche zones risk release of pollutants due to project inundation?*

**Reference:** L.A. CEQA Thresholds Guide (Sections E.1, G.1 and G.2); City of Los Angeles General Plan Safety Element.

**Comment:** A significant impact may occur if the project were to be in an area where a dam or levee could fail, exposing people or structures to a significant risk of loss, injury, or death. A significant impact may occur if the project were to be in an area with inundation potential due to seiche, tsunami, or mudflow. A significant impact would occur if the proposed project would create a risk for the release of pollutants due to inundation when located in a flood hazard, tsunami, or seiche zone.

**No impact.** The project site is not located in an area subject to flood hazard, tsunami, or seiche risk. Based on the General Plan Safety Element Exhibit F (100-Year & 500-Year Flood Plains), the project site is not located within a 100- or 500-year flood zone. The project site is located over 9 miles inland from the coast making inundation by a tsunami unlikely. Per the General Plan Safety Element Exhibit G (Inundation & Tsunami Hazard Areas), the project site is not located within a tsunami inundation area. There are no nearby enclosed water bodies where a seiche could form. The

project site is flat and no potential source of mudflow has been identified. No impact would occur, and no mitigation measure is required.

*e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**Reference:** L.A. CEQA Thresholds Guide (Section G.4); LADWP UWMP; DWR Basin Prioritization.

**Comment:** A significant impact could occur if the project includes potential sources of water pollutants that would have the potential to interfere with a water quality control plan or sustainable groundwater management plan.

**No impact.** The nearest water body to the proposed project site is Compton Creek, which is located approximately 0.2-mile north and 0.3-mile east. The Los Angeles RWQCB's Basin Plan identifies the following beneficial uses of Compton Creek: groundwater recharge (GWR), warm freshwater habitat (WARM), wildlife habitat (WILD), wetland habitat (WET). Because that project would not affect groundwater recharge in the area or wildlife habitats and wetlands in Compton Creek, implementation of the project would not impact any of the beneficial uses of Compton Creek nor conflict with the overall objectives of the Basin Plan.

The project site is not located within a high- or medium-priority groundwater basin and therefore, would not conflict with a Sustainable Groundwater Management Plan prepared by a groundwater sustainability agency. No impact would occur, and no mitigation measure is required.

### 3.12 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Community Impact Assessment was prepared for the project and is provided in Appendix H. The findings of the study are summarized below.

#### 3.12.1 Regulatory Setting

This section describes existing laws and regulations related to land use and planning that apply to the project.

##### 3.12.1.1 Federal

There are no federal regulations that specifically address impacts related to land use and planning and apply to the project.

##### 3.12.1.2 State

There are no state regulations that specifically address impacts related to land use and planning and apply to the project.

##### 3.12.1.3 Regional

#### **SCAG 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy**

SCAG’s 2020–2045 RTP/SCS is a comprehensive long-term transportation plan that provides a vision for the future of the SCAG region’s multimodal transportation system and specifies how that vision can be achieved for the region. It combines land use and transportation strategies with options to increase mobility and achieve a more sustainable growth pattern. The RTP/SCS identifies major challenges, as well as potential opportunities associated with growth, transportation finances, the future of airports in the region, and impending transportation system deficiencies that could result from growth projections for the region.

### **3.12.1.4 Local**

#### **City of Los Angeles General Plan**

The City's General Plan outlines the City's long-range goals and policies for the development of land within the City and addresses community development relative to the distribution of land use. The General Plan includes the Framework Element, Plan for a Healthy Los Angeles – Health and Wellness Element, Housing Element, Mobility Plan 2035 (i.e., Mobility Element), Noise Element, Air Quality Element, Conservation Element, Open Space Element, Safety Element, Infrastructure Systems Element, and Public Facilities and Services Element and 35 Community Plans that collectively comprise the Land Use Element of the General Plan.

#### **Southeast Los Angeles Community Plans**

The Southeast Los Angeles Community Plan serves as the Land Use Element of the City's General Plan and articulates the vision for long-term physical and economic development and community enhancement of the Southeast Los Angeles community. This Community Plan includes goals and policies addressing land use and urban design, mobility, community facilities, and infrastructure issues in the community. It designates the project site as Limited Industrial with a Manufacturing zone and classifies East 111th Place as a Collector Street.

#### **Southeast Los Angeles CPIO**

The Southeast Los Angeles CPIO District implements the goals and policies of the Southeast Los Angeles Community Plan and contains supplemental development regulations. The project site is located within this CPIO and is part of Subarea K – Compatible Industrial. This subarea applies to industrial uses located adjacent to residential neighborhoods and allows light industrial and commercial uses, while restricting noxious and other incompatible uses.

#### **Los Angeles Zoning Regulations**

The project site is zoned M1-1-CPIO (Limited Industrial-Height District 1-CPIO). Section 12.17.6 of the LAMC contains the development standards for the M1 zone. The standards include permitted uses, use restrictions, required lot areas, yard widths, and loading space. Requirements for off-street parking, building heights, landscaping, signs, and other overlay zones and building regulations are also outlined in the LAMC.

### **3.12.2 Existing Environment**

The project site is developed with two industrial buildings that have been left vacant for approximately 2 years, but they are currently used as a logistics warehouse for solar panels. Land uses immediately adjacent to the site include the Animo James Taylor Charter Middle School to the east, East 111th Place and residential uses to the north, the Kedren Health Community Center and Head Start Preschool to the west, and the UPRR tracks, Lanzit Avenue, and residential uses to the south. The large undeveloped lot at the eastern end of East 111<sup>th</sup> Place and 109<sup>th</sup> Place (known as the Lanzit Industrial Site) is a City-owned property that was formerly in industrial use and



is planned for redevelopment, but it has remained undeveloped for more than 25 years.

Existing land uses in the surrounding area are shown in Figure 3.12-1 based on SCAG land use data and a review of 2021 aerial photographs. As shown, the project area is predominantly residential in land use, with commercial uses on major streets and industrial uses along the railroad tracks.

### 3.12.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project physically divide an established community?*

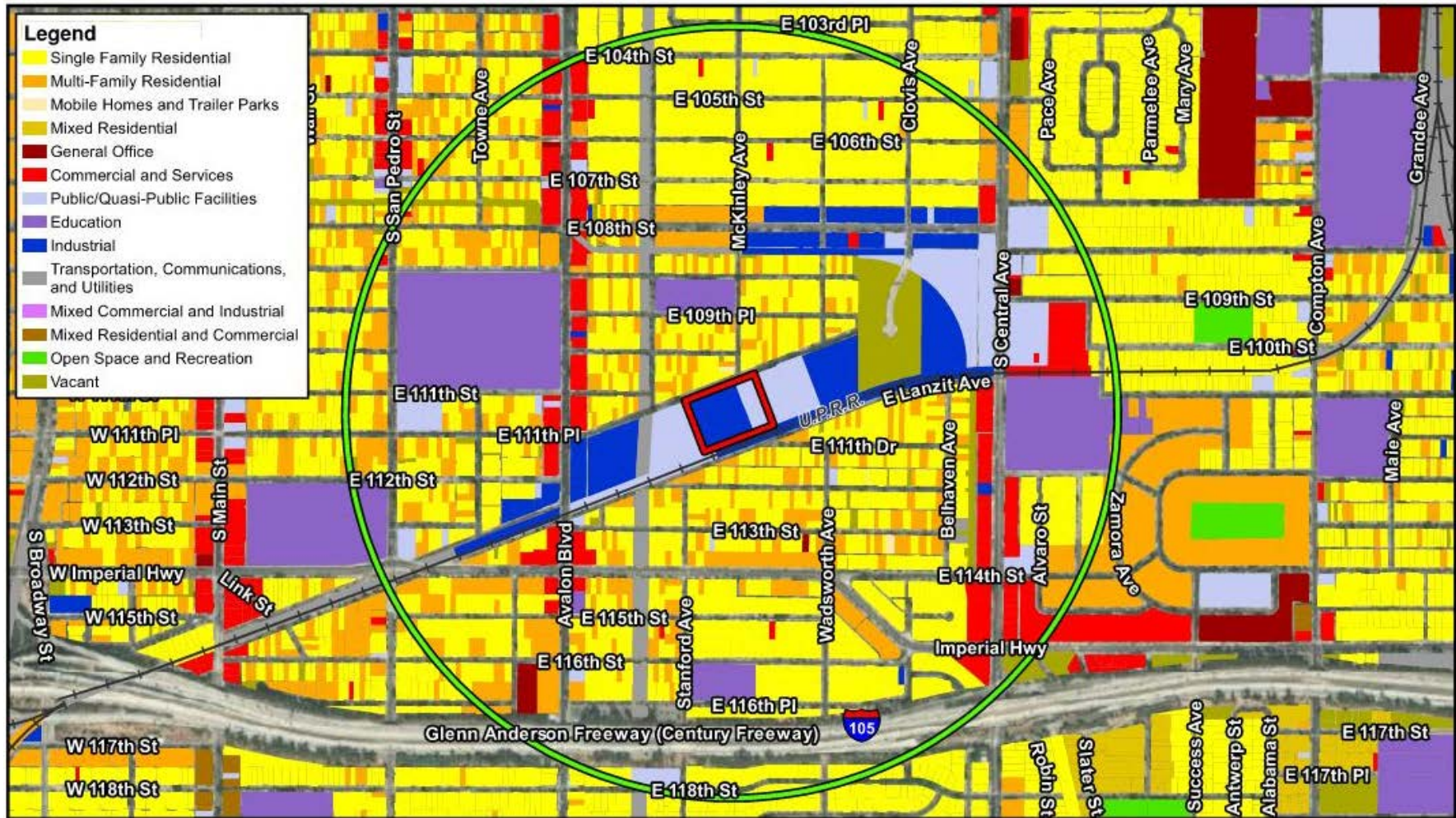
**Reference:** L.A. CEQA Thresholds Guide (2006) (Section H.2); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact on an established community could occur if the project includes features such as a highway, above-ground infrastructure, or an easement that would cause a permanent disruption to an established community or would otherwise create a physical barrier within an established community.

**Less than significant impact.** The proposed project would be constructed and operated on the existing parcels zoned for industrial uses. Therefore, it would not physically divide an established community. However, impacts to the area residents and businesses could occur as described in the following paragraphs.

In terms of access, during construction, access to adjacent land uses could be affected by sidewalk, roadway, and driveway improvements on East 111<sup>th</sup> Place. The lane restriping, sidewalk closures and related pedestrian detours could temporarily delay travel on East 111<sup>th</sup> Place and impede property access. Offsite construction equipment and activities could temporarily block vehicle access to the adjacent school, community center, and other developments (i.e., commercial and industrial uses on East 111<sup>th</sup> Place near Avalon Boulevard) in the immediate vicinity of the project site. This could indirectly impact the operations and businesses of adjacent properties. Implementation of a Traffic Management Plan (TMP) as described in SC-CC-1 would minimize traffic disruption. Maintenance of roadway and driveway access for adjacent land uses at all times during construction (SC-CC-2) and the provision of crossing guards (SC-CC-3) would ensure construction activities do not result in significant adverse impacts in terms of access to community facilities. A public liaison will be established to address any public concerns related to, but not limited to, access, noise, dust, or odor emanating from the construction activities. Notifications will be sent to nearby properties regarding construction dates and hours. Signage will be posted at the construction site regarding the project and contact information for the public liaison (SC-CC-4).

Figure 3.12-1: Existing Land Uses



In terms of community cohesion, the UPRR tracks immediately south of the project site serve as a barrier between the Green Meadows neighborhoods to the north and south. The project would be located immediately north of the tracks and would not divide existing neighborhoods. Thus, the EBMF is not expected to affect community cohesion, because it would not create any new barrier that would separate or isolate any of the adjacent resident populations physically or functionally from the rest of the community or from nearby services that are not already separated by the tracks. With no resident/household displacement or the creation of new barriers, the project is also not anticipated to lead to neighborhood fragmentation or the disruption of existing social patterns.

In terms of acquisition and displacement, the proposed project would require the acquisition of two industrial-use parcels, which are currently used as a logistics warehouse for solar panels. The lease is temporary, and the tenant is aware of the planned property acquisition; therefore, future displacement would be voluntary. No other property acquisitions are required; therefore, no resident or household displacement would occur. Temporary construction easements (TCEs) may be required on adjacent parcels during construction of the perimeter wall, but no displacement of community-serving businesses (e.g., adjacent community center/preschool and middle school) would occur.

In addition, the construction of the EBMF to support the use of BEBs for DASH and CE services would not result in the displacement of businesses. The EBMF would relocate 203 employees from the LADOT's Compton Facility to the site and add 109 new employees, for a total of 312 onsite employees. The relocated employees are not expected to move their place of residence because the new site is only 2 miles from the existing Compton Facility. Also, the new employees are expected to come from the local labor pool and jobs filled from among current unemployed persons in the study area, the City, County, and/or the region.

### **Standard Conditions**

The following Standard Conditions shall be implemented, as standard measures for compliance with existing regulations:

**SC-CC-1:** In compliance with Section 601-1 of the Greenbook (*Standard Specifications for Public Works Construction*), the Contractor shall prepare a Transportation Management Plan (TMP) in consultation with the City of Los Angeles before construction. The TMP will be submitted with the construction plans and schedule to the Los Angeles Police and Fire Departments before the commencement of construction activities. The TMP will outline necessary street/lane closures and detours. In addition, detours around construction areas will be identified for bicyclists and pedestrians. Signs will be posted to direct bicyclists and pedestrians to sidewalks and intersections where they may safely cross. A restriction on large-size trucks shall also be imposed to confine travel to and from the construction site during off-peak commute times.

- SC-CC-2:** In compliance with Section 600 of the Greenbook (*Standard Specifications for Public Works Construction*), roadway and driveway access for adjacent land uses shall be maintained at all times during construction, and work shall be scheduled to avoid unnecessary inconvenience to residents, students, and users of abutting properties. Undue delays in construction activities shall be avoided to reduce the public's exposure to construction-related impacts.
- SC-CC-3:** In compliance with Section 5-7, Safety, of the Brownbook (*Additions and Amendments to the 2021 Edition of the Standard Specifications for Public Works Construction*), the contractor shall provide all safety measures necessary to protect the public and workers within the Work area. Particular attention is directed to the possibility of children playing or going to or from school in the Work area. The Contractor shall take all necessary precautions to ensure that its operations will not create a safety hazard for children. Crossing guards shall be placed at the project site driveways and the intersections of East 111<sup>th</sup> Place with McKinley Avenue and Stanford Avenue, leading to the nearby schools, when construction activities (e.g., sidewalk improvements and haul truck traffic) occur during school start and end times.
- SC-CC-4:** In compliance with the City of Los Angeles Building Regulations Ordinance No. 178,048 (LAMC Section 91.106.4.8), a construction site notice to be provided that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public. A public liaison shall be appointed for project construction and shall be responsible for addressing public concerns about construction activities, including, but not limited to, access, excessive noise, dust, or odor. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, blocked driveway) and implement measures, in consultation with the Contractor, to address the concern. Notices detailing the dates and hours of construction shall be sent to properties within 500 feet of the construction site. A project information sign shall be posted at the construction site and shall display the telephone number for the public liaison.

No significant adverse impacts related to land use and planning would occur, which would be ensured by compliance with SC-CC-1 through SC-CC-4, and no mitigation measure is required.

*b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections H.1 and H.2), City of Los Angeles General Plan; Southeast Los Angeles Community Plan; LAMC, LAAC, SCAG RTP/SCS; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project were inconsistent with the General Plan, or other applicable plans, or with the site's zoning if designated to avoid or mitigate a significant potential environmental impact.

**Less than significant impact.** A review of the City's land use plans and policies and other planning documents was made to determine the EBMF's consistency with these plans, policies, and regulations (see Appendix H for the Community Impact Assessment), a summary of which is provided below.

**SCAG's RTP/SCS.** The project would be consistent with SCAG regional goals because it would allow electric buses to provide transit services that connect transit users to key destinations and regional transportation connectors while reducing auto trips, vehicle miles traveled, and air emissions, thereby improving air quality, reducing GHG emissions, and promoting energy efficiency.

**City of Los Angeles General Plan.** The project as it relates to the provision of transit services as alternative transportation. Transit use would improve with the implementation of the project, thus satisfying goals for a multimodal transportation system. The project would improve air quality and reduce GHG emissions, energy use, and noise through the use of electric buses. The project could also serve as a catalyst for the revitalization of the site through the replacement of older structures at the site with new ones utilizing green technology and improving the abutting streetscape. As such, the Build Alternative is generally consistent with goals, objectives, and policies associated with improved transit services, green technology, reduced air pollution and GHG emissions, and decreased use of nonrenewable energy resources.

**Southeast Los Angeles Community Plan.** In accordance with the goals and policies in the Southeast Los Angeles Community Plan, the EBMF would improve LADOT transit service provision through a new and larger maintenance facility and would support the use of renewable energy (i.e., battery-powered electric buses), which in turn would reduce air pollutants, GHG emissions, noise, and nonrenewable energy consumption.

Subarea K – Compatible Industrial of the Southeast Los Angeles CPIO District allows warehouses and storage buildings with storage in an enclosed building; sets maximum building heights and density; and includes guidelines for building design, parking, signs, equipment, walls, lighting, and open storage. The Build Alternative would be designed to comply with applicable development regulations, environmental standards, and design guidelines for the Southeast Los Angeles CPIO District (SC-

LU-1), and CPIO approval would be obtained as part of the project approval. No conflict with the Southeast Los Angeles CPIO would occur.

**Zoning Regulations.** The project would not require changes in the zoning and land use designation of the site because the proposed project is a permitted use under the Limited Industrial land use designation and M1-1-CPIO zoning of the site. In addition, the project would comply with applicable zoning regulations. LAMC Section 12.17.6 includes regulations for parcels zoned as M1 – Limited Industrial. Subsection B.5 g) and h), which allow the parking of trucks or buses and public service utility yards “...when conducted wholly within a completely enclosed building or within an area enclosed on all sides with a solid wall or solid fence, not less than 6 feet in height, when no material or equipment is stored to a height greater than that of the enclosing wall or fence...” In addition, the project would be designed to comply with the height limitations and applicable CPIO development regulations (SC-LU-1).

No conflict with land use plans, policies, and programs would occur.

### **Standard Conditions**

The project shall comply with the following Standard Condition to avoid conflict with adopted land use plans and policies:

**SC-LU-1:** The proposed project shall be designed and constructed in compliance with applicable design guidelines and development standards in the Southeast Los Angeles Community Plan, Southeast Los Angeles Community Plan Implementation Overlay District, and the City’s Zoning Regulations.

No significant adverse impacts related to land use and planning would occur, which would be ensured by compliance with SC-LU-1, and no mitigation measure is required.

### 3.13 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.13.1 Regulatory Setting

This section describes existing laws and regulations related to mineral resources that apply to the project.

##### 3.13.1.1 Federal

There are no federal regulations that specifically address impacts related to mineral resources and that apply to the project.

##### 3.13.1.2 State

#### Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board (SMGB) map areas throughout California that contain regionally significant mineral resources and adopt State policy for the reclamation of mined lands and the conservation of mineral resources. The primary objective of SMARA is for each jurisdiction to develop policies that will conserve important mineral resources, where feasible, that might otherwise be unavailable when needed.

The California Department of Conservation, California Geological Survey (CGS) is the agency responsible for providing information about the state's geology, seismology, and mineral resources, including their related hazards to the health, safety, and business interests of the residents of the state. The CGS operates several major programs including the Mineral Resources (and Mineral Hazards) Program. As mandated by the SMARA, the Mineral Resources Program provides data to federal, state, and local government agencies, industry, and the public about California's availability and consumption of non-fuel mineral resources (such as metals and industrial minerals), naturally occurring mineral hazards (such as asbestos, radon, and mercury), and information about active and historic mining activities throughout the state.

The project site is located within the San Gabriel Production-Consumption region but is outside areas where geologic data indicate that significant plain cement concrete (PCC)- grade aggregate resources are present (e.g., areas designated as Mineral Resources Zone [MRZ]-2).

### **3.13.1.3 Local**

#### **City of Los Angeles General Plan Conservation Element**

The City's General Plan Conservation Element includes policies focused on the preservation of mineral resources and access to these resources. The Conservation Element notes that sand and gravel extraction occurred in the Arroyo Seco and Big Tujunga Wash areas in the early 1900s and sand and gravel resources from the adjacent mountains are available in the Tujunga alluvial fan. It identifies the locations of MRZ in the City. The Conservation Element also shows the general locations of Oil Drilling Districts, Surface Mining Districts, and State-designated oil fields within the City. The site is not within MRZ-2, an Oil Drilling District, Surface Mining District, or State-designated oil field.

#### **Los Angeles Municipal Code**

Section 13.01 of the LAMC protects the City's oil resources and has established a supplemental use district - "O" Oil Drilling District, where oil fields are known to be present and drilling operations are regulated. Section 13.03 of the LAMC protects the City's mineral resources and has established a supplemental use district - "G" Surface Mining Operations District, where surface mining operations are allowed subject to a permit. The site is not within an Oil Drilling District or Surface Mining Operations District.

### **3.13.2 Existing Environment**

The project site is located within a developed urban area and has previously been disturbed by the construction of the existing industrial structures on the site. The General Plan Conservation Element Exhibit A (Mineral Resources) shows the site is not located within an identified MRZ-2 (where information indicates that mineral deposits are present or there is a high likelihood for their presence). The nearest MRZ-2 area is located north of the project site towards downtown Los Angeles and correlates with the presence of sand and gravel aggregate west of the Los Angeles River. There are no mining activities on or near the site.

The project site is not located within a City-designated oil or gas resource area, with the Rosecrans oil and gas field as the nearest oil and gas area, where numerous active wells are located. This area is approximately 1.4 miles southwest of the project site. There are no oil or gas wells on or near the site. The nearest well is a plugged oil and gas well on 116<sup>th</sup> Place, just west of Clovis Avenue (2,300 feet to the southeast of the site).



### 3.13.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.4); City of Los Angeles General Plan Conservation Element; LAMC; CDOC Wellfinder; CGS Information Warehouse: Mineral Land Classification.

**Comment:** A significant impact may occur if the proposed project is located in an area used or available for extraction of a regionally important mineral resource, if the project converts a regionally or locally important mineral extraction use to another use, or if the proposed project blocks or affects access to a mineral resource area.

**Less than significant impact.** The site is not located within an MRZ-2 or an oil or gas resource area. The development of an electric bus maintenance facility within a developed urban area of the city would not involve the extraction of mineral resources or result in the loss of availability of a known regional mineral resource.

While construction of the project would require mineral resources in the form of sand and gravel, as well as the use of oil resources as fossil fuels, this demand would be a minor amount of available resources in the region. Impacts would be less than significant and no mitigation measure is required.

*b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section E.4); City of Los Angeles General Plan Conservation Element; LAMC; CDOC Wellfinder; CGS Information Warehouse: Mineral Land Classification.

**Comment:** See comment above.

**No impact.** Based on the General Plan Conservation Element, the site is not located within an MRZ-2 and the City has not designated a locally significant mineral resource on or near the site. In addition, there is no oil field underlying the site nor are there oil or gas wells on or near the site. The proposed project would have no impact on locally-important mineral resources. No mitigation measure is required.

### 3.14 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project result in:				
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Noise and Vibration Impact Analysis Technical Memorandum (Parsons 2021) was prepared for the project and is provided in Appendix I. The findings of the analysis are summarized below.

#### 3.14.1 Regulatory Setting

This section describes existing laws and regulations related to noise that apply to the project.

##### 3.14.1.1 Federal

##### **Transit Noise and Vibration Impact Assessment Noise Impact Criteria**

The noise impact criteria for transit projects, as prescribed in FTA's Transit Noise and Vibration Impact Assessment (FTA, 2018), are summarized in Table 3.14-1.

