Vapor Intrusion Study Report

East Adjacent Properties – Property 2
24701, 24707, and 24747 Crenshaw Boulevard
Torrance, California 90505
Investigative Order No.: R4-2020-0035

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Sign-off Sheet

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Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Executive Summary

This report was prepared on behalf of Magellan Aerospace, Middletown, Inc. (Middletown) and Robinson Helicopter Company (Robinson) by Stantec Consulting Services Inc. (Stantec) to document vapor intrusion study ("VI Study") findings at a property addressed as 24701, 24707, and 24747 Crenshaw Boulevard addresses (the Subject Property; Figure 1), collectively referred to as "Property 2" in the Los Angeles Regional Water Quality Control Board's (LARWQCB's) Investigative Order No. R4-2020-0035, dated May 12, 2020.

The LARWQCB has been overseeing environmental investigations at the Hi-Shear Corporation's (Hi-Shear's) facility located at 2600 Skypark Drive in Torrance, California (Site Cleanup Program [SCP] No. 0218) and at properties adjacent to the Hi-Shear facility which are identified as the East Adjacent Properties of Hi-Shear Corporation (EA Properties [SCP No. 1481]). Property 2, or the Subject Property, is one of the EA Properties.

The VI Study was conducted pursuant to the investigative order and was performed to evaluate whether the presence of subsurface VOCs potentially posed a vapor intrusion risk to Site workers. The VI Study scope of work included:

- Conducting a non-intrusive visual building survey;
- Collecting three outdoor ambient air samples;
- Collecting ten indoor air samples;
- Installing and sampling ten sub-slab vapor probes;
- Collecting pressure/vacuum measurements from the installed sub-slab vapor probes;
- Analyzing ambient air, indoor air, and sub-slab vapor samples for VOCs; and
- Preparing this report summarizing the VI Study procedures and findings.

Stantec compared the ambient air, indoor air, and sub-slab vapor analytical data to the following screening criteria:

- United States Environmental Protection Agency, Region 9, Regional Screening Levels (RSLs) for Indoor Air for Target Cancer Risk (TR) = 1E-06, Target Hazard Quotient (THQ) = 1.0, and industrial land use (November 2020); and
- California Environmental Protection Agency, Department of Toxic Substances Control Human and Ecological Risk Office (HERO), Human Health Risk Assessment Note Number 3, Modified Screening Levels (SLs) for Indoor Air (June 2020) for commercial/industrial land use.

Twelve (12) VOCs were reported above laboratory reporting limits in sub-slab samples. Of these, only three VOCs (chloroform, tetrachloroethene [PCE], and trichloroethene [TCE] were reported above sub-

slab screening levels using a conservative attenuation factor of 0.03. Eighteen (18) VOCs were reported in at least one indoor air sample. Of these, only benzene, chloroform, and ethylbenzene were reported above the commercial industrial screening level. Based on the data collected by Stantec, the following conclusions are made with respect to the five analytes detected in indoor air and/or sub-slab vapor samples at concentrations in excess of their respective RSLs and/or SLs:

- Benzene is present in indoor and outdoor ambient air at similar concentrations. A comparison of indoor air data to ambient air data suggests the benzene concentrations observed in indoor air are not originating subsurface vapors, or from the indoor building space, but rather are reflective of background ambient air conditions in the vicinity of the Subject Property.

- Ethylbenzene is present in one indoor air sample (IA-7) at a concentration exceeding the RSL; however, ethylbenzene was not detected in any of the sub-slab samples above the laboratory reporting limit (<4.4 $\mu g/m^3$). The ethylbenzene concentrations in indoor air do not appear to be originating from sub-slab vapor.

- Chloroform is present in four indoor air samples (IA-6, IA-7, IA-8, and IA-10) above the RSLs. However, the collocated sub-slab samples did not report chloroform above the laboratory reporting limit (<4.9 $\mu g/m^3$). Chloroform was reported above the RSL (using an attenuation factor of 0.03) at two of the sub-slab vapor samples (VP-3 and VP-4); however, chloroform was not reported above the laboratory reporting limit in either of the corresponding indoor air samples. Chloroform does not appear to be originating from vapor intrusion but likely from other sources.

- PCE was reported above the SL at all 10 sub-slab vapor sample locations; however, PCE was not detected in any of the indoor samples at concentrations exceeding the SL. Further, PCE was not detected above the laboratory reporting limit at 7 of the 10 indoor air sample locations. Of the sample locations in which PCE was detected in the collected indoor samples, the ratio of indoor air to sub-slab PCE concentrations ranged from 0.0008 to 0.0203, with a mean ratio of 0.0077.

- TCE was reported above the RSL in 7 of the 10 sub-slab sample locations; however, TCE was not detected in any of the indoor samples at concentrations exceeding the RSL. Further, TCE was not detected above the laboratory reporting limit at 8 of the 10 indoor air sample locations. Of the sample locations in which TCE was detected in the collected indoor samples (IA-7 and IA-10), the ratio of indoor air to sub-slab TCE concentrations were 0.0042 and 0.0022, respectively.

Based on evaluation of the data, this study did not find evidence of a significant vapor intrusion pathway of concern. The primary constituents of potential concern (COPCs) for vapor intrusion are PCE and TCE; however, neither of these was reported above the chronic SL or RSL. Stantec opines that vapor intrusion is not a pathway of exposure of concern for other COPCs detected in indoor air, and that most of these COPCs are likely the result of sources other than intrusion from the subsurface.

Abbreviations

AA	Ambient air
bgs	Below ground surface
Cal-EPA	California Environmental Protection Agency
COC	Chain-of-custody
COPCs	Constituents of potential concern
Dasco	Dasco Engineering Corporation
DCE	Dichloroethene
DTSC	California Department of Toxic Substances Control
EA Properties	East-Adjacent Properties of Hi-Shear Corporation
ESA	Environmental Site Assessment
ft	Feet
FREY	Frey Environmental Inc.
GER	Genesis Engineering & Redevelopment
HASP	Health and safety plan
H&P	H&P Mobile Geochemistry
HERO	DTSC Human and Ecological Risk Office
HHRA	Human health risk assessment
Hi-Shear	Hi-Shear Corporation
HVAC	Heating, ventilation and air conditioning
IA	Indoor air
in	Inch
LARWQCB	Los Angeles Regional Water Quality Control Board
LRL	Laboratory Reporting Limit
Middletown	Magellan Aerospace, Middletown, Inc.
mL	Milliliter
msl	Mean seal level
µg/m^3	Micrograms per cubic meter
PCE	Tetrachloroethene
RSLs	USEPA Region 9 Regional Screening Levels
Robinson	Robinson Helicopter Company
SCP	Site Cleanup Program
Stantec	Stantec Consulting Services, Inc.
SLs	Cal-EPA, DTSC, HERO, HHRA Note Number 3, Screening Levels (June 2020)
TCE	Trichloroethylene
USEPA	United States Environmental Protection Agency
VOCs	Volatile organic compounds
VI	Vapor intrusion
VP	Sub-slab vapor probe
µg/L	Micrograms per liter
µg/m^3	Micrograms per cubic meter

1.0 INTRODUCTION

This report documents vapor intrusion study ("VI Study") activities performed at a property addressed as 24701, 24707, and 24747 Crenshaw Boulevard (the Subject Property) which is also referred to as "Property 2" in the Los Angeles Regional Water Quality Control Board's (LARWQCB's) Investigative Order No. R4-2020-0035, dated May 12, 2020 (included in Appendix A). The completed scope of work was originally proposed in Stantec's *Vapor Intrusion Investigation Workplan*, dated August 25, 2020 (Stantec, 2020), which was approved, with modifications, in a LARWQCB letter dated October 6, 2020 (Appendix A). An extension to the original January 20, 2021 reporting deadline was subsequently approved in a LARWQCB letter dated February 24, 2021 (Appendix A).

The LARWQCB has been overseeing environmental investigations at the Hi-Shear Corporation's (Hi-Shear's) facility located at 2600 Skypark Drive in Torrance, California (Site Cleanup Program [SCP] No. 0218) and at properties adjacent to the Hi-Shear facility which are identified as the East Adjacent Properties of Hi-Shear Corporation (EA Properties [SCP No. 1481]). Property 2, or the Subject Property, is one of the EA Properties. Based on previous environmental investigations at both the Hi-Shear and EA Properties, it has been determined that volatile organic compounds (VOCs) are widely found in subsurface media. To further evaluate VOCs in the subsurface, LARWQCB issued an investigative order to multiple parties near the Hi-Shear facility, including the Subject Property.

1.1 PURPOSE AND OBJECTIVE

The VI Study was conducted to evaluate the vapor intrusion exposure pathway, as it relates to the migration of vapor-phase VOCs through the soil and into the indoor air environment at the Subject Property.

The objectives of the VI Study of the Site Investigation were to provide sufficient data to 1) evaluate the contribution of VOCs from VI to indoor air, and 2) provide information to assess the risk to Site workers' health from VI.

1.2 SCOPE OF WORK

The VI Study scope of work included:

- Collecting three outdoor ambient air samples;
- Collecting ten indoor air samples (plus a replicate);
- Installing and sampling ten sub-slab vapor probes (plus a replicate sample);
- Collecting pressure/vacuum measurements from the installed sub-slab vapor probes;
- Analyzing ambient air, indoor air, and sub-slab vapor samples for VOCs; and
- Preparing this report summarizing the VI Study procedures and findings.

2.0 BACKGROUND

The following sections provide a brief description of the Subject Property, physical conditions (topography, geology, and hydrogeology), a summary of the environmental history, and a description of the VI Study area.

2.1 SITE DESCRIPTION AND LAND USE

The Subject Property (herein referred to as Property 2) consists of interconnected buildings located at 24701, 24707, and 24747 Crenshaw Boulevard in Torrance, California. Property 2 is part of a larger 27-acre parcel (Assessor Identification Number 7377-006-906) owned by the City of Torrance, which includes the Hi-Shear facility, the EA Properties, and the Torrance Airport. The Subject Property is located in a predominantly commercial and light industrial area.

Frey Environmental Inc. (Frey) reportedly prepared a *Phase I Environmental Site Assessment* (ESA) report, dated September 14, 2015 for the 24701 and 24747 Crenshaw Boulevard (both part of Property 2) and 2530 and 2540 Skypark Drive (Property 3) addresses. While the complete Phase I ESA was not available to Stantec for review, a summary of findings was presented in Frey's *Evaluation of Subsurface VOCs*, dated February 23, 2018 (Frey, 2018). The Phase I ESA noted that aerospace and manufacturing industries had occupied the building addresses since the 1960s, and that VOCs were potentially utilized during the various manufacturing processes and generated heavy metal products, byproducts, and wastes. The Phase I ESA also documented the use of petroleum-based products by current building occupants and visible staining of concrete in the 24747 Crenshaw Boulevard (Property 2) building and exterior yard space.

2.2 PHYSICAL SETTING

2.2.1 Topography

The Subject Property is situated at an elevation of approximately 81 to 83 feet (ft) above mean sea level (msl). The topography slopes gently towards the north. The Subject Property is bounded by Crenshaw Boulevard to the east and Skypark Drive to the north. The Subject Property is bounded to the south by a car dealership facility (Property 1 of the EA Properties), and to the west by a commercial/industrial manufacturing facility (Property 3 of the EA Properties).

2.2.2 Site Geology

A more detailed discussion of regional and local geology is presented in Sections 2.2 and 2.3 of Genesis Engineering & Redevelopment's (GER's) *Soil, Soil Vapor, and Groundwater Evaluation Delineation Module III – Interim Report*, dated July 3, 2020 (GER, 2020). GER described soils beneath the project area in four units as follows:

- *Unit 1: Silt and clay are predominant in the upper 15 to 25 feet of sediment with interbedded lenses of fat clay. This unit is generally uniform in thickness throughout the area; however, it thickens to 35 feet in the southwest part of the investigation area.*

- *Unit 2: This unit consists of primarily silty sand which grades to sand to the north along Crenshaw Boulevard. This unit extends to a depth of 40 to 50 feet below the ground surface ("bgs") and has a corresponding thickness between 20 feet and 30 feet.*

- *Unit 3: This unit consists generally of silt, clay, and fat clay that varies in thickness between 5 feet and 15 feet. Unit 3 is interbedded with clayey sand, silty sand, and/or sand layers that range in thickness between 1 foot and 3 feet. In the borings adjacent to Crenshaw Boulevard perched groundwater has occasionally been observed on top of Unit 3 or within the unit's interbeds. This unit is not as laterally continuous as are Units 1, 2, and 4 and tends to pinch out in areas resulting in windows that interconnect Unit 2 with Unit 4.*

- *Unit 4: Unit 4 is dominated by poorly graded to well graded sands and silty sand with interbedded 1 to 2-foot-thick layers of clayey sand. This unit is first encountered at a depth of 55 feet to 65 feet bgs and extends below the water table to at least 265 feet bgs. Occasional 1 to 3 foot thick discontinuous layers of silty sand and clayey sand occur throughout the unit. Heaving sands are encountered below the water table throughout the unit starting at approximately 110 feet bgs.*

2.2.3 Site Hydrogeology

As presented in Sections 2.2 and 2.3 of GER's report (GER, 2020), the Gage Aquifer is present at a depth of approximately 90 feet bgs with a thickness of approximately 100 feet in the vicinity of Property 2 and is comprised primarily of sand. A perched water layer was reported by GER at a depth of approximately 60 feet bgs in the vicinity of the EA Properties, with the static water table being encountered at a depth of approximately 90 feet bgs. Groundwater generally flows to the southeast beneath Property 2. As presented in GER's *Second Semi-Annual 2020 Groundwater Monitoring Report*, dated February 18, 2021 (GER, 2021), groundwater elevations observed in the Hi-Shear groundwater monitoring well network have been steadily increasing since at least 2007, with average groundwater elevations increasing by approximately one foot per year since 2014.

2.3 HISTORICAL SITE ASSESSMENT SUMMARY

Stantec understands that multiple rounds of soil, groundwater, and soil vapor assessment have been performed on the Hi-Shear and EA Properties (including Property 2) by Hi-Shear's consultants. Reports documenting these assessment activities are available on the State Water Resources Control Board's online GeoTracker database page for SCP No. 0218 (https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL204231523). The most recent report documenting environmental assessment activities at Property 2 and the surrounding parcels is GER's *Soil, Soil Vapor, and Groundwater Evaluation Delineation Module III – Interim Report* (GER, 2020). A copy of a figure depicting the sample locations, as well as tables summarizing the collected analytical data are attached in Appendix B. The

following summarizes key findings of GER as they relate to Property 2 (determined to be vapor probe locations VP-31, VP-105, and VP-133):

- To date, no investigations have identified VOCs in soil samples beneath Property 2 that indicate an on-site VOC source. As identified in GER's *Soil, Soil Vapor, and Groundwater Evaluation Delineation Module III – Interim Report* (GER, 2020) – the highest concentrations of tetrachloroethene (PCE) and trichloroethene (TCE) in on-site soil are 0.010 milligrams per kilogram (mg/kg) and 0.013 mg/kg, respectively (both of which are below applicable commercial/industrial screening criteria). In contrast, PCE and TCE concentrations in soil beneath the adjacent upgradient Hi-Shear property have been detected at concentrations as high as 1,600 mg/kg and 5,500 mg/kg, respectively (in HS3 at 50 feet bgs), as documented in Camp Dresser & McKee Inc.'s *Report of Subsurface Soil Investigation at Hi-Shear Torrance Facility*, dated May 15, 1991. Overall, the observed increasing concentration trend in soil vapor with depth, a general absence of VOCs in shallow soil beneath Property 2 and known sources/releases of PCE (and other VOCs) at the adjacent/upgradient Hi-Shear property suggest that VOC impacts beneath Property 2 (and the EA Properties, more generally) are the result of releases that have occurred at off-site locations. Potential off-site sources include not just the adjacent Hi-Shear property, but also the Torrance Airport. No significant detections of PCE, TCE, or other chlorinated solvents were identified in collected soil samples that would suggest a release on Property 2.

- Based on data presented in GER's *Second Semi-Annual 2020 Groundwater Monitoring Report* (GER, 2021), one groundwater monitoring well (MW-12) is located on the western corner of Property 2. During a December 26, 2019 groundwater sampling event, the sample collected from MW-12 contained PCE and TCE at concentrations of 100 micrograms per liter (µg/L) and 10,000 µg/L, respectively. It should be noted that well MW-12 is screened from approximately 88 to 113 feet bgs. During the December 26, 2019 groundwater sampling event, GER observed the groundwater gradient to be towards the southeast (away from the Hi-Shear property and towards Properties 1, 2 and 3, which would be directly downgradient of GER's reported groundwater gradient and flow direction).

- When reviewing data collected from Property 2, the highest detected concentrations of PCE and TCE in soil vapor were observed by GER in VP-133 at concentrations of 250,000 micrograms per cubic meter (µg/m^3 [at a depth of 65 feet bgs]) and 280,000 µg/m^3 (at a depth of 85 feet bgs), respectively. A review of data presented in GER's report indicates that most of the collected soil vapor data on the EA Properties (including Property 2) exhibits increasing concentrations with depth suggests that the observed impacts are volatilizing from groundwater and/or the deep smear-zone as a result of fluctuations in groundwater levels over time.

In summary, based on the available data, the elevated vapor-phase concentrations of VOCs historically detected beneath Property 2 appear to represent volatilization of contaminants in groundwater, or in smear-zone soils resulting from impacted groundwater (adsorption to soils), rather than from a release at Property 2.

2.4 STUDY AREA DESCRIPTION

Property 2 is improved with a large slab-on-grade building occupying a footprint of approximately 50,000 square feet. The building was reportedly constructed in the 1950s and is currently configured primarily for manufacturing. Adjoining the manufacturing space is a two-story building space comprised of office suites. There is an additional external office suite along the north side of the Subject Property adjacent to Skypark Drive that was observed by Stantec to be undergoing remodeling (new paint, flooring, etc.). The building is constructed over a slab-on-grade foundation and is bordered by asphalt or concrete pavement on all sides.

3.0 VAPOR INTRUSION STUDY

Based on previous work performed by others, the primary constituents of potential concern (COPCs) for this investigation, as defined and determined by GER's *Soil, Soil Vapor, and Groundwater Evaluation Delineation Module III – Interim Report* (GER, 2020) are PCE, TCE cis-1,2 dichloroethene (DCE), trans-1,2 DCE, 1,1-DCE, and vinyl chloride.

As presented in Table 2 of GER's 2020 report, vapor phase COPC concentrations increase with depth to groundwater, with the highest observed concentrations being detected in soil vapor samples collected directly above groundwater; suggesting COPCs are partitioning from groundwater and/or smear-zone soils (interval of groundwater fluctuations within the lower vadose zone). Similarly, soil analytical data presented in Table 3 of GER's 2020 report (presented in Appendix B) suggests that the bulk of COPCs adsorbed to soil beneath Property 2 are constrained to smear-zone soils. Accordingly, the secondary source mass of the COPCs detected in groundwater and/or smear-zone soils are likely to be the primary source of COPCs in vapor phase below the Subject Property building.

Of the identified COPCs, PCE and TCE are the primary risk-driver based on prevalence, concentration, and toxicity. While Stantec's Work Plan (Stantec, 2020) proposed limiting the analysis of the collected samples to the identified COPCs, in the LARWQCB's October 6, 2020 response letter, the LARWQCB requested that the collected samples be analyzed for the full suite of VOCs.

The following sub-sections describe the general methodology implemented for the VI Study along with a summary of deviations from the approved scope of work.

3.1 PRE-FIELD ACTIVITIES

3.1.1 Site Access & Notification

Access agreements were requested from Robinson and DASCO Engineering Corporation (DASCO [as a Subject Property tenant]) to perform the proposed scope of work. Advanced scheduling and notification of sampling in and on private property was provided to the owners and occupants of buildings. Advanced work notice was provided to the LARWQCB on February 2, 2021 prior to commencing with the sampling activities.

3.1.2 Health and Safety Plan

A Site-specific Health and Safety Plan (HASP) was prepared as required by the State of California General Industry Safety Order 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120. The HASP outlined potential hazards to Stantec personnel and subcontractors during planned field activities. The HASP also included required personal protective equipment to be worn by field personnel for each task. A copy of the HASP was available on-site during all field activities.

3.1.3 Utility Locating

A private utility locating subcontractor was contracted to evaluate each of the proposed sub-slab sampling locations for subsurface features that may potentially interfere with the proposed sampling activities.

3.2 VISUAL BUILDING SURVEY

A building inspection was conducted on January 27, 2021 to assess building construction characteristics, heating, ventilation, and air conditioning system characteristics, building use and occupancy, chemical use and storage areas, and floor penetrations and other preferential pathways for vapor intrusion. A copy of the completed inspection survey is included in Appendix C. The building survey was utilized to facilitate the final selection of co-located indoor air and sub-slab sampling locations, as depicted on Figure 3.

3.3 VAPOR INTRUSION SAMPLING

Ambient air, indoor air, and sub-slab vapor samples were collected to assess indoor air concentrations and evaluate whether VOCs appear to be intruding into the Subject Property building from the subsurface. Three outdoor ambient air (AA-1 through AA-3) samples, and ten co-located indoor air and sub-slab vapor sampling points (IA-1/VP-1 through IA-10/VP-10) were collected at the locations depicted on Figure 3. The ambient air and indoor air samples were collected on February 5, 2021, while the sub-slab vapor samples were collected on February 11, 2021.

3.3.1 General Techniques and Methods

3.3.1.1 Sample Collection Documentation

Field Forms

Several forms and the daily field log/report comprise the field record for the VI Study. Examples of various types of field forms include:

- Daily field notes;
- HASP tailgate safety meeting;
- Chain-of-custody forms; and
- Sample collections logs.

Field Notes

Field notes were collected during the field work and contains pertinent information regarding the Subject Property conditions and sampling procedures implemented during the field VI Study. Information contained in the field notes included the date, time, location, and unique sample identifier, media sampled and description, analyses to be performed, observations, and any identified deviations from the Work Plan and the rationale for the deviation.

Chain-of-Custody

Chain-of-custody (COC) procedures were used to document the custody, control, transfer, and requested analysis of the samples collected as part of the VI Study. The COC included sample identifiers, media sampled, container type and volume, and analyses to be performed. Signatures (relinquished by, received by) on the COC forms were made in ink and included the date and time of signature. COCs accompanied samples from the time of collection to delivery to the laboratory. Copies of the COC forms are included with the laboratory reports in Appendix D.

Sample Identification

Samples were labeled, with the unique sample identifier, sample time and sample date recorded on the label. Samples were generally identified with the following sample ID nomenclature:

- The sample media or type is indicated by the first two letters as follows:
    - AA: Ambient Air
    - IA: Indoor Air
    - VP: Sub-slab vapor
- The "####" represents a sequential numerical identifier for the Subject Property location number, based on the sample locations.

Photographic Documentation

As permitted, sampling locations were documented with photographs. The photographic record of the sampling event allows positive identification of the sampling point and shows existing conditions of the area before drilling activities and following the installation of the sub-slab vapor probes.

3.3.1.2 Equipment Decontamination

Single-use, disposable vapor sample tubing was used at each sampling point to avoid cross contamination. All sample containers and additional sampling apparatus were provided by the laboratory subcontractor and certified clean for the COPCs of this VI Study, and not reused between sampling point or mobilization prior to returning to the laboratory for cleaning.

3.3.2 Ambient Air Sampling

To understand ambient conditions, and for comparative purposes, Stantec's subcontractor (H&P Mobile Geochemistry [H&P]) collected three outdoor ambient air samples during this VI Study (Figure 3) to ensure samples were collected both upwind and downwind of the Subject Property building. To maintain quality assurance, the ambient air samples were collected at the same time as the indoor air samples and were outfitted with flow-controllers set at the same flow rate as the corresponding indoor air samples (8-hours for commercial sampling). The ambient air sampling containers' inlet tubing were located within the typical breathing zone height for adults, approximately 4 to 5 ft above the ground. The initial vacuum of each canister was checked to assure that the canister had not leaked during transport from the laboratory

to the sampling location. Throughout the sampling period, Stantec staff, or Stantec's air sampling subcontractor, periodically checked the vacuum gauges on the canisters to ensure that the canisters were sampling at the appropriate rate and operating properly. At the end of sample collection, the canister valve was closed before the vacuum reached zero vacuum. All samples were subsequently analyzed by H&P at their laboratory.

3.3.3 Indoor Air Sampling

Indoor air samples were collected from 10 locations within the Subject Property building to evaluate the VI exposure pathway. Due to the Subject Property being an active manufacturing facility, it was not possible to remove the chemicals utilized as part of the Subject Property's ongoing manufacturing and general business activities from the building prior to sampling.

In addition to the 10 indoor air samples, one replicate sample was also collected. The sample locations are shown as the locations depicted on Figure 3. Indoor air samples were collected over an 8-hour sampling period utilizing laboratory provided, individually certified 6-liter Summa® canisters. Indoor air sampling container inlets were located within the typical breathing zone, approximately 4 ft above the ground level flooring. The initial vacuum of each canister was checked to assure that the canister had not leaked during transport from the laboratory to the sampling location. During the sampling period, Stantec staff periodically checked, as allowed by the tenant, the vacuum readings of the canisters to ensure that the canisters were operating properly and sampling at the appropriate rate. Upon arrival at H&P's laboratory, H&P staff confirmed that the canisters still exhibited a vacuum. Since none of the sample canisters had final vacuum readings that had reached zero, all submitted samples were subsequently analyzed by H&P.

3.3.4 Sub-Slab Vapor Probe Installation and Sampling

Ten (10) semi-permanent sub-slab vapor probes were installed on the ground level of the Subject Property building by H&P. The locations of the probes were selected based on building features, flooring material, and observations and input from facility personnel during a Site walk with the property owner and building tenant representatives in advance of the installation. Initial soil vapor probe installation and subsequent sample collection activities were performed after the indoor air sampling had been completed to avoid the potential for introducing subsurface vapors into indoor air samples.

3.3.4.1 Probe Installation

Sub-slab vapor probes were installed at 10 locations using the following process:

- An approximate 1.5-inch (in) diameter hole was advanced approximately two inches into the building concrete slab. A smaller-diameter hole (approximately 5/8-in diameter) was advanced in the center of the 1.5-in hole and through the building concrete slab, and approximately three inches into underlying soils using a rotary hammer drill. Dust and loose cuttings generated during drilling were collected with a portable vacuum, and care was taken to avoid applying suction directly to the hole.

- Sub-slab vapor probes were constructed using Vapor Pins® manufactured by Cox-Colvin. The probe assembly was fitted with the manufacturer-supplied silicon sleeve to ensure an air-tight fit and then driven into the 5/8-in diameter hole in the concrete slab and inset into the 1.5-in-diameter hole. After installation and following sampling, a silicone cap was placed on the sub-slab sampling port to keep sub-slab vapors from migrating into the indoor air, and a plastic cover cap was placed over the sample port to protect from foot traffic, where applicable.

3.3.4.2 Leak Testing

A shut-in test was conducted on the purge syringe by closing all the sampling valves and applying a vacuum of 100 inches-of-water-column using a 60-milliliter (mL) gas-tight syringe to verify that no leaks in the sample train were present. Shut-in tests were also conducted on the 450 mL sample canisters to assure that there were not leaks in the sampling train connections.

During sampling leak checks were performed by placing a helium shroud around the sampling setup to test for leaks in the sampling train. A helium tracer gas was contained in the shroud placed over the sub-slab vapor probe location and the entire sample train. The sampling shroud was equipped with a port to facilitate the purging of the sub-slab vapor probe and the use of an in-line helium detector, a tracer gas injection port, and a switch to facilitate actuating the sampling train's three-way valve located inside the sampling shroud. Inside the sampling shroud was the sub-slab vapor probe, the sampling train (including the Summa® canister) and a helium detector. Helium was then injected into the sampling shroud and the measured concentration on the in-shroud helium detector was recorded.

3.3.4.3 Purging

After the sampling equipment passed the shut-in test, the probe was purged to remove internal air from the sample train (tubing and sub-slab implant only). Three internal volumes were purged from each sampling probe using a 60-mL gas-tight syringe. The flow rate during purging was approximately equivalent to the flow rate during sampling at not more than 200 mL/minute (approximately 20 seconds to fill a 60-mL syringe), which is set by the flow controller provided by the laboratory. Each probe was sampled immediately following purging.

3.3.4.4 Sample Collection

Initial sub-slab vapor sampling was performed following a minimum equilibration period of 2 hours. A total of 10 sub-slab vapor samples (plus one replicate) were collected during this VI Study. The sub-slab vapor samples were collected using batch-certified 450-mL Summa® canisters, which were obtained from the project laboratory with the proper vacuum of approximately 30 inches-of-mercury. Teflon® or nylon tubing was used to connect the sub-slab sampling port to the sample containers fitted with flow regulators restricting flow to less than 200 mL/minute and an in-line particulate filter. The canister valve was closed when the laboratory-supplied analog vacuum gauge registered zero.

3.4 LABORATORY TESTING AND DATA VALIDATION

VI Study ambient air, indoor air, and sub-slab vapor samples were submitted to H&P under COC for analysis of full-scan VOCs by United States Environmental Protection Agency (USEPA) Test Method TO-15. Collected sub-slab vapor samples were also analyzed for helium by ASTM International (ASTM) Test Method D1945M. H&P reviewed the reported sample collection details, reported analytical results, and reported quality control results (including equipment blanks and laboratory control samples); the results of which indicate that no data were rejected, and the data are suitable for their intended purpose. Refer to Appendix D for additional data validation information.

3.5 DEVIATIONS FROM THE WORK PLAN

The following is a summary of Work Plan deviations and modifications related to the VI Study:

- **Sample Location Addendum:** Due to difficulties in securing access, and the desire to complete the work as soon as possible, the results of the building survey and chemical use inventory, along with selected indoor and outdoor air sample locations were not presented in an addendum submitted to the LARWQCB prior to collecting the indoor air and sub-slab vapor samples. Stantec staff involved in the project's management met with the field staff to discuss the findings of the visual building survey, and considered ongoing business operations when selecting the sampling locations. Accordingly, the deviation is not expected to have a significant impact on the findings from the completed scope of work.

- **Differential Pressure Monitoring:** The Work Plan proposed the collection of differential pressures during the completion of the indoor air sampling activities. Due to the desire to avoid the potential for introducing subsurface vapors into indoor air samples, the sub-slab vapor pins were not installed until after the indoor air sampling work was completed. It should be noted that none of the sub-slab vapor pins exhibited differing vapor probe pressures.

- **Sub-Slab Vapor Sampling:** The Work Plan proposed the use of a water dam at each sub-slab vapor sampling location as an additional measure to seal and isolate the sub-slab environment from the indoor air environment. In some instances, the water dam would have interfered with sampling. Therefore, all samples were collected utilizing a helium shroud without the extra precaution of a water dam.

There were no other significant deviations from the Work Plan.

4.0 DISCUSSION OF RESULTS

The following sections summarize the results of the building survey and the subsequent ambient air, indoor air, and sub-slab vapor sampling activities. The Subject Property building is utilized for commercial purposes; accordingly, screening levels established for commercial/industrial land use were utilized in this VI study.

Screening levels are conservative guidelines used as initial screening tools to assess chemical vapor concentrations below and inside buildings. When a chemical is found at a level above its screening level it does not necessarily indicate that VI is occurring or that there is a significant health risk. However, it does suggest further investigation may be beneficial, as the COPCs are also found in many industrial and household products including, cleaners, adhesives, glues, etc.

These screening criteria are derived from the following sources:

- The USEPA, Region 9, Regional Screening Levels (RSLs) for Indoor Air for Target Cancer Risk (TR) = 1E-06, Target Hazard Quotient (THQ) = 1.0, and industrial land use (November 2020); and
- California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO), Human Health Risk Assessment Note Number 3, Modified Screening Levels (SLs) for Indoor Air (June 2020) for commercial/industrial land use.

Sub-slab vapor COPC results were compared to the RSLs and SLs referenced above utilizing a conservative attenuation factor of 0.03 (Table 2). In instances in which a COPC has both an RSL and an SL, the COPC concentrations were compared to the more conservative SL. Similarly, in instances in which a COPC had both carcinogenic and non-carcinogenic RSLs and/or SLs, the more conservative value was utilized.

4.1 BUILDING SURVEY

Stantec performed an initial non-invasive visual inspection of the Subject Property building on January 27, 2021. The main building space, with a footprint of approximately 190 feet by 210 feet, is primarily utilized for manufacturing purposes. Stantec staff noted that the area's ventilation was provided by 14 passive roof vents and the flooring consisted of bare concrete that exhibited significant staining. The presumed source of the staining is cutting oils that would be utilized by the drills, lathes, and computer numerical control (CNC) machines occupying the manufacturing space. A smaller manufacturing space located in the northern portion of the Subject Property (see sampling locations IA-9/VP-9 on Figure 3) was observed to have concrete flooring that exhibited less staining than the main manufacturing space.

Adjacent to the manufacturing space is a two-story building space comprised of office suites. There was an additional external single-story office suite along the north side of the Subject Property adjacent to

Skypark Drive that was observed to be undergoing remodeling (new paint, flooring, etc.). Stantec subsequently collected indoor air and sub-slab vapor samples from within the ground floor of the two-story building space and adjacent single-story office suite. The office space was the only portion of the building observed to have a forced air heating and cooling system.

During the January 27, 2021 visual building survey, Stantec staff did not have the opportunity to inspect any chemical storage areas. Based on a 2018 Chemical Use and Storage Questionnaire prepared for the Subject Property by DASCO, there is a chemical storage lockup cabinet in the northwest corner of the smaller manufacturing space (to the northwest of IA-9/VP-9), and an outdoor hazardous material and hazardous waste storage area located by the western corner of the Subject Property building (near ambient air sample location AA-2). While no large slab penetrations (those greater than 1-foot across) were identified, a determination could not be made as to whether smaller slab penetrations were present.

A copy of the completed visual building survey form is included in Appendix C.