**Table 3.14-1: FTA Land Use Categories**

Land Use Category	Noise Metric, dBA	Description of Land Use Category
1	Outdoor $L_{eq}(h)^*$	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use.
2	Outdoor $L_{dn}$	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor $L_{eq}(h)^*$	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls fall into this category. Places for meditation or study associated with cemeteries, monuments, and museums. Certain historical sites, parks, and recreational facilities are also included.
<p>Note: * <math>L_{eq}</math> for the noisiest hour of transit-related activity during hours of noise sensitivity. Source: FTA, 2018.</p>		

$L_{dn}$  is used to characterize noise exposure for residential areas, hotels, and hospitals where people normally sleep (Category 2). The maximum 1-hour average hourly  $L_{eq}$  during the period that the facility is in use is used for other noise-sensitive land uses such as schools, libraries, churches, and parks (Category 3). The noise impact criteria for human annoyance are based on a comparison of the existing outdoor noise levels and the future outdoor noise levels from a proposed transit project. They incorporate activity interference caused by the transit project alone and annoyance due to the change in the noise environment caused by the project. There are two levels of impact included in the FTA noise impact criteria, as shown in Figure 3.14-1.

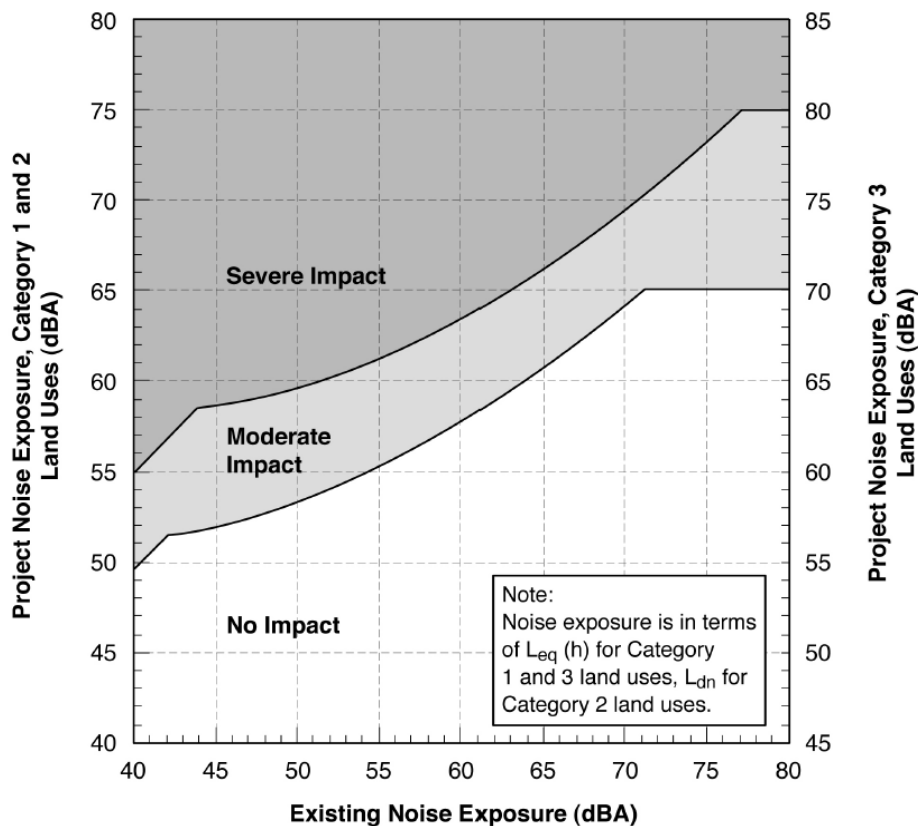
- Severe impact: Project noise above the upper curve is considered to cause severe impact because a significant percentage of people would be highly annoyed by the new noise. This curve flattens out at 75 dB for Category 1 and 2 land uses, a level associated with an unacceptable living environment.
- Moderate impact: The change in the cumulative noise level is noticeable to most people, but it may not be sufficient to cause strong, adverse reactions from the community. In this transitional area, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation, such as the existing level, predicted level of increase over existing noise levels, and the types and numbers of noise-sensitive land uses affected.

Figure 3.14-1 illustrates that a project noise level of  $L_{dn}$  of 61 dBA at a Category 2 receptor would be considered as “moderate impact” if the existing  $L_{dn}$  of a selected

residence is 65 dBA. If the project noise level reaches an  $L_{dn}$  of 67 dBA, the project noise level would be considered as a “severe impact” to the Category 2 receptor.

Although the curves in Figure 3.14-1 are defined in terms of the project noise exposure and the existing noise exposure, it is important to emphasize that the increase in the cumulative noise (i.e., when the project noise is added to existing noise) is the basis for the criteria.

**Figure 3.14-1: Noise Impact Criteria for Transit Projects**



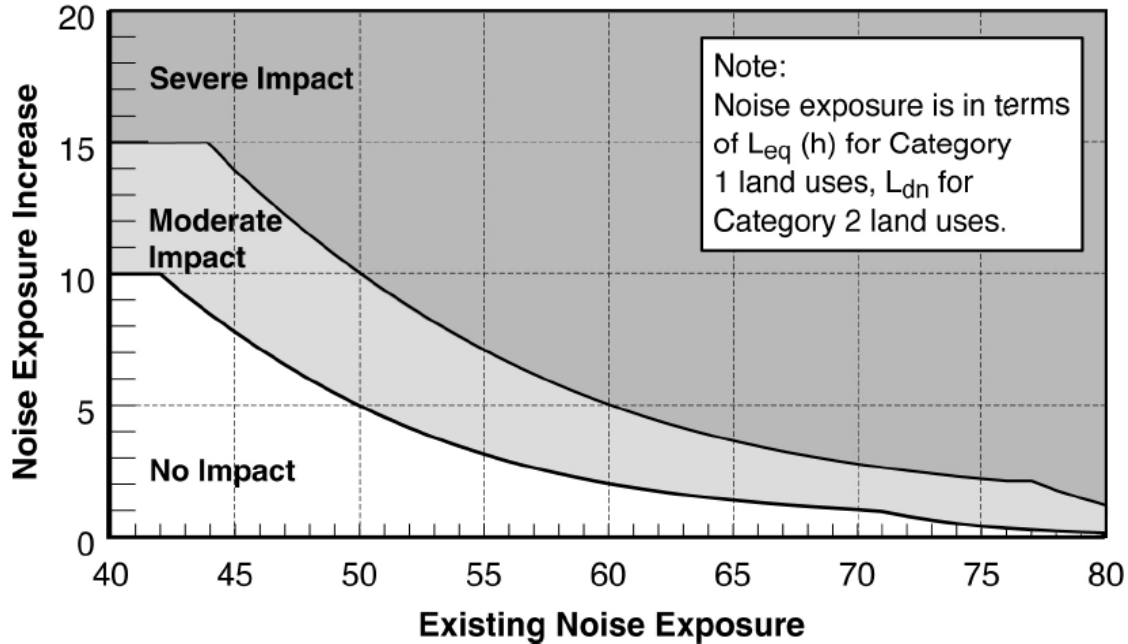
Source: FTA, 2018.

Figure 3.14-2 shows the noise impact criteria for Categories 1 and 2 land uses in terms of the allowable increase in the cumulative noise exposure. As shown, the criterion for moderate impact allows a noise exposure increase of 10 dB, if the existing noise exposure is 42 dBA or less, but only a 1-dB increase when the existing noise exposure is 70 dBA. As the existing level of ambient noise increases, the allowable level of project noise increases, but the total allowable increase in community noise exposure is reduced. This reduction accounts for the unexpected result – project noise exposure levels that are less than the existing noise exposure can still cause a moderate impact.

For residential land uses, the noise criteria are to be applied outside the building locations at noise-sensitive areas with frequent human use, including outdoor patios. If none is present, the criteria should be applied near building doors and windows. For parks and other significant outdoor uses, the criteria are to be applied at the property

lines; however, for locations where land use activities are solely indoors, noise impact may be less significant if the outdoor-to-indoor reduction is greater than for typical buildings (approximately 25 dB with windows closed or 12 dB with windows open).

**Figure 3.14-2: Allowable Increase in Cumulative Noise Levels**



Source: FTA, 2018.

**Vibration Impact Criteria**

The vibration impact criteria in the Transit Noise and Vibration Impact Assessment (FTA, 2018) are used to evaluate vibration impacts from the project’s transit operations. The evaluation of vibration impacts can be divided into two categories: (1) human annoyance and (2) building damage. Generally, human annoyance criteria are used to assess potential impacts associated with operational vibration, whereas building damage criteria are used to estimate vibration impacts due to construction activities.

**Human Annoyance**

The ground-borne vibration impact criteria describe the human response to vibration and potential interference as it relates to the operation of vibration-generating equipment. Table 3.14-2 presents the criteria for various land use categories and frequency of events.

**Table 3.14-2: Ground-Borne Vibration Impact Criteria For Human Annoyance**

Land Use Category	Ground-Borne Vibration Impact Levels, VdB*		
	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>

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Land Use Category	Ground-Borne Vibration Impact Levels, VdB*		
	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>
<u>Category 2:</u> Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
<u>Category 3:</u> Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB
<p>Notes:</p> <p>1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.</p> <p>2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have these many operations.</p> <p>3. "Infrequent Events" is defined as more than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.</p> <p>4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.</p> <p>* Root-mean-square velocity in decibels (VdB) re: 1 micro-inch per second.</p> <p>Source: FTA, 2018.</p>			

Vibration-sensitive receptors include residences, hotels, schools, churches, libraries, and hospitals. These receptors fall under Category 2, places where people normally sleep, including hotels and hospitals, and Category 3, schools, churches, and parks with primarily daytime use. Because the number of proposed bus operations at the site is estimated at up to 150 electric buses per weekday, FTA would classify the proposed service as "Frequent Events." According to Table 3.14-2, the maximum vibration level cannot exceed 72 VdB for Category 2 land uses and 75 VdB for Category 3 land uses.

### Building Damage

Vibration resulting from electric bus operations on city streets would not cause building damage because the vibration impact from rubber tire-fitted vehicles is extremely rare. This is because rubber tire-fitted vehicles are not very massive and they are typically well isolated by the vehicle suspension design and rubber tires, which act as a highly effective barrier to vibration transmission from the vibration-generating carriage and the main propagation medium for vibration excitation – the ground. Potential vibration impact for building damage from rubber tire-fitted vehicles such as those proposed for this project can be reasonably dismissed under general conditions.

Construction activities can result in varying degrees of ground vibration, depending on the equipment used and the method employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings founded on the soil near the construction site respond to these vibrations with varying results, ranging from no perceptible effects at the lowest levels, perceptible vibrations at moderate levels, and slight damage at the highest levels.

Per the FTA noise and vibration assessment manual, ground vibrations from construction activities do not often reach the levels that can damage structures, and

the vibration associated with typical construction is not likely to damage building structures. Vibrations generated by construction activities are mainly in the form of surface or Raleigh waves. The FTA manual states that peak particle velocity (ppv) correlates best with building damage and complaints. Table 3.14-3 summarizes the construction vibration limits shown in FTA guidelines for structures located near a transit project.

**Table 3.14-3: FTA Construction Vibration Damage Criteria**

Building Category	Peak Particle Velocity, in/sec	Approximate Lv*, VdB
I. Reinforced-concrete, steel, or timber (no plaster)	0.50	102
II. Engineered concrete and masonry (no plaster)	0.30	98
III. Non-engineered timber and masonry buildings	0.20	94
IV. Buildings extremely susceptible to vibration damage	0.12	90
Note: * Root-mean-square velocity in decibels (VdB) re: 1 micro-inch per second. Source: FTA, 2018.		

### 3.14.1.2 State

#### **California Planning and Zoning Law**

The California Planning and Zoning Law requires each local government entity to adopt a Noise Element as part of its General Plan. State land use guidelines for evaluating the compatibility of various land uses as a function of community noise exposure are generally incorporated into adopted Noise Elements.

### 3.14.1.3 Local

#### **City of Los Angeles General Plan Noise Element**

The City's General Plan Noise Element identifies ambient noise levels and major noise sources (e.g., vehicles, rail systems, and airports) in the City and sets goals, objectives, and policies for reducing intrusive noise and the noise impacts of development and changes in land use, and its effects on noise-sensitive land uses.

#### **City of Los Angeles Noise Ordinance**

LAMC Chapter IV, Article 1, Section 41.40; and Ordinance No. 161,574 and amended Ordinance No. 156,363 (the City Noise Ordinance) address noise generated at construction sites, including permissible hours of construction. In addition, operational noise from stationary and mobile sources is regulated by the City.

LAMC Section 112.05 states that construction and industrial machinery shall not exceed a maximum of 75 dBA at a distance of 50 feet in a residential zone or within 500 feet of a residential zone, except where compliance is technically infeasible. In addition, LAMC Section 41.40, as referenced, restricts construction activities during

different hours of the day (i.e., no person shall perform any construction or repair work that makes loud noises that disturb persons occupying sleeping quarters in any place of residence between the hours of 9:00 p.m. of one day and 7:00 a.m. of the following day).

LAMC Section 112.02 states that operational noise (e.g., heating, ventilation, and air conditioning [HVAC] equipment) shall not cause the noise level on the premises on any other occupied property to exceed the ambient noise level by more than 5 dBA. LAMC Section 112.04 also restricts mechanical noise between the hours of 10:00 p.m. and 7:00 a.m. of the following day. Excess noise during this period is defined as loud, raucous, or impulsive sound within a residential zone or within 500 feet of a residential zone.

The project design shall comply with a construction management plan that includes project design conditions, as necessary, to protect the health, safety, or convenience of affected sensitive receptors, located in the neighborhood that surrounds the project. General conditions to control construction noise and vibration, as may be listed in the construction management plan specifications, could include:

- 1) Construction or use of temporary noise barriers, enclosures, or sound blankets
- 2) Use of low noise, low vibration, low emission-generating construction equipment (e.g., quieter) Tier 4 engines, as needed
- 3) Maintenance of mufflers and ancillary noise-abatement equipment
- 4) Scheduling high noise-producing activities during periods that are least sensitive when most people are at work during daytime hours
- 5) Routing construction-related truck traffic away from noise-sensitive areas
- 6) Reducing construction vehicle speeds
- 7) Locating equipment as far as feasible from sensitive receptors

Design methods that shall be considered to further lower operations noise levels may include but are not limited to:

- 1) Selecting mechanical equipment designed to produce low noise levels. This includes mechanical (i.e., HVAC) equipment for heating and cooling interior spaces.
- 2) Locating mechanical equipment inside the building or shielding it with screens; walls, including parapet walls for rooftop equipment; acoustical louvers; or other noise-control devices.
- 3) Designing the building shell to contain noise within the building. This includes proper specifications for windows, doors, and ventilation systems.
- 4) Limiting the maximum noise levels that may be produced by activities within the project.



- 5) Orienting doors, windows, and other openings away from NSLUs. Where windows or emergency doors need to be oriented toward homes or other noise-sensitive uses, ensure they remain closed when not in use.
- 6) Considering all of the above noise control methods in the final architectural and engineering designs and specifications for project construction.

### 3.14.2 Existing Environment

The project site is developed with two industrial buildings that are currently used as a logistics warehouse for solar panels. Noise-sensitive land uses (NSLUs) within 500 feet of the project site include single-family residences to the north along East 111th Place and the south along East Lanzit Avenue, a community center to the west, and a school to the east, both along East 111th Place.

Noise monitoring was conducted by Greg Berg, Parsons noise specialist, at the project area on June 7 and 8, 2021, to determine the existing ambient exterior noise levels. Noise monitoring was conducted for a 24-hour period (long-term) and during off-peak traffic conditions (short-term) at several NSLUs to establish the baseline conditions. The long-term measurement was conducted to establish the upper and lower ambient noise-level ranges in the project area during daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours and to adjust the short-term measurements to the lowest daytime and nighttime noise levels to which predicted noise levels from project-related construction activities and operations can be compared.

Based on the measured noise levels, the project area has an exterior (outside) ambient noise level between 59 and 62 dBA during the daytime hour of 7:00 p.m. and between 53 and 56 dBA during the nighttime hour of 5:00 a.m., depending on location.<sup>2</sup> Measured and adjusted project site noise levels at the NSLUs are shown in Table 3.14-4, and noise monitoring locations are shown in Figure 3.14-3.

**Table 3.14-4: Measured Noise Levels at Noise-Sensitive Land Uses**

Noise Measurement Site	Noise Sensitive Location	Measurement Date	Start Time <sup>1</sup>	Measured Ambient Noise Level, Leq, dBA	Adjusted Daytime Ambient Noise Level, Leq, dBA <sup>2</sup>	Adjusted Nighttime Ambient Noise Level, Leq, dBA <sup>3</sup>	Adjusted Ambient Noise Level, Ldn / (Leq), dBA <sup>4</sup>
ST1	710 E 111th Place	06/07/21	11:20	57	59	53	62 / (59)
ST2	810 E 111th Place	06/08/21	8:20	55	59	53	62 / (61)
ST3	745 E 111th Place	06/08/21	9:00	56	62	56	63 / (61)
ST4	750 E Lanzit Avenue	06/07/21	13:00	60	61	55	64 / (63)

Notes:

- 1 - Duration of measurement was 20 minutes.
- 2 - Daytime ambient was adjusted from the 7:00 p.m. hour which is the assumed daytime hour with the highest electric bus traffic volumes.
- 3 - Nighttime ambient was adjusted from the 5:00 a.m. hour which is the assumed nighttime hour with the highest electric bus traffic volumes.
- 4 - Ldn is provided for Category 2 receptors; Peak-hour Leq is provided for nearby Category 3 receptors per FTA manual.

Figure 3.14-3: Noise Monitoring Locations



### **3.14.3 Impact Analysis**

#### **3.14.3.1 CEQA Thresholds**

According to the L.A. CEQA Thresholds Guide (2006), a project would normally have a significant effect on construction noise if:

- Construction activities lasting more than 1 day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise-sensitive use;
- Construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

The proposed project would be under construction for 24 months; thus, construction activities would last longer than 10 days in a 3-month period. Therefore, the first and second bulleted threshold above applies to the proposed project. Because construction activities and deliveries would be restricted to 7:00 a.m. to 5 p.m. on weekdays, with no work on weekends and holidays, the third bulleted threshold does not apply.

According to the L.A. CEQA Thresholds Guide (2006), a project would normally have a significant operational noise impact if the project causes:

- The ambient noise level measured at the property line of affected uses to increase by 3 dBA in community noise equivalent level (CNEL) to or within the "normally unacceptable" or "clearly unacceptable" category, or any 5 dBA or greater noise increase.

Additionally, the City Noise Ordinance, Section 112.02 states that operational noise (e.g., bus maintenance and repairs) shall not cause the noise level on the premises of any occupied property other than the site to exceed the ambient noise level by 5 dBA or more. This threshold is more conservative than the CEQA Threshold Guide of 5 dBA at an affected land use in that the noise increase is measured at the nearest occupied property rather than the nearest sensitive land use (i.e., NSLU or affected use). An NSLU may be farther away than the next occupied property. Therefore, LAMC Section 112.02 is being used for an operational threshold in this screening assessment. LAMC Section 112.04 also restricts excess mechanical noise between the hours of 10:00 p.m. and 7:00 a.m. of the following day in residential zones and within 500 feet of a residential zone. Excess noise during this period is defined as loud, raucous, or impulsive sounds. The qualitative threshold is also being used for nighttime operational noise.

### **3.14.3.2 Methodology**

#### **Operations**

Operations noise from the EBMF is expected to be generated by the electric buses entering and leaving the maintenance facility, as well as activities within the maintenance facility itself. This analysis considers the aggregate of the electric bus noise emanating from a line source as well as maintenance facility noise emanating from a single point-source at approximately pedestrian height (i.e., approximately 5 ft). The effects of air and ground acoustical absorption are conservatively excluded from the point-source sound propagation algorithm. Operational noise analysis follows FTA procedures and is calculated from the FTA noise model.

#### **Construction**

Construction noise from the proposed project construction was predicted with a technique based on the FTA “general assessment” method that focuses on the anticipated equipment and vehicles on site per phase. Consistent with data provided by the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (FHWA, 2006), the predictive analysis for this study also applies the “acoustical usage factor” to calculate an equivalent sound level ( $L_{eq}$ ) for a typical hour during which the construction equipment is expected to generate noise. Other included analysis factors are as follows:

- On average, equipment noise emanates from a single point at the geographic center of the nearest activity, illustrated as construction activity focal points on Figure 3.14-3, representing the mobility of construction activities and equipment locations across the entire project area as work proceeds;
- Point-source sound propagation and the source emission point is 6 feet above grade;
- First-floor receivers are 5 feet above property grade;
- The effect of acoustical ground and air absorption is conservatively not included.

The proposed project construction activities are expected to involve the use of various equipment, including a backhoe, paver, generators, compressors, rollers, skid loaders, and trucks. Reference maximum noise levels for such conventional construction equipment range between 74 and 81 dBA at a distance of 50 ft from the sound-producing source (FHWA, 2018).

### **3.14.3.3 Responses to CEQA Checklist**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project result in the generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections I.1 to I.4); City of Los Angeles General Plan Noise Element; City Noise Ordinance; Noise and Vibration Impact Analysis (Parsons, 2022).

**Comment:** A significant impact would occur if the project exposed persons to or generated noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The City's Noise Ordinance in LAMC Section 112.05 states that construction machinery shall not exceed a maximum of 75 dBA at a distance of 50 feet in a residential zone. If the estimated construction noise level exceeds the 75-dBA threshold at 50 feet, a noise impact would be assumed to occur.

**Less than significant impact with mitigation incorporated.** The project would generate noise during construction and operations and maintenance activities.

### **Construction Noise**

The proposed project construction activities are expected to involve the use of various equipment, including a backhoe, paver, generators, compressors, rollers, skid loaders, and trucks. Reference maximum noise levels for such conventional construction equipment range between 74 and 81 dBA at a distance of 50 feet from the sound-producing source (FHWA, 2018).

During the construction period, the projected construction activity noise levels have been calculated to be up to 83 dBA at 50 ft, as shown in Table 3.14-5.

The surrounding NSLUs located adjacent to the project site are 265 to 315 feet from the center of construction activity within the site; thus, they may experience temporary exterior noise levels of approximately 67 to 68 dBA  $L_{eq}$  from the operation of the loudest expected construction equipment during hours as allowed by the City of Los Angeles. Table 3.14-6 presents the estimated noise levels for project construction at the noise-sensitive land uses.

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**Table 3.14-5: Estimated Construction Noise Levels**

Construction Activity Equipment	Number of Equipment Used	Sound Level at 50 ft (dBA)	Usage Factor <sup>1</sup>	Effective Usage Factor <sup>2</sup>	Leq, dBA <sup>3, 4</sup>	
					@ 50 ft	@ 100 ft
<b>O&amp;M Facility Construction</b>						
<u>Demolition of Existing Facility</u>						
Pavement Breaker	2	82	0.3	0.15	74	68
Front-end loader	2	79	0.5	0.30	74	68
Dozer	1	80	0.5	0.15	72	66
Dump Truck	2	88	0.3	0.15	80	74
<b>Overall Leq =</b>					<b>82</b>	<b>76</b>
<b>Noise Impact Distance<sup>5</sup> = 110 ft</b>						
<u>Removal of Pavement</u>						
Pavement Breaker	2	82	0.5	0.30	77	71
Dozer	1	80	0.3	0.08	69	63
Dump Truck	2	88	0.3	0.15	80	74
<b>Overall Leq =</b>					<b>82</b>	<b>76</b>
<b>Noise Impact Distance<sup>5</sup> = 105 ft</b>						
<u>Excavation and Site Grading</u>						
Backhoe	2	80	0.5	0.30	75	69
Compactor	2	82	0.3	0.15	74	68
Grader	1	85	0.5	0.15	77	71
Front-end loader	2	79	0.3	0.15	71	65
<b>Overall Leq =</b>					<b>81</b>	<b>75</b>
<b>Noise Impact Distance<sup>5</sup> = 90 ft</b>						
<u>Foundation</u>						
Utility Truck	2	84	0.3	0.15	76	70
Concrete Mixer	1	85	0.5	0.15	77	71
Saw	2	78	0.3	0.15	70	64
<b>Overall Leq =</b>					<b>80</b>	<b>74</b>
<b>Noise Impact Distance<sup>5</sup> = 85 ft</b>						
<u>Structure Construction</u>						
Crane, Derrick	1	88	0.5	0.15	80	74
Saw	2	78	0.3	0.15	70	64
Utility Truck	2	84	0.5	0.30	79	73
<b>Overall Leq =</b>					<b>83</b>	<b>77</b>
<b>Noise Impact Distance<sup>5</sup> = 115 ft</b>						

Notes:

- 1 - Usage factor is a percentage of time of the 8-hour construction period through which a hypothetical receptor would be noise impacted by the piece of equipment concerned. This value cannot exceed 0.5 in practical terms.
- 2 - Assuming that the equipment are operating at, or near, their maximum sound levels 30 percent of the time during operation except for the compressor, roller, and generator. These 3 pieces of equipment were assumed to be operational
- 3 - Calculated noise levels do not assume any mitigation measures.
- 4 - Distance is measured from the geometric center of construction activities.
- 5 - Based on the construction noise limit criteria of 80 dBA for daytime hours at residential land uses. Distances are measured from the center of the noise producing activities associated with the construction phase.

Source: Parsons

**Table 3.14-6: Estimated Construction Noise Levels**

Noise Sensitive Location	Lowest Daytime Ambient Noise Level, Leq, dBA	Distance to NSLU, feet	Loudest Construction Phase Noise Level at NSLU, Leq, dBA <sup>1</sup>	Unmitigated Noise Level Increase, Leq, dB	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	53	295	67	14	No
810 E 111th Place	53	285	67	14	No
745 E 111th Place	56	265	68	12	No
750 E Lanzit Avenue	55	315	67	12	No

As shown in Table 3.14-6, ambient noise levels within the project vicinity range from 53 to 56 dBA, and construction-related noise are estimated to be 67 to 68 dBA. Because the projected construction noise levels are expected to be 12 to 14 dBA above existing ambient noise levels and above CEQA thresholds of less than a 5-dBA increase at noise-sensitive receptors, the project is anticipated to have a significant effect associated with unmitigated construction noise. Construction of a temporary noise barrier, which includes noise barrier fences, moveable noise barriers, and noise control curtains, with an effective height of 12 ft around the perimeter of the construction site should be implemented before the start of construction (MM-NOI-1). Temporary noise barriers may be made, for example, of concrete jersey barriers with 0.75-inch plywood attached to fence posts, and noise control curtain material may be mounted or hung over perimeter chain-link fences. Additionally, a public liaison would be appointed to address public concerns related to construction activities including excessive noise (SC-CC-4). Table 3.14-7 presents the estimated mitigated noise levels for project construction at the nearby noise-sensitive land uses.

**Table 3.14-7: Estimated Mitigated Construction Noise Levels**

Noise Sensitive Location	Lowest Daytime Ambient Noise Level, Leq, dBA	Distance to NSLU, feet	Loudest Construction Phase Noise Level at NSLU, Leq, dBA <sup>1</sup>	Mitigation Measure*	Mitigated Construction Noise Level at NSLU, Leq, dBA	Mitigated Noise Level Increase, Leq, dB	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	53	295	67	12-Foot Barrier	51	-2	Yes
810 E 111th Place	53	285	67	12-Foot Barrier	51	-2	Yes
745 E 111th Place	56	265	68	12-Foot Barrier	59	3	Yes
750 E Lanzit Avenue	55	315	67	12-Foot Barrier	59	4	Yes

\* - Mitigation measure would be located along the construction site perimeter.

Construction-related noise impacts would be less than significant after mitigation.

**Operations Noise**

CEQA impact analysis is applied to the project using the measured existing ambient noise levels at the project vicinity. Figure 3.14-3 shows the locations of nearby noise-sensitive receptors. For this analysis, it is assumed that an average of six buses would be cleaned, washed, and/or possibly provided preventive maintenance and repairs in a given hour for 24 hours per day. Based on the existing bus schedule of the South Yard facility, it is assumed that approximately 57 and 67 buses would arrive and depart the maintenance facility during daytime and nighttime hours, respectively, and it is assumed that 7:00 p.m. and 5:00 a.m. would be the times with the loudest operational noise levels. Electric buses are also assumed to be traveling at 20 miles per hour (mph) near the maintenance facility.

Table 3.14-8 presents the estimated noise levels from the maintenance facility and BEB operations at the NSLUs during the daytime hour of 7:00 p.m., and Table 3.14-9 presents the estimated noise levels during the nighttime hour of 5:00 a.m.

**Table 3.14-8: Estimated Operations Noise Levels at Noise-Sensitive Land Uses during Daytime Hours**

Noise Sensitive Location	Daytime Ambient Noise Level, Leq, dBA <sup>1</sup>	Distance to Property Line, feet <sup>2</sup>	Operational Noise Level at Property Line, Leq, dBA	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	59	30 / 265	55	Yes
810 E 111th Place	59	225 / 285	47	Yes
745 E 111th Place	62	30 / 270	57	Yes
750 E Lazit Avenue	61	550 / 315	45	Yes

1 - Daytime ambient was adjusted from the 7:00 p.m. hour which is the assumed hour with the highest electric bus traffic volumes.

2 - Distance to electric bus operations / distance to maintenance facility.

**Table 3.14-9: Estimated Operations Noise Levels at Noise-Sensitive Land Uses during Nighttime Hours**

Noise Sensitive Location	Daytime Ambient Noise Level, Leq, dBA <sup>1</sup>	Distance to Property Line, feet <sup>2</sup>	Operational Noise Level at Property Line, Leq, dBA	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	53	30 / 265	55	Yes
810 E 111th Place	53	225 / 285	47	Yes
745 E 111th Place	56	30 / 270	58	Yes
750 E Lazit Avenue	55	550 / 315	45	Yes

1 - Nighttime ambient was adjusted from the 5:00 a.m. hour which is the assumed hour with the highest electric bus traffic volumes.

2 - Distance to electric bus operations / distance to maintenance facility.



With ambient noise levels and project-generated noise combined, Tables 3.14-10 and 3.14-11 present the estimated cumulative noise levels of ambient noise and operational noise levels at the NSLUs during daytime and nighttime hours, respectively.

**Table 3.14-10: Estimated Cumulative Noise Levels at Noise-Sensitive Land Uses during Daytime Hours**

Noise Sensitive Location	Daytime Ambient Noise Level, Leq, dBA <sup>1</sup>	Operational Noise Level at Property Line, Leq, dBA	Cumulative Daytime Noise Level, Leq, dBA <sup>1</sup>	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	59	55	60	Yes
810 E 111th Place	59	47	59	Yes
745 E 111th Place	62	57	63	Yes
750 E Lazit Avenue	61	45	61	Yes

1 - Daytime ambient was adjusted from the 7:00 p.m. hour which is the assumed hour with the highest electric bus traffic volumes.

**Table 3.14-11: Estimated Cumulative Noise Levels at Noise-Sensitive Land Uses during Nighttime Hours**

Noise Sensitive Location	Daytime Ambient Noise Level, Leq, dBA <sup>1</sup>	Operational Noise Level at Property Line, Leq, dBA	Cumulative Nighttime Noise Level, Leq, dBA <sup>1</sup>	Compliant with CEQA Threshold (Outdoor Ambient < 5 dBA)
710 E 111th Place	53	55	57	Yes
810 E 111th Place	53	47	54	Yes
745 E 111th Place	56	58	60	Yes
750 E Lazit Avenue	55	45	55	Yes

1 - Nighttime ambient was adjusted from the 5:00 a.m. hour which is the assumed hour with the highest electric bus traffic volumes.

As shown, cumulative operational noise levels would not exceed City standards and thus, operational noise impacts would be less than significant.

*b) Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections I.1 and I.2); City of Los Angeles General Plan Noise Element; City Noise Ordinance; FHWA RCNM User's Guide, FTA Transit Noise and Vibration Impact Assessment; Noise and Vibration Impact Analysis (Parsons, 2022).

**Comment:** A significant impact would occur if the project exposed persons to or generated excessive groundborne vibration or groundborne noise levels.

**Less than significant impact.** No pile-driving or blasting activities are proposed that may result in ground-borne vibration. Equipment and vehicles to be used for construction are listed in Table 3.14-5. The anticipated ground vibration due to the operation of the construction equipment and vehicles on the proposed project site has been predicted with a technique based on the FTA “general assessment” method and available data for construction activities. Among the construction equipment and vehicles shown in Table 3.14-5, during some of the activities, loaded trucks would be expected to produce the largest magnitude of vibration. FTA guidance indicates that such equipment produces a reference vibration velocity level of 86 VdB at a distance of 25 ft. However, it is assumed that the loaded trucks would not be operating closer than an estimated 50 ft to the nearest façade of the closest vibration-sensitive building. Because construction would be short-term and temporary, the vibration velocity level as perceived by nearby building occupants would be approximately 77 VdB, which is less than the 80-VdB threshold/vibration velocity levels for “Infrequent Events” from the most vibratory of onsite construction equipment.

The vibration velocity level would also be considerably less than the 94-VdB threshold/vibration velocity levels that may result in building damage from the most vibratory of onsite construction equipment (see Table 3.14-5). Therefore, operating equipment associated with the construction of the project is not expected to result in significant annoyance to nearby building occupants nor result in building damage.

In addition, long-term operation at the site (e.g., electric bus parking and charging, and inspection and maintenance activities) would not produce vibration. Thus, it is not anticipated that there would be any excessive ground-borne vibration or ground-borne noise levels due to the construction of the maintenance facility or operations of the electric buses and maintenance facility.

Vibration impacts would be less than significant and no mitigation is required.

*c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections I.1, I.2, and I.4); City of Los Angeles General Plan Noise Element; Southeast Los Angeles Community Plan; City Noise Ordinance; Noise and Vibration Impact Analysis (Parsons, 2022).

**Comment:** A significant impact would occur if the project exposed people residing or working in the project area to excessive noise levels due to the project site being located within an airport land use plan or within two miles of a public airport where such a plan has not been adopted.

**No impact.** No impact is anticipated because the project site is not located within a public airport land use plan area or 2 miles of a public airport, and it is not located within the vicinity of a private airstrip. The nearest public airport is Hawthorne Municipal Airport (also known as Jack Northrop Field) located at 12101 South Crenshaw Boulevard in Hawthorne, California (approximately 3.9 miles to the west/southwest of the EBMF project site). Additionally, the Los Angeles International Airport (LAX), located at 1 World Way in Los Angeles, California, is 8.4 miles west of the project site. The closest private airstrips are Compton/Woodley Airport in Los Angeles, approximately 3.3 miles south of the project site, and the Prairie Gate at the Hawthorne Airport in Hawthorne, approximately 3.9 miles east of the project site. Persons who reside in the area or would be working at the site would not be exposed to excessive noise levels from airport and aircraft operations.

No impacts related to noise from airport or aircraft operations would occur and no mitigation is required.

### **3.14.4 Mitigation Measure**

The following mitigation measure shall be implemented before and during construction activities:

**MM-NOI-1:** To minimize noise impacts to area residents during project construction, the Contractor shall install a temporary noise barrier, which includes noise barrier fences, moveable noise barriers, and/or noise control curtains, with an effective height of 12 feet around the perimeter of the construction site. Temporary noise barriers may be made, for example, of concrete jersey barriers with 0.75-inch plywood attached to fence posts, or the noise control curtain material may be mounted or hung over perimeter chain-link fences.

Construction noise impacts would be less than significant after mitigation.

### 3.15 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.15.1 Regulatory Setting

This section describes existing laws and regulations related to population and housing that apply to the project.

##### 3.15.1.1 Federal

There are no federal regulations related to population and housing that apply to this project.

##### 3.15.1.2 State

There are no State regulations related to population and housing that apply to this project.

##### 3.15.1.3 Regional

#### SCAG Projections

SCAG is responsible for preparing the Regional Comprehensive Plan, RTP/SCS, and Regional Housing Needs Assessment (RHNA) in coordination with other State and local agencies. These planning documents include population, employment, and housing projections for the region for use by local agencies and public service agencies, and utility companies in projecting future service demands. Projections in SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) serve as the basis for demographic estimates.

#### **3.15.1.4 Local**

##### **City of Los Angeles General Plan Housing Element**

The City's General Plan Housing Element outlines the City's goals, objectives, policies, and programs for the conservation, preservation, and provision of adequate housing to meet the existing and future needs of the City.

#### **3.15.2 Existing Environment**

The California Department of Finance (DOF) estimates the City's January 2021 population at 3,923,341 persons, which includes 3,847,606 persons in households and 75,735 persons in group quarters. The City's housing stock consists of 1,535,606 dwelling units, of which 562,721 are single-detached units, 88,926 are single-attached units, 140,936 are two to four units; 732,939 are five or more units, and 10,084 are mobile homes. The City's housing stock has a 7.7 percent vacancy rate and the average household size is 2.72 persons per household. In September 2020, SCAG projected the population of the City to reach 4,771,000 persons by the year 2045, along with 1,793,000 households and 2,135,900 jobs.

The 2019 resident population and housing stock of the Southeast Los Angeles community is estimated at 301,512 residents and 74,232 housing units. There are no dwelling units at the site and the site was recently leased and the existing industrial buildings are used as a logistics warehouse for solar panels.

#### **3.15.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section J.1); City of Los Angeles General Plan; Southeast Los Angeles Community Plan, SCAG RTP/SCS; EDD Unemployment Data; Community Impact Assessment (Parsons, 2022).

**Comment:** The inducement of substantial unplanned growth and development from a project may have a significant impact on housing, roads, and other infrastructure, as well as environmental resources, by creating growth that was not previously anticipated in the General Plan or relevant Community Plan.

**Less than significant impact.** The project does not include the construction or occupancy of any housing units. No extension of roads or other infrastructure that could potentially induce population growth is proposed. Rather, the project would replace the existing industrial structures with a bus maintenance facility. Construction activities will generate a temporary demand for construction workers and long-term

operation of the facility is anticipated to bring in 312 employees to the site (including the 203 employees at the South Yard who will be transferred to the EBMF). The temporary construction jobs and 109 new permanent jobs created by the project would be a minor increase in local jobs and is not expected to result in significant adverse impacts related to growth inducement, but it would be a beneficial impact for providing local employment opportunities. Also, It is anticipated that most workers filling the construction jobs would reside within the region or live in relative proximity to the project site. The temporary jobs generated by the construction of the proposed project are not anticipated to result in a direct demand for additional housing or cause unplanned growth in the project area.

The 109 new jobs that would be created by the project represent less than 0.01 percent of the City's employment base and can be easily filled by the unemployed labor force of the City. It would also represent only 0.04 percent of SCAG's projected employment growth for the City from 2016 to 2045 (287,600 jobs). This would not be considered unplanned population growth nor would it exceed SCAG's demographic projections.

With the project proposing redevelopment of the site with the same industrial land use, the EBMF may encourage redevelopment of the vacant parcel at the eastern end of East 111<sup>th</sup> Place (Lanzit Industrial Site). However, this industrial site has remained vacant for more than 25 years, and the project is not expected to be a major factor in its redevelopment nor influence the amount, timing, or location of growth in the surrounding area.

Less than significant impacts would occur and no mitigation is required.

*b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**Reference:** L.A. CEQA Thresholds Guide (Sections J.1 and J.2); City of Los Angeles General Plan Housing Element; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project displaced substantial numbers of existing housing, necessitating the construction of replacement dwelling units elsewhere.

**Less than significant impact.** The project would involve the acquisition of two industrial parcels, but it would not require the involuntary displacement of businesses because the existing structures are currently under a temporary lease while the properties are in escrow until the City acquires the property. Existing tenants at the site have been informed of the City's planned acquisition and redevelopment of the property. Temporary construction easements (TCEs) may be required on adjacent parcels during construction of the perimeter wall, but no acquisition or displacement of adjacent residences or institutional uses would occur. Impacts related to displacement would be less than significant and no mitigation is required.

### 3.16 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.16.1 Regulatory Setting

This section describes existing laws and regulations related to public services that apply to the project.

##### 3.16.1.1 Federal

##### **Occupational Safety and Health Act of 1970**

The Occupational Safety and Health Act of 1970 sets forth the provisions to ensure safe and healthful working conditions for all workers. The federal Occupational Safety and Health Administration (OSHA) enforces the provisions of the Act. Subpart F, Fire Protection and Prevention, of Part 1926 of the Act include those regulations related to construction work and job site fire-related regulations. Examples of requirements for fire protection and prevention include requirements for maintaining fire suppression equipment specific on-site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site fire-fighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

### **3.16.1.2 State**

#### **California Building Code and California Fire Code**

The California Code of Regulations (CCR) Title 24 (California Building Code [CBC]) is the compilation of uniform building standards, including fire safety standards, for residential and commercial buildings throughout the state. Part 9 of the CBC is known as the California Fire Code (CFC) which establishes minimum fire safety requirements for new and existing buildings, facilities, storage, and processing. The CFC applies to all occupancies in California, except where more stringent standards have been adopted by local agencies.

#### **California Fire Service and Rescue Emergency Mutual Aid Plan**

The Office of Emergency Services (OES) Fire and Rescue Branch is responsible for the development, implementation, and coordination of the California Fire Service and Rescue Emergency Mutual Aid Plan. The Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and State levels, so fire and rescue resources can be mobilized, and operated in the event of natural or man-caused disasters. The Los Angeles Fire Department (LAFD) participates in the California Fire Service and Rescue Emergency Mutual Aid System and is in Region I with the fire and rescue organizations located within San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange counties. All Mutual Aid participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

#### **California Education Code**

Public school facilities and services within the State of California are subject to the rules and regulations of the California Education Code, with the State Board of Education providing the oversight and policy-making responsibilities of the California Department of Education.

### **3.16.1.3 Local**

#### **City of Los Angeles General Plan Framework Element**

The City's General Plan Framework Element includes an Infrastructure and Public Services chapter, which sets goals, objectives, and policies for fire protection and emergency medical services (EMS) in the City. The objectives and policies call for every neighborhood to have the necessary level of fire protection service, EMS, and infrastructure. It also sets a standard for response distance from the fire station to the destination location at 1.5 miles, which is consistent with the specifications for response distances in the LAMC.

The Framework Element also states that every neighborhood should have the necessary police services, facilities, equipment, and manpower required to provide for the public safety needs of that neighborhood. Objective 9.13 and Policy 9.13.1 of the Infrastructure and Public Services Chapter require the monitoring and reporting of police statistics and population projections to evaluate existing and future police



protection needs. Objective 9.14 requires that adequate police services, facilities, equipment, and personnel are available to meet such needs

### **City of Los Angeles General Plan Safety Element**

The City's General Plan Safety Element recognizes that most jurisdictions rely on emergency personnel to respond to and handle emergencies. The Safety Element establishes specific policies and objectives that emphasize hazard mitigation, emergency response, and disaster recovery. It serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City. It sets forth policies and standards for fire station distribution and location, fire suppression water flow (or "fire flow"), firefighting equipment access, emergency ambulance services, and fire prevention activities.

### **City of Los Angeles General Plan Public Facilities and Services Element**

The City's General Plan Public Facilities and Services Element consists of the Cultural and Historical Monuments Plan; the City-Owned Power Transmission Rights-of-Way Development Plan for park development on lands underlying transmission rights-of-way; the Major Equestrian and Hiking Trails Plan for acquisition, construction, and maintenance of equestrian and hiking trails; the Public Libraries Plan for construction, maintenance, and operation of public library facilities; the Public Recreation Plan for development of public recreational facilities; and the Public Schools Plan for acquisition and development of public schools and related facilities.

### **City of Los Angeles Municipal Code**

Chapter 5 of the LAMC addresses Public Safety and Protection. Article 2, Police and Special Officers, in Chapter 5 contains regulations governing administrative issues, such as requirements for police badges and uniforms. Article 7 contains the Fire Code for the City. The Fire Code contains regulations to safeguard life and property from fire, explosion, panic, or other hazardous conditions that may arise in the City. It also includes the requirements for Hazardous Materials Release Response Plans and Inventory Statements and the storage, management, and disposal of hazardous materials, such as chemical USTs/ASTs, asbestos-containing materials/asbestos-containing building material, and various other combustible and flammable materials.

### **Los Angeles Fire Department Strategic Plan 2018-2020**

LAFD's Strategic Plan 2018-2020 (A Safer City 2.0) focuses on five overarching goals over a three-year planning period:

- Provide Exceptional Public Safety and Emergency Service
- Embrace a Healthy, Safe and Productive Work Environment
- Capitalize on Advanced Technology
- Enhance LAFD Sustainability and Community Resiliency
- Increase Opportunities for Personal Growth and Professional Development

### **3.16.2 Existing Environment**

#### **Fire Protection Services**

Fire protection and emergency response in the project area are provided by the Los Angeles Fire Department. The nearest fire station serving the project site is Station 64, located at 10811 South Main Street (approximately 0.73-mile northwest of the site). In 2021, the average emergency medical service (EMS) operational response time for LAFD Station 64 is 7 minutes and 9 seconds while the average response for a structure fire is 4 minutes 51 seconds (LAFD 2021).

#### **Police Protection Services**

The City of Los Angeles Police Department (LAPD) is the local law enforcement agency responsible for providing police protection services in the City. The proposed EBMF is located within the LAPD South Bureau and would be served by the Southeast Community Police Station located at 145 W. 108th Street (approximately 0.81-mile northwest of the site). The Southeast Community Police Station serves the neighborhoods within an area of approximately 10 square miles and has over 350 sworn and civilian personnel.

#### **School and other Public Services**

LAUSD provides educational services to students in the City, several unincorporated sections of Los Angeles County, and all or parts of 31 smaller municipalities. It serves students in kindergarten through 12<sup>th</sup> grade in over 1,000 schools and over 200 independently-operated public charter schools. The project site is within the service areas of the following schools:

- 109th Street Elementary School (Grades K-5) - 10915 S McKinley Ave, Los Angeles, CA, 90059
- Samuel Gompers Middle School (Grades 6-8) - 234 E 112th St, Los Angeles, CA, 90061
- Thomas Riley High School (Grades 9-12) - 1524 E 103rd St, Los Angeles, CA, 90002

The *Ánimo* James B. Taylor Charter Middle School operates out of two classroom buildings at 810 – 820 and 840 East 111<sup>th</sup> Place, immediately east of the project site. The Kedren Health Community Center and Head Start Preschool provides primary care, behavioral health, early childhood education, community food distribution, and other community services at 710 East 111<sup>th</sup> Place, immediately west of the project site.

The City's Department of Recreation and Parks operates and manages 444 separate park sites throughout the City. There are no City parks or recreation centers within 0.5-mile of the site, although there are several nearby schools with playfields. The nearest parks are the Ted Watkins Memorial Park at 1335 E 103rd Street and the 109th Street Recreation Center at 1464 E 109th Street.

Several other community facilities and services are located near the project (0.5-mile), including private schools, hospitals, clinics, churches, and other public facilities (e.g., libraries, city and county offices, and post offices).