4.2 AMBIENT AIR

Ambient air samples were collected during the indoor air sampling event for comparative purposes to indoor air quality. As presented on Table 1, 11 COPCs reported above laboratory reporting limits (LRLs) in ambient air: 2-butanone, benzene, carbon tetrachloride, chloromethane, ethylbenzene, methylene chloride, toluene, trichlorofluoromethane, 1,2,4-trimethylbenzene, m,p-xylene, and o-xylene. Only benzene was reported in the ambient air samples above the SL (0.42 $\mu g/m^3$) at concentrations ranging from 0.65 $\mu g/m^3$ to 0.91 $\mu g/m^3$. Ambient air sampling locations are presented on Figure 3. A copy of the associated laboratory analytical report and H&P's sample collection field notes are included in Appendix D.

4.3 INDOOR AIR

As presented on Table 1, 18 COPCs were reported above LRLs in indoor air: 2-butanone, benzene, carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, ethylbenzene, 4-methyl-2-pentanone, methylene chloride, styrene, PCE, TCE, toluene, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, 1,2,4-trimethylbenzene, m,p-xylene, and o-xylene. Of these COPCs, only three were detected in one or more indoor air samples at concentrations exceeding their respective RSLs and/or SLs.

- **Benzene** was reported above its SL of 0.42 $\mu g/m^3$ in all indoor air samples at concentrations ranging from 0.61 $\mu g/m^3$ to 0.94 $\mu g/m^3$, but was consistent with outdoor ambient air sample concentrations which ranged from 0.65 $\mu g/m^3$ to 0.91 $\mu g/m^3$. None of the concentrations exceed the RSL of 1.6 $\mu g/m^3$. Stantec concludes that indoor benzene concentrations are reflective of ambient air conditions and not the result of VI.
- **Chloroform** was reported in indoor air samples IA-6 through IA-8 and IA-10 at concentrations (0.59 $\mu g/m^3$ to 1.7 $\mu g/m^3$) above the RSL of 0.53 $\mu g/m^3$ (no SL has been established for chloroform); however, the lack of detected chloroform concentrations in the collocated sub-slab

samples (VP-6 through VP-8 and VP-10) suggest the observed indoor air concentrations are the result of sources other than VI.

- **Ethylbenzene** was reported in one sample (IA-7) at a concentration (8.3 μg/m^3) that exceeded the respective RSL of 4.9 μg/m^3 (no SL has been established for ethylbenzene); however, the absence of detected ethylbenzene concentrations in the collocated sub-slab sample (VP-7) suggest the observed indoor air concentration at this location is due to sources other than VI.

Indoor air data is summarized on Table 1, while a copy of the associated laboratory analytical report and H&P's sample collection field notes are included in Appendix D.

4.4 SUB-SLAB VAPOR

As presented on Table 2, 12 COPCs were reported above LRLs in sub-slab vapor samples: 2-butanone, benzene, chloroform, 1,1-dichloroethene, 4-methyl-2-pentanone, PCE, TCE, toluene, 1,1,1-trichloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, and m,p-xylene. However, only three of the COPCs were reported above their respective RSLs and/or SLs (utilizing an attenuation factor of 0.03).

- **Chloroform** was reported in sub-slab samples VP-3 and VP-4 at 18 μg/m^3 and 200 μg/m^3, respectively, equaling or exceeding the RSL of 18 μg/m^3. However, chloroform was not detected above the LRL in the collocated indoor air samples (IA-3 and IA-4). Chloroform concentrations observed at VP-3 and VP-4 do not appear to be contributing to indoor air.

- **PCE** was reported in all of the collected sub-slab vapor samples at concentrations ranging from 69 μg/m^3 to 44,000 μg/m^3, which are above the SL of 67 μg/m^3 in all collected samples; however, PCE was only detected in three indoor air samples (IA-7, IA-8, and IA-10), and the reported indoor air concentrations in all instances were below the established SL of 2.0 μg/m^3. Furthermore, the collocated indoor air sample (IA-3) from the location with the highest reported sub-slab vapor PCE concentration (44,000 μg/m^3 in VP-3) did not contain PCE at a concentration at or above the LRL of 0.69 μg/m^3. Based on the collected data, if VI is occurring, PCE concentrations in indoor air do not exceed the chronic SL.

- **TCE** was reported in the collected sub-slab vapor samples at concentrations ranging from 16 μg/m^3 to 20,000 μg/m^3. The reported concentrations exceeded the RSL of 67 μg/m^3 in sub-slab vapor samples collected from VP-1 through VP-4, VP-7, and VP-10; however, TCE was not detected above the RSL of 3.0 μg/m^3 in any of the samples. Based on the collected data, if VI is occurring TCE concentrations in indoor air do not exceed the chronic RSL.

Sub-slab vapor data is summarized on Table 2, while a copy of the associated laboratory analytical report and H&P's sample collection field notes are included in Appendix D.

The ratio of indoor air to sub-slab PCE concentrations ranged from 0.0008 to 0.0023 with a mean ratio of 0.0077. Similarly, the ratio of indoor air to sub-slab TCE concentrations ranged from 0.0022 to 0.0042.

Based on the observed indoor air to sub-slab PCE and TCE ratios, the use of an attenuation factor of 0.03 to assess sub-slab screening levels is extremely conservative.

Based on the collected data, if VI is occurring, PCE and TCE concentrations in indoor air do not exceed the chronic RSLs and/or SLs.

Additionally, as part of the sampling process, H&P staff affixed analog pressure gauges to each of the installed sub-slab vapor probes to evaluate the building space for potential differences in sub-slab vapor pressures; in all instances, the sub-slab vapor probes registered a probe pressure of “zero”, suggesting differential pressure conditions in sub-slab vapor beneath the Subject Property building are not present.

5.0 CONCLUSIONS

The VI Study was conducted pursuant to the investigative order and was performed to evaluate whether the presence of subsurface VOCs potentially posed a vapor intrusion risk to Site workers. Based on a review of the collected ambient air, indoor air, and sub-slab vapor samples, Stantec's conclusions regarding the COPCs identified in one or more samples at concentrations exceeding their respective RSLs and/or SLs are as follows:

- Benzene is present in indoor and outdoor ambient air at similar concentrations. A comparison of indoor air data to ambient air data suggests the benzene concentrations observed in indoor air are not originating subsurface vapors, or from the indoor building space, but rather are reflective of background ambient air conditions in the vicinity of the Subject Property.

- Ethylbenzene is present in one indoor air sample (IA-7) at a concentration exceeding the RSL; however, ethylbenzene was not detected in any of the sub-slab samples above the laboratory reporting limit (<4.4 $\mu g/m^3$). The ethylbenzene concentrations in indoor air do not appear to be originating from sub-slab vapor.

- Chloroform is present in four indoor air samples (IA-6, IA-7, IA-8, and IA-10) above the RSLs. However, the collocated sub-slab samples did not report chloroform above the laboratory reporting limit (<4.9 $\mu g/m^3$). Chloroform was reported above the RSL at two of the sub-slab vapor samples (VP-3 and VP-4); however, chloroform was not reported above the laboratory reporting limit in either of the collocated indoor air samples. Chloroform does not appear to be originating from vapor intrusion but likely from other sources. Chloroform is known to be an artifact in water treatment and may be associated with treated water sources.

- PCE was reported above the SL at all 10 sub-slab vapor sample locations; however, PCE was not detected in any of the indoor samples at concentrations exceeding the SL. Further, PCE was not detected above the laboratory reporting limit at 7 of the 10 indoor air sample locations. Of the sample locations in which PCE was detected in the collected indoor samples, the ratio of indoor air to sub-slab PCE concentrations ranged from 0.0008 to 0.0203, with a mean ratio of 0.0077.

- TCE was reported above the RSL in 7 of the 10 sub-slab sample locations; however, TCE was not detected in any of the indoor samples at concentrations exceeding the RSL. Further, TCE was not detected above the laboratory reporting limit at 8 of the 10 indoor air sample locations. Of the sample locations in which TCE was detected in the collected indoor samples (IA-7 and IA-10), the ratio of indoor air to sub-slab TCE concentrations were 0.0042 and 0.0022, respectively.

Based on evaluation of the data, this study did not find evidence of a significant vapor intrusion pathway of concern. The primary COPCs for vapor intrusion are PCE and TCE. However, neither of these was reported above the chronic SL or RSL. Stantec opines that vapor intrusion is not a pathway of exposure of concern for other COPCs detected in indoor air, and that most of these COPCs are likely the result of sources other than intrusion from the subsurface.

6.0 REFERENCES

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TABLES

TABLE 1
Summary of Indoor Air & Ambient Air Sample Analytical Results
Property 2
24701, 24707, and 24747 Crenshaw Boulevard, Torrance, California 90505

Sample Location	Date Sampled	2-Butanone	Benzene	Carbon tetrachloride	Chloroform	Chloromethane	1,4-Dichlorobenzene	1,1-Dichloroethene	Ethylbenzene	4-Methyl-2-pentanone	Methylene chloride	Styrene	PCE	TCE	Toluene	1,1,1-Trichloroethane	Trichlorofluoromethane	1,1,2-Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	m,p-Xylene	o-Xylene	All Other VOCs
		(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)
EPA Reg. 9 RSL (Industrial)[1]		22,000	1.6	2.0	0.53	390	1.1	880	4.9	13,000	1,200	4,400	47	3.0	22,000	22,000	--	22,000	260	440	440	various
DTSC SL (Commercial/Industrial)[2]		--	0.42	2.0	--	--	--	310	--	--	12	3,900	2.0	--	1,300	4,400	5,300	--	--	--	--	various
Indoor Air Samples																						
IA-1	02/05/21	74	**0.71**	0.51	<0.25	1.2	<0.61	<0.40	<0.44	<0.83	0.56	<0.43	<0.69	<0.55	1.8	<0.55	0.96	<0.77	0.85	1.5	0.62	ND
IA-2	02/05/21	86	**0.74**	0.51	0.30	1.1	<0.61	<0.40	<0.44	<0.83	0.56	<0.43	<0.69	<0.55	1.3	<0.55	0.96	<0.77	0.55	1.2	0.48	ND
IA-2-DUP	02/05/21	85	**0.61**	0.51	0.30	1.0	<0.61	<0.40	<0.44	<0.83	0.49	<0.43	<0.69	<0.55	1.3	<0.55	1.1	<0.77	0.65	1.2	0.53	ND
IA-3	02/05/21	32	**0.65**	0.51	<0.25	1.3	<0.61	<0.40	<0.44	<0.83	0.56	<0.43	<0.69	<0.55	1.4	<0.55	1.2	<0.77	0.70	1.2	0.53	ND
IA-4	02/05/21	52	**0.68**	0.51	<0.25	1.2	<0.61	<0.40	<0.44	<0.83	0.56	<0.43	<0.69	<0.55	1.4	<0.55	0.90	<0.77	0.65	1.4	0.53	ND
IA-5	02/05/21	45	**0.61**	0.45	<0.25	0.95	<0.61	<0.40	<0.44	<0.83	0.53	<0.43	<0.69	<0.55	1.2	<0.55	0.85	<0.77	0.55	1.1	0.44	ND
IA-6	02/05/21	120	**0.68**	0.51	**1.7**	1.1	<0.61	<0.40	0.57	<0.83	0.56	<0.43	<0.69	<0.55	1.9	<0.55	0.85	<0.77	0.60	2.2	0.79	ND
IA-7	02/05/21	300	**0.81**	0.57	**0.59**	1.2	<0.61	<0.40	**8.3**	4.1	0.60	<0.43	1.7	1.3	5.1	<0.55	1.2	0.77	0.65	30	8.2	ND
IA-8	02/05/21	220	**0.91**	0.64	**0.69**	1.5	<1.2	<0.80	<0.88	<1.7	0.99	<0.86	1.4	<1.1	3.5	<1.1	1.4	<1.5	<1.0	3.3	1.3	ND
IA-9	02/05/21	390	**0.81**	0.57	0.44	1.2	<0.61	<0.40	1.5	1.2	0.74	<0.43	<0.69	<0.55	3.5	<0.55	1.2	0.93	1.2	5.7	1.9	ND
IA-10	02/05/21	230	**0.94**	0.64	**0.89**	1.5	0.79	<0.40	0.97	0.83	0.95	0.91	1.9	0.71	4.2	<0.55	1.4	1.6	0.95	3.6	1.3	ND
Ambient Air Samples																						
AA-1	02/05/21	1.2	**0.81**	0.51	<0.25	1.2	<0.61	<0.40	<0.44	<0.83	0.71	<0.43	<0.69	<0.55	1.6	<0.55	1.2	<0.77	0.50	1.1	0.44	ND
AA-2	02/05/21	3.9	**0.65**	0.51	<0.25	1.2	<0.61	<0.40	<0.44	<0.83	0.53	<0.43	<0.69	<0.55	1.5	<0.55	0.96	<0.77	0.60	1.1	0.48	ND
AA-3	02/05/21	5.9	**0.91**	0.51	<0.25	1.2	<0.61	<0.40	0.48	<0.83	0.63	<0.43	<0.69	<0.55	2.1	<0.55	1.2	<0.77	0.70	1.7	0.70	ND

Notes:
Analysis for full-scan VOCs by USEPA Test Method TO-15.
PCE = Tetrachloroethene
TCE = Trichloroethene
VOC = Volatile organic compound
ug/m^3 = Micrograms per cubic meter
ND = Not detected at or above the laboratory's reporting limit
DUP = Duplicate sample
< = Analyte not reported at or above the laboratory's reporting limit
-- = Not analyzed or not applicable
Bold concentrations represent detections exceeding established screening level.

1 = US Environmental Protection Agency Region 9 Regional Screening Levels for Indoor Air (TR=1E-06, HQ=1), November 2020; the lower of the carcinogenic and non-carcinogenic values is listed for each analyte.
2 = Department of Toxic Substances Control HERO Note 3, Table 1 - DTSC Recommended Screening Levels for Indoor Air, June 2020; the lower of the carcinogenic and non-carcinogenic values is listed for each analyte.

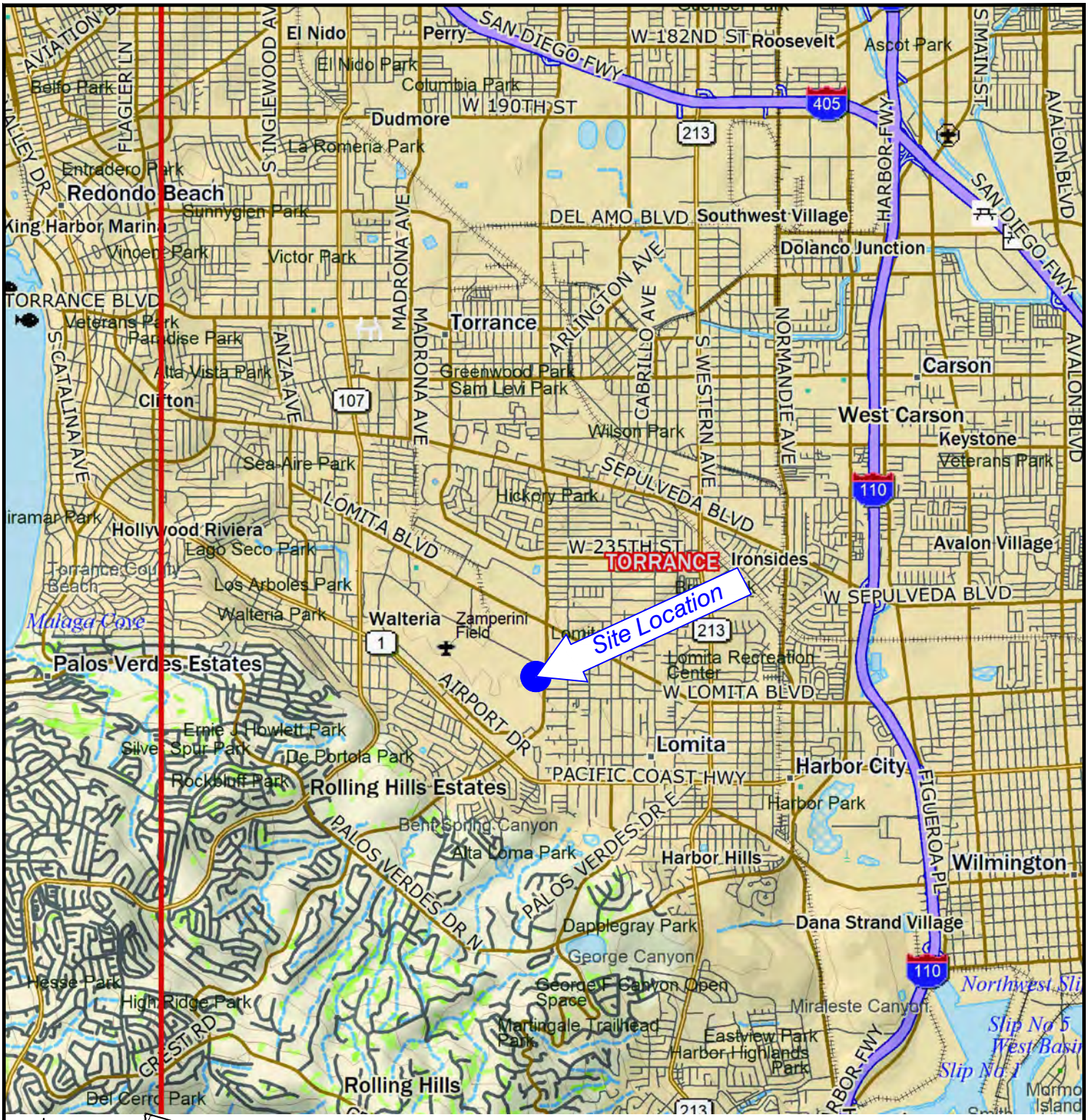
TABLE 2
Summary of Sub-Slab Vapor Sample Analytical Results
Property 2
24701, 24707, and 24747 Crenshaw Boulevard, Torrance, California 90505

Sample Location	Date Sampled	2-Butanone	Benzene	Carbon tetrachloride	Chloroform	Chloromethane	1,4-Dichlorobenzene	1,1-Dichloroethene	Ethylbenzene	4-Methyl-2-pentanone	Methylene chloride	Styrene	PCE	TCE	Toluene	1,1,1-Trichloroethane	Trichlorofluoromethane	1,1,2-Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	m,p-Xylene	o-Xylene	All Other VOCs	Helium (LCC)
		(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(%)
EPA Reg. 9 RSL (Industrial)[1]		733,000	53	67	18	13,000	37	29,333	163	433,000	40,000	146,666	1,570	100	733,000	733,000	--	733,000	8,670	14,700	14,700	various	--
DTSC SL (Commercial/Industrial)[2]		--	14	67	--	--	--	10,333	--	--	400	130,000	67	--	43,333	146,666	176,667	--	--	--	--	various	--
VP-1	02/11/21	82	<3.2	<6.4	<4.9	<2.1	<12	230	<4.4	<8.3	<3.5	<4.3	**2,700**	**900**	10	33	18	450	<5.0	<8.8	<4.4	ND	<0.10
VP-2	02/11/21	<30	<3.2	<6.4	8.6	<2.1	<12	140	<4.4	<8.3	<3.5	<4.3	**1,800**	**910**	6.0	6.6	<5.6	190	<5.0	<8.8	<4.4	ND	0.13
VP-2-DUP	02/11/21	<30	<3.2	<6.4	8.7	<2.1	<12	130	<4.4	<8.3	<3.5	<4.3	**1,900**	**960**	6.3	6.6	<5.6	170	<5.0	<8.8	<4.4	ND	<0.10
VP-3	02/11/21	<30	13	<6.4	**18**	<2.1	<12	360	<4.4	<8.3	<3.5	<4.3	**44,000**	**20,000**	6.8	35	11	290	<5.0	<8.8	<4.4	ND	0.13
VP-4	02/11/21	75	6.8	<6.4	**200**	<2.1	<12	230	<4.4	<8.3	<3.5	<4.3	**7,300**	**4,600**	29	7.8	8.3	560	<5.0	15	<4.4	ND	0.16
VP-5	02/11/21	45	3.2	<6.4	<4.9	<2.1	<12	<4.0	<4.4	<8.3	<3.5	<4.3	**2,400**	35	20	43	12	1,000	<5.0	12	<4.4	ND	<0.10
VP-6	02/11/21	42	<3.2	<6.4	<4.9	<2.1	<12	<4.0	<4.4	<8.3	<3.5	<4.3	**900**	64	9.5	<5.5	<5.6	250	<5.0	<8.8	<4.4	ND	<0.10
VP-7	02/11/21	47	<3.2	<6.4	<4.9	<2.1	<12	100	<4.4	<8.3	<3.5	<4.3	**2,200**	**310**	10	<5.5	13	920	<5.0	9.5	<4.4	ND	<0.10
VP-8	02/11/21	50	<3.2	<6.4	<4.9	<2.1	<12	<4.1	<4.4	<8.3	<3.5	<4.3	**69**	16	6.6	<5.5	<5.6	25	<5.0	<8.8	<4.4	ND	<0.10
VP-9	02/11/21	150	<3.2	<6.4	<4.9	<2.1	<12	<4.0	<4.4	9.0	<3.5	<4.3	**1,200**	61	16	<5.5	10	1,500	<5.0	12	<4.4	ND	<0.10
VP-10	02/11/21	87	<3.2	<6.4	<4.9	<2.1	<12	<4.0	<4.4	<8.3	<3.5	<4.3	**1,000**	**320**	10	<5.5	<5.6	500	<5.0	9.1	<4.4	ND	<0.10

Notes:
Analysis for full-scan VOCs by USEPA Test Method TO-15, and for helium by ASTM Method D1945M.
PCE = Tetrachloroethene
TCE = Trichloroethene
VOC = Volatile organic compound
LCC = Leak-check compound
ug/m^3 = Micrograms per cubic meter
ND = Not detected at or above the laboratory's reporting limit
DUP = Duplicate sample
< = Analyte not reported at or above the laboratory's reporting limit
-- = Not analyzed or not applicable
Bold concentrations represent detections exceeding established screening level.

1 = US Environmental Protection Agency Region 9 Regional Screening Levels for Indoor Air (TR=1E-06, HQ=1), November 2020 with an attenuation factor of 0.03 was utilized to calculate the listed values. The lower of the carcinogenic and non-carcinogenic values was utilized for each analyte.
2 = Department of Toxic Substances Control HERO Note 3, Table 1 - DTSC Recommended Screening Levels for Indoor Air, June 2020 with an attenuation factor of 0.03 was utilized to calculate the listed values. The lower of the carcinogenic and non-carcinogenic values was utilized for each analyte.

FIGURES



REFERENCE: DELORME TOPO MAP, TORRANCE, CALIFORNIA

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

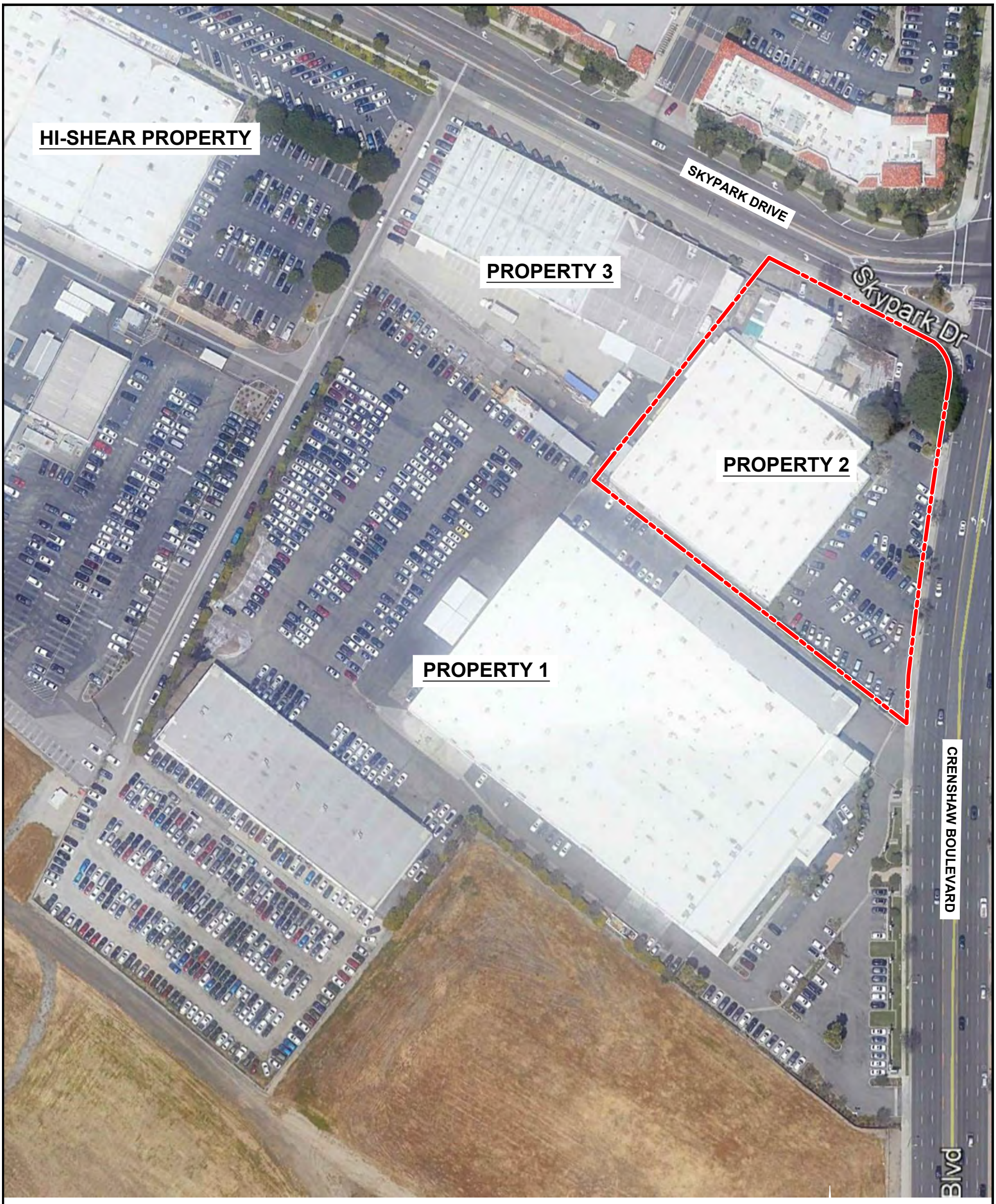
EAST ADJACENT PROPERTIES - PROPERTY 2
24701, 24707, AND 24747 CRENSHAW BOULEVARD
TORRANCE, CALIFORNIA

SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804849	STA	BC	BC	08/10/20

FILEPATH:C:\Users\SAguinaldo\Desktop_WORKING FILES_2020\TO\185804849\FIG 2_185804849_SITE PLAN_A.dwg | Layout Tab: 1P2 | Drafter: SAguinaldo | Aug 12, 2020 at 18:50



LEGEND:

PROPERTY BOUNDARY

N

0 100 200

APPROXIMATE SCALE IN FEET

REFERENCE: GOOGLE EARTH PRO AND STANTEC FIELD NOTES.

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

EAST ADJACENT PROPERTIES
PROPERTY 2
24701, 24707, AND 24747
CRENSHAW BOULEVARD
TORRANCE, CALIFORNIA

SITE PLAN

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804849	STA	BC	BC	08/10/20

FILEPATH:C:\Users\SAguinaldo\Desktop_WORKING FILES_2020\TO\185804849\FIG 2_185804849_SITE PLAN.dwg | Layout Tab: 2P2 | Drafter: SAguinaldo | Aug 13, 2020 at 11:48

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- INDOOR AIR/SUB-SLAB VAPOR SAMPLE LOCATION
- AMBIENT AIR SAMPLING LOCATION

N

0 50 100

APPROXIMATE SCALE IN FEET

NOTE:
INTERIOR FLOOR PLAN DIGITIZED USING A SITE PLAN PROVIDED BY DASCO ENGINEERING CORPORATION.

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

FOR:
EAST ADJACENT PROPERTIES
PROPERTY 2
24701, 24707, AND 24747
CRENSHAW BOULEVARD
TORRANCE, CALIFORNIA

VAPOR INTRUSION
STUDY SAMPLE
LOCATIONS

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804979	JBL	BC	LS	02/12/21

FILEPATH:E:\(M) CADD (US0332-PPFSS01)\00_OTHER OFFICES\Thousand_Oaks, CA\185804979\Site-Maps.dwg|JLieberman|Feb 22, 2021 at 14:44|Layout: Layout1

APPENDIX A

LARWQCB Correspondences

INVESTIGATIVE ORDER NO. R4-2020-0035

CALIFORNIA WATER CODE SECTION 13267 ORDER

ORDER TO PROVIDE A TECHNICAL WORK PLAN TO ASSESS VAPOR INTRUSION RISK IN INDOOR AIR AND TO IMPLEMENT A VAPOR INTRUSION RESPONSE PLAN

DIRECTED TO
THE CITY OF TORRANCE
MAGELLAN AEROSPACE, MIDDLETOWN, INC. (FORMERLY KNOWN AS AERONCA, INC., FORMERLY KNOWN AS AERONCA MANUFACTURING CORPORATION)
EXCELLON INDUSTRIES, INC. (ALSO KNOWN AS EXCELLON AUTOMATION COMPANY AND NOW KNOWN AS EXCELLON TECHNOLOGIES, LLC)
ESTERLINE TECHNOLOGIES CORPORATION
ROBINSON HELICOPTER COMPANY
DASCO ENGINEERING CORPORATION
HI-SHEAR CORPORATION (ALSO KNOWN AS LISI AEROSPACE)

SKYPARK COMMERCIAL PROPERTIES

NORTHEAST PORTION OF CITY OF TORRANCE PARCEL
ASSESSOR PARCEL NO. 7377-006-906
24751 CRENSHAW BOULEVARD, TORRANCE, CALIFORNIA
24777 CRENSHAW BOULEVARD, TORRANCE, CALIFORNIA
24707 CRENSHAW BOULEVARD, TORRANCE, CALIFORNIA
24747 CRENSHAW BOULEVARD, TORRANCE, CALIFORNIA
24701 CRENSHAW BOULEVARD, TORRANCE, CALIFORNIA
2530 SKYPARK DRIVE, TORRANCE, CALIFORNIA
2540 SKYPARK DRIVE, TORRANCE, CALIFORNIA
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA

(SCP NO. 1499)

ON
MAY 12, 2020

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) makes the following findings and issues this Order pursuant to California Water Code (CWC) section 13267 requiring the City of Torrance; Magellan Aerospace, Middletown, Inc. (formerly known as Aeronca, Inc. formerly known as Aeronca Manufacturing Corporation); Excellon Industries, Inc. (also known as Excellon Automation Company and now known as Excellon Technologies, LLC); Esterline Technologies Corporation; Robinson Helicopter Company; Dasco Engineering Corporation; and Hi-Shear Corporation (also known as Lisi Aerospace) (hereinafter collectively referred to as Parties) to assess the vapor intrusion risk to indoor air at the properties located at 24751, 24777, 24707, 24747, and 24701 Crenshaw Boulevard and 2530, 2540, and 2600 Skypark Drive in the City of Torrance (hereinafter collectively referred to as the "Site") and properties off-Site. Volatile organic compounds (VOCs), primarily trichloroethene (TCE) and tetrachloroethene (PCE), are among the chemicals of concern.

1. The Site is approximately 27 acres in size and is located on the northeast portion of assessor parcel number (APN) 7377-006-906 in Torrance, California shown in Attachment 1. The Site envelops existing Regional Board cases Hi-Shear Corporation (Hi-Shear; Global ID No. SL204231523; Site ID No. 2042300; File SCP No. 0218) and East Adjacent Properties of Hi-Shear Corporation (EA Properties; Global ID No. T10000013835; File SCP No. 1481). The entire parcel APN 7377-006-906, including the Site, is owned by the City of Torrance and has been primarily leased to aviation or aerospace-related companies since 1954.

2. The following is a summary of the current and former occupants and the historical property use for the Hi-Shear Corporation property and the EA Properties.

    A. Hi-Shear Corporation (Hi-Shear) is located at 2600 Skypark Drive and occupies the western half of the Site. Hi-Shear has been an occupant as early as 1954. Activities performed on the property include the manufacture, production, assembly and cleaning of fasteners for the aerospace industry. Wastes generated as part of the activities contained VOCs, primarily TCE and PCE. Maximum historical soil PCE and TCE concentrations detected beneath the Hi-Shear property are 3,200,000 micrograms per kilogram (µg/kg) and 7,200,000 µg/kg, respectively.

    B. EA Properties are located at 24751, 24777, 24707, 24747, and 24701 Crenshaw Boulevard, and at 2530 and 2540 Skypark Drive and occupy the eastern half of the Site. EA Properties consist of Property 1 (24751 and 24777 Crenshaw Boulevard), Property 2 (24707, 24747 and 24701 Crenshaw Boulevard), and Property 3 (2530 and 2540 Skypark Drive).

        i. Property 1 occupants include: Aeronca, Inc. (a manufacturer of aircraft, missiles and their components from 1954 to 1987), Excellon

Industries, Inc., an Esterline Company, also known as Excellon Automation Company (a manufacturer of printed circuit board fabrication equipment from 1979 to 2003), and South Bay Lexus (a vehicle dealership from 2006 to present). Wastes generated as part of the historical occupants' activities contained PCE, 1,1,1-trichloroethane (1,1,1-TCA), trichlorotrifluoroethane, alkaline and solvent mixtures, waste oil mixtures, and organic waste mixtures.

ii. Property 2 occupants include: Aeronca, Inc. (a manufacturer of aircraft, missiles and their components from 1966 to 1973), Robinson Helicopter Company (a manufacturer of rotorcraft and related components from 1978 to 1996), and Dasco Engineering Corporation (a manufacturer of precision mechanical aircraft and space components from 1995 to present).

iii. Property 3 has been occupied by Robinson Helicopter from 1978 to present. The occupant has used the property to operate paint spray booths and store solvents.

Maximum historical soil PCE and TCE concentrations detected beneath the EA Properties are 3,390 µg/kg and 223 µg/kg, respectively.

3. Under the oversight of this Regional Board, Hi-Shear has been implementing onsite and offsite investigations and interim mitigation measures under a Water Code section 13267 Order dated October 29, 2009. The most recent investigations completed are documented in the technical reports titled, "Soil, Soil Vapor, and Groundwater Delineation – Module I" (Module I) dated March 13, 2020 and "Soil, Soil Vapor, and Groundwater Delineation Report – Module II" (Module II) dated March 16, 2020, prepared by Genesis Engineering and Redevelopment, Inc. (Genesis) on behalf of Hi-Shear. Additionally, on March 20, 2020, Genesis submitted the "Vapor Intrusion Response Plan" (VIRP), which proposes response actions to assess vapor intrusion risk based on the VOCs detected in soil vapor in the residential and commercial areas located east of Crenshaw Boulevard. A summary of Module I, Module II and the VIRP is provided below.