### 3.16.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

*i) Fire protection?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.2); City of Los Angeles General Plan Safety Element; Southeast Los Angeles Community Plan; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project required the addition of a new fire station or the expansion, consolidation, or relocation of existing fire stations to maintain service.

**Less than significant impact.** The project would require fire protection services from LAFD, replacing the demand currently created by the existing buildings on the site. The project would be constructed in a developed area served by LAFD Fire Station 64.

The proposed project would be designed, constructed, and operated in accordance with all applicable fire codes set forth by the State Fire Marshall and Los Angeles Fire Department (SC-PS-1). Therefore, the proposed project would not create a fire hazard. Also, the nearest local fire responders would be notified, as appropriate, of the construction schedule to coordinate emergency response routing during construction work (SC-CC-1). In a review of the existing service area of the LAFD and Fire Station 64, to maintain the level of fire protection and emergency services, the LAFD may require additional fire personnel and equipment. However, given that there is an existing fire station in proximity to the project site, it is not anticipated that there would be a need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times, or other performance objectives for fire protection. By analyzing data from previous years and continuously monitoring current data regarding response times, types of incidents, and call frequencies, LAFD can shift resources to meet local demands for fire protection and emergency services. The proposed project would neither create capacity or service level problems nor result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain

acceptable service ratios, response times or other performance objectives for fire protection. Impacts on fire protection services would be less than significant and no mitigation is required.

### **Standard Condition**

The following standard condition shall be implemented to prevent the creation of fire hazards at the site and an increase in demand for fire protection services:

**SC-PS-1:** The project shall be designed, constructed, and operated in accordance with the Los Angeles Fire Code and other applicable requirements in the Los Angeles Municipal Code (LAMC), Los Angeles Building Code (LABC), and other State and City regulations to prevent the creation of fire hazards, to reduce the potential for property damage and personal injury in the event of a fire, and to facilitate evacuation and emergency response.

Impacts on fire protection services would be less than significant, which would be ensured by compliance with SC-PS-1. No mitigation is required,

*ii) Police protection?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.1); City of Los Angeles General Plan Safety Element; Southeast Los Angeles Community Plan; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project resulted in an increase in demand for police services that would exceed the capacity of the police department responsible for serving the site.

**Less than significant impact.** The project site is served by the LAPD's Southeast Community Police Station. The proposed project would not result in an increase in population or create new demand for police services. Rather, existing industrial activities at the site will be replaced with a different type of industrial activity. In addition, the project site would be surrounded by walls and fences; the driveways would be gated; and security cameras and security guards would be provided. Therefore, to maintain the level of police services, the LAPD may require additional personnel and equipment. However, given that the site is adequately served by an existing station, and the project would not result in a significant increase in population or jobs, it is not anticipated that there would be a need to build a new or expand an existing police station to serve the proposed project and maintain acceptable service ratios, response times, or other performance objectives for police protection. The Southeast Community Police Station would be notified, as appropriate, of the construction schedule to coordinate emergency response routing during construction work (SC-CC-1). Impacts on police protection services would be less than significant and no mitigation is required.

*iii) Schools?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.3); LAUSD Local District Map; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project included substantial employment or population growth that would generate demand for school facilities that exceeded the capacity of the school district responsible for serving the project site.

**No impact.** The proposed project does not include the development of any residential uses and would not increase the residential population. No direct population growth would occur with the implementation of the project and no new students would be added to the existing school populations. Therefore, there would not be an increase in demand for school services from local LAUSD schools. No impact to schools would occur and no mitigation is required.

*iv) Parks?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.4.), City of Los Angeles General Plan Open Space Element; Southeast Los Angeles Community Plan; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the recreation and park services available could not accommodate the population increase resulting from the implementation of the project and new or physically altered facilities were needed.

**No impact.** The proposed project does not include the development of any residential uses and would not generate any new permanent residents that would increase the demand for local and regional park facilities. No impact to park and recreational facilities would occur and no mitigation is required.

*v) Other public facilities?*

**Reference:** L.A. CEQA Thresholds Guide (Section K.5); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project resulted in the need for new or altered public facilities, such as libraries, due to population or housing growth.

**No impact.** The proposed project would improve the City's transit services and would be a public facility for use by LADOT buses. Construction and operation of the proposed project would not induce growth, either directly or indirectly, and, therefore, would not increase the demand for or use of libraries and other public facilities in the area. Therefore, no impact to other public facilities would occur. No mitigation is required.

### 3.17 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.17.1 Regulatory Setting

This section describes existing laws and regulations related to recreation that apply to the project.

##### 3.17.1.1 Federal

There are no federal regulations that specifically address impacts related to recreation and apply to the project.

##### 3.17.1.2 State

There are no State regulations that specifically address impacts related to recreation and apply to the project.

##### 3.17.1.3 Local

###### **City of Los Angeles General Plan Open Space Element**

The City's General Plan Open Space Element serves as a guide for the identification, preservation, conservation, and acquisition of open space in the City. It sets goals, objectives, policies, standards, and criteria for publicly owned and privately owned open spaces and recreational uses.

###### **City of Los Angeles General Plan Public Facilities and Services Element**

The City's General Plan Public Facilities and Services Element includes the Major Equestrian and Hiking Trails Plan for the acquisition, construction, and maintenance of equestrian and hiking trails in the City and the Public Recreation Plan, which calls for the development of public recreational facilities. The Public Recreation Plan also includes service standards and goals for the provision of recreational facilities and operations.

### **Los Angeles Municipal Code**

Section 19.17 of the LAMC sets a park fee for subdivisions in accordance with the Quimby Act, as well as park mitigation fees for non-subdivisions. Fees collected are then used for the development of new parkland to serve the developments.

### **3.17.2 Existing Environment**

The project site does not accommodate or provide recreational facilities. The nearest park is the Ted Watkins Memorial Park (1335 E 103rd Street) and 109th Street Recreation Center (1464 E 109th Street).

### **3.17.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.4); City of Los Angeles Open Space Element and Public Facilities and Services Element; Los Angeles Department of Recreation and Parks; Community Impact Assessment (Parsons, 2022).

**Comment:** Based on the L.A. CEQA Thresholds Guide (Section K.4), the determination of whether a project results in a significant impact on recreation and parks will be made considering the following factors: (a) the net population increase resulting from the project; (b) the demand for recreation and park services anticipated at the time of project build-out compared to the expected level of service available, considering, as applicable, scheduled improvements to recreation and park services (renovation, expansion, or addition) and the project's proportional contribution to the demand; and (c) whether the project includes features that would reduce the demand for park services (e.g., on-site recreation facilities, land dedication, or direct financial support to the Department of Recreation and Parks).

**No impact.** No direct or indirect use of nearby parks and recreational facilities is anticipated with the project because nearby parks are not going to be affected by the construction and operations of the project. Also, the BEBs would not pass the Ted Watkins Memorial Park or 109th Street Recreation Center when going to and from the EBMF. In addition, employees who will be working at the EBMF are not expected to relocate to live within the project vicinity; therefore, they would not create a demand for parks and recreational facilities near the project. No impacts on existing parks and recreational facilities would occur and no mitigation is required.

*b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.4); City of Los Angeles Open Space Element and Public Facilities and Services Element; Community Impact Assessment (Parsons, 2022).

**Comment:** A significant impact may occur if the proposed project would require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

**No impact.** The project does not propose the construction of recreational facilities or the expansion of existing recreational facilities. No impacts related to the construction of recreational facilities would occur and no mitigation is required.



### 3.18 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Transportation/Traffic Impact Assessment (Parsons, 2022) was prepared for the project and is provided in Appendix J. To assess the traffic impacts, the construction and operation traffic trip generation arising from the project were qualitatively and quantitatively evaluated. In determining the level of significance, the assessment assumed that the construction and operational activities of the project would comply with relevant City regulations, ordinances, and guidance. The findings of the assessment are summarized below.

#### 3.18.1 Regulatory Setting

This section describes existing laws and regulations related to transportation that apply to the project.

##### 3.18.1.1 Federal

##### **Americans with Disabilities Act of 1990**

Titles I, II, III, and V of the ADA have been codified in Title 42 of the United States Code. Title III prohibits discrimination on the basis of disability in “places of public accommodation” (businesses and nonprofit agencies that serve the public) and “commercial facilities” (other businesses). The regulations promulgated to implement ADA include *Appendix A to Part 36 (Standards for Accessible Design)*, establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travelway, and a vibration-free zone for pedestrians.

### 3.18.1.2 State

#### **Senate Bill 743**

SB 743 streamlines the review of traffic impacts under CEQA for development projects, including infill projects in transit priority areas to promote active transportation and the reduction of GHG emissions. It adds Chapter 2.7: Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of Level of Service (LOS) in CEQA documents. Under SB 743, the focus of transportation analysis changes from vehicle delay to VMT.

#### **VMT Guidelines**

Updates to the State CEQA Guidelines establish VMT as the primary metric for evaluating a project's impacts on the environment and transportation system. The revised guidelines require that a project's environmental assessment must assess and disclose whether it conflicts or is inconsistent with local plans or policies. The revised guidelines also state, among other things, that "transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less-than-significant transportation impact."

OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides recommendations regarding significance thresholds for development projects with common land use types, general plans, and transportation projects. It lists more than two dozen types of transportation projects that would most likely not lead to a substantial or measurable increase in vehicle travel and therefore should not require an induced travel analysis. Among them are "rehabilitation, maintenance, replacement, safety and repair projects designed to improve the condition of existing transportation assets ([...] pedestrian facilities) and that do not add additional motor vehicle capacity."

### 3.18.1.3 Regional

#### **SCAG Regional Transportation Plan/Sustainable Communities Strategy**

SCAG's RTP/SCS is a long-range visioning plan that balances future mobility and transportation needs with economic, environmental, and public health goals. The RTP/SCS consists of a vision for the region's future and is developed with input from local governments, County Transportation Commissions (CTCs), tribal governments, non-profit organizations, businesses, and local stakeholders within the region.

There are more than 4,000 transportation projects from local plans identified in the 2020–2045 RTP/SCS, including highway improvements, railroad grade separations, bicycle lanes, new transit hubs, replacement bridges, and pedestrian improvements.

These future investments would reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone.

### **Los Angeles County Congestion Management Program**

The Los Angeles County Congestion Management Program (CMP) is a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use, and air quality planning programs throughout the County. The 2010 CMP for Los Angeles County links local land use decisions with their impacts on regional transportation. The CMP identifies a system of highways and roadways and establishes a minimum LOS performance measurements of LOS E (except where the 1992 base year LOS is worse than E, in which case base year LOS is the standard) for highway segments and key roadway intersections on this system. A traffic impact analysis (TIA) is required for projects that generate at least 50 new trips at CMP monitoring intersections or 150 one-way trips on mainline freeway monitoring locations during either the AM or PM peak hour on weekdays.

#### **3.18.1.4 Local**

### **City of Los Angeles General Plan Mobility Element (Mobility Plan 2035)**

The Mobility Plan 2035 provides the policy foundation for achieving a transportation system that balances the needs of all road users. The Mobility Plan 2035 incorporates "complete streets" principles and lays the policy foundation for how future generations of residents interact with their streets. The Mobility Plan also contains policies that pertain to maintaining safe and attractive sidewalks.

### **Southeast Los Angeles Community Plan**

The Southeast Los Angeles Community Plan serves as the Land Use Element of the City's General Plan and articulates the vision for long-term physical and economic development and community enhancement of the Southeast Los Angeles community. This Community Plan includes goals and policies addressing land use and urban design, mobility, community facilities, and infrastructure issues in the community. It designates the project site as Limited Industrial with a Manufacturing zone and classifies East 111<sup>th</sup> Place as a Collector Street.

### **Los Angeles Municipal Code**

LAMC Section 12.21.A,4. contains requirements related to vehicle parking spaces by development type. Section 12.21.A,16 contains requirements related to bicycle parking spaces. LAMC Section 12.37 contains requirements related to highway and collector street dedication and improvement. LAMC Section 17.05 contains standards that expand the role of the Street Standards Committee and reflect the City's new focus on complete streets. LAMC Section 62.61 states that temporary lane closures resulting from non-emergency construction along major and secondary highways or collector streets would be limited to off-peak hours. Permits may be issued on a case-by-case basis to provide exemption. Section 62.105 outlines City requirements for streets, sidewalks, driveways, and other improvements.

### 3.18.2 Existing Environment

#### Regional Access

The City has a freeway network that includes Interstates, United States Highways, and State Routes (SR). The nearest State highway is I-105, located approximately 0.4-mile (about seven blocks) south of the site.

#### Local Roadway Network

The City has approximately 7,500 miles of public streets that accommodate a variety of motorized and non-motorized vehicles, including private motor vehicles, taxis, freight vehicles, transit vehicles, and bicycles. The project site is located on the south side of East 111<sup>th</sup> Place, which is classified as a Collector Street in the Mobility Plan 2035.

#### Public Transit Services

The City is served by multiple transit operators, with the Los Angeles County Metropolitan Transportation Authority (Metro) as the primary transit operator within the City. Metro operates local bus, rapid bus, busway service, light rail, and heavy rail throughout the County and surrounding areas. Local jurisdictions, including the City of Los Angeles, operate additional transit services. LADOT operates local DASH service as well as Commuter Express bus routes. Several other municipal bus operators provide additional transit services connecting the City to neighboring jurisdictions and counties. LADOT operates and maintains some of its existing DASH and Commuter Express bus fleet at the South Yard, located approximately 2 miles south of the project site. The South Yard facility currently operates approximately 95 buses: 3 propane and 42 CNG DASH buses and 50 CNG Commuter Express buses.

#### Traffic Volumes

The COVID-19 pandemic has abnormally impacted statewide traffic patterns, such that current field traffic counts have decreased significantly as compared to pre-pandemic conditions. To ensure the credibility of baseline traffic conditions, on which future year conditions (post-COVID-19) are based, the traffic count data collected by LADOT in June 2021 was compared to the year 2019 traffic count data of StreetLight Data. Since the 2019 traffic count data of StreetLight Data was considerably higher than the recent LADOT traffic count, the year 2019 traffic count data of StreetLight Data has been used for the traffic operational analysis. Table 3.18-1 presents the existing condition intersection LOS summary at the South Avalon Boulevard and East 111<sup>th</sup> Place intersection.

**Table 3.18-1: Existing Intersection LOS Summary**

Intersection No.	Intersection Location	Control	Existing Conditions			
			<i>AM Peak Hour</i>		<i>PM Peak Hour</i>	
			Delay	LOS	Delay	LOS
1	S. Avalon Blvd & E. 111th Pl	Signal	72.3	E	28.3	C

## **Parking**

On-street parking is generally allowed on Local and Collector streets in the study area, including East 111<sup>th</sup> Place and the west side of Avalon Boulevard. Off-street surface parking is available at individual lots. On East 111<sup>th</sup> Place in the study area, no parking is allowed on the south side of the street from 2:00 a.m. to 6:00 a.m. and vehicles over 7-feet tall and 22-feet long are prohibited. Additionally, no parking is allowed on Tuesdays from 9:30 a.m. to 11:30 a.m. for street cleaning.

## **3.18.3 Impact Analysis**

### **3.18.3.1 Methodology**

Traffic analysis for the proposed project was performed in consultation with LADOT. Per the request of LADOT, both VMT and LOS analyses were performed to analyze the potential project impacts as outlined in the Memorandum of Understanding, which was approved by LADOT on September 1, 2021.

### **Vehicle Miles Traveled (VMT)**

The City of Los Angeles Vehicle Miles Traveled Calculator (VMT Calculator) was used to review the project's vehicle trips and vehicle miles traveled (VMT). As with the land use type of the proposed project, light industrial was selected for the existing land use based on discussions with LADOT. The thresholds of further VMT analysis are 250 daily trips and 1,000 daily VMT. If the proposed facility would generate an increase of less than 250 daily trips and less than 1,000 daily VMT, further VMT analysis is not required.

### **Intersection Level of Service Analysis**

The LOS analysis for the proposed project was performed consistent with the City of Los Angeles Transportation Impact Study Guidelines. The methodology used to assess the operation of signalized intersections in the City of Los Angeles is the Highway Capacity Manual (HCM 2010) delay-based methodology. Under HCM 2010 methodology, LOS thresholds are based on the average delay incurred by vehicles traveling through an intersection. Delay is dependent on a number of factors, including signal cycle length, roadway capacity (number of travel lanes) provided on each intersection approach, and traffic demand.

The LOS analysis is used to evaluate congestion and delay on streets and highways. The relative level of congestion is evaluated on a scale of A through F. Level of service A indicates free-flow conditions with no delay. LOS F indicates the breakdown of the system with very long vehicular delays. The relationship between the LOS and delay for signalized intersections is shown in Table 3.18-2.

**Table 3.18-2 Level of Service For Signalized Intersections**

Level of Service	Signalized Intersection Control Delay (Seconds)
A	0-10
B	10-20
C	20-35
D	35-55
E	55-80
F	80 or more

Source: Highway Capacity Manual (2010)

The computer software program Synchro (version 9) was used to calculate the intersection delay and resulting LOS. Synchro is a traffic signal progression analysis software tool that is capable of performing intersection delay analyses using various methodologies, including the HCM 2010 method.

Model input, calculation methods, and model output are presented in the TIA prepared for this project (see Appendix J).

### **3.18.3.2 Responses to CEQA Checklist**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections L.1 through L.4 and L.6 through L.8); LADOT Transportation Assessment Guidelines; Los Angeles County Congestion Management Program; City of Los Angeles General Plan; Mobility Plan 2035; Transportation/Traffic Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

**Less than significant impact with mitigation incorporated.** The proposed project would not conflict with the Los Angeles General Plan, including the Southeast Los Angeles Community Plan, Mobility Plan 2035, and the 2010 Bicycle Plan. Project construction and operation would generate vehicle trips on local roads in the project area.

### **Construction Trip Generation**

Construction activities associated with the project would occur mainly within the project site during the two-year construction period. Traffic flow along the roadway alignment would be maintained during construction, although, occasionally, lane

reduction could occur to accommodate construction activities on the adjacent sidewalk and site frontage on 111<sup>th</sup> Place. The Contractor shall prepare a TMP before construction. The TMP will outline necessary street lane closures and detours. A restriction on large-size trucks shall be imposed to confine travel to and from the construction site during off-peak commute times. Construction contractors shall reroute construction trucks away from congested streets or sensitive receptor areas, as feasible. The TMP will be submitted with the construction plans to the Los Angeles Police and Fire departments before the commencement of construction activities (SC-CC-1).

During temporary blockages of sidewalks, a sidewalk detour that would reroute pedestrians to an alternative sidewalk path or a sidewalk diversion, which provides a protected pathway near, but safely away from the station construction, would be included in the TMP, and implemented in accordance with the California MUTCD or other City-approved standard. Signs will be posted to direct pedestrians to intersections where they may cross.

Business access would be maintained at all times during construction, and work would be scheduled to avoid unnecessary inconvenience to the public and abutting property owners (SC-CC-2). Undue delays in construction activities would be avoided to reduce the public's exposure to construction.

As such, significant traffic impacts during construction would not occur, which would be ensured by the implementation of SC-CC-1 through SC-CC-2.

### **Operations Trip Generation**

The project would generate vehicle trips that would replace those currently generated by the logistics warehouse operating at the site. Most of the buses from the EBMF would roll out in the early morning hours, before AM peak hour traffic. In addition, many other staffs and workers would work a very early shift, arriving before the AM peak hour (7 AM) and leaving before the PM peak hour (5 PM). Mechanics and attendants would rotate in three shifts, early morning, swing shift, nights, as shown in Table 2-23. Therefore, the new vehicle trips generated at the EBMF would be limited to approximately 20 trips each for AM peak hour and PM peak hour. The proposed project would generate an increase of less than 500 daily trips and less than 43 PM peak hour vehicle trips on the street system.

Table 3.18-3 presents the existing and projected intersection Level of Service (LOS) at the S. Avalon Boulevard and East 111<sup>th</sup> Place intersection.

**Table 3.18-3: No-Build and Build Intersection LOS Summary**

Intersection No.	Intersection Location	Control	No-Build Conditions				Build Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	S. Avalon Blvd & E. 111 <sup>th</sup> Pl	Signal	75.7	E	29.1	C	77.7	E	30.5	C

Under existing conditions, the intersection LOS is already at LOS E during the AM peak hour, and the westbound movement is failing. The project would not change the LOS but the delay would increase by 2 seconds during the AM peak hour and by 1.4 seconds during the PM peak hour. Per City TIA guidelines, this is considered a minor increase in delay since no change in LOS would occur. The impact of the proposed project would be less than significant, but the intersection LOS at South Avalon Blvd. and East 111<sup>th</sup> Place in the existing and No-Build condition is LOS E and the westbound left-turn movement has a volume-to-capacity ratio (v/c) of greater than 1.0. The performance of the nearby intersections will be quantified after the project is fully constructed and operational. If it is determined that the project exceeds screen criteria as defined in the LADOT Transportation Assessment Guidelines (TAG), potential corrective action could be implemented including, for the westbound approach, providing an additional left-turn lane pocket is recommended to improve the intersection delay and LOS, or improving the East 111<sup>th</sup> Place to two lanes in each direction from the eastern end of the site frontage to Avalon Boulevard would provide additional roadway capacity. This is outlined below in the project design feature, PDF-TR-1, and would reduce transportation impacts to less than significant levels.

### Project Design Feature

The following project design feature would be incorporated into the project:

**PDF-TR-1:** The proposed project shall quantify the operational performance for primary site access points, unsignalized intersections integral to the project’s site access, and signalized intersections in the vicinity of the project site after the project is fully operational. If it is determined that the project exceeds the travel volume screening criteria for Boulevards and Avenues as defined in the Los Angeles Department of Transportation's (LADOT) Transportation Assessment Guidelines (TAG), further analysis is required to estimate the travel delay at each major signalized intersection where the capacity would be altered by the projects and to estimate how the project would be expected to improve safety or reduce hazards to vulnerable road users. Potential corrective actions for the project access and circulation constraints could include:

- Provide an additional left-turn lane pocket for the westbound approach at the S. Avalon Blvd. and E. 111th Place intersection.



- Improving the segment of E. 111th Place from the eastern end of the site frontage to Avalon Boulevard to two lanes each direction to provide additional roadway capacity.
- Transportation Demand Management (TDM) Strategies that reduce trips above and beyond those required in Section 2.2 of the LADOT TAG.
- Installation of a traffic signal or stop signs or electronic warning devices at site access points.
- Redesign and/or relocation of project access points.
- Redesign of the internal access and circulation system.
- Installation of stop signs and pavement markings internal to the site.
- Restrict or prohibit turns at site access points.
- Repurpose existing curb space to better accommodate passenger loading.
- New traffic signal installation, left-turn signal phasing, or other vehicle flow enhancements (e.g., Automated Traffic Surveillance and Control [ATSAC] system upgrades) at nearby intersections.
- Intersection reconfiguration that reduces gridlock and unsafe conflict points.
- Provide continuous paved sidewalks, walkways, or shared-use paths to off-site pedestrians and bicyclists to adjacent or nearby transit facilities.
- Fair share contribution to planned LADOT capital project that accomplishes one or more of the above.

*b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section L); LADOT Transportation Assessment Guidelines; Transportation/Traffic Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project generates a net increase of 250 or more daily vehicle trips or generates a net increase of 1,000 VMT or more per site over existing conditions in daily VMT. A significant impact would occur if the project includes retail uses and the portion of the project that contains retail uses exceeds net 50,000 square feet; and if located within 0.5-mile of a fixed-rail or fixed-guideway transit station, replaces an existing number of residential units with a smaller number of residential units.

**Less than significant impact.** To assess traffic impacts of the proposed facility in VMT, the City of Los Angeles VMT Calculator was used. Regionally, the Compton Facility would be considered as the existing facility since it is located only 2 miles south of the proposed facility. Based on the discussion with LADOT, the Light Industrial category was used for the existing Land Use of the project site to determine the net increase in daily trips and the net increase in daily VMT. Using this input, the proposed project would generate a net increase of 90 trips and a net increase of 724

VMT. Since the proposed facility would generate an increase of less than 250 daily trips and less than 1,000 daily VMT over existing conditions, the proposed project is not required to perform further VMT analysis. The proposed project would not conflict with State CEQA Guidelines Section 15064.3, subdivision (b) during construction and maintenance/operations. The impact of the proposed project would be less than significant, and no mitigation is required.

The project site is within a Transit Priority Area (TPA) with bus lines along several roadways in proximity to the site (108<sup>th</sup> Street, S. Avalon Boulevard, S. Central Avenue, and Imperial Highway). The project site is within 1,500 feet of several major transit stops (intersections with two or more bus routes with a service interval of 15 minutes or less during the morning and afternoon peak commute periods) as defined under PRC Section 21064.3. The State Office of Planning and Research issued guidance with respect to how to evaluate transportation impacts. As stated in the CEQA Guidelines Section 15064.3 (b)(1), lead agencies generally should presume that projects proposed within 0.5-mile (2,640 feet) of an existing major transit stop or an existing stop along a high-quality transit corridor should be presumed to cause a less than significant impact on transportation. Therefore, with the project's location near an existing stop along a high-quality transit corridor, the proposed project would not be considered to have a significant impact on transportation.

The impact of the project would be less than significant and no mitigation is required.

*c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Reference:** L.A. CEQA Thresholds Guide (Section L.5); LADOT Transportation Assessment Guidelines; Transportation/Traffic Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project proposes new driveways, introduces new vehicle access to the property from the public right-of-way, or proposes to, or is required to, make any voluntary or required modifications to the public right-of-way (e.g., street dedications, reconfigurations of curb line).

**Less than significant impact.** The proposed project would improve the existing driveways for entry and exit and introduce new vehicle access to the property from the public right-of-way. The proposed project shall be designed in accordance with City standards and would not substantially create or increase hazards due to design features. The impact of the proposed project would be less than significant with the implementation of SC-TR-1, requiring compliance with City standards for streets, sidewalks, driveways, and other street improvements, as outlined in the LAMC.

### **Standard Conditions**

The project shall implement the following standard condition to avoid the creation of traffic hazards:

**SC-TR-1:** The proposed project shall be designed in accordance with City of Los Angeles standards for streets, sidewalks, driveways, and other street improvements to prevent the creation of traffic hazards.

The impact of the project would be less than significant, which would be ensured by compliance with SC-TR-1 and no mitigation is required.

*d) Would the project result in inadequate emergency access?*

**Reference:** L.A. CEQA Thresholds Guide (Sections L.5 and L.8); LADOT Transportation Assessment Guidelines; Transportation/Traffic Impact Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the project resulted in inadequate emergency access.

**Less than significant impact.** Based on the conceptual design of the proposed facility, three driveways would be constructed on East 111<sup>th</sup> Place, which would also serve as emergency access. The northwestern driveway would serve arriving buses, the northeastern driveway would serve departing buses, and the center driveway would serve employee and visitor vehicles. Emergency access would not be substantially inhibited by the proposed project, with compliance with the City's Fire Code (SC-PS-1). The impact of the proposed project would be less than significant, and no mitigation is required.

### 3.19 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>				
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An Archaeological Resources Assessment was prepared for the project and is provided in Appendix C1. The assessment included an analysis of potential impacts to Tribal Cultural Resources (TCR). The findings of the memo are summarized below.

#### 3.19.1 Regulatory Setting

This section describes existing laws and regulations related to TCR that apply to the project.

##### 3.19.1.1 Federal

There are no federal regulations that specifically address impacts related to TCR and apply to the project.

##### 3.19.1.2 State

##### California State Assembly Bill (AB) 52

AB 52 defines TCRs and requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a project if they have

requested to be notified of projects subject to AB 52. Consultation, as defined under AB 52 includes, but is not limited to, discussing the type of environmental review necessary, the significance of TCRs, the significance of project impacts on the TCRs, and alternatives and mitigation measures recommended by the tribe. Parties must consult in good faith and consultation is deemed concluded when (1) the parties agree to the measures to avoid or reduce a significant impact on a TCR (if such a significant impact exists) or (2) when a party concludes that mutual agreement cannot be reached. Further, under AB 52, mitigation measures agreed upon during consultation must be included in the environmental document and, if no formal agreement on the appropriate mitigation has been established, mitigation measures that avoid or substantially lessen potential significant impacts should be implemented.

### **California Native American Graves Protection and Repatriation Act**

The Native American Graves Protection and Repatriation Act (California Health and Safety Code Division 7, Part 2, Chapter 5, Sections 8010–8030) includes broad provisions for the protection of Native American cultural resources. The Act ensures that all California Native American human remains and cultural items are treated with due respect and dignity. It provides the mechanism for the disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California.

#### **3.19.1.3 Local**

### **City of Los Angeles General Plan Conservation Element**

The City's General Plan Conservation Element includes goals, objectives, and policies requiring measures be taken to protect the City's historical, archaeological and paleontological resources for historical, cultural, research, and/or educational purposes. One policy requires that the City continue to identify and protect significant archaeological and paleontological sites and resources known to exist or that are identified during land development, demolition, or property modification activities.

### **City of Los Angeles Historic-Monument Ordinance**

On the local level, a historical or cultural monument is eligible for listing as a Los Angeles Historic-Cultural Monument (HCM) under Section 22.171 of Article 1, Division 22 of the City of Los Angeles *Administrative Code* (the City of Los Angeles Cultural Heritage Ordinance, as amended by Ordinance No, 185472) if the resource meets specific criteria.

The City further maintains a list of all sites, buildings, and structures that have been designated through the Historic-Cultural Monuments (HCMs), which since the enactment of the ordinance, now number more than 1,000. An HCM is presumed to be a significant historical resource under CEQA, that could lead to the preparation of an EIR before demolition can occur.

### 3.19.2 Existing Environment

The project site is located in the traditional native lands of the Gabrielino of the Shoshonean language stock. This area covered the Los Angeles Basin, the San Gabriel Valley, the Santa Monica and Santa Ana mountains, the coast from Aliso Creek to Topanga Creek, and the islands of San Clemente, San Nicholas, and Santa Catalina. The Los Angeles Basin was known to include many major Gabrielino villages with a total population estimated at over 10,000 individuals at the time of the Spanish arrival in 1769.

A request was made of the Native American Heritage Commission (NAHC) for a review of their Sacred Lands File (SLF) and a list of Native American contacts on May 5, 2021, and a reply was received on May 20, 2021. The NAHC check of the SLF was negative for the project site. NAHC recommended that any additional information concerning sacred lands should be sought from the Native American contacts and provided the following tribal contacts:

- Andrew Salas, Chairperson, Gabrieleño Band of Mission Indians - Kizh Nation
- Anthony Morales, Chairperson, Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Sandonne Goad, Chairperson, Gabrieliño/Tongva Nation
- Robert Dorame, Chairperson, Gabrieliño Tongva Indians of California Tribal Council
- Charles Alvarez, Gabrieliño-Tongva Tribe
- Lovina Redner, Tribal Chair, Santa Rosa Band of Cahuilla Indians
- Isaiah Vivanco, Chairperson, Soboba Band of Luiseno Indians

Letters inviting these tribes to consult under AB 52 were mailed on June 8, 2021, via United States Post Office mail and by email by the Los Angeles Bureau of Engineering (LABOE) to the Native American contacts identified by the NAHC. The Gabrielino Band of Mission Indians - Kizh Nation responded and requested consultation and this consultation was concluded on August 16, 2022.

### 3.19.3 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined Public Resources Code section 5020.1(k)?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section D.2); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; AB 52 Consultations; HCM List; CRHR; Archaeological Resources Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project caused a substantial adverse change in the significance of a Tribal Cultural Resource that is listed or is eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k).

**Less than significant impact with mitigation incorporated.** TCRs were identified through the review of the NAHC's SLF and consultation carried out under the auspices of AB 52. While there are no TCRs currently listed on the CRHR, the City's HCM List includes a Gabrieleño Indian site near Griffith Park (HCM #112) and the Gabrieleño village of Sa'angna near the Ballona wetlands (HCM #490). The project site is not located near these HCMs. However, there is the possibility that ground-disturbing activities could impact native soils containing previously undiscovered buried TCR. MM-TCR-1 shall be implemented to avoid impacts to TCRs. Impacts would be less than significant after mitigation.

*b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section D.2); City of Los Angeles General Plan; Southeast Los Angeles Community Plan; HCM List; AB 52 Consultations; Archaeological Resources Assessment (Parsons, 2022).

**Comment:** A significant impact would occur if the proposed project caused a substantial adverse change in the significance of a tribal cultural resource which is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

**Less than significant impact with mitigation incorporated.** In compliance with the mandates of AB 52 and Section 21080.31 of CEQA, notification letters were sent by the City to tribes and Native American organizations whose names were on file with the NAHC and the City, informing them about the project and providing an opportunity to consult about the project. One tribe requested consultation, and the City initiated consultation. On August 16, 2022, consultation was concluded.

As stated above, there is the possibility that ground-disturbing activities that extend below a depth of 3 feet in native soil could impact previously undiscovered buried TCRs. Disturbance of undocumented TCRs would be ensured to be less than significant with the implementation of MM-TCR-1. Impacts would be less than significant after mitigation.

### **3.19.4 Mitigation Measure**

The following mitigation measure shall be implemented to avoid impacts on TCRs:

**MM-TCR-1:** Due to the potential for tribal cultural resources to exist on the project site, prior to the commencement of any ground-disturbing activity at the project site, the City of Los Angeles (the City) shall retain a tribal monitor that is qualified to identify, record, and evaluate the significance of any archaeological and/or tribal cultural finds during construction. The qualified tribal monitor shall be from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (the Tribe). Ground-disturbing activities shall include removing pavement, potholing, auguring, grubbing, removing trees, boring, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or similar activity at the project site. The executed monitoring service agreement shall be submitted by the qualified tribal monitor to the City prior to any ground-disturbing activity. The qualified tribal monitor will complete logs describing each day's construction activities, locations, soil, and any cultural materials, human remains, and/or burial goods discovered. Tribal monitoring shall conclude when ground-disturbing activities on the project site have been completed, or when the qualified tribal monitor indicates any additional construction activity at the project site has little or no potential to impact tribal cultural resources. In accordance with PDF-CUL-1, prior to commencing any ground disturbing activities, the qualified archaeologist and the qualified tribal monitor shall provide Worker Environmental Awareness Program (WEAP) training to construction crews involved in ground-disturbing activities that provides information on regulatory requirements for the protection of tribal cultural resources. As part of the WEAP training, construction crews shall be briefed on proper procedures to follow should a crew member discover tribal cultural resources during ground-disturbing activities. In addition, workers will be shown examples of the types of resources that would require notification to the archaeological monitor and tribal monitor.

Upon discovery of any subsurface object or artifact that may be a tribal cultural resource during the course of any ground-disturbing activity, procedures to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:



- All such ground-disturbing activities shall cease in the immediate vicinity of the discovery, the radius of which will be determined by the qualified tribal monitor or the qualified archaeological monitor, until the qualified tribal monitor has evaluated the find in accordance with federal, state, and local guidelines.
- The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribe and the tribal monitor, and in accordance with federal, state, and local guidelines.
- Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials or publish the location of tribal cultural resources.
- If the resources are Native American in origin, the tribal monitor will make recommendations to the City regarding the monitoring of future ground-disturbing activities, as well as the treatment and disposition of any discovered tribal cultural resources, which may include but not limited to the preservation in place or recovery and retention of them in the form and/or manner which the tribal monitor and the Tribe deem appropriate for educational, cultural, and/or historic purposes. Until a recommendation is made, the discovery should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource and this determination is documented by a qualified archaeologist or tribal monitor.
- The City shall implement the tribal monitor and Tribe's recommendations if the City can reasonably conclude that the recommendations are reasonable and feasible to mitigate or avoid any significant impacts to the identified tribal cultural resources. If the City does not accept a particular recommendation determined to be reasonable and feasible by the qualified tribal monitor, the City may request mediation by a mediator agreed to by the tribal monitor, the Tribe, and the City who has the requisite professional qualifications and experience to mediate such a dispute. The City shall pay any costs associated with the mediation. After making a reasonable effort to mediate this particular dispute, the City may (1) require the recommendation be implemented as originally proposed by the archaeologist or tribal monitor; (2) require the recommendation, as modified by the City, be implemented as it is at least as equally effective to mitigate a potentially significant impact; (3) require a substitute recommendation be implemented that is at least as equally effective to mitigate a potentially significant impact to a tribal cultural resource; or (4) not require the recommendation be implemented because it is not necessary to mitigate an significant impacts to tribal cultural resources.

- The ground-disturbing activities may recommence outside of a specified radius of the discovery site, so long as this radius has been cleared by both the qualified archaeologist and qualified tribal monitor and determined to be reasonable and appropriate.
- The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, qualified tribal monitor, and the Tribe.
- If the resources consist of non-Native American historic archaeological materials, a qualified archaeologist will apply National Register of Historic Places Criterion D to determine their significance. Artifacts will be curated per the Code of Federal Regulations 36 Part 79, as applicable, or be offered to a local historical society museum or educational facility, as deemed appropriate by the City.

SC-CUL-1 shall be implemented should human remains be inadvertently discovered at the project site. If the Gabrieleño Band of Mission Indians – Kizh Nation is designated Most Likely Descendant (MLD) by the Native American Heritage Commission (NAHC), the Koonas-gna Burial Policy shall be implemented. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be prepared by the MLD. Associated funerary objects reasonably believed to have been placed with individual human remains either at the time of death or later and made exclusively for burial purposes are to be treated with utmost respect and dignity. The prepared soil and cremation soils are to be treated in the same manner as intact bone fragments. Cremations will either be removed in bulk or by means necessary to ensure the complete recovery of all sacred materials.

In such cases where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate which can only be moved by heavy equipment. If this type of steel plate is unavailable, a 24-hour guard should be posted outside of working hours. The City will make every effort to divert project activities and keep the remains in situ and protected. If the project cannot be diverted, it may be determined that the burials will be removed. The MLD will work closely with the City's designated qualified archaeologist and tribal monitor to ensure that the excavation is treated carefully, ethically, and respectfully. Each occurrence of human remains and associated funerary objects, sacred objects, and objects of cultural patrimony will be retained and reburied within six months of recovery in a secure container. If preservation in place is not possible despite good faith efforts, a site located within the project parcel footprint, as agreed to by the City and the Tribe, and to be protected in perpetuity, shall be designated for the respectful reburial of

the human remains and/or ceremonial objects. There shall be no publicity regarding any cultural materials recovered.

Any data recovery plans shall require approval by the Tribe; such documentation will include detailed descriptive notes and sketches, at a minimum. Additional documentation as outlined in a treatment plan should also be approved by the Tribe. If additional data recovery is conducted, a final report will be submitted to the Tribe, Native American Heritage Commission, and South Central Coastal Information Center. No invasive and/or destructive diagnostics on human remains shall be conducted.

### 3.20 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
<b>Would the project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.20.1 Regulatory Setting

This section describes existing laws and regulations related to utilities and service systems that apply to the project.

##### 3.20.1.1 Federal

There are no federal regulations that specifically address impacts related to utilities and that apply to the project.

### **3.20.1.2 State**

#### **California Water Plan**

The *California Water Plan* (CWP) presents information on California's water resources such as water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The plan identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs. It includes resource management strategies and recommendations to strengthen integrated regional water management, including ways to reduce water demand, improve operational efficiency, increase water supply, improve water quality, practice resource stewardship, and improve flood management.

#### **California Integrated Waste Management Act**

The *California Integrated Waste Management Act* (AB 939) required each city and county in the State of California and regional solid waste management agencies to enact plans and implement programs to divert 25 percent of its waste stream by 1995 and 50 percent by 2000. Later legislation mandates the 50 percent diversion requirement be achieved every year. SB 1374 (amending PRC Sections 41821 and 41850 and adding to Section 4291) requires that the annual report mandated by the California Integrated Waste Management Act also include a summary of progress made in diversion of construction and demolition waste materials, including information on programs and ordinances implemented by the local government and quantitative data, where available.

### **3.20.1.3 Local**

#### **City of Los Angeles General Plan Conservation Element**

The City's General Plan Conservation Element calls for the conservation, protection, development, utilization, and reclamation of natural resources, such as water, forests, soils, rivers, and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

#### **City of Los Angeles General Plan Infrastructure Systems Element**

The City's General Plan Infrastructure Systems Element addresses water supply and demand, measures related to energy conservation and reducing the City's reliance on oil, landfill capacity assessment, wastewater discharge into the ocean and other water bodies, protection of groundwater and watershed resources, solid waste management, as well as electrical and other City-managed resource areas.

#### **City of Los Angeles General Plan Open Space Element**

The City's General Plan Open Space Element provides guidance for the preservation, conservation, and acquisition of open space in the City, including lands needed for life support systems such as the water supply, water recharge, water quality protection, wastewater disposal, solid waste disposal, air quality protection, energy production, and noise prevention.

### **City of Los Angeles Water Integrated Resources Plan**

Prepared jointly by the Los Angeles Bureau of Sanitation and Environment (LASAN) and LADWP, the Water Integrated Resources Plan (WIRP) contains an implementable facility plan through the year 2020 that integrates water supply, water conservation, water recycling, runoff management, and wastewater facilities planning, using a regional watershed approach. The WIRP contains recommendations that would be achieved through a series of projects and policy directions to staff.

### **City of Los Angeles Emergency Water Conservation Plan**

The City's Emergency Water Conservation Plan sets standards for water use during an emergency. Ordinance No. 181288, an amendment to Chapter XII, Article I of LAMC, clarified prohibited uses and modified certain water conservation requirements in the Emergency Water Conservation Plan. The ordinance minimizes the effect of a water shortage on the customers of the City and includes provisions that will significantly reduce water consumption over an extended period of time. The Plan sets five water conservation "phases," which correspond to the severity of water shortage, with each increase in phase requiring more stringent conservation measures related to outdoor watering restrictions, sprinkler use restrictions and other prohibited water uses.

### **City of Los Angeles Stormwater and Urban Runoff Pollution Control Ordinance**

The Stormwater and Urban Runoff Pollution Control Ordinance (LAMC Section 64.70) prohibits illicit discharges into the municipal storm drain system and gave the City local legal authority to enforce the NPDES and to take corrective actions with serious offenders. Any commercial, industrial, or construction business found discharging waste or wastewater into the storm drain system would be subject to legal penalties.

### **Sewer System Management Plan**

The SWRCB adopted the Statewide General Waste Discharge Requirements (WDRs) for publicly owned sanitary sewer systems. Under the WDRs, the owners of such systems must develop and implement a Sewer System Management Plan. The Sewer System Management Plans include objectives to properly fund, manage, operate, and maintain all parts of the sanitary sewer system; provide adequate capacity to convey base flows and peak flows; and take all feasible steps to stop and mitigate overflows.

### **Construction and Demolition Waste Recycling Ordinance**

To meet AB 939 and SB 1374 mandates, the City adopted the Construction and Demolition Waste Recycling Ordinance (Ordinance 181519, which amended LAMC Sections 66.32 through 66.32.5). This ordinance requires that all solid waste haulers and contractors obtain a permit before transporting construction and demolition waste, and stipulates that such waste may only be processed at City-certified construction and demolition waste-processing facilities.

### **City of Los Angeles Solid Waste Integrated Resources Plan**

The SWIRP, also known as the Zero Waste Master Plan, is a stakeholder-driven process and long-range master plan for solid waste management in the City. The SWIRP proposes to achieve a goal of 80 percent diversion by 2020 and 95 percent

diversion by 2035. These targeted diversion rates are expected to be achieved through an enhancement of existing policies and programs, implementation of new policies and programs, and the development of future facilities to meet the City's recycling and solid waste infrastructure needs over a 20-year planning period. According to the 2015 Zero Waste Master Plan Report, the City achieved a baseline diversion rate of 72 percent. The City reports a landfill diversion rate of 76.4 percent, using the calculation methodology adopted by the State of California.

### **LADWP Power Integrated Resources Plan**

LADWP is responsible for the construction, operation, maintenance, and management of electric works and property for the benefit of the City and developed the 2015 Power Integrated Resource Plan (PIRP) as a comprehensive 20-year roadmap to guide its efforts to supply reliable electricity in an environmentally responsible and cost-effective manner over the next 20 years. The PIRP provides objectives and recommendations to reliably supply LADWP customers with power and to meet SB 1078's 33 percent renewable energy goal by 2020. The 2015 PIRP increases the RPS to 50 percent by 2030.

### **Urban Water Management Plan**

LADWP adopted the 2020 Urban Water Management Plan (UWMP) as required by the California Urban Water Management Act. The UWMP forecasts future water demands and water supplies under average and dry year conditions. It presents strategies that would be used to meet the City's current and future water needs, which focus primarily on water supply reliability and water use efficiency measures.

## **3.20.2 Existing Environment**

### **Water Supply and Service**

The project site is served by an LADWP water line on East 111<sup>th</sup> Place. The Los Angeles Aqueduct supplies approximately 48 percent of the City's water, imported water purchased from MWD accounts for 41 percent, local groundwater resources comprise 9 percent, with recycled water supplies accounting for 2 percent of the City's total water supply in Fiscal Years 2016-2020. Between 2016 and 2020, LADWP supplied an average of about 495,685 AF of water annually, where the average daily use for all customers in 2020 was 106 gallons per capita per day.

### **Sewers and Wastewater Treatment**

The project site is served by an 8-inch sewer line on East 111<sup>th</sup> Place that runs northeasterly and then southerly to the sewer line on Lanzit Avenue that, in turn, ties to the Los Angeles County Sanitation District (LACSD) sewer line on Belhaven Street and Imperial Highway, which provides wastewater conveyance from the project area for treatment at the Joint Water Pollution Control Plant (JWPCP) in Carson.

The JWPCP is operated by the LACSD and provides primary and secondary treatment for a design capacity of 400 million gallons per day (mgd) of wastewater, and serves over 4.8 million residents, businesses, and industries. It currently treats 260 mgd.

### **Stormwater**

The City's storm drain system includes streets, driveways, sidewalks, and structures that directly convey runoff to curb and gutter systems, catch basins, culverts, underground storm drain lines, detention/retention basins, and downstream receiving waters (e.g., creeks and rivers). The area-wide storm drainage system is owned and managed by the Los Angeles County Flood Control District (LACFCD). There is an underground storm drain line on East 111<sup>th</sup> Place that connects to Compton Creek, east of the site.

### **Solid Waste Disposal**

While LASAN is responsible for the collection and removal of solid materials and wastes from single-family homes and small multi-family complexes, medium and large multi-family complexes and commercial businesses are served by permitted private haulers (i.e., Athens, CalMet, NASA, Republic, Universal Waste System, Ware, and Waste Management) and by construction and demolition waste processors.

There are several Class III solid waste disposal facilities (landfills accepting municipal and other non-hazardous, household waste) in Los Angeles County. Hazardous wastes are disposed of at designated Class I facilities (i.e., landfills accepting hazardous and non-hazardous wastes), located in Kern County, Kings County, and Imperial County.

### **Other Utility Systems**

Electric power services to the site are provided by LADWP through overhead power lines on East 111<sup>th</sup> Place. Natural gas service is provided by Southern California Gas Company (SCG) through local distribution lines that are connected to high-pressure distribution lines on 108<sup>th</sup> Street and Central Avenue. Telecommunication services are provided by various private companies.