A. Module I documented the results of the soil vapor assessment east of Crenshaw Boulevard (i.e., off-Site into the City of Torrance and City of Lomita neighborhoods). Soil vapor sample results indicated elevated concentrations of VOCs in the area between Crenshaw Boulevard and Pennsylvania Avenue, and the area between Amsler Avenue and in the vicinity of 247th Street. Additional delineation and the implementation of the VIRP are warranted to fully assess and address potential threats to human health and the environment.

B. Module II documented the results of the soil and soil vapor assessment on the Hi-Shear property. Soil vapor sample results indicated elevated concentrations of VOCs on the eastern and western portions of the Hi-Shear property, converging towards the center of the property. The restart of the soil vapor extraction system and an indoor air assessment are warranted.

C. The VIRP provides the criteria and sequence for response actions and proposed further soil vapor, sub-slab vapor, and indoor air sampling for VOCs at residential and commercial properties east of Crenshaw Boulevard. The Regional Board is in the process of reviewing the VIRP.

4. On January 13, 2020, the Regional Board issued a Water Code section 13267 Order to the City of Torrance; Magellan Aerospace, Middletown, Inc. (formerly known as Aeronca, Inc. formerly known as Aeronca Manufacturing Corporation); Excellon Industries, Inc. (also known as Excellon Automation Company and now known as Excellon Technologies, LLC); Esterline Technologies Corporation; Robinson Helicopter Company; and Dasco Engineering Corporation for the EA Properties to submit a technical work plan for the complete delineation of the vertical and lateral extent of VOCs impacts to soil, soil vapor, and groundwater onsite and offsite. This Order discusses the relationship of each of the parties to the various properties and identifies reasons why each is a suspected discharger. To date, the EA Properties have not submitted the required work plan which was due on April 3, 2020.

5. On March 6, 2020, the Regional Board issued an amendment to a Water Code section 13267 Order, requiring Hi-Shear to submit an indoor air sampling and analysis plan to assess the vapor intrusion risk for occupants on the Hi-Shear property. On April 28, 2020, the Regional Board received the “Onsite Indoor Assessment Workplan.”

6. California Water Code (CWC) section 13267, subdivision (b)(1) states, in part:

> “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person

with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports."

7. The Regional Board has evidence in the case file for the Site and data collected as part of Hi-Shear's ongoing investigations and interim mitigation measures indicating that there was a discharge of waste at or from the Site that continues to migrate unabated. The discharge of waste poses a potential vapor intrusion risk to on-Site and off-Site occupants that has not been assessed or evaluated. For the purposes of the findings of this Order, pertinent historical report(s) and the most recently available soil vapor data at depths of 5 and 15 feet below ground surface (ft-bgs) from the Module I and Module II reports were reviewed. These depths are consistent with the "Public Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion" (Supplemental Guidance), prepared by Department of Toxic Substances Control (DTSC) and California Water Resources Control Boards dated February 2020. For ease of reference, the soil vapor data is summarized below by the following locations – Hi-Shear, EA Properties, and off-Site in the City of Torrance and City of Lomita neighborhoods.

   A. Hi-Shear

      i. Maximum soil vapor PCE and TCE concentrations at 5 ft-bgs are 2,850,000 micrograms per cubic meter (µg/m^3) and 684,000 µg/m^3, respectively. Soil vapor samples were collected and analyzed in October and November 2019.

      ii. Maximum soil vapor PCE and TCE concentrations at 15 ft-bgs are 290,000 µg/m^3 and 36,100 µg/m^3, respectively. Soil vapor samples were collected and analyzed in October and November 2019.

      iii. These soil vapor concentrations exceed the commercial soil vapor screening level of 67 µg/m^3 for PCE and 100 µg/m^3 for TCE.

   B. EA Properties

      i. Maximum soil vapor PCE and TCE, concentrations at 5 ft-bgs are 17,700,000 µg/m^3 and 791,000 µg/m^3 respectively. Soil vapor samples were collected in August 2014 and June 2016.

      ii. Maximum soil vapor PCE and TCE concentrations at 15 ft-bgs are 27,900,000 µg/m^3 and 899,000 µg/m^3, respectively. Soil vapor samples were collected and analyzed in August 2014 and June 2016.

      iii. These soil vapor concentrations exceed the commercial soil vapor screening level of 67 µg/m^3 for PCE and 100 µg/m^3 for TCE.

C. Off-Site in the City of Torrance and City of Lomita neighborhoods

i. Maximum soil vapor PCE and TCE concentrations at 5 ft-bgs are 6,070 µg/m^3 and 30,000 µg/m^3, respectively. Soil vapor samples were collected and analyzed in January 2020.

ii. Maximum soil vapor PCE and TCE concentrations at 15 ft-bgs are 7,710 µg/m^3 and 152,000 µg/m^3, respectively. Soil vapor samples were collected and analyzed in January 2020.

iii. These soil vapor concentrations exceed both the commercial and residential soil vapor screening levels of 67 µg/m^3 and 15 µg/m^3 for PCE, 100 µg/m^3 and 16 µg/m^3 for TCE, respectively

Based on the available case files, the recent soil vapor PCE and TCE concentrations summarized above and the soil concentrations detected on the Hi-Shear and EA Properties, the VOC soil vapor plumes beneath the Hi-Shear property and EA Properties are commingled. The recent soil vapor concentrations demonstrate that the plumes have migrated off-Site and east of Crenshaw Boulevard.

8. This Order identifies the above suspected dischargers of waste identified in paragraphs one (1) through five (5) and seven (7), because, as described above these entities own(ed) and/or operated the properties on which the waste is or has been discharged and continues to migrate unabated in soil and soil vapor, which is a potential threat to human health.

9. This Order requires the Parties to prepare and submit a technical work plan to completely assess the vapor intrusion risk to indoor air on-Site and off-Site and to implement the VIRP or a substantively similar plan that will assess the vapor intrusion threat to human health and the environment in areas impacted above DTSC Human Health Risk Assessment (HHRA) Note No.3 screening levels or USEPA Regional Screening Levels (RSLs). You are expected to submit a complete work plan as required by this Order. The Regional Board may reject the report if it is deemed incomplete and/or require revisions to the report under this Order.

10. The burdens, including costs, of these reports bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The information is necessary to adequately determine the extent of discharges of wastes at and from the Site to assure adequate cleanup of the Site, as contaminants at the Site may pose a threat to public health and the environment. The technical reports required by this Order are needed by the Regional Board in order to assess the vapor intrusion risk for occupants on-Site and off-Site resulting

from the discharges of waste, specifically VOCs and identify appropriate on-Site and off-Site interim mitigation measures.

11. The issuance of this Order is an enforcement action by a regulatory agency and is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15321, subdivision (a)(2). This Order requires submittal of technical reports, and may require the submittal of including workplans. The scope of activities required to prepare the reports required by this Order are not yet known. It is unlikely that compliance with this Order, including implementation of the work plans, could result in anything more than minor physical changes to the environment. If the implementation of this Order may result in significant impacts on the environment, the appropriate lead agency will address the CEQA requirements prior to approval of any work plan.

12. Any person aggrieved by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

THEREFORE, IT IS HEREBY ORDERED that the City of Torrance; Magellan Aerospace, Middletown, Inc. (formerly known as Aeronca, Inc. formerly known as Aeronca Manufacturing Corporation); Excellon Industries, Inc. (also known as Excellon Automation Company and now known as Excellon Technologies, LLC); Esterline Technologies Corporation; Robinson Helicopter Company; Dasco Engineering Corporation; and Hi-Shear Corporation (also known as Lisi Aerospace) pursuant to Water Code section 13267, subdivision (b), are required to submit the following:

1. By **July 10, 2020**, a technical work plan, acceptable to the Executive Officer, to assess the vapor intrusion risk to indoor air at the EA Properties and off-Site. This shall contain but is not limited to items (A) through (D) listed below.

    A. The technical work plan shall be developed in accordance with the Supplemental Guidance; DTSC's "Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air," dated October 2011; DTSC's "Vapor Intrusion Mitigation Advisory," (VIMA) dated October 2011; and other applicable existing California guidance.

B. A description of the proposed soil vapor, sub-slab vapor and/or indoor air sampling locations. The soil vapor, sub-slab vapor and/or indoor air sampling locations shall consider the available environmental data collected as part of Hi-Shear's onsite and offsite investigations and interim mitigation measures. The sampling locations shall be presented on an accurately scaled map.

C. Soil vapor, sub-slab vapor and/or indoor air samples shall be analyzed for VOCs and laboratory reporting limit concentrations shall be sufficiently low to identify risks such that all known or suspected carcinogens are included in the risk assessment. Vapor concentration units shall be reported in $\mu g/m^3$.

D. A timeline for implementing the work plan. Completion of all indoor air sampling contemplated by the work plan shall occur no later than **October 30, 2020**. This Order contemplates one technical work plan for the EA Properties and the soil vapor plume identified east of Crenshaw Boulevard.

2. On March 20, 2020, Genesis submitted the VIRP on behalf of Hi-Shear. The Parties must implement the VIRP (with any conditions of approval by the Regional Board) or a substantively similar work plan designed to assess the vapor intrusion threat to human health and the environment for buildings east of Crenshaw Boulevard, in areas exceeding DTSC HHRA Note No. 3 screening levels or USEPA RSLs. The Parties must complete the VIRP (as conditionally approved) or any substantively similar plan (reviewed and approved by the Regional Board) no later than **October 15, 2020**.

3. The Regional Board recommends the Parties work together to implement the work plan in Item 1 and VIRP (or equivalent plan) to avoid duplication of efforts. If the results of the work plan implementation indicate unacceptable risk to building occupants, the Regional Board further recommends that the Parties develop and implement mitigation measures as soon as possible to reduce vapor intrusion. Refer to the DTSC's VIMA for examples of various mitigation measures.

4. This Order shall not supersede, rescind, nor amend requirements set forth in the existing Hi-Shear Corporation (Global ID No. SL204231523; Site ID No. 2042300; File SCP No. 0218) and East Adjacent Properties of Hi-Shear Corporation (Global ID No. T10000013835; File SCP No. 1481) orders originally dated October 29, 2009 and January 13, 2020, respectively. All aspects of those orders, and their amendments thereto, remain in full force and effect.

5. The above items shall be submitted to:

   Kevin Lin, P.E.
   Los Angeles Regional Water Quality Control Board
   320 West 4th Street, Suite 200

Los Angeles, CA 90013
Phone: (213) 576-6781
Email: kevin.lin@waterboards.ca.gov

6. Pursuant to Water Code section 13268, subdivision (a), any person who fails to submit reports in accordance with the Order is guilty of a misdemeanor. Pursuant to Water Code section 13268, subdivision (b)(1), failure to submit the required technical report described above by the specified due date(s) may result in the imposition of administrative civil liability by the Regional Board in an amount up to one thousand dollars ($1,000) per day for each day the technical report is not received after the above due date. These civil liabilities may be assessed by the Regional Board for failure to comply, beginning with the date that the violations first occurred, and without further warning.

7. The State Water Resources Control Board adopted regulations (California Code of Regulations, title 23, sections 3891 et seq.) requiring the electronic submittals of information (ESI) for all site cleanup programs, starting January 1, 2005. Currently, all of the information on electronic submittals and GeoTracker contacts can be found on the Internet at the following link: http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml.

   To comply with the above referenced regulation, you are required to upload all technical reports, documents, and well data to GeoTracker by the due dates specified in the Regional Board letters and orders issued to you or for the Site. However, the Regional Board may request that you submit hard copies of selected documents and data in addition to electronic submittal of information to GeoTracker. For your convenience, the GeoTracker Global ID for this site is T10000014333.

8. The Regional Board, under the authority given by Water Code section 13267, subdivision (b)(1), requires you to include a perjury statement in all reports as required by this Order. The perjury statement shall be signed by senior authorized representatives of the City of Torrance; Magellan Aerospace, Middletown, Inc. (formerly known as Aeronca, Inc. formerly known as Aeronca Manufacturing Corporation); Excellon Industries, Inc. (also known as Excellon Automation Company and now known as Excellon Technologies, LLC); Esterline Technologies Corporation; Robinson Helicopter Company; Dasco Engineering Corporation; and Hi-Shear Corporation [also known as Lisi Aerospace] (not by a consultant). The perjury statement shall be in the following format:

   > "I, [NAME], certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information

submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

SO ORDERED.

_____ May 12, 2020
Renee Purdy Date
Executive Officer

Attachment:
Attachment 1 – Site

ATTACHMENT 1 – SITE

October 6, 2020

CT Corporation System
c/o Esterline Technologies Corporation
500 – 108th Avenue NE,
Suite 1500
Bellevue, Washington 98004

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0511

Mr. Richard Doyle
Magellan Aerospace, Middletown, Inc.
2320 Wedekind Drive
Middletown, Ohio 45042-2390

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0528

Mr. Tim A. Goetz
Robinson Helicopter Company
2901 Airport Drive
Torrance, California 90505

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0535

Mr. Ward Olson
Dasco Engineering Corporation
24747 Crenshaw Boulevard
Torrance, California 90505

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0542

Mr. Bailey Su
Excellon Technologies, LLC
20001 S. Rancho Way
Rancho Dominguez, California 90220

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0559

Mr. Christian Darville
Lisi Aerospace/Hi-Shear Corporation
2600 Skypark Drive
Torrance, California 90509-2975

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0566

Mr. Leroy Jackson
City of Torrance
3031 Torrance Boulevard
Torrance, California 90503

Certified Mail
Return Receipt Requested
Claim No. 7018 2290 0001 8504 0573

SUBJECT: REVIEW OF TECHNICAL WORK PLANS PURSUANT TO CALIFORNIA WATER CODE SECTION 13267

SITE: SKYPARK COMMERCIAL PROPERTIES (ASSESSOR PARCEL NO. 7377-006-906), 24701 – 24777 CRENSHAW BOULEVARD AND 2530, 2540, AND 2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA (SCP NO. 1499)

Dear Mr. Doyle, Goetz, Olson, Darville, Su, Jackson, and Representative of Esterline Technologies Corporation:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) staff have reviewed the following work plans:

- "Indoor Air Sampling Work Plan – 24751/24777 Crenshaw Boulevard, Torrance, California," dated August 25, 2020, prepared by Ramboll US Corporation (Ramboll) on behalf of Esterline Technologies Corporation (Esterline) for Property 1.

- "Indoor Air Sampling Workplan – 24751-24777 Crenshaw Boulevard, Torrance, California," dated August 25, 2020, prepared by MK Environmental Consulting, Inc. (MK) on behalf of Magellan, Middletown, Inc. (Middletown) for Property 1

- "Vapor Intrusion Investigation Workplan – East Adjacent Properties – Property 2," dated August 25, 2020, prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Middletown and Robinson Helicopter (RHC) for Property 2 (Property 2 Work Plan).

- "Vapor Intrusion Investigation Workplan – East Adjacent Properties – Property 3," dated August 25, 2020, prepared by Stantec on behalf of RHC for Property 3 (Property 3 Work Plan).

The two work plans prepared by Ramboll and MK for Property 1 are nearly identical; therefore, for the purposes of this letter those two work plans will discussed as one (Property 1 Work Plan).

Each work plan was accompanied with cover letters prepared by Cermak & Inglin, LLP (C&I; for Property 1), Lamb and Kawakami, LLP (L&K; for Property 1), and Gordon Rees Scully Mansukhani, LLP (GRSM; for Property 2 and Property 3). C&I and L&K noted that

in submitting the work plans, Esterline and Middletown are not agreeing to implement the work.

Brief summaries of the work plans followed by Regional Board comments and requirements are included below.

SUMMARY OF PROPERTY 1 WORK PLAN

The Property 1 Work Plan proposed the following:

1. Collect up to six indoor air samples in six-liter Summa canisters over an 8-hour period with 1 duplicate sample

2. Collect three outdoor ambient air samples in six-liter Summa canisters over an 8-hour period

3. Install up to six semi-permanent sub-slab soil vapor probes using Cox-Colvin Vapor Pin. Sub-slab soil vapor samples will be collected in Summa canisters collocated with each of the indoor air sample locations

4. Analyze soil vapor samples using USEPA Method TO-15 for volatile organic compounds – tetrachloroethylene (PCE); trichloroethene (TCE); 1,1-dichloroethene (1,1 DCE); and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)

SUMMARY OF PROPERTY 2 WORK PLAN

The Property 2 Work Plan proposed the following:

1. Collect up to 10 indoor air samples (approximately one for every 5,000 square feet of occupied interior building space) in 6-liter Summa cannisters over an 8- or 10-hour period with 1 duplicate sample.

2. Collect 3 outdoor air samples around the exterior of the buildings with 1 duplicate sample.

3. Install sub-slab vapor monitoring probes using Vapor Pin (or equivalent) with sampling ports collocated with each of the indoor air sample locations. Sub-slab soil vapor samples will be collected in Summa cannisters.