## **3.20.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Sections M.1, M.2, and G.1); LADWP UWMP; LACSD JWPCP.

**Comment:** A significant impact would occur if the project resulted in the need for new construction or expansion of water or wastewater treatment facilities and if the volume of stormwater runoff from the project increased to a level exceeding the capacity of the storm drain system serving the project site that could result in an adverse environmental effect that could not be mitigated.



**Less than significant impact.** The project site is currently served by existing utility systems, with overhead and underground lines on East 111<sup>th</sup> Place. The proposed project would abandon/remove existing utility connections and provide new ones to serve the project.

**Water Demand.** The project would be connected to the existing water line on East 111<sup>th</sup> Place. Water use during construction would be a minimal amount and a temporary demand. During project operations, assuming a water demand of 106 gallons per capita per day, the 312 employees at the site would generate a demand of 33,072 gpd (approximately 12 million gallons per year). Even if additional water demand is added for bus washing activities, the project's water demand would be a minor amount of the total annual water use in the City of 495,685 AF (1 AF = 325,851 gallons). Thus, the project is not anticipated to generate a major increase in the demand for water to require the construction of a new or expanded water service and supply facilities.

**Wastewater Generation.** The project would be connected to the existing sewer line on East 111<sup>th</sup> Place. Wastewater generation from the construction and operation of the project is expected to be a portion of water demand. There is 140 mgd of available capacity at the JWPCP to provide wastewater treatment to the project. Thus, the project is not anticipated to generate a major increase in wastewater to require the construction of new or expanded wastewater treatment facilities.

**Storm Drainage.** As discussed in Section 3.10.3, the site is largely paved and will remain largely paved with the project. The runoff will be directed to curbs and gutters and the underground storm drain line on East 111<sup>th</sup> place for conveyance to Compton Creek. No major change in volumes of runoff being discharged to the storm drain system is anticipated. Thus, no new or expanded stormwater drainage would be required.

**Electric Power.** Electrical power to the site is provided by LADWP through overhead lines on East 111<sup>th</sup> Place. Energy for the operation of the facility is expected to be provided by LADWP and the on-site PV system. As discussed in Section 3.6.3, the proposed project's peak electricity demand would be no more than 8 MW, and the LADWP capacity is approximately 8,000 MW, with an instantaneous peak demand of 6,502 MW experience in August 2017. Thus, there is more than sufficient capacity within the existing LADWP infrastructure to support the implementation of the proposed project and its peak and sustained electricity requirements. Also, given the size of the project, compared to the service area of LADWP, project demand on LADWP's electrical grid would be minimal and impacts would be less than significant.

**Other Utilities.** The project would not require natural gas services from SCG although there is an existing gas line on 111<sup>th</sup> Place. The potential provision of Wi-Fi and Broadband 5G telecommunications service could be through small-cell towers or fiber optic cabling by a private company with local telecommunication facilities. These services would be provided through connections to existing facilities on East 111<sup>th</sup> Place and would not require any major infrastructure upgrades.

To avoid the interruption of services to adjacent land uses during construction and new connections to the project, coordination with the affected utility agencies/companies will be made (SC-CF-1).

**Standard Condition**

To avoid utility service interruptions to adjacent land uses, the following Standard Condition would be implemented:

**SC-CF-1:** Before starting construction, the City of Los Angeles will notify and coordinate with affected utility providers to avoid service interruptions during peak periods or provide temporary backup services for interruptions during peak periods, as well as notify customers of scheduled service interruptions.

Project demand for utility services would not require the construction or expansion of existing services and facilities. Impacts would be less than significant, which would be ensured by SC-CF-1, and no mitigation is required.

*b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**Reference:** L.A. CEQA Thresholds Guide (Section M.1); LADWP UWMP.

**Comment:** A significant would occur if the project would require water supplies that would result in a water shortage during normal, dry, or multiple dry years.

**Less than significant impact.** As discussed above, the construction and operation of the project would require a minor amount of water from LADWP and would not require new water supplies. During water shortages, water use at the project will also comply with the City's mandatory conservation measures. Impacts to available water supplies would be less than significant. No mitigation is required.

*c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**Reference:** L.A. CEQA Thresholds Guide (Section M.2); LACSD JWPCP.

**Comment:** A significant impact would occur if the project generated wastewater in excess of what current wastewater treatment providers would be able to process.

**Less than significant impact.** As discussed above, the construction and operation of the project would generate wastewater that could be readily served by the remaining available capacity of 140 mgd at the JWPCP. Thus, impacts related to the need for wastewater treatment will be less than significant and no mitigation is required.

*d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

**Reference:** L.A. CEQA Thresholds Guide (Section M.3); City's Construction and Demolition Waste Recycling Ordinance; City's Zero Waste Plan.

**Comment:** The management of solid waste in the City involves public and private refuse collection services as well as public and private operation of solid waste transfer, resource recovery, and disposal facilities. A significant impact may occur if the project were to increase solid waste generation to a degree that existing and projected landfill capacities would be insufficient to accommodate the additional waste. Further, a significant impact may occur if the project would generate solid waste that was in excess of or was not disposed of in accordance with applicable regulations.

**Less than significant impact.** Construction and operation of the project would generate solid wastes in the form of demolition debris, construction debris/wastes, and trash and debris/solid wastes from onsite activities. Contractor compliance with the City's Construction and Demolition Waste Recycling Ordinance (SC-UT-1) would promote the recycling and reuse of wastes and, in turn, reduce demand for landfill disposal. In addition, the project shall implement on-site recycling and other Zero Waste behaviors in accordance with the City's Zero Waste Plan (SC-UT-2). These standard conditions would reduce the amount of solid wastes requiring landfill disposal.

### **Standard Conditions**

The project would comply with the following standard conditions to reduce the need for landfill disposal:

**SC-UT-1:** The Contractor shall comply with the City's Construction and Demolition Waste Recycling Ordinance by obtaining a permit before transporting construction and demolition waste, and transporting the wastes to City-certified construction and demolition waste-processing facilities.

**SC-UT-2:** In accordance with the City's Zero Waste Plan, the City shall implement recycling programs at the EBMF, which may include but not be limited to the phasing out expanded polystyrene foam takeout containers and single-use water bottles and the placement of recycling containers for a variety of materials such as beverage containers, newspaper, mixed paper, and other materials.

Impacts related to solid waste disposal would be less than significant with compliance with SC-UT-1 and SC-UT-2; no mitigation is required.

*e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

**Reference:** L.A. CEQA Thresholds Guide (Section M.3); City's Construction and Demolition Waste Recycling Ordinance; City's Zero Waste Plan.

**Comment:** A significant impact would occur if the proposed project generated solid waste that was in excess of or was not disposed of in accordance with applicable regulations.

**Less than significant impact.** The construction and operation of the project will comply with federal, state, and local statutes and regulations regarding solid waste. As discussed above, these include compliance with SC-HAZ-1 for the proper disposal of hazardous wastes and SC-UT-1 and SC-UT-2 for the recycling of construction and operational wastes. Impacts would be less than significant and no mitigation is required.

### 3.21 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.21.1 Regulatory Setting

This section describes existing laws and regulations related to wildfire that apply to the project.

##### 3.21.1.1 Federal

###### **Federal Wildland Fire Management Policy**

The 1995 Federal Fire Policy recognized the essential role of fire in maintaining natural systems. It was updated in 2001 and includes guiding principles for firefighter and public safety; the role of wildland fire as an essential ecological process and natural change agent; fire management plans, programs, and activities that support land and resource management plans; sound risk management; economically viable fire management programs and activities; use of best available science; public health and environmental quality considerations; federal, State, tribal, local, interagency, and international coordination and cooperation; and standardized policies and procedures.

### **3.21.1.2 State**

#### **2018 Strategic Fire Plan for California**

The 2018 Strategic Fire Plan for California is a cooperative effort between the State Board of Forestry and Fire Protection and CalFire to address fire concerns in California, including adequate statewide fire protection of state responsibility areas. The plan addresses fire prevention, natural resource management, and fire suppression efforts.

#### **Fire Hazard Severity Zones – Public Resources Code Sections 4201–4204**

PRC Sections 4201–4204, directed CalFire to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as fire hazard severity zones (FHSZ), define the application of various mitigation strategies to reduce the risk associated with wildland fires.

Government Code Sections 51175–51189 established the classification for very high fire hazard severity based on fuel loading, terrain, weather, and other relevant factors identified by CalFire as major causes of wildfire spread and on the severity of fire hazard that is expected to prevail in those areas. The code established the requirements for those that maintain an occupied dwelling within a designated very high fire hazard severity zone (VHFHSZ).

#### **California Building Code and Fire Code**

CCR Title 24 is a compilation of building standards, including fire safety standards for residential and commercial buildings. The California Building Code standards serve as the basis for the design and construction of buildings in California. The California Fire Code is a component of the California Building Code and includes fire safety requirements related to the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code applies to all occupancies in California, except where more stringent standards have been adopted by local agencies. Specific California Fire Code regulations have been incorporated by reference, with amendments, in the Los Angeles Building Code, Fire Safety Regulations.

### **3.21.1.3 Local**

#### **City of Los Angeles General Plan Safety Element**

The City's General Plan Safety Element identifies wildfire hazard areas in the City and sets specific policies and objectives related to hazard mitigation, emergency response, and disaster recovery, including standards for fire station distribution and location, fire suppression water flow (or "fire flow"), firefighting equipment access, emergency ambulance services, and fire prevention activities. It serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City.

#### **City of Los Angeles Hazard Mitigation Plan**

The 2018 Hazard Mitigation Plan (HMP) was prepared to lessen the City's vulnerability to disasters and to reduce risks from natural hazards. It serves as a guide for decision-makers and commits City resources to minimize the effects of natural hazards. The HMP integrates with existing planning mechanisms such as building and zoning regulations, long-range planning mechanisms, and environmental planning and includes a hazard vulnerability analysis, community disaster mitigation priorities, and mitigation strategies and projects. The Los Angeles Department of Emergency Operations Organization (EOO) is responsible for implementing the Plan, including the City's emergency preparations (planning, training, and mitigation), response and recovery operations.

### **3.21.2 Existing Environment**

There has been an increasing frequency and size of wildfires in the LA region, including historic brushfires in the City such as the La Tuna, Creek, and Skirball fires. Smaller brush fires have also been accidentally started by brush clearance activities. Under the direction of CalFire, the City has determined VHFHSZs within its jurisdiction, as defined in LAMC Sections 57.4908.1.1 through 57.4908.1.3. These VHFHSZ are located in the hilly and mountainous areas of the City. There are no large open areas or steep hillside areas on or near the project site. The site is not located in an area designated as a Very High, High, or Moderate Fire Hazard Severity Zone.

The LAFD responds to fire emergencies, including wildfires and brush fires. The HMP outlines the responsibilities of various City departments for providing emergency public information regarding emergency alerts and warnings, notifications, evacuations, and shelters.

### **3.21.3 Impact Analysis**

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.2); City of Los Angeles General Plan Safety Element; CalFire Fire Hazard Severity Zones; Los Angeles Hazard Mitigation Plan.

**Comment:** A significant impact would occur if the project were to substantially impair an adopted emergency response plan or emergency evacuation plan.

**No impact.** The site is not located in the designated VHFHSZ. The project does not propose roadway improvements that could obstruct emergency response routes or emergency evacuation routes in the event of wildfires. While the project would include roadway, driveway, and sidewalk improvements for access to or from the project site, wildfire hazards are not present in or near the site. Also, travel lanes and driveways

would be maintained throughout the construction phase and adjacent sidewalk areas would still be available to provide access to nearby developments (SC-CC-2). As such, no impacts to emergency response and emergency evacuation during wildfires would occur. No mitigation is required.

*b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.2); City of Los Angeles General Plan Safety Element; CalFire Fire Hazard Severity Zones; Los Angeles Hazard Mitigation Plan.

**Comment:** A significant impact may occur if construction or operation of the project exacerbates wildfire risks and thereby exposes project occupants to pollutant concentrations from a wildfire to a degree that would significantly affect the project occupants.

**No impact.** The site is highly urbanized and the project would not be located in an area with wildfire hazards. The project would be designed and constructed in accordance with the City's Building Code, including the Fire Code (SC-PS-1), and would not create fire hazards. The project would replace existing older buildings and remove the fire hazards associated with the existing structures. There are no steep slopes or large brush areas on or near the site that could create or exacerbate wildfire risks or contribute to the spread of wildfire. The project would not be located in or near wildfire hazard areas and would not expose people or property to wildfire hazards. No impacts would occur and no mitigation is required.

*c) Would the project require the installation or maintenance of associated infrastructure (such as roads, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.2); City of Los Angeles General Plan Safety Element; CalFire Fire Hazard Severity Zones; Los Angeles Hazard Mitigation Plan.

**Comment:** A significant impact would occur if the proposed project required the installation or maintenance of infrastructure that may exacerbate the fire risk or that may result in temporary or ongoing impact to the environment.

**No impact.** The project would not be located in or near wildfire hazard areas and does not propose the construction of new roads or the installation of new power lines in an area susceptible to wildfires. No emergency water sources or other utilities are proposed as part of the project. Power use would be obtained from the on-site photovoltaic system and existing power lines on East 111<sup>th</sup> Place. The electrical connections would be constructed in accordance with the City's Building Code and



would not create fire hazards (SC-PS-1). No impacts related to new infrastructure would occur and no mitigation is required.

*d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

**Reference:** L.A. CEQA Thresholds Guide (2006) (Section K.2); City of Los Angeles General Plan Safety Element; CalFire Fire Hazard Severity Zones; Los Angeles Hazard Mitigation Plan.

**Comment:** A significant impact would occur if the proposed project exposed people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

**No impact.** The project would not be located on steep slopes or in large brush areas that are susceptible to wildfires. The project would also be designed and constructed in accordance with the City's Building Code, including the Fire Code (SC-PS-1), and would not create wildfire hazards. Wildfires that result in flooding or landslides from runoff, post-fire slope instability, or drainage changes would not affect the project because it would not be located near and downstream of hills and mountains that carry wildfire risks. No impacts would occur and no mitigation is required.

### 3.22 Mandatory Findings

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.22.1 Impact Analysis

Using the Initial Study Checklist questions in Appendix G of the CEQA Guidelines, Project impacts are analyzed for significance as follows:

*a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Reference:** L.A. CEQA Thresholds Guide (2006); City of Los Angeles General Plan; Southeast Los Angeles Community Plan.

**Comment:** See Section 3.5 Biological Resources, Section 3.6, Cultural Resources, and Section 3.19, Tribal Cultural Resources.

**Less than significant impact with mitigation incorporated.** As discussed in Sections 3.5, 3.6, and 3.19, the project would not have the potential for adverse but less than significant impacts on biological and cultural resources and tribal cultural resources. Compliance with existing regulations (Standard Condition measures), incorporation of project design features (PDFs) into the project, and implementation of mitigation measures would ensure these impacts are less than significant. After the implementation of MM-BIO-1, the project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Also, with the implementation of PDF-CUL-1, PDF-CUL-2, MM-PAL-1 through MM-PAL-4, SC-CUL-1, SC-CUL-2, and MM-TCR-1, the project would be ensured to not eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant with standard conditions adhered to and mitigation incorporated.

*b) Does the project have impacts that are individually limited, but cumulatively considerable? (“cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Reference:** L.A. CEQA Thresholds Guide (2006); City of Los Angeles General Plan; Southeast Los Angeles Community Plan.

**Comment:** Cumulative impacts are two or more individual effects that, when considered together, are considerable or compounded and increase other environmental impacts. These impacts may be analyzed by considering a list of past, present, and possible future projects or through a summary of projections adopted in a local, regional, or statewide plan. See Sections 3.2 to 3.21 for the discussion of significant impacts for each environmental issue.

**Less than significant impact.** The related projects, for the cumulative impact analysis for this project, are any past, present, and foreseeable projects within the 0.5-mile radius from the project site, as listed in Table 3.22-1. Out of five projects identified, two are related to the proposed EBMF, including the LADOT Zero-Emission Bus Rollout Plan (#1) and the proposed new DASH shuttle buses for first mile/last mile connections to regional transit centers (#2). Project # 3, Taylor Charter Middle School Expansion, is located immediately east of the proposed project site, and Project #4 is a street improvement project on Avalon Boulevard (approximately 0.18-mile west of the site). Project #5 is being referred to as the Lanzit Industrial Site (approximately 0.16-mile east of the project site). The City of Los Angeles Economic and Workforce Development Department acquired this vacant property located at 10901 South Clovis Avenue in 1994 and has tried to redevelop this land; however, no developer has expressed any interest thus far.

**Table 3.22-1: Related Projects**

No.	Project	Size and Location	Status
1*	LADOT Zero-Emission Bus Rollout Plan	Purchase of 253 BEBs and installation of infrastructure and electric bus charging equipment at 3 existing City bus yards	Approved 2020, implemented 2020–2021
2*	RTP/SCS ID S1160301, S1160351	New DASH shuttle buses for first mile/last mile connections to regional transit centers	Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Project List adopted September 2020
3	Taylor Charter Middle School Expansion	Demolition of warehouse and construction of six modular classrooms, soccer field, lunch area shade structures, and other improvements at the adjacent Taylor Charter Middle School, located at 810–820 and 840 East 111 <sup>th</sup> Place, Los Angeles	Conditional Use Permit (CUP) approved
4	Avalon Boulevard Complete Street	Complete street treatments on Avalon Boulevard, which will include bicycle facilities, curb extensions, upgrade curb ramps to Americans with Disabilities Act (ADA) standards, pedestrian refuge islands, landscaped median island, pedestrian lighting, continental crosswalks, signal and striping modifications, and tree planting/landscaping.	Predesign (Construction in 2023 to 2026)
5	Lanzit Industrial Site	The City of Los Angeles Economic and Workforce Development Department acquired the vacant property located at 10901 South Clovis Avenue, Los Angeles (approximately 0.16-mile from the project site) in 1994 and has tried to identify a developer to redevelop this land; no developers have expressed any interest thus far.	Predesign

Note that while there are some small developments and street improvement projects proposed within 1.0 to 2.0 miles of the project site, these smaller developments and projects would not be considered major projects that would result in cumulative impacts with the project when considered by distance, type, and size of the projects.

In particular, the resurfacing of East 111<sup>th</sup> Place (from Stanford Avenue to Avalon Boulevard) is proposed in 2021–2022, which would occur before the start of project construction in mid-2024.

The cumulative impacts of the related projects are considered with the impacts of the project. The analysis below considers whether the project would result in a new significant cumulative impact or make a considerable contribution to an already significant cumulative impact.

**Aesthetics.** The project’s impacts on aesthetics due to changes in visual quality would mainly occur on the site and East 111<sup>th</sup> Place. Implementation of PDF-V-1 through PDF-V-3 would reduce these visual impacts. The project and Projects #3 and #5 would improve the streetscape on East 111<sup>th</sup> Place and views from East 111<sup>th</sup> Place. Project #4 would improve the streetscape on Avalon Boulevard. Thus, cumulative changes in visual quality would be beneficial and the project’s incremental contribution to cumulative impacts on aesthetics would be less than significant.

**Agriculture and Forestry.** As discussed in Section 3.3, no impacts on agriculture and forestry resources would occur with the project. The related projects are also not proposed on sites designated as Farmland or supporting agricultural activities or forestry. Thus, the project would not contribute to cumulative impacts on this resource.

**Air Quality.** The project and related projects would increase both mobile and stationary emissions in the South Coast Air Basin, as well as potentially expose sensitive receptors to pollutant concentrations. Existing SCAG, SCAQMD, and CARB regulatory programs, plans, policies, strategies, and mitigation measures imposed on individual developments and projects would help reduce air quality impacts and regional air pollution levels. While basin-wide emissions could result in a significant cumulative impact on air quality, the project itself would not exceed SCAQMD thresholds, which are set by SCAQMD to account for an individual project’s contribution to other projects and activities occurring throughout the South Coast Air Basin. Air emissions generated by the construction of the project would be temporary and reduced to less than significant levels with compliance with applicable CARB and SCAQMD Rules and Regulations (SC-AQ-1) and coordination of construction schedules (MM-CUM-1). Long-term operations of the EBMF would support transit services and the use of non-polluting BEBs, which would result in improvements to air quality. Therefore, the project would not result in a cumulatively considerable contribution to a significant adverse air quality impact within the context of the Basin-wide impacts. Cumulative impacts on air quality would be less than significant.

**Biological Resources.** Because the project would be located on a site with no suitable habitat for sensitive species, it would not contribute to cumulatively significant impacts. Also, MM-BIO-1 would avoid impacts on nesting birds. The project’s incremental contribution to cumulative impacts on biological resources would be less than significant after mitigation.

**Cultural Resources.** The project's impacts on cultural resources would be less than significant with the implementation of PDF-CUL-1, PDF-CUL-2, SC-CUL-1, SC-CUL-2, and MM-PAL-1 through MM-PAL-4. With the shallow excavation and ground disturbance needed for the construction of the project, its incremental contribution to cumulative impacts on cultural resources would be less than significant.

**Energy.** When considering the energy demands of the project and related projects and the energy demands in the entire City and the region, the energy demands of the project would represent a minimal amount of the available energy supplies and demand, as discussed in Section 3.7. In addition, the project would replace the Compton Facility, reducing the net increase in energy use and would be constructing critical infrastructure to support other projects associated with the City's efforts to reduce energy use as it transitions to a cleaner zero-emission bus fleet. Thus, the project's incremental contribution to cumulative impacts on energy would be less than significant.

**Geology and Soils.** Since geologic and seismic hazards are highly dependent on underlying soil conditions, they are site-specific and would not be considered cumulative. The project would not create or exacerbate a geologic or seismic hazard. In addition, the project and related projects would be located at scattered locations and would have to individually implement measures for structural stability and integrity, as required by State law and local building regulations. Thus, there is a potential for increased exposure to geologic and seismic hazards, which may be considered cumulatively significant impacts on geology and soils, but individual projects would implement measures to reduce these hazards and maintain public safety. With the implementation of SC-GEO-1 and SC-GEO-2, project contribution to impacts related to geology and soils would not be cumulatively considerable. Cumulative impacts would be less than significant.

**Greenhouse Gas Emissions.** The project and related projects would have the potential for generating GHG emissions that would contribute to global climate change. The GHG impact analysis in Section 3.9 shows that a limited amount of project-related GHG emissions (compared to City, State, and global GHG emissions) would be generated and the project is consistent with GHG reduction plans. Thus, the project's incremental contribution to cumulative GHG impacts is not considered cumulatively considerable. Cumulative impacts would be less than significant.

**Hazards and Hazardous Materials.** The project and related projects would utilize hazardous materials and generate hazardous wastes that have the potential to pose risks to public health and safety. However, there are numerous federal, state, regional, and local regulations that address the identification and proper transport, use, handling, storage, and disposal of hazardous materials and wastes, along with required plans and procedures to implement in the event of a spill, fire, or explosion that existing and future developments, facilities, and activities are required to follow to protect public health and safety. Remediation of soil vapor contamination (MM-HAZ-1), implementation of a Soil Management Plan (MM-HAZ-2), and implementation of operational and structural measures to protect site workers (MM-HAZ-3) would also

eliminate hazards from past land uses and activities at the site. With the implementation of these mitigation measures and compliance with various regulations on the proper handling, use, storage, and disposal of hazardous materials and wastes for the safety of both construction and maintenance workers and the general public (SC-HAZ-1 through SC-HAZ-5), the project is not expected to generate hazardous emissions or wastes during construction and operational activities that may pose hazards to the public. Consequently, its cumulative impacts involving hazards and hazardous materials would be less than significant.

**Hydrology and Water Quality.** The project and related projects would alter existing hydrology and water quality at individual sites but mandatory compliance with NPDES permits and implementation of BMPs to comply with applicable stormwater management requirements for pollution prevention would ensure that they do not degrade surface and groundwater quality; create flood hazards; or expose people and structures to inundation. Project compliance with these same regulations (SC-HYD-1 and SC-HYD-2) would reduce temporary hydrology and water quality impacts during construction and operation; and impacts would not be cumulatively considerable. In addition, limited changes in surface hydrology or groundwater supply and recharge would occur with the project would not increase impervious surfaces. Therefore, the project would not contribute to cumulatively significant impacts on hydrology and water quality and its cumulative impacts would be less than significant.

**Land Use and Planning.** The project would replace existing structures on the site and would not create a new barrier in the Green Meadows neighborhood. Also, the project would comply with SC-LU-1 to ensure the project would not conflict with applicable City land use plans and regulations. The project would also implement SC-CC-1 through SC-CC-3 to prevent impacts related to access within the community. Thus, the project would not have a significant impact and would not make a considerable contribution to any cumulative impact on land use and planning. Cumulative impacts on land use and planning would be less than significant.

**Mineral Resources.** As discussed in Section 3.13, the project would use a minor amount of mineral resources for construction and operational activities. Less than significant impacts on mineral resources of value to the State or City would occur; and the project would not contribute to the depletion of these resources. The project's incremental contribution to cumulative impacts on mineral resources would be considered less than significant.

**Noise.** While the project and related projects would have the potential to increase ambient noise levels in the City, the project's temporary construction noise impacts would be reduced by the implementation of MM-NOI-1. The implementation of MM-CUM-1 would avoid concurrent construction activities near one another and would reduce cumulative noise impacts from the construction of the project and Projects #3, #4, and #5. During long-term operations, the project would not contribute to the ambient noise environment in a significant manner and the use of BEBs would reduce roadway noise from transit buses used by LADOT. The project's incremental contribution to cumulative noise impacts would be less than significant after mitigation.

**Population and Housing.** As discussed in Section 3.15, the project would not increase the population and housing stock of the City but would bring in 312 jobs to the site. Along with the other related projects, it would increase the employment base of the project area, resulting in beneficial impacts. Accordingly, no cumulative adverse impacts on population and housing would occur with the project.

**Public Services.** The project and related projects would increase demands for public services, including fire protection, police protection, but would not affect school services, parks, libraries, and other public facilities. With compliance with the City's Fire Code (SC-PS-1), cumulative impacts on fire protection services would be less than significant. As State, regional, and local governments provide public services to acceptable levels to meet demand, it is anticipated that cumulative impacts would be less than significant with individual project compliance with fire prevention regulations and as new facilities and augmented services are provided by service agencies and providers. Thus, the project may have a periodic need for fire protection and police protection services but is not an incremental contribution to cumulative impacts on public services would be less than significant.

**Recreation.** The project and related projects are not expected to create a demand for parks and recreational facilities. Since the project would have no adverse impacts on recreation; thus, it would not contribute to cumulative impacts on this resource.

**Transportation.** In the long-term, the project and related projects are expected to increase vehicle, transit, bikeway, and sidewalk use. Increases in vehicle miles traveled and traffic volumes on streets and freeways would add to traffic congestion and degraded levels of service at roadway segments and intersections. As discussed in Section 3.18, the number of vehicle trips associated with the construction and operation of the proposed project is not expected to substantially affect roadway and intersection volumes and operations with the implementation of PDF-TR-1, which would also serve Project #3. The project would also comply with SC-TR-1 to avoid the creation of traffic hazards. At the same time, Projects #1 and #2 would improve transit services and Project #4 would enhance alternative transportation in the City. The project would have no cumulatively significant traffic impacts during operation.

During construction, the project and related projects could have cumulative traffic impacts on East 111<sup>th</sup> Place and Avalon Boulevard. To avoid these impacts, MM-CUM-1 requires coordination with the construction schedules of the project and Projects #3, #4, and #5 to avoid concurrent and cumulative impacts from construction-related traffic on the same roadways and intersections in the area. Thus, the project's incremental contribution to cumulative impacts on transportation would be less than significant.

**Tribal Cultural Resources.** Ground disturbance and excavation associated with the project and related projects would have the potential to disturb undiscovered buried TCRs, which would be a significant cumulative impact. Compliance with AB 52 and consultations with local tribes would reduce individual impacts. The project would implement MM-TCR-1 to ensure impacts would be avoided on TCRs that may be



found in native soils underlying the site during excavation activities for the construction of the project. This would reduce the project's incremental contribution to cumulative impacts on TCRs. Cumulative impacts on TCRs would be less than significant.

**Utilities and Service Systems.** The project and related projects would generate demands for water supply and service, wastewater treatment and disposal, storm drainage, solid waste collection and disposal, power and natural gas supplies, and/pr telecommunication services. Implementation of SC-CC-1 and SC-UT-1 through SC-UT-2 would reduce project demands for utility services. Also, since private and public entities provide the necessary resources, infrastructure, and services to meet demands, it is anticipated that cumulative impacts would be less than significant with their provision of expanded/improved utility infrastructure and services. As discussed in Section 3.20, the project would not create substantive new demands for utilities and service systems but would instead primarily rely on the existing infrastructure and resource networks. The project's incremental contribution to cumulative impacts on utilities and service systems would be less than significant.

**Wildfire.** The project and related projects would not be located in or near wildfire hazard areas and would not be exposed to wildfire hazards. The project would have no adverse impacts related to wildfire; thus, it would not contribute to cumulative impacts on this resource.

### **Mitigation Measures**

The following mitigation measure would be implemented to avoid cumulative traffic impacts:

**MM-CUM-1:** The construction schedules of other projects in the vicinity should be coordinated with each other through communication among City departments and staff to avoid cumulatively affecting vehicle traffic, pedestrians, and bicyclists on Avalon Boulevard and East 111th Place.

Project impacts would not be cumulatively considerable and it would not contribute to cumulatively significant impacts from the related projects, with the implementation of MM-CUM-1. The project's incremental contribution to cumulative impacts would be less than significant after mitigation.

*c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

**Reference:** L.A. CEQA Thresholds Guide (2006).

**Comment:** See Sections 3.2 to 3.21 above for a discussion of the project's significant adverse impacts for each environmental issue.

**Less than significant impact with mitigation incorporated.** The project would have potentially significant impacts related to hazards and hazardous materials, noise, and

traffic/transportation. However, with the implementation of mitigation measures MM-BIO-1, MM-PAL-1 through MM-PAL-4, MM-HAZ-1 through MM-HAZ-3, MM-NOI-1, MM-TCR-1, and MM-CUM-1, impacts would be less than significant.

## **4.0 DETERMINATION – RECOMMENDED ENVIRONMENTAL DOCUMENTATION**

### **4.1 Summary**

The analysis in this Initial Study and the supporting technical reports indicate that the project would potentially result in significant adverse environmental impacts on biological resources, paleontological resources, hazards and hazardous materials, noise, and tribal cultural resources. It also has the potential for cumulative impacts. The impacts can be mitigated to less than significant levels with compliance with SCs, incorporation of PDFs, and the implementation of mitigation measures MM-BIO-1, MM-PAL-1 through MM-PAL-4, MM-HAZ-1 through MM-HAZ-3, MM-NOI-1, MM-TCR-1, and MM-CUM-1. With these mitigation measures, a Mitigated Negative Declaration may be adopted by the City in compliance with CEQA.

### **4.2 ~~Recommended~~ Environmental Documentation**

The City ~~will~~ should consider and adopt the Initial Study/Mitigated Negative Declaration before making a decision on the proposed Project.

## **5.0 PREPARATION AND CONSULTATION**

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# EXHIBIT "D"

## Mitigation Monitoring Program for the LADOT All-Electric Bus Maintenance Facility



SCH Number 2022090264

Prepared for:  
**City of Los Angeles**  
Department of Transportation  
and  
Department of Public Works  
Bureau of Engineering

Prepared by:

**PARSONS**  
January 2023

# Mitigation Monitoring Program

## Introduction

The City of Los Angeles (City) is planning to purchase a 5.5-acre property at 740 and 800 East 111th Place in South Los Angeles for the construction of an electric bus maintenance facility (EBMF or Project). The proposed Project would support the City's larger and cleaner zero-emissions bus fleet. The Project will be implemented by the Los Angeles Department of Transportation (LADOT). The site is currently developed with two industrial buildings that are being utilized as a logistics warehouse for solar panels. To build the new EBMF, the existing buildings would be demolished, and the site would be cleaned up. The proposed EBMF would include a two-story operations and maintenance building, 11 bus maintenance bays, a service building, a bus wash building, a bus parking/charging area, a second-story parking deck with a canopy, and a photo-voltaic system. Electrification equipment, including electrical transformers, switch cabinets, and bus chargers would also be included.

The Project would enable LADOT to provide maintenance services, parking, charging, and inspection functions to approximately 130 Battery-Electric Buses (BEBs) to be used for the DASH and Commuter Express (CE) services provided by LADOT Transit. It would also be used to store and dispatch the electric buses for daily service. Approximately 312 employees would be working on-site, and the facility would be open 24 hours per day, 7 days a week.

The proposed facility would eliminate the need to use the existing South Los Angeles Bus Maintenance Facility at 14011 South Central Avenue in the City of Compton, which is located approximately 2 miles to the south.

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.), and the L.A. CEQA Thresholds Guide, an Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the City of Los Angeles Bureau of Engineering (LABOE) Environmental Management Group (EMG), on behalf of the City as the Lead Agency, for the proposed EBMF.

Based on the analysis provided in the Final IS/MND, the proposed Project would not have a significant effect on the environment with the incorporation of project design features, compliance with existing regulations or standard conditions, and implementation of mitigation measures.

## Mitigation Monitoring

Section 21081.6 of CEQA requires the Lead Agency to adopt a mitigation monitoring program (MMP) for ensuring that the changes made to the Project, the conditions of Project approval, and any mitigation measures to reduce or avoid significant effects on the environment are implemented as part of the Project. CEQA Guidelines Section 15097

provides general guidelines for MMPs. The MMP for proposed EBMF shall be adopted by the decision-makers before completion of the CEQA environmental review process.

As discussed in the Final IS/MND for the proposed EBMF, mitigation is required to address the significant or potentially significant impacts of the Project on the following environmental issues:

- Biological Resources
- Paleontological Resources
- Hazards and Hazardous Materials
- Noise
- Tribal Cultural resources
- Cumulative Impacts

Each mitigation measure is listed in this MMP, along with:

- Party Responsible for Implementation of the Mitigation (“Responsible Party”)
- Implementation Phase
- Party Responsible for Monitoring Compliance (“Monitoring Party”)
- Monitoring Activity/Verification of Compliance

Table 1 presents the MMP for the proposed Project.

### **Monitoring and Reporting Procedures**

This MMP shall be enforced throughout design, construction, and operation of the proposed Project. LADOT shall be responsible for implementing each mitigation measure, project design feature, and standard condition and shall be obligated to provide verification, as identified below, to the appropriate monitoring party that each mitigation measure, project design feature, and standard condition has been implemented. LADOT shall maintain records demonstrating compliance with each project design feature, standard condition, and mitigation measure listed below.

All applicable construction-related mitigation measures, project design features, and standard conditions will be included in any bid specification released for construction of the proposed Project. Prior to the release of the bid specifications, construction plans and specifications will be provided to LABOE’s Environmental Management Group (EMG) for review and approval regarding environmental mitigation. Unless otherwise specified herein, LADOT will be responsible for taking all actions necessary to implement the mitigation measures, standard conditions, and project design features according to the provided specifications and demonstrating that each action has been successfully completed. LADOT, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor. LADOT will be responsible for administering the MMP and ensuring that all parties comply with its provisions. LADOT may delegate monitoring responsibilities to staff, consultants, or contractors.

The construction contractor shall submit an Environmental Compliance Plan for LADOT

approval prior to the beginning of construction and ground-disturbing activities. The Environmental Compliance Plan will document how the contractor intends to comply with all environmental mitigation measures, standard conditions, and project design features applicable to the contract. LADOT will also ensure that monitoring is documented in an Environmental Compliance Report and that deficiencies are promptly corrected. A designated environmental monitor within LADOT will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to rectify problems. LADOT will monitor compliance with operational mitigation measures.

During the construction phase and prior to going through plan check review, LADOT shall retain an independent Construction Monitor (either via the City or through a third-party consultant), who shall be responsible for monitoring implementation of mitigation measures during construction activities consistent with the monitoring phase and frequency set forth in this MMP.

The Construction Monitor shall also prepare documentation of the City's compliance with the project design features, standard conditions, and mitigation measures during construction every 90 days in a form satisfactory to LADOT. The documentation must be signed by LADOT and the Construction Monitor and be included as part of the City's Compliance Report. The Construction Monitor shall be obligated to immediately report to the Monitoring Party any non-compliance with mitigation measures, standard conditions, and project design features within two businesses days if the non-compliance is not corrected within a reasonable time or if the non-compliance is repeated.

### **Changes to Mitigation Measures**

Under CEQA, mitigation measures may be modified or deleted if the relevant decision-maker approves such action, gives a legitimate reason for making the change, and supports those reasons with substantial evidence, including an appropriate subsequent CEQA document. Any substantive change to the MMP shall be documented in writing. Modifications to the mitigation measures may be made by the City subject to one of the following findings and documented by evidence included in the record:

1. The mitigation measure included in the IS/MND and the MMP is no longer required because the significant environmental impact identified in the IS/MND has been found not to exist, or to occur at a level which makes the impact less than significant as a result of changes in the Project, changes in conditions of the environment, or other factors.

OR

2. The modified or substitute mitigation measure to be included in the MMP provides a level of environmental protection equal to or greater than that afforded by the mitigation measure included in the IS/MND and the MMP.

AND

3. The modified or substitute mitigation measure does not have significant adverse effect on the environment in addition to or greater than those which were considered by the City in its decisions regarding the IS/MND and the Project.

AND

4. The modified or substitute mitigation measure is feasible, and LADOT, through measures included in the MMP or other established procedures, can assure its implementation. Findings and related documentation supporting the findings involving modifications to mitigation measures shall be maintained in the Project file with the MMP and shall be made available to the public upon request.





**Table 1  
Mitigation Monitoring Program**

<b>Mitigation Measure</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity/ Verification of Compliance</b>
<p>provided to all construction and managerial personnel involved with the project's ground disturbing activities. The WEAP training shall provide an overview of paleontological resources and outline the regulatory requirements for their protection. The WEAP shall also cover the proper procedures to be followed in the event of a fossil discovery during construction. The WEAP training may be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.</p>	LADOT CM	Construction – prior to ground disturbing activities.	LADOT LABOE EMG	<p>A qualified paleontological monitor is retained. WEAP training is provided to construction workers prior to ground-disturbing activities.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>
<p><b>MM-PAL-2:</b> The qualified paleontological monitor will monitor project-related excavation activities in high paleontological deposits, if encountered in the subsurface. Project-related excavation activities greater than 5 feet depth shall be monitored on a part-time (i.e., spot-checking) basis to check for the presence of underlying paleontologically sensitive sediments. If paleontologically sensitive deposits are observed, full-time monitoring will be implemented in those areas. Excavations determined to be entirely within previously disturbed sediments or late Holocene-age deposits do not require paleontological monitoring or continued spot-checking.</p>	LADOT CM	Construction - During ground disturbing activities (5 feet or deeper)	LADOT LABOE EMG	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Mitigation measures shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review Project specifications and Environmental Compliance Plan.</p> <p>Paleontological monitor is scheduled and be on-site during deep excavation activities.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout</p>

**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<p><b>MM-PAL-3:</b> In the unanticipated event that fossil resources are discovered, they shall be protected from further excavation, destruction, or removal. Work will be halted within 25 feet of the discovery until they can be evaluated by a qualified paleontologist (i.e., one who meets the SVP professional standards for Principal Investigator or Project Paleontologist).</p> <p>If determined to be scientifically important, the paleontological resources will be recovered, prepared to the point of curation, identified, and curated at the Natural History Museum of Los Angeles County or another accredited repository along with associated field data.</p>	LADOT CM and Construction contractor as a designee of LADOT	Construction - During ground disturbance (5 feet or deeper)	LADOT LABOE EMG	<p>Report.</p> <p>LADOT Project Engineer shall include requirement in contract specifications and plans. Mitigation measures shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review Project specifications and Environmental Compliance Plan.</p> <p>In the unanticipated event that fossil resources are discovered, review the evidence that work is halted within 25 feet of the discovery until notified otherwise by the paleontological monitor.</p> <p>Review the evidence that paleontological monitor follows the protocol if significant paleontological resources are discovered.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.</p>
<p><b>MM-PAL-4:</b> After ground-disturbing activities are completed, a memo report documenting the methods and results of paleontological monitoring will be prepared by the qualified paleontologist and submitted to the City of Los Angeles.</p>	LADOT and Construction contractor as a designee of LADOT	Construction - after ground disturbing activities	LADOT LABOE EMG	<p>Review the completion of resource evaluation and monitoring memo report.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>

**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<b>Hazards and Hazardous Materials</b>				
<p><b>MM-HAZ-1:</b> Additional site characterization to identify the lateral and vertical extents of PCE-impacted soil vapor and assess if groundwater beneath the site has been impacted shall be conducted.</p> <p>Following completion of site characterization, the City of Los Angeles shall report the “unauthorized release” to the appropriate agency for regulatory oversight. Once a case is opened, the City of Los Angeles shall comply with any additional characterization activities and subsequent remedial actions to the satisfaction of the regulatory oversight agency to protect construction workers, facility workers, and neighboring residences/businesses from exposure to impacted media (i.e., soil, groundwater, and/or soil vapor).</p>	<p>LADOT and Bureau of Sanitation (LASAN)</p> <p>LADOT CM and Contractor as a designee of LADOT</p>	<p>Design</p> <p>Construction</p>	<p>LADOT LABOE EMG</p> <p>LADOT CM LABOE EMG</p>	<p>Review and approve site characterization report</p> <p>LADOT Project Engineer shall include requirement in contract specifications and plans. Mitigation measures shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review Project specifications and Environmental Compliance Plan.</p> <p>Review the completion of site remediation activities.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>
<p><b>MM-HAZ-2:</b> Before construction, a Soil Management Plan (SMP) shall be developed to provide construction workers with guidelines from a health and safety perspective (e.g., use of personal protective equipment, action levels, etc.) on handling impacted media that is encountered during any subsurface disturbance activities.</p>	<p>LADOT and LASAN</p>	<p>Design and Construction - prior to ground disturbing activities</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Mitigation measures shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review Project specifications and</p>



**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<p>the Los Angeles Regional Water Quality Control Board (LARWQCB) of the potential unauthorized release is warranted. Should a case be opened with the LARWQCB, additional action may likely be required, including detailed site characterization, active remediation, and the designation of a responsible party.</p> <ul style="list-style-type: none"> <li>Measures (i.e., engineering controls such as vapor barriers) shall be installed within new construction, to address residual impacts of tetrachloroethene (PCE) in soil vapor in the event remediation is not pursued or completed. These measures typically consist of the installation of either an active or passive venting system and/or the application of a vapor barrier that is chemically resistant to chlorinated solvents</li> </ul>				
<b>Noise</b>				
<p><b>MM-NOI-1:</b> To minimize noise impacts to area residents during project construction, the Contractor shall install a temporary noise barrier, which includes noise barrier fences, moveable noise barriers, and/or noise control curtains, with an effective height of 12 feet around the perimeter of the construction site. Temporary noise barriers may be made, for example, of concrete jersey barriers with 0.75-inch</p>	<p>Construction contractor as a designee of LADOT</p>	<p>Construction</p>	<p>LADOT CM or designee LABOE EMG</p>	<p>Construction site inspection</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>



**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<p>activities, locations, soil, and any cultural materials, human remains, and/or burial goods discovered. Tribal monitoring shall conclude when ground-disturbing activities on the project site have been completed, or when the qualified tribal monitor indicates any additional construction activity at the project site has little or no potential to impact tribal cultural resources.</p> <p>See full mitigation language at the end of this table**.</p>				<p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>
<b>Cumulative Impacts</b>				
<p><b>MM-CUM-1:</b> The construction schedules of other projects in the vicinity should be coordinated with each other through communication among City departments and staff to avoid cumulatively affecting vehicle traffic, pedestrians, and bicyclists on Avalon Boulevard and East 111th Place.</p>	<p>LADOT CM  Construction contractor as a designee of LADOT</p>	<p>Construction - before ground disturbing activities</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Mitigation measures shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review Project specifications and Environmental Compliance Plan.</p> <p>Review construction schedules.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>



**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<p><b>**MM-TCR-1 Mitigation language</b></p> <p>Due to the potential for tribal cultural resources to exist on the project site, prior to the commencement of any ground-disturbing activity at the project site, the City of Los Angeles (the City) shall retain a tribal monitor that is qualified to identify, record, and evaluate the significance of any archaeological and/or tribal cultural finds during construction. The qualified tribal monitor shall be from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (the Tribe). Ground-disturbing activities shall include removing pavement, potholing, auguring, grubbing, removing trees, boring, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, augering, backfilling, blasting, stripping topsoil or similar activity at the project site. The executed monitoring service agreement shall be submitted by the qualified tribal monitor to the City prior to any ground-disturbing activity. The qualified tribal monitor will complete logs describing each day's construction activities, locations, soil, and any cultural materials, human remains, and/or burial goods discovered. Tribal monitoring shall conclude when ground-disturbing activities on the project site have been completed, or when the qualified tribal monitor indicates any additional construction activity at the project site has little or no potential to impact tribal cultural resources. In accordance with PDF-CUL-1, prior to commencing any ground disturbing activities, the qualified archaeologist and the qualified tribal monitor shall provide Worker Environmental Awareness Program (WEAP) training to construction crews involved in ground-disturbing activities that provides information on regulatory requirements for the protection of tribal cultural resources. As part of the WEAP training, construction crews shall be briefed on proper procedures to follow should a crew member discover tribal cultural resources during ground-disturbing activities. In addition, workers will be shown examples of the types of resources that would require notification to the archaeological monitor and tribal monitor.</p> <p>Upon discovery of any subsurface object or artifact that may be a tribal cultural resource during the course of any ground-disturbing activity, procedures to ensure that tribal cultural resources are not damaged include but are not limited to the following steps:</p> <ul style="list-style-type: none"> <li>• All such ground-disturbing activities shall cease in the immediate vicinity of the discovery, the radius of which will be determined by the qualified tribal monitor or the qualified archaeological monitor, until the qualified tribal monitor has evaluated the find in accordance with federal, state, and local guidelines.</li> <li>• The found deposits shall be treated with appropriate dignity and protected and preserved as appropriate with the agreement of the Tribe and the tribal monitor, and in accordance with federal, state, and local guidelines.</li> <li>• Personnel of the project shall not collect or move any archaeological or tribal resources or associated materials or publish the location of tribal cultural resources.</li> <li>• If the resources are Native American in origin, the tribal monitor will make recommendations to the City regarding the monitoring of future ground-disturbing activities, as well as the treatment and disposition of any discovered tribal cultural resources, which may include but not limited to the preservation in place or recovery and retention of them in the form and/or manner which the tribal monitor and the Tribe deem appropriate for educational, cultural, and/or historic purposes. Until a recommendation is made, the discovery should be preserved in place or left in an undisturbed state. When preserving in place or leaving in an undisturbed state is not possible, excavation should not occur unless testing or studies already completed have adequately recovered the scientifically consequential information form and about the resource and this determination is documented by a qualified archaeologist or tribal monitor.</li> </ul>				