4. Monitor the sampling period with differential pressure meters to assess the role of HVAC operations and building stack effect on vapor migration potential.

5. Analyze samples using USEPA Method TO-15 for the compounds of concern (COCs) – PCE; TCE; and their degradation products cis-1,2 dichloroethene (cis-1,2 DCE); trans-1,2 dichloroethene (trans-1,2 DCE); 1,1 DCE; and vinyl chloride.

6. Compare indoor air, outdoor air, and sub-slab vapor concentrations to the June 2020 update to Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3.

SUMMARY OF PROPERTY 3 WORK PLAN

The Property 3 Work Plan proposed the following:

1. Collect up to 8 indoor air samples (approximately one for every 5,000 square feet of occupied interior building space) in 6-liter Summa cannisters over an 8- or 10-hour period with 1 duplicate sample.

2. Collect 3 outdoor air samples around the exterior of the building with 1 duplicate sample.

3. Install sub-slab vapor monitoring probes using Vapor Pin (or equivalent) with sampling ports collocated with each of the indoor air sample locations. Sub-slab soil vapor samples will be collected in Summa cannisters.

4. Monitor the sampling period with differential pressure meters to assess the role of HVAC operations and building stack effect on vapor migration potential.

5. Analyze samples using USEPA Method TO-15 for the COCs – PCE; TCE; and their degradation products cis-1,2 DCE; trans-1,2 DCE; 1,1 DCE; and vinyl chloride.

6. Compare indoor air, outdoor air, and sub-slab vapor concentrations to the June 2020 update to HERO HHRA Note 3.

REGIONAL BOARD COMMENTS AND REQUIREMENTS

The work plans are approved with the following comments and requirements:

1. The work plans must be conducted in accordance with the methodology outlined in the Department of Toxic Substances Control (DTSC) Vapor Intrusion Guidance titled “Final – Guidance for the Evaluation and Mitigation of subsurface Vapor Intrusion to Indoor Air” (DTSC October 2011), and the “Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion”, prepared by DTSC and California Water Resources Control Boards, dated February 14, 2020.

2. Property 1 Work Plan

    a. The footprint of the showroom is approximately 40,000 square feet. Consistent with the Property 2 Work Plan and Property 3 Work Plan, eight indoor air samples (approximately one for every 5,000 square feet of occupied interior building space) paired and collocated with sub-slab soil vapor samples, with one duplicate, should be collected within the footprint of the showroom.

b. The footprint of the existing service portion of the building is approximately 65,000 square feet. Consistent with the Property 2 Work Plan and Property 3 Work Plan, 13 indoor air samples (approximately one for every 5,000 square feet of occupied interior building space) paired and collocated with sub-slab soil vapor samples, with one duplicate, should be collected within the footprint of the existing service portion of the building.

c. Although currently unoccupied, the second smaller building shall be sampled to assess and evaluate potential future occupants' risks. The footprint of the second smaller building, located southwest of the larger building on Property 1, is approximately 28,000 square feet. Consistent with the Property 2 Work Plan and Property 3 Work Plan, six indoor air samples (approximately one for every 5,000 square feet of occupied interior building space) paired and collocated with sub-slab soil vapor samples, with one duplicate, should be collected.

3. Property 2 Work Plan

   a. Consistent with the proposed criteria (one sample for every 5,000 square feet), one indoor air and a collocated sub-slab soil vapor sample located within the footprint of trapezoidal modular building along the northeast facing portion of the main building shall be collected.

4. All indoor air, ambient outdoor air, and sub-slab vapor samples shall be analyzed using USEPA Method TO-15 for the full suite of VOCs. Laboratory reporting limits for each analyte shall be sufficiently low to adequately evaluate and assess risk.

5. Indoor air, ambient outdoor air, and sub-slab vapor samples shall be evaluated in accordance with the June 2020 update to HERO HHRA Note 3 and/or the 2019 San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels.

6. Indoor air data should also be evaluated in accordance with the DTSC HERO HHRA Note 5, which identifies the EPA Region 9 Interim Indoor Air Response Action Levels for indoor air concentrations of TCE under differing exposure scenarios. If necessary, any interim measures and/or response actions should adhere to the DTSC HERO HHRA Note 5.

7. Notify the Regional Board case manager at least ten (10) working days in advance of field work.

8. Submit technical reports for the implementation of the Property 1 Work Plan, Property 2 Work Plan, and Property 3 Work Plan by **January 20, 2021**. The technical reports shall include detailed descriptions of current uses and detailed floor plans and schematics of site buildings. All indoor air, ambient outdoor air, and sub-slab vapor sample concentrations shall be reported in units of microgram per cubic meter.

The above requirement for submittal of technical reports constitutes an amendment to the requirements of the California Water Code section 13267 Order originally dated May 12, 2020. All other aspects of the Order originally dated May 12, 2020, and the amendments thereto, remain in full force and effect. The required technical reports are necessary to investigate the characteristics of and extent of the discharges of waste at the site and to evaluate cleanup alternatives. Therefore, the burden, including costs, of the reports bears a reasonable relationship to the need for the report and benefits to be obtained. Pursuant to section 13268 of the California Water Code, failure to submit the required technical report by the specified due date may result in civil liability administratively imposed by the Regional Board in an amount up to one thousand dollars ($1000) for each day each technical report is not received.

If you have any questions regarding this letter, please contact Mr. Kevin Lin at (213) 576-6781 or via email at kevin.lin@waterboards.ca.gov, or contact Ms. Jillian Ly, Unit IV Chief, at (213) 576-6664 or via email at jillian.ly@waterboards.ca.gov.

Sincerely,

R Purdy Digitally signed by R Purdy
Date: 2020.10.05 20:45:58 -07'00'
Water Boards

Renee Purdy
Executive Officer

cc:
Aram Chaparyan, City of Torrance
Travis Van Ligten, Rutan & Tucker, LLP
Richard Montevideo, Rutan & Tucker, LLP
Sonja A. Inglin, Cermak & Inglin, LLC
Patrick L. Rendon, Lamb and Kawakami, LLP
William J. Beverly, Law Offices of William J. Beverly
Brian M. Ledger, Gordon Rees Scully Mansukhani, LLP
Thomas Schmidt, Hamrick & Evans, LLP
David L. Evans, Hamrick & Evans, LLP

February 24, 2021

Mr. Aram Chaparyan
City Manager
City of Torrance
3031 Torrance Boulevard
Torrance, California 90503

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7190

Mr. Christian Darville
Lisi Aerospace/Hi-Shear Corporation
2600 Skypark Drive
Torrance, California 90509-2975

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7206

Mr. Richard Doyle
Magellan Aerospace, Middletown, Inc.
2320 Wedekind Drive
Middletown, Ohio 45042-2390

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7213

Mr. Bailey Su
Excellon Technologies, LLC
20001 S. Rancho Way
Rancho Dominguez, California 90220

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7220

CT Corporation System
c/o Esterline Technologies Corporation
500 – 108th Avenue NE,
Suite 1500
Bellevue, Washington 98004

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7237

Mr. Tim A. Goetz
Robinson Helicopter Company
2901 Airport Drive
Torrance, California 90505

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7244

Mr. Ward Olson
Dasco Engineering Corporation
24747 Crenshaw Boulevard
Torrance, California 90505

Certified Mail
Return Receipt Requested
Claim No. 7020 1290 0001 8571 7251

SUBJECT: RESPONSE TO TIME EXTENSION REQUESTS FOR SUBMITTAL OF TECHNICAL REPORTS PURSUANT TO CALIFORNIA WATER CODE SECTION 13267

SITE: SKYPARK COMMERCIAL PROPERTIES (ASSESSOR PARCEL NO. 7377-006-906), 24701 – 24777 CRENSHAW BOULEVARD AND 2530, 2540, AND 2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA (SCP NO. 1499)

Dear Mr. Chaparyan, et al.:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) staff have reviewed the following letters dated January 19, 2021:

1. "Investigative Order No R4-2020-0035/California Water Code Section 13267 Order ("Order") - Request for Extension of Deadline to Submit Technical Report for Property 1," prepared by Cermak & Inglin, LLP on behalf of Esterline Technologies Corporation for Property 1 of the referenced site (Site).

2. "Request for Extension for Vapor Intrusion Investigation Report Submittal: East Adjacent Properties – Property 2, 24701, 24707, and 24747 Crenshaw Boulevard, Torrance, CA 90505 (Investigative Order No. R4-2020-0035)," prepared by Stantec Consulting Services Inc. (Stantec) on behalf of Magellan Aerospace, Middletown, Inc. and Robinson Helicopter Company (Robinson) for Property 2 of the Site.

3. "Request for Extension for Vapor Intrusion Investigation Report Submittal: East Adjacent Properties – Property 3, 2530 and 2540 Skypark Dr., Torrance, CA 90505 (Investigative Order No. R4-2020-0035)," prepared by Stantec on behalf of Robinson for Property 3 of the Site.

The letters request an extension to submit the indoor air sampling and/or vapor intrusion investigation reports for Property 1, Property 2, and Property 3. The initial due date for the technical reports was January 20, 2021 as required in the Regional Water Board's California Water Code (CWC) Section 13267 Order amended on October 6, 2020.

The letters provide the following reasons for the extension request:

1. To allow for receipt and analysis of the analytical results of the sampling completed in early January, additional time is needed to submit the indoor air sampling report for Property 1.

2. Due to delays in negotiating and securing an access agreement and non-disclosure agreement between Robinson and DASCO (one of the Property 2 building tenants) and coordination efforts to conduct investigation at Property 2 and Property 3 concurrently, additional time is needed to submit the vapor intrusion report for Property 2 and Property 3.

After reviewing your request, additional information and file documents for this Site, the Regional Water Board has made the following determinations:

1. The Regional Water Board approves the extension request for submitting the indoor air sampling report for Property 1 from January 20, 2021 to **February 12, 2021**.

2. The Regional Water Board approves the extension request for the submittal of vapor intrusion reports for Property 2 and Property 3 from January 20, 2021 to **March 31, 2021**.

The above due date extensions for submittal of technical reports constitute an amendment to the requirements of the California Water Code section 13267 Order originally dated May 12, 2020. All other aspects of the Order originally dated May 12, 2020, and the amendments thereto, remain in full force and effect. Pursuant to section 13268 of the California Water Code, failure to submit the required technical report by the specified due date may result in civil liability administratively imposed by the Regional Water Board in an amount up to one thousand dollars ($1,000) for each day each technical report is not received.

If you have any questions regarding this letter, please contact Mr. Kevin Lin at (213) 576-6781 or via email at kevin.lin@waterboards.ca.gov, or contact Ms. Jillian Ly, Unit IV Chief, at (213) 576-6664 or via email at jillian.ly@waterboards.ca.gov.

Sincerely,

R Purdy Digitally signed by R Purdy Date: 2021.02.24 06:58:00 -08'00'

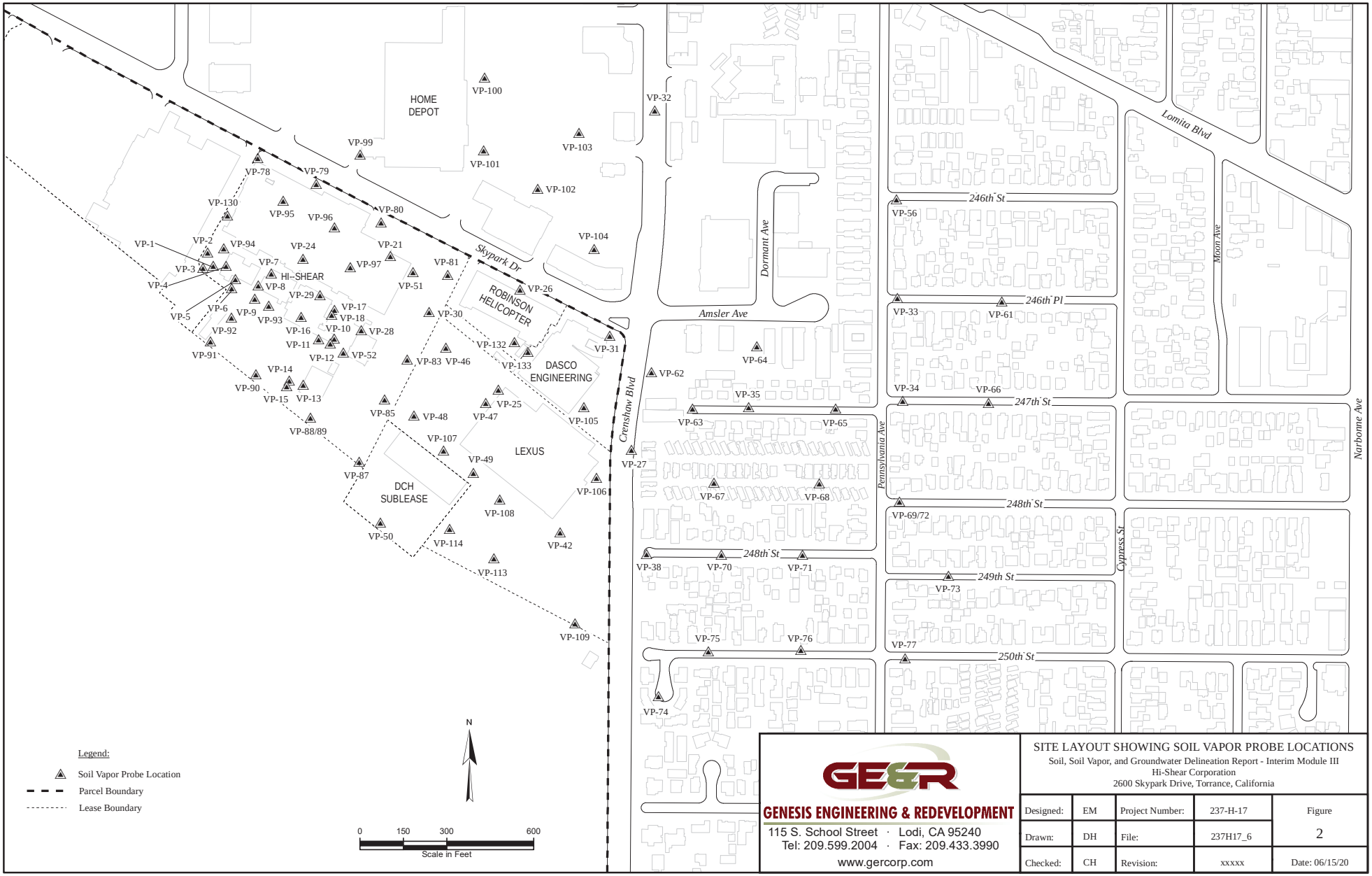
Renee Purdy
Executive Officer

cc:

Dmitriy Ginzburg, State Water Board Division of Drinking Water
Joseph Liles, Water Replenishment District
Carla Dillon, City of Lomita
Ryan Smoot, City of Lomita
Travis Van Ligten, Rutan & Tucker, LLP
Richard Montevideo, Rutan & Tucker, LLP
Sonja A. Inglin, Cermak & Inglin, LLC
Patrick L. Rendon, Lamb and Kawakami, LLP
William J. Beverly, Law Offices of William J. Beverly
Brian M. Ledger, Gordon Rees Scully Mansukhani, LLP
Thomas Schmidt, Hamrick & Evans, LLP
David L. Evans, Hamrick & Evans, LLP
Steve Van der Hoven, Genesis Engineering & Redevelopment

APPENDIX B

Historical Data



GENESIS ENGINEERING & REDEVELOPMENT
115 S. School Street · Lodi, CA 95240
Tel: 209.599.2004 · Fax: 209.433.3990
www.gercorp.com

SITE LAYOUT SHOWING SOIL VAPOR PROBE LOCATIONS

Soil, Soil Vapor, and Groundwater Delineation Report - Interim Module III
Hi-Shear Corporation
2600 Skypark Drive, Torrance, California

Designed:	EM	Project Number:	237-H-17	Figure 2
Drawn:	DH	File:	237H17_6	
Checked:	CH	Revision:	xxxxx	Date: 06/15/20

GENESIS ENGINEERING & REDEVELOPMENT

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-25	5	8/9/14	**26,200**	**7,930**	<20	<20	472	<20
		3/3/20	**34,200**	**1,560**	<20	<20	199	<20
	15	8/9/14	**18,600**	**16,000**	1,020	<20	<20	<20
		3/5/20	**89,400**	**11,400**	225	<20	169	<20
	25	8/9/14	**980,000**	**403,000**	29,200	199	**40,300**	<20
		3/3/20	NA	**132,000**	6,850	176	**24,200**	<20
		Summa	**720,000**	**140,000**	4,400	<330	**15,000**	<330
	45	8/9/14	**1,500,000**	**784,000**	40,900	31	**59,000**	**144**
		DUP	**1,540,000**	**768,000**	40,600	<20	**57,300**	**144**
		3/5/20	**543,000**	**238,000**	16,200	286	**44,300**	**36**
	55	8/9/14	**995,000**	**677,000**	28,600	709	**90,000**	<20
		3/5/20	**685,000**	**377,000**	20,400	351	7,180	**48**
	65	8/9/14	**1,270,000**	**874,000**	34,900	115	**124,000**	**208**
		3/5/20	**548,000**	**341,000**	19,600	347	7,420	**47**
	85	8/9/14	**1,140,000**	**853,000**	21,800	577	**113,000**	<20
		3/5/20	**475,000**	**321,000**	19,000	344	7,600	**49**
VP-26	5	8/9/14	**2,620**	**1,000**	<20	<20	<0.020	<20
		5/7/20	**2,700**	**60**	<31	<31	<78	<31
	15	8/9/14	**13,200**	**2,880**	<20	<20	<0.020	<20
		5/7/20	**8,900**	**490**	<34	<34	<84	<34
	25	8/9/14	**24,600**	**14,700**	43	<20	1,180	<20
		5/7/20	**37,000**	**30,000**	<3,100	<3,100	<7,800	<3,100
	45	8/9/14	**19,900**	**14,100**	<20	<20	935	<20
		5/7/20	**67,000**	**100,000**	230	20	1,400	<33
	65	8/9/14	**66,600**	**134,000**	<20	<20	2,020	<20
		5/7/20	**97,000**	**190,000**	<3,300	<3,300	1,600	<3,300
	85	8/9/14	**112,000**	**173,000**	260	<20	2,380	<20
		5/7/20	**87,000**	**330,000**	<3,600	<3,600	1,700	<3,600
		DUP	**120,000**	**450,000**	<3,200	<3,200	2,200	<8,000
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-31	5	8/9/14	**3,760**	**16,000**	<20	<20	<0.020	<20
		1/31/20	38	**<20**	<20	<20	<20	<20
		Summa	<5.2	**<5.8**	<3.5	<3.1	<3.1	<4.4
	15	8/9/14	**2,350**	**1,660**	<20	<20	<0.020	<20
		1/31/20	**1,500**	**1,440**	<20	<20	186	<20
	25	8/9/14	**3,910**	**10,900**	<20	<20	1,270	<20
		1/31/20	**3,560**	**6,260**	<20	<20	918	<20
	45	8/9/14	**10,900**	**43,600**	<20	<20	3,780	<20
		1/31/20	**14,600**	**66,400**	216	<20	5,270	<20
	65	8/9/14	**18,200**	**50,700**	95	<20	6,730	<20
		1/31/20	**25,800**	**119,000**	268	15	7,290	<20
	85	8/9/14	**22,200**	**76,900**	<20	<20	5,680	<20
		1/31/20	**33,300**	**183,000**	393	94	7,220	<20
VP-42	5	6/7/16	**53,100**	**1,510**	<8	<8	6,030	<8
		1/22/19	Not Sampled					
	15	6/7/16	**8,180**	**1,110**	<8	<8	**31,900**	<8
		1/22/19	Not Sampled					
	25	6/7/16	**13,700**	**583**	<8	<8	**71,900**	<8
		1/22/19	Not Sampled					
	45	6/7/16	**13,000**	**1,510**	<8	<8	**85,800**	<8
		1/22/19	Not Sampled					
		1/23/20	**10,200**	**377**	<20	<20	**98,101**	<21
	55	6/7/16	**3,480**	**261**	<8	<8	**97,100**	<8
		1/22/19	Not Sampled					
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-46	5	6/9/16	**18,500**	**29,600**	12,300	3,950	8,670	**413**
		1/27/20	**22,900**	**42,300**	13,100	1,920	854	**142**
		DUP	**23,700**	**41,900**	13,000	2,000	912	**131**
	15	6/9/16	**27,900**	**45,600**	11,000	5,480	7,380	**197**
		1/27/20	**24,200**	**18,600**	5,650	1,040	671	**23**
	25	5/31/16	**775,000**	**192,000**	15,300	2,530	**12,000**	**46**
		1/27/20	**94,300**	**24,900**	5,060	1,370	1,681	**31**
	45	5/31/16	**781,000**	**170,000**	14,100	2,260	**11,400**	**30**
		1/27/20	**222,000**	**71,300**	8,320	1,090	7,470	**31**
	65	5/31/16	**1,400,000**	**348,000**	17,200	1,800	**13,900**	**41**
		1/27/20	**483,000**	**170,000**	15,800	826	**13,500**	**29**
	85	5/31/16	**1,430,000**	**417,000**	13,800	1,790	6,990	**44**
		1/27/20	**494,000**	**129,000**	11,300	701	8,190	<20
VP-47	5	6/8/16	**6,420**	**4,920**	94	<8	6,450	<8
		3/3/20	**3,910**	**1,420**	<20	<20	3,400	<20
	15	6/8/16	**4,780**	**5,070**	<8	<8	9,720	<8
		3/3/20	**47,000**	**21,000**	152	22	**63,700**	<20
	25	6/8/16	**242,000**	**241,000**	8,440	154	**258,000**	**19**
		3/3/20	**593,000**	**234,000**	6,570	194	**229,000**	**32**
	45	6/8/16	**886,000**	**786,000**	19,600	827	**293,000**	**95**
		DUP	**884,000**	**773,000**	17,900	773	**276,000**	**95**
		3/4/20	**946,000**	**584,000**	21,500	432	**247,000**	**80**
	65	6/8/16	**1,180,000**	**907,000**	25,900	847	**358,000**	**113**
		3/4/20	**86,500**	**64,600**	3,180	61	**45,500**	**24**
	85	6/8/16	**1,350,000**	**1,040,000**	29,000	857	**400,000**	**114**
		3/4/20	**995,000**	**642,000**	26,600	510	**391,000**	**97**
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-48	5	6/1/16	**115,000**	**38,200**	88	<8	**204,000**	<8
		1/22/20	**8,230**	**5,840**	<20	<20	**12,300**	<20
		DUP	**7,250**	**6,000**	<20	22	**14,700**	<20
	15	6/1/16	**665,000**	**203,000**	3,000	726	**453,000**	<8
		1/22/20	**18,200**	**3,820**	136	84	**58,100**	**57**
	25	6/1/16	**927,000**	**418,000**	7,470	3,200	**1,470,000**	**80**
		1/22/20	**65,000**	**49,300**	2,000	433	**515,000**	<20
		Summa	**520,000**	**600,000**	2,900	600	**2,800,000**	**25**
	45	6/3/16	**2,170,000**	**1,080,000**	6,960	2,930	**2,360,000**	**111**
		1/22/20	**321,000**	**203,000**	4,710	1,150	**802,000**	**56**
	65	6/3/16	**8,770,000**	**1,150,000**	6,890	1,370	**3,610,000**	**120**
		1/24/20	**11,300,000**	**846,000**	6,960	1,010	**3,480,000**	**104**
		DUP	**16,000,000**	**1,160,000**	6,430	837	**3,880,000**	**95**
	85	6/3/16	**25,300,000**	**1,650,000**	8,630	1,260	**4,130,000**	**125**
		1/24/20	**23,300,000**	**1,770,000**	7,170	940	**5,350,000**	**112**
VP-49	5	6/3/16	**17,700,000**	79	957	130	**5,070,000**	**49**
		1/22/20	**593,000**	**21,700**	79	40	**1,470,000**	**70**
	15	6/7/16	**27,900,000**	**899,000**	1,400	<8	**6,990,000**	**88**
		1/22/20	**1,860,000**	**89,400**	753	137	**3,800,000**	**112**
	25	6/7/16	**11,500,000**	**729,000**	2,980	<8	**13,600,000**	**157**
		1/22/20	**5,470,000**	**237,000**	3,760	273	**9,560,000**	**171**
	45	6/7/16	**5,880,000**	**588,000**	4,380	<8	**13,300,000**	**146**
		1/22/20	**3,450,000**	**63,600**	9,880	<20	**1,300,000**	**189**
		Summa	**300,000**	**200,000**	6,900	<390	**1,600,000**	<570
	65	6/7/16	**27,700,000**	**1,010,000**	2,950	<8	**9,180,000**	**175**
		DUP	**22,000,000**	**818,000**	2,840	<8	**7,430,000**	**168**
		1/22/20	**6,440,000**	**53,400**	618	147	**453,000**	**58**
	85	6/7/16	**35,900,000**	**1,100,000**	1,800	293	**6,100,000**	**108**
		1/22/20	**8,040,000**	**212,000**	1,630	278	**2,520,000**	**146**
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-50	5	6/8/16	**36,100**	**7,140**	<0.008	<8	**278,000**	<8
		1/24/20	**5,900**	**10,100**	<20	<20	**578,000**	<20
		Summa	**7,700**	**<630**	<380	<330	**100,000**	<480
	15	6/8/16	**201,000**	**60,700**	156	<8	**4,160,000**	**35**
		1/24/20	**724,000**	**86,200**	22	46	**3,000,000**	**28**
	25	6/8/16	**834,000**	**239,000**	146	<8	**17,500,000**	**34**
		1/24/20	**3,950,000**	**338,000**	81	92	**6,650,000**	**41**
	45	6/9/16	**1,970,000**	**322,000**	358	<8	**12,500,000**	**61**
		1/24/20	**5,140,000**	**444,000**	597	246	**13,700,000**	**97**
	53	6/9/16	**4,940,000**	**893,000**	3,380	<8	**20,600,000**	**76**
		DUP	**6,060,000**	**976,000**	3,480	<8	**22,600,000**	**113**
		1/24/20	**71,500,000**	**4,100,000**	3,590	618	**86,700,000**	**301**
VP-99	5	4/22/20	<20	<20	<20	<20	<20	<20
	15	4/22/20	**125**	<20	<20	<20	<20	<20
	30	4/22/20	**296**	<20	<20	<20	<20	<20
	45	4/22/20	**256**	<20	<20	<20	<20	<20
	65	4/22/20	**486**	<20	<20	<20	<20	<20
	80	4/22/20	**471**	<20	<20	<20	<20	<20
VP-100	5	4/21/20	<20	<20	<20	<20	<20	<20
	15	4/21/20	<20	<20	<20	<20	<20	<20
	30	4/21/20	<20	<20	<20	<20	<20	<20
	45	4/21/20	<20	<20	<20	<20	<20	<20
	65	4/21/20	<20	<20	<20	<20	<20	<20
	80	4/21/20	<20	<20	<20	<20	<20	<20
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-101	5	4/22/20	<20	<20	<20	<20	<20	<20
	15	4/22/20	<20	<20	<20	<20	<20	<20
	30	4/22/20	36	<20	<20	<20	<20	<20
	45	4/22/20	**250**	**317**	<20	<20	<20	<20
		REP	**262**	**305**	<20	<20	<20	<20
	65	4/22/20	**290**	**315**	<20	<20	<20	<20
	80	4/22/20	**290**	**308**	<20	<20	<20	<20
VP-102	5	4/21/20	No Flow					
		5/7/20	32	<34	<34	<34	<85	<34
	15	4/21/20	25	<20	<20	<20	<20	<20
	30	4/21/20	**1,250**	**2,370**	<20	<20	<20	<20
	45	4/21/20	**1,460**	**2,850**	<20	<20	<20	<20
	65	4/21/20	**1,770**	**3,260**	<20	<20	<20	<20
	80	4/21/20	**1,490**	**2,670**	<20	<20	<20	<20
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-103	5	4/21/20	<20	<20	<20	<20	<20	<20
	15	4/21/20	<20	<20	<20	<20	<20	<20
	30	4/21/20	<20	<20	<20	<20	<20	<20
	45	4/21/20	<20	<20	<20	<20	<20	<20
	65	4/21/20	<20	<20	<20	<20	<20	<20
		REP	**98**	<20	<20	<20	<20	<20
	80	4/21/20	38	<20	<20	<20	<20	<20
VP-104	5	4/22/20	Tracer in Probe					
		5/7/20	**79**	**290**	<32	<32	<80	<32
	15	4/22/20	**649**	**8,110**	<20	<20	<20	<20
	30	4/22/20	**2,550**	**15,400**	<20	<20	<20	<20
	45	4/22/20	**5,160**	**32,600**	<20	<20	<20	<20
	65	4/22/20	**6,720**	**58,400**	<20	21	<20	<20
	80	4/22/20	**6,350**	**65,600**	25	<20	<20	<20
VP-105	5	12/26/19	**320**	**470**	7	<2.0	28	<1.3
	15	12/26/19	<3.4	<2.7	<2.0	<2.0	<2.0	<1.3
	30	12/26/19	**2,500**	**3,700**	22	<20	6,600	<13
	45	12/26/19	13	19	<2.0	<2.0	21	<1.3
		REP	**3,200**	**3,600**	<9.9	<9.9	3,300	<6.4
VP-106	5	3/3/20	**201**	<20	<20	<20	102	<20
	15	3/3/20	**582**	**119**	<20	<20	1,100	<20
	30	3/3/20	**1,540**	89	<20	<20	**16,900**	<20
		REP	**1550**	**111**	<20	<20	**18,800**	<20
	45	3/5/20	**2,310**	**654**	30.0	<20	**11,100**	<20
		REP	**3050**	**582**	<20	<20	**15,100**	<20
	53	3/5/20	**1,260**	**293**	<20	<20	674	<20
		REP	**9200**	**1200**	<320	<320	**13,000**	<320
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-107	5	1/28/20	**46,700**	**11,000**	<20	<20	**53,600**	<20
		DUP	**49,500**	**11,400**	<20	<20	**56,200**	<20
	15	1/28/20	**46,300**	**22,000**	108	32	**29,600**	<20
	25	1/28/20	**2,310,000**	**305,000**	2,270	425	**5,030,000**	**153**
	30	1/28/20	**1,820,000**	**325,000**	2,170	459	**5,440,000**	**143**
	45	1/28/20	**727,000**	**38,000**	1,880	456	**469,000**	**125**
	65	1/28/20	**5,490,000**	**235,000**	1,850	451	**2,890,000**	**138**
VP-108	5	1/27/20	**25,400**	**1,580**	60	<20	**134,000**	<20
		Summa	**6,400**	<590	<360	<310	**140,000**	<450
	15	1/27/20	**267,000**	**21,000**	531	41	**1,880,000**	**28**
	30	1/27/20	**10,500,000**	**120,000**	5,450	291	**9,790,000**	**258**
	40	1/27/20	**1,770,000**	**22,900**	1,440	61	**5,710,000**	**22**
	54	1/27/20	**83,500**	**2,770**	81	<20	**86,200**	<20
VP-109	5	1/31/20	**5,590**	**591**	<20	<20	46	<20
	15	3/2/20	**2,330**	47	<20	<20	<20	<20
	25	3/2/20	**159**	23	72	<20	72	<20
	45	3/2/20	**1,260**	34	5,860	<20	5,860	<20
		Summa	**1,500**	<320	<320	<320	4,200	<320
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-113	5	3/2/20	**13,700**	**237**	<20	<20	6,120	<20
		REP	**14,500**	**251**	<20	<20	9,090	<20
	15	3/2/20	**12,800**	**1,400**	<20	<20	**125,000**	<20
	30	3/2/20	**300,000**	**20,600**	<20	<20	**780,000**	<20
	45	3/2/20	**1,640,000**	**55,700**	179	<20	**2,110,000**	<20
	60	3/2/20	**7,690,000**	**150,000**	1,440	363	**4,630,000**	<20
VP-114	5	3/3/20	**19,800**	**877**	<20	<20	**79,000**	<20
	15	3/3/20	**658,000**	**16,400**	110	<20	**3,170,000**	<20
		REP	**25,800,000**	**15,800**	103	<20	**26,100,000**	**40**
	30	3/3/20	**14,000,000**	**126,000**	2,000	320	**16,800,000**	**84**
	45	3/3/20	**26,800,000**	**231,000**	5,260	737	**22,800,000**	**256**
VP-132	5	4/23/20	**2,200**	**596**	30	<20	<20	<20
	15	4/23/20	**18,800**	**1,630**	125	<20	80	<20
	30	4/23/20	**484,000**	**35,800**	9,160	230	1,200	<20
		REP	**456,000**	**33,900**	8,790	223	1,450	<20
	45	4/23/20	**31,200**	**8,850**	2,310	49	1,560	<20
	65	4/23/20	**865,000**	**375,000**	10,600	396	**16,400**	<20
	80	4/23/20	**881,000**	**424,000**	11,200	419	**19,500**	<20
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

Table 2

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-133	5	12/26/19	10	18	<2.0	<2.0	<2.0	<1.3
	15	12/26/19	**470**	**300**	30	<2.0	26	<1.3
	30	12/26/19	**98,000**	**22,000**	13,000	320	1,800	<51
	45	12/26/19	**150,000**	**85,000**	12,000	430	7,500	<51
	65	12/26/19	**250,000**	**260,000**	7,100	280	**19,000**	<51
	85	12/26/19	**130,000**	**160,000**	4,000	180	**12,000**	<20
		DUP-1	**180,000**	**280,000**	5,700	240	**19,000**	21
Commercial Screening Level (α=0.03)			**67**	**100**	**NA**	**NA**	**10,333**	**5.3**

NOTES:

- "feet bgs" - feet below ground surface
- "PCE" - tetrachloroethene
- "TCE" - trichloroethene
- "cis-1,2-DCE" - cis-1,2-dichloroethene
- "NA" - not analyzed
- "**Bold**"- concentration exceeds the commercial screening level
- "ND" - Non-detect
- "trans-1,2-DCE" - trans-1,2-dichloroethene
- "1,1-DCE" - 1,1-dichloroethene
- "*" - Screening levels obtained from HHRA Note No. 3 (April 2019) or EPA Region 9 RSL (April 2019) with attenuation factor of 0.03