**Table 1  
Mitigation Monitoring Program**

Mitigation Measure	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity/ Verification of Compliance
<ul style="list-style-type: none"> <li>• The City shall implement the tribal monitor and Tribe’s recommendations if the City can reasonably conclude that the recommendations are reasonable and feasible to mitigate or avoid any significant impacts to the identified tribal cultural resources. If the City does not accept a particular recommendation determined to be reasonable and feasible by the qualified tribal monitor, the City may request mediation by a mediator agreed to by the tribal monitor, the Tribe, and the City who has the requisite professional qualifications and experience to mediate such a dispute. The City shall pay any costs associated with the mediation. After making a reasonable effort to mediate this particular dispute, the City may (1) require the recommendation be implemented as originally proposed by the archaeologist or tribal monitor; (2) require the recommendation, as modified by the City, be implemented as it is at least as equally effective to mitigate a potentially significant impact; (3) require a substitute recommendation be implemented that is at least as equally effective to mitigate a potentially significant impact to a tribal cultural resource; or (4) not require the recommendation be implemented because it is not necessary to mitigate an significant impacts to tribal cultural resources.</li> <li>• The ground-disturbing activities may recommence outside of a specified radius of the discovery site, so long as this radius has been cleared by both the qualified archaeologist and qualified tribal monitor and determined to be reasonable and appropriate.</li> <li>• The location of the find of tribal cultural resources and the type and nature of the find will not be published beyond providing it to public agencies with jurisdiction or responsibilities related to the resources, the qualified archaeologist, qualified tribal monitor, and the Tribe.</li> <li>• If the resources consist of non-Native American historic archaeological materials, a qualified archaeologist will apply National Register of Historic Places Criterion D to determine their significance. Artifacts will be curated per the Code of Federal Regulations 36 Part 79, as applicable, or be offered to a local historical society museum or educational facility, as deemed appropriate by the City.</li> </ul> <p>SC-CUL-1 shall be implemented should human remains be inadvertently discovered at the project site. If the Gabrieleño Band of Mission Indians – Kizh Nation is designated Most Likely Descendant (MLD) by the Native American Heritage Commission (NAHC), the Koo-nas-gna Burial Policy shall be implemented. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be prepared by the MLD. Associated funerary objects reasonably believed to have been placed with individual human remains either at the time of death or later and made exclusively for burial purposes are to be treated with utmost respect and dignity. The prepared soil and cremation soils are to be treated in the same manner as intact bone fragments. Cremations will either be removed in bulk or by means necessary to ensure the complete recovery of all sacred materials.</p> <p>In such cases where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate which can only be moved by heavy equipment. If this type of steel plate is unavailable, a 24-hour guard should be posted outside of working hours. The City will make every effort to divert project activities and keep the remains in situ and protected. If the project cannot be diverted, it may be determined that the burials will be removed. The MLD will work closely with the City’s designated qualified archaeologist and tribal monitor to ensure that the excavation is treated carefully, ethically, and respectfully. Each occurrence of human remains and associated funerary objects, sacred objects, and objects of cultural patrimony will be retained and reburied within six months of recovery in a secure container. If preservation in place is not possible despite good faith efforts, a site located within the project parcel footprint, as agreed to by the City and the Tribe, and to be protected in perpetuity, shall be designated for the respectful reburial of the human remains and/or ceremonial objects. There shall be no publicity regarding any cultural materials recovered.</p>				

**Table 1**  
**Mitigation Monitoring Program**

<b>Mitigation Measure</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity/ Verification of Compliance</b>
<p>Any data recovery plans shall require approval by the Tribe; such documentation will include detailed descriptive notes and sketches, at a minimum. Additional documentation as outlined in a treatment plan should also be approved by the Tribe. If additional data recovery is conducted, a final report will be submitted to the Tribe, Native American Heritage Commission, and South Central Coastal Information Center. No invasive and/or destructive diagnostics on human remains shall be conducted.</p>				

## **Project Design Features and Standard Conditions**

In addition to the mitigation measures above, the proposed Project has been designed to incorporate several project design features (PDF) and will have to comply with existing applicable regulations as standard conditions (SC).

SCs are existing requirements based on applicable federal, State, regional, and City regulations, and generally consists of regulatory compliance measures, and standard construction conditions and procedures. The SCs will be implemented as a part of the project to ensure compliance and that potential impacts would remain less than significant.

PDFs are specific design and/or operational measures proposed by the City and incorporated into the project to avoid or reduce potential environmental effects. While PDFs do not constitute mitigation measures, they will be implemented as a part of the project.

The PDFs and SCs for the proposed EBMF are listed in Table 2 below, along with:

- Party Responsible for Implementation
- Implementation Phase
- Party Responsible for Monitoring Compliance
- Monitoring Activity/Verification of Compliance

**Table 2  
EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
<b>Aesthetics</b>				
<p><b>PDF-V-1:</b> The project shall be designed to provide vegetative screening along the east and west sides of the site to minimize the views into the proposed facility from the two community assets - Animo James B. Taylor Charter Middle School on the east and Kedren Health Community Center on the west.</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>
<p><b>PDF-V-2:</b> The project shall be designed to set back the proposed building along East 111<sup>th</sup> Place to allow for landscaping along the street to soften the height of the building on the streetscape.</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>
<p><b>PDF-V-3:</b> Where feasible, the project shall be designed to allow for vine plantings along the inside of the wall along the railroad tracks and provide vine portals to allow the vines to grow over the backside of the wall to minimize the surface area for graffiti.</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and</p>

**Table 2  
EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
Environmental Compliance Plan.				
<b>Air Quality</b>				
<p><b>SC-AQ-1:</b> The construction and operation of the project shall comply with applicable California Air Resource Board (CARB) and South Coast Air Quality Management District (SCAQMD) Rules and Regulations, including but not limited to CARB Airborne Toxic Control Measures (ATCM) 2485 and SCAQMD Rules 401 through 403 and 1403.</p>	LADOT	Construction	LADOT CM or designee LABOE EMG	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review contractor's compliance with CARB and SCAQMD rules and regulations.</p>
<b>Cultural Resources</b>				
<p><b>SC-CUL-1:</b> In the event of the inadvertent discovery of human remains, the Contractor shall immediately notify the County Coroner and the City of Los Angeles.</p> <p>If the County Coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission in accordance with Health and Safety Code (HSC) Section 7050.5 subdivision c, and Public</p>	<p>LADOT</p> <p>LADOT CM and Construction contractor as a</p>	<p>Design</p> <p>Construction - upon discovery of human remains</p>	<p>LADOT LABOE EMG</p> <p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review evidence of established procedures being followed upon discovery of human remains during any ground-</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>Resources Code (PRC) Section 5097.98 (as amended by Assembly Bill 2641).</p> <p>The Native American Heritage Commission shall designate the most likely descendant (MLD) for the remains per PRC 5097.98.</p> <p>Under PRC 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations, if applicable.</p> <p>If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California HSC Section 7100 37 et seq. directing identification of the next-of-kin will apply.</p>	<p>designee of LADOT</p>			<p>disturbing activity</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p><b>SC-CUL-2:</b> In compliance with Section 6.6-2 of the Greenbook (<i>Standard Specifications for Public Works Construction</i>) regarding archaeological and paleontological discoveries, if a discovery is made of items of archaeological or paleontological interest, the Contractor shall immediately cease excavation in the area of discovery and shall not continue until ordered by the Engineer. When resumed, excavation operations within the area of discovery shall be as directed by the Engineer.</p>	<p>LADOT</p> <p>Construction contractor as a designee of LADOT</p>	<p>Design</p> <p>Construction - upon discovery of items of archaeological or paleontological interest</p>	<p>LADOT CM or designee LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review evidence of established procedures being followed upon discovery of items of archaeological or paleontological interest during any ground-disturbing activity</p>
<p><b>PDF-CUL-1:</b> A qualified archeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, shall be retained before the project construction and shall remain on-call during all ground-disturbing activities. The qualified archeologist shall ensure that a Worker Environmental Awareness Protection (WEAP) training, presented by the qualified archeologist and Native American representative,</p>	<p>LADOT</p>	<p>Before construction</p> <p>Construction – prior to ground disturbing</p>	<p>LADOT LABOE EMG</p> <p>LADOT CM or designee</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>A qualified archeologist is retained. Review the evidence of WEAP training</p>



**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>is provided to all construction and managerial personnel involved with the project. The WEAP training shall provide an overview of cultural (prehistoric and historic) and tribal cultural resources and outline regulatory requirements for the protection of cultural resources. The WEAP shall also cover the proper procedures to be followed in the event of an unanticipated cultural resource discovery during construction. The WEAP training can be in the form of a video or PowerPoint presentation or printed literature (handouts) that can be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.</p>		<p>activities.</p>	<p>LABOE EMG</p>	<p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report, and the Project Final Acceptance and Closeout Report.</p>
<p><b>PDF-CUL-2:</b> In the event of an inadvertent discovery of archaeological materials, the resource shall be fully documented by the qualified archaeologist or designee and a Department of Parks and Recreation (DPR) 523 record shall be prepared. If prehistoric or potential tribal cultural resources are identified, the consulting</p>	<p>LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>Native American Tribes shall be notified.</p> <p>The qualified archaeologist, in consultation with consulting Native American Tribes and the City of Los Angeles, shall determine whether the resource is potentially significant as per CEQA (i.e., whether it is a historical resource, a unique archaeological resource, or tribal cultural resources).</p> <p>If preservation in place or avoidance is not feasible, the qualified archaeologist, in consultation with the City, shall prepare and implement a detailed treatment plan. Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code (PRC) Section 21083.2. Treatment for most resources would consist of, but would not be limited to, in-field documentation, archival research, subsurface testing, excavation, and preparation of a final report and DPR 523 record. The treatment plan shall include provisions for analysis of data in a regional context, reporting of</p>		<p>Construction - upon discovery of cultural materials</p>	<p>LADOT CM or designee LABOE EMG</p>	<p>In the unanticipated event that cultural resources are discovered, review evidence of established procedures being followed upon discovery of any cultural resource materials.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of the final report and DPR 523 record(s) to the City of Los Angeles and South Central Coastal Information Center.</p>				
<b>Geology and Soils</b>				
<p><b>SC-GEO-1:</b> In accordance with the Los Angeles Municipal Code (LAMC) and Los Angeles Building Code (LABC), a geotechnical investigation shall be prepared to assess site-specific geologic conditions, including the potential for liquefaction, soil expansion, and other geologic hazards at the project site. Applicable standards in the LABC and the recommendations of the geotechnical investigation shall be incorporated into the design and construction of the project.</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>
<p><b>SC-GEO-2:</b> The project plans and specifications shall be reviewed by a qualified Geotechnical Engineer to ensure proper implementation and application of the required building and seismic codes.</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p>



**Table 2**  
**EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
<p><b>SC-HAZ-2:</b> Workers exposed to or handling contaminated soils shall have sufficient health and safety training, consistent with Occupational Safety and Health Administration (OSHA) Hazardous Waste Operation Standards (29 CFR 1910.120), and Cal-OSHA “Hazardous Waste Operations &amp; Emergency Response” (HAZWOPER) (8 CCR 5192). The Contractor, qualified subcontractor, or an industrial hygienist shall prepare a site-specific health and safety plan. The plan shall appoint a site safety officer and establish responses to contaminants, including methane gas, known to exist in the area based on the site knowledge and the Phase II Environmental Site Assessment (ESA) and Additional Site Assessment Report.</p>	<p>LADOT</p> <p>Construction contractor as a designee of LADOT</p>	<p>Design</p> <p>Construction - prior to ground disturbing activities</p>	<p>LADOT LABOE EMG</p> <p>LADOT CM LABOE EMG</p>	<p>Report.</p> <p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review site-specific health and safety plan.</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.</p>
<p><b>SC-HAZ-3:</b> Soils that have visible staining or an odor shall be tested in the field by the Contractor or qualified environmental subcontractor with an organic vapor analyzer (OVA) for volatile components, which require additional considerations</p>	<p>LADOT</p>	<p>Design</p>	<p>LADOT CM LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>in their handling and disposal. Soil with OVA readings exceeding 50 parts per million (ppm) volatile organic compounds (probe held 3 inches from the excavated soil face), or which is visibly stained or has a detectable petrochemical odor shall be stockpiled by the Contractor separately from non-contaminated soils. If volatile compounds are present at concentrations exceeding 50 ppm, the South Coast Air Quality Management District (SCAQMD) Rule 1166 permit will be required, which most likely will require control of vapor, such as covering the stockpiles with plastic sheeting or wetting with water or a soap solution.</p>	<p>Construction contractor as a designee of LADOT</p>	<p>Construction - upon discovery of stained or odorous soils during construction</p>	<p>LADOT CM</p>	<p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Construction site inspections</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.</p>
<p><b>SC-HAZ-4:</b> Any contaminated material (i.e., soil, asphalt, concrete, railroad ballast, trash fill, or debris) that is to be hauled off the site is considered a "waste product" and must be classified as hazardous or non-hazardous waste under all criteria by both State and Federal Codes before disposal. If the waste soil or other material is determined hazardous, a hazardous waste</p>	<p>LADOT</p>	<p>Design</p>	<p>LADOT CM LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>

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**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
manifest will be prepared by the Contractor or its qualified representative, and the material transported to an appropriate class of facility for recycling or landfill disposal by a registered hazardous material transporter. If the soil is nonhazardous but still exceeds levels that can be returned to the excavation or is not needed on the site, a less costly nonhazardous transporter and soil recycling facility shall be used if no hazardous constituents are present above their respective action levels.	Construction contractor as a designee of LADOT	Construction - Before offsite hauling of construction debris	LADOT CM LABOE EMG	Construction site inspections  LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.
<b>SC-HAZ-5:</b> In accordance with South Coast Air Quality Management District (SCAQMD) Rule 1403, a pre-demolition building survey for asbestos-containing materials (ACMs) is required before demolition. Therefore, a pre-demolition survey is recommended for ACMs, lead-based paint, polychlorinated biphenyl (PCB), and other hazardous materials before any on-site demolition.	LADOT	Design          Construction - before demolition	LADOT LABOE EMG       LADOT LABOE EMG	LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.  LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.  Review ACM report and other hazardous material reports  LABOE EMG will review Environmental Compliance Plan prepared by Contractor,

**Table 2  
EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
				the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.
<b>Hydrology and Water Quality</b>				
<p><b>SC-HYD-1:</b> In compliance with National Pollutant Discharge Elimination System (NPDES) No. CAS000002, the Contractor shall obtain coverage under the NPDES Construction General Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during construction activities. The SWPPP shall include appropriate Best Management Practices (BMPs) from the City's Reference Guide for Stormwater Best Management Practices.</p> <p>In addition, the Contractor shall comply with Order No. 2003-003-DWQ, including the terms and conditions of the General Waste Discharge Requirements of this order. Any groundwater extracted during excavation activities will be disposed of in accordance with the General Waste Discharge Requirements for discharges to land with a low threat to water quality.</p>	<p>LADOT</p> <p>Construction contractor as a designee of LADOT</p>	<p>Design</p> <p>Before and during construction</p>	<p>LADOT LABOE EMG</p> <p>LADOT CM or designee</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review Waste Discharger Identification (WDID) No. and SWPPP for construction.</p> <p>Construction site inspections</p>
<p><b>SC-HYD-2:</b> In compliance with</p>	<p>Design contractor as a</p>	<p>Design</p>	<p>LADOT</p>	<p>LADOT Project Engineer shall include</p>



**Table 2  
EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>National Pollutant Discharge Elimination System (NPDES) No. CAS000001, the City shall obtain coverage under the NPDES General Industrial Activity Storm Water Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) during project operations.</p> <p>In addition, the on-site storm drainage shall be designed in compliance with LAMC Section 64.30 for requirements on the disposal of industrial wastewater and with the City's Low-Impact Development Ordinance for permanent site Best Management Practices (BMPs) that would allow the beneficial use of rainwater and urban runoff; reduce stormwater/urban runoff while improving water quality; promote rainwater harvesting; reduce off-site runoff and provide increased groundwater recharge; and reduce erosion and hydrologic impacts downstream.</p>	<p>designee of LADOT</p> <p>LADOT</p>	<p>Prior to start of operation</p>	<p>LABOE EMG</p> <p>LADOT</p>	<p>requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review NPDES permit and SWPPP for operations</p>
<b>Land Use and Planning and Community Impacts</b>				
<p><b>SC-LU-1:</b>The proposed project shall be designed and constructed in compliance with</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
applicable design guidelines and development standards in the Southeast Los Angeles Community Plan, Southeast Los Angeles Community Plan Implementation Overlay (CPIO) District, and the City's Zoning Regulations.				<p>Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p>
<p><b>SC-CC-1:</b> In compliance with Section 601-1 of the Greenbook (<i>Standard Specifications for Public Works Construction</i>), the Contractor shall prepare a Transportation Management Plan (TMP) in consultation with the City of Los Angeles before construction. The TMP will be submitted with the construction plans and schedule to the Los Angeles Police and Fire Departments before the commencement of construction activities. The TMP will outline necessary street/lane closures and detours. In addition, detours around construction areas will be identified for bicyclists and pedestrians. Signs will be posted to direct bicyclists and pedestrians to sidewalks and intersections where they may safely cross. A restriction on large-size trucks shall also be</p>	<p>LADOT</p> <p>Construction contractor as a designee of LADOT</p>	<p>Design</p> <p>Before construction</p>	<p>LADOT LABOE EMG</p> <p>LADOT CM or designee</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Review TMP and site inspections for TMP implementation</p>



**Table 2  
EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>children playing or going to or from school in the work area. The Contractor shall take all necessary precautions to ensure that its operations will not create a safety hazard for children. Crossing guards shall be placed at the project site driveways and the intersections of East 111<sup>th</sup> Place with McKinley Avenue and Stanford Avenue, leading to the nearby schools, when construction activities (e.g., sidewalk improvements and haul truck traffic) occur during school start and end times.</p>	<p>Construction contractor as a designee of LADOT</p>	<p>Construction</p>	<p>LADOT CM or designee LABOE EMG</p>	<p>Construction site inspections</p> <p>LABOE EMG will review Environmental Compliance Plan prepared by Contractor, the Environmental Compliance Report and the Project Final Acceptance and Closeout Report.</p>
<p><b>SC-CC-4:</b> In compliance with the City of Los Angeles Building Regulations Ordinance No. 178,048 (LAMC Section 91.106.4.8), a construction site notice to be provided that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction</p>	<p>LADOT</p> <p>Construction contractor as a designee of LADOT</p>	<p>Design</p> <p>Before construction</p>	<p>LADOT</p> <p>LADOT CM or designee</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.</p> <p>LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.</p> <p>Inspection of site notice sign. Review notices and proof of distribution/mailing and inspection of sign.</p>

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**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<p>site prior to the start of construction and displayed in a location that is readily visible to the public.</p> <p>A public liaison shall be appointed for project construction and shall be responsible for addressing public concerns about construction activities, including, but not limited to, access, excessive noise, dust, or odor. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler, blocked driveway) and implement measures, in consultation with the Contractor, to address the concern.</p> <p>Notices detailing the dates and hours of construction shall be sent to properties within 500 feet of the construction site. A project information sign shall be posted at the construction site and shall display the telephone number for the public liaison.</p>	<p>LADOT and Construction contractor as a designee of LADOT</p>	<p>Before and during construction</p>	<p>LADOT CM or designee</p>	<p>Review public liaison plan.</p>
<b>Public Services</b>				
<p><b>SC-PS-1:</b> The project shall be designed, constructed, and operated in accordance with the Los Angeles Fire Code and other</p>	<p>Design contractor as a designee of LADOT</p>	<p>Design</p>	<p>LADOT LABOE EMG</p>	<p>LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor</p>

**Table 2**  
**EBMF Standard Conditions and Project Design Features**

Standard Condition or Project Design Feature	Responsible Party	Implementation Phase	Monitoring Party	Monitoring Activity Verification of Compliance
applicable requirements in the Los Angeles Municipal Code (LAMC), Los Angeles Building Code (LABC), and other State and City regulations to prevent the creation of fire hazards, to reduce the potential for property damage and personal injury in the event of a fire, and to facilitate evacuation and emergency response.	Construction contractor as a designee of LADOT	Construction	LADOT CM or designee	bid documents and Environmental Compliance Plan prepared by construction contractor.  LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.  Construction site inspections
<b>Transportation</b>				
<b>SC-TR-1:</b> The proposed project shall be designed in accordance with City of Los Angeles standards for streets, sidewalks, driveways, and other street improvements to prevent the creation of traffic hazards.	Design contractor as a designee of LADOT	Design	LADOT LABOE EMG	LADOT Project Engineer shall include requirement in contract specifications and plans. Project Design Features or Standard Conditions shall be included in contractor bid documents and Environmental Compliance Plan prepared by construction contractor.  LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.
<b>PDF-TR-1:</b> The proposed project shall quantify the operational performance for primary site access points, unsignalized intersections integral to the project's site access, and signalized intersections in the vicinity of the project site after the project is	LADOT or operation manager as designee of the LADOT	At the start of operations	LADOT	Review traffic operations assessment report  Review compliance with report recommendations

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EBMF Standard Conditions and Project Design Features**

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<p>fully operational. If it is determined that the project exceeds the travel volume screening criteria for Boulevards and Avenues as defined in the Los Angeles Department of Transportation's (LADOT) Transportation Assessment Guidelines (TAG), further analysis is required to estimate the travel delay at each major signalized intersection where the capacity would be altered by the projects and to estimate how the project would be expected to improve or reduce safety for vulnerable road users.</p> <p>Potential corrective actions for the project access and circulation constraints could include:</p> <ul style="list-style-type: none"> <li>• Provide an additional left-turn lane pocket for the westbound approach at the S. Avalon Blvd. and E. 111th Place intersection.</li> <li>• Improving the segment of E. 111th Place from the eastern end of the site frontage to Avalon Boulevard to two lanes each direction to provide additional roadway capacity.</li> </ul>				

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**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
<ul style="list-style-type: none"> <li>• Transportation Demand Management (TDM) Strategies that reduce trips above and beyond those required in Section 2.2 of the LADOT TAG.</li> <li>• Installation of a traffic signal or stop signs or electronic warning devices at site access points.</li> <li>• Redesign and/or relocation of project access points.</li> <li>• Redesign of the internal access and circulation system.</li> <li>• Installation of stop signs and pavement markings internal to the site.</li> <li>• Restrict or prohibit turns at site access points.</li> <li>• Repurpose existing curb space to better accommodate passenger loading.</li> <li>• New traffic signal installation, left turn signal phasing, or other vehicle flow enhancements (e.g., Automated Traffic Surveillance and Control [ATSAC] system upgrades) at nearby intersections.</li> </ul>				





**Table 2**  
**EBMF Standard Conditions and Project Design Features**

<b>Standard Condition or Project Design Feature</b>	<b>Responsible Party</b>	<b>Implementation Phase</b>	<b>Monitoring Party</b>	<b>Monitoring Activity Verification of Compliance</b>
obtaining a permit before transporting construction and demolition waste and transporting the wastes to City-certified construction and demolition waste-processing facilities.	Construction contractor as a designee of LADOT	Before transporting construction and demolition wastes	LADOT CM or designee	contractor bid documents and Environmental Compliance Plan prepared by construction contractor.  LADOT Project Manager and LABOE EMG will review project specifications and Environmental Compliance Plan.  Review contractor permit for transporting construction and demolition waste and site inspections.
<b>SC-UT-2:</b> In accordance with the City's Zero Waste Plan, the City shall implement recycling programs at the EBMF, which may include but not be limited to the phasing out expanded polystyrene foam takeout containers and single-use water bottles and the placement of recycling containers for a variety of materials such as beverage containers, newspaper, mixed paper, and other materials.	LADOT or operation manager as designee of LADOT	During EBMF operations	LADOT	Review recycling programs and records