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-25	5	8/9/14	<20	**187**	<20	<20	<20	<20	<20	408	<20	584	<20	<20	<20	<20	<100	<20	<20	<20	<20	<20
		3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	106	<60	<20	<40	<40	<40
	15	8/9/14	<20	**215**	<20	<20	<20	<20	<20	**104**	<20	66	<20	<20	<20	<20	<100	<20	<20	<20	<20	<20
		3/3/20	<20	**36**	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	187	<60	<20	<40	<40	<40
	25	8/9/14	<20	**763**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,690	<20	<20	<20	<20	<20
		3/3/20	<20	**326**	<20	**43**	<20	<20	**605**	<20	<20	<20	<40	<20	<20	<20	2,430	<60	<20	<40	<40	72
		Summa	<820	**220**	<1600	<820	<820	<820	**390**	<820	<820	<820	<820	<820	<820	<820	1,700	<1600	--	<820	<1600	<820
	45	8/9/14	<20	**931**	<20	<20	133	**690**	<20	**78**	<20	<20	<20	<20	<20	<20	3,370	<20	**153**	<20	<20	<20
		DUP	<20	**907**	<20	<20	146	**690**	<20	<20	<20	<20	<20	<20	<20	<20	3,200	<20	**151**	<20	<20	<20
		3/5/20	22	**536**	<20	**1,260**	62	<20	**1,010**	<20	<20	<20	<40	<20	<20	<20	5,090	<60	**103**	<40	<40	177
	55	8/9/14	<20	**1,020**	<20	**8,160**	518	**28,600**	87	<20	<20	<20	<20	**2,320**	<20	<20	<100	<20	**140**	<20	<20	<20
		3/5/20	37	**580**	<20	**1,040**	126	<20	**1,050**	<20	<20	<20	<40	<20	<20	<20	6,380	<60	**127**	<40	<40	228
	65	8/9/14	**141**	**884**	<20	<20	909	<20	**589**	**77**	<20	<20	<20	<20	<20	<20	11,100	<20	**185**	<20	<20	235
		3/5/20	**43**	**575**	<20	**1,430**	148	<20	**1,010**	<20	<20	<20	<40	<20	<20	<20	6,320	<60	**117**	<40	<40	234
	85	8/9/14	<20	**924**	<20	<20	754	<20	81	<20	<20	<20	<20	**2,410**	<20	<20	9,550	<20	**108**	<20	<20	28
		3/5/20	43	**564**	<20	**1,060**	186	<20	**992**	<20	<20	<20	<40	<20	<20	<20	7,260	<60	**114**	<40	<40	241
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-26	5	5/16/11	<20	**329**	<20	<20	<20	<20	**2,530**	<20	<20	<20	<20	<20	<20	<20	389	<20	<20	<20	<20	<20
		5/7/20	<78	<78	<160	<78	<78	<78	<78	<78	<78	<78	<78	<78	<78	<78	620	<160	--	--	<160	<78
	15	5/16/11	<20	**6,020**	<20	<20	16,800	<20	**27,800**	<20	<20	<20	<20	<20	<20	<20	9,800	<20	<20	<20	<20	<20
		5/7/20	<84	<84	<170	<84	<84	<84	<84	<84	<84	<84	<84	<84	<84	<84	860	<170	--	--	<170	<84
	30	5/16/11	<20	**2,270**	<20	<20	16,600	<20	**4,200**	<20	<20	<20	<20	<20	<20	<20	219	<20	<20	<20	<20	<20
		5/7/20	<7,800	<7,800	<16,000	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	<7,800	3,900	<16,000	--	--	<16,000	<7,800
	45	5/16/11	<20	<20	<20	<20	12,900	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
		5/7/20	<82	2,400	<160	<82	<82	<82	<82	<82	<82	<82	<82	<82	<82	<82	7,400	<160	--	--	<160	33
	65	5/16/11	<20	**112**	<20	<20	3,340	<20	108	<20	<20	<20	<20	<20	<20	<20	106	<20	<20	<20	<20	<20
		5/7/20	<8,400	2,800	<17,000	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	<8,400	11,000	<17,000	--	--	<17,000	<8,400
	85	5/16/11																				
		5/7/20	<9,000	2,100	<18,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	<9,000	8,400	<18,000	--	--	<18,000	<9,000
		DUP	<8,000	3,000	<16,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	<8,000	11,000	<16,000	--	--	<16,000	<8,000
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-31	5	8/9/14	<20	**167**	<20	<20	<20	<20	<20	132	<20	104	<20	<20	<20	<20	14,800	<20	<20	<20	<20	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	569	<60	<20	<40	<40	<40
		Summa	<5.8	<3.8	<3.7	<4.3	<4.3	<3.2	<4.3	<6.1	<5	<6.6	<5.8	<4.6	<3.5	<4.6	180	<38	NS	<17	<8.9	<4.6
	15	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,770	<20	<20	<20	<20	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	6,930	<60	<20	<40	<40	21
	25	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	12,600	<20	<20	<20	<20	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	11,400	<60	<20	<40	<40	60
	45	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	15,000	<20	<20	<20	<20	<20
		1/31/20	<20	**82**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	28,800	<60	<20	<40	<40	134
	65	8/9/14	<20	**188**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	29,500	<20	<20	<20	<20	<20
		1/31/20	<20	**141**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	37,100	<60	<20	<40	<40	202
	85	8/9/14	<20	**270**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	29,400	<20	<20	<20	<20	<20
		1/31/20	<20	**157**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	48,300	<60	<20	<40	<40	194
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-42	5	6/7/16	71	<8	<8	<8	577	<8	<8	<8	<8	<8	<8	<8	<8	<8	892	<8	<8	<8	<8	<8
	15	6/7/16	<8	<8	<8	<8	186	<8	<8	<8	<8	<8	<8	<8	<8	<8	3,920	<8	<8	<8	<8	324
	25	6/7/16	<8	<8	<8	<8	229	<8	<8	<8	<8	<8	<8	<8	<8	<8	6,090	<8	<8	<8	<8	709
	45	6/7/16	<8	195	<8	<8	459	<8	<8	92	<8	<8	<8	<8	<8	<8	2,630	<8	<8	<8	<8	233
		1/22/20	<20	33	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	5,910	<60	<20	<40	<40	687
	55	6/7/16	<8	<8	<8	<8	44	<8	<8	<8	<8	<8	<8	<8	<8	<8	3,640	<8	<8	<8	<8	311
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-46	5	6/9/16	<8	**156**	<8	<8	116	<8	<8	**32**	<8	86	<8	<8	<8	<8	<40	<8	<8	<8	<8	<8
		1/27/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	<40	<60	<20	<40	<40	<40
		DUP	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	<40	<60	<20	<40	<40	<40
	15	6/9/16	<8	**203**	<8	<8	81	<8	<8	**38**	<8	88	<8	<8	<8	<8	<40	<8	<8	<8	<8	<8
		1/27/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	89	<60	<20	<40	<40	<40
	25	5/31/16	<8	**366**	<8	<8	49	<8	<8	<8	<8	<8	<8	<8	<8	<8	2,250	<8	**100**	<8	<8	<8
		1/27/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	548	<60	<20	<40	<40	<40
	45	5/31/16	<8	351	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	2,050	<8	**104**	<8	<8	<8
		1/27/20	<20	<20	<20	<20	<20	<20	41	<20	<20	<20	<40	<20	<20	<20	2,390	<60	<20	<40	<40	30
	65	5/31/16	<8	**673**	<8	<8	105	<8	<8	<8	<8	<8	<8	<8	<8	<8	6,400	<8	**181**	<8	<8	<8
		1/27/20	<20	**370**	<20	<20	30	<20	156	<20	<20	<20	<40	<20	<20	<20	3,300	<60	**174**	<40	<40	42
	80	5/31/16	<8	**774**	<8	<8	121	<8	<8	<8	<8	<8	<8	<8	<8	<8	7,230	<8	**220**	<8	<8	<8
		1/27/20	<20	**298**	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	1,600	<60	**141**	<40	<40	24
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-47	5	6/8/16	<8	**128**	<8	<8	56	<8	<8	**23**	<8	<8	<8	<8	<8	<8	<40	<8	<8	<8	<8	<8
		3/3/20	<20	**<20**	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	<40	<60	<20	<40	<40	<40
	15	6/8/16	<8	**43**	<8	<8	20	<8	<8	**18**	<8	<8	<8	<8	<8	<8	<40	<8	<8	<8	<8	<8
		3/3/20	<20	**25**	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	1,480	<60	<20	<40	<40	121
	25	6/8/16	26	**458**	<8	<8	94	<8	10	<8	<8	<8	<8	<8	<8	<8	3,920	<8	22	<8	<8	275
		3/3/20	26	**276**	23	<20	27	<20	**225**	<20	<20	<20	<40	<20	<20	<20	3,660	<60	<20	<40	<40	260
	45	6/8/16	**140**	**988**	<8	<8	1,600	43	66	<8	<8	<8	<8	<8	<8	<8	6,810	<8	**97**	<8	<8	316
		DUP	**137**	**932**	<8	<8	1,590	40	66	<8	<8	<8	<8	<8	<8	<8	6,450	<8	**95**	<8	<8	28
		3/4/20	46	**698**	56	32	167	<20	**442**	<20	<20	<20	<40	<20	<20	<20	7,430	<60	**186**	<40	<40	296
	65	6/8/16	**209**	**900**	<8	51	3,110	<8	71	<8	<8	<8	<8	<8	<8	<8	7,680	<8	**171**	<8	<8	341
		3/4/20	<20	**81**	<20	<20	52	<20	37	<20	<20	<20	<40	<20	<20	<20	383	<60	<20	<40	<40	42
	85	6/8/16	**227**	**908**	<8	68	3,510	<8	76	<8	<8	<8	<8	<8	<8	<8	8,020	<8	**187**	<8	<8	351
		3/4/20	**158**	**801**	45	78	468	<20	**671**	<20	<20	<20	<40	<20	<20	<20	6,590	<60	<20	<40	<40	400
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-48	5	6/1/16	41	<8	<8	<8	3,070	<8	<8	**26**	<8	<8	<8	<8	<8	<8	2,610	<8	<8	<8	<8	<8
		1/22/20	<20	**23**	<20	<20	35	<20	<20	<20	<20	<20	<40	<20	<20	<20	114	<60	<20	<40	<40	<40
		DUP	<20	**26**	<20	<20	46	<20	<20	<20	<20	<20	<40	<20	<20	<20	66	<60	<20	<40	<40	<40
	15	6/1/16	**172**	<8	<8	<8	14,700	<8	15	<8	<8	<8	<8	<8	<8	<8	2,190	<8	24	<8	<8	<8
		1/22/20	<20	**32**	<20	<20	299	<20	<20	<20	<20	<20	<40	<20	<20	<20	<40	<60	<20	<40	<40	<40
	25	6/1/16	**316**	<8	<8	579	11,400	<8	78	**15**	<8	81	<8	<8	<8	<8	1,380	<8	**62**	<8	<8	11
		1/22/20	**38**	**116**	25	<20	208	<20	112	<20	<20	<20	<40	<20	<20	<20	23	<60	<20	<40	<40	<40
		DUP	**46**	**160**	<4.9	330	610	<4.3	170	<8.2	<6.7	<8.8	<7.8	<6.1	<4.7	<6.1	510	<51	NS	<22	<12	43
	45	6/3/16	**654**	<8	<8	1,910	33,700	15	107	<8	<8	<8	<8	<8	<8	<8	1,410	<8	**211**	<8	<8	299
		1/22/20	**138**	**397**	55	1,410	1,310	<20	**396**	<20	<20	<20	<40	<20	<20	<20	2,640	<60	**123**	<40	<40	97
	65	6/3/16	**119**	<8	152	294	119,000	<8	**244**	<8	<8	<8	<8	<8	<8	<8	3,920	<8	**237**	<8	<8	708
		1/24/20	**1,320**	**927**	375	<20	93,700	110	**2,670**	<20	38	<20	<40	<20	<20	<20	6,210	<60	**404**	<40	<40	847
		DUP	**1,240**	**833**	295	<20	92,100	97	**2,500**	<20	46	<20	<40	<20	<20	<20	5,210	<60	**419**	<40	<40	833
	85	6/3/16	**114**	<8	<8	125	**149,000**	<8	**1,770**	<8	<8	<8	<8	<8	<8	<8	5,170	<8	**295**	<8	<8	856
		1/24/20	**1,350**	**963**	311	<20	**211,000**	102	**2,970**	**22**	31	<20	<40	<20	<20	<20	7,390	<60	441	<40	<40	982
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-49	5	6/3/16	**1,140**	<8	<8	**595**	**764,000**	**1,350**	**718**	<8	118	70	<8	<8	<8	<8	1,090	<8	**1,540**	<8	<8	1,150
		1/22/20	65	**291**	<20	<20	510	<20	**896**	<20	<20	<20	<40	<20	<20	<20	5,920	<60	<20	<40	<40	870
	15	6/7/16	**1,970**	<8	<8	**813**	**751,000**	**1,260**	**740**	<8	162	<8	<8	<8	<8	<8	2,810	<8	**1,820**	<8	<8	2,870
		1/22/20	**716**	**1,410**	40	<20	4,360	<20	**4,770**	<20	<20	<20	<40	<20	<20	<20	5,140	<60	29	<40	<40	1,460
	25	6/7/16	**3,410**	<8	<8	**971**	**593,000**	**1,290**	**867**	<8	122	<8	<8	<8	<8	<8	<40	<8	**1,550**	<8	<8	5,890
		1/22/20	**2,650**	**2,010**	46	<20	75,700	<20	**6,920**	<20	30	<20	<40	<20	<20	<20	2,480	<60	77	<40	<40	3,570
	45	6/7/16	**2,970**	<8	<8	**193**	**655,000**	**769**	**1,000**	<8	<20	<8	<8	<8	<8	<8	1,960	<8	**512**	<8	<8	3,440
		1/22/20	**4,740**	**4,930**	<20	<20	38,900	**586**	**13,500**	<20	98	<20	<40	<20	<20	<20	3,180	<60	**242**	<40	<40	5,270
		Summa	**3,200**	**3,800**	<470	<550	**400,000**	<410	**9,700**	<780	<640	<840	<740	<580	<450	<580	56,000	<4,900	**NS**	<2,100	<1,100	4,500
	65	6/7/16	**1,660**	<8	<8	**1,220**	**985,000**	**4,070**	**830**	<8	196	<8	<8	<8	<8	<8	412	<8	**1,950**	<8	<8	1,920
		DUP	**2,570**	<8	<8	**1,200**	**812,000**	**3,990**	**195**	<8	194	<8	<8	<8	<8	<8	1,260	<8	**2,060**	<8	<8	1,950
		1/22/20	22	**164**	90	<20	2,160	**582**	**433**	<20	25	<20	<40	<20	<20	<20	362	<60	<20	<40	<40	131
	85	6/7/16	**2,560**	<8	<8	**1,570**	**1,200,000**	**2,860**	**419**	<8	338	<8	<8	<8	<8	<8	1,660	<8	**3,490**	<8	<8	1,420
		1/22/20	**1,460**	**1,090**	255	**1,150**	36,500	**3,500**	**2,290**	<20	207	<20	<40	<20	<20	<20	2,890	<60	**2,900**	<40	<40	645
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-50	5	6/8/16	16	<8	<8	<8	992	**22**	<8	<8	<8	<8	<8	<8	<8	<8	4,020	<8	<8	<8	<8	<8
		1/24/20	45	74	<20	<20	137	<20	<20	<20	<20	<20	<40	<20	<20	<20	6,850	<60	<20	<40	<40	617
		Summa	<630	<420	<400	<460	<460	<350	<460	<660	<550	<710	<630	<500	<380	<500	<650	<4,200	NS	<1,800	<960	<500
	15	6/8/16	2,210	<8	<8	**110**	29,400	**717**	213	<8	<8	<8	<8	<8	<8	<8	1,660	<8	<8	<8	<8	4,580
		1/24/20	628	**330**	<20	<20	1,300	<20	157	<20	<20	<20	<40	<20	<20	<20	13,500	<60	<20	<40	<40	2,770
	25	6/8/16	2,100	<8	<8	**108**	49,200	**672**	210	<8	<8	<8	<8	<8	<8	<8	1,710	<8	<8	<8	<8	4,420
		1/24/20	910	**417**	44	<20	2,890	**35**	**366**	**25**	<20	<20	<40	<20	<20	<20	11,600	<60	<20	<40	<40	3,220
	45	6/9/16	3,060	<8	<8	**148**	84,200	**312**	**361**	<8	<8	59	<8	<8	<8	<8	706	<8	49	<8	<8	7,430
		1/24/20	2,420	**873**	190	<20	68,200	**186**	**2,690**	**24**	<20	<20	<40	<20	<20	<20	6,830	<60	**71**	<40	<40	4,960
	53	6/9/16	3,220	<8	<8	**4,210**	**804,000**	**12,700**	**3,980**	<8	<8	<8	<8	<8	<8	<8	<40	<8	**528**	<8	<8	11,400
		DUP	3,100	<8	<8	**4,110**	**901,000**	**12,800**	**3,770**	<8	<8	<8	<8	<8	<8	<8	<40	<8	**534**	<8	<8	11,900
		1/24/20	2,750	**6,460**	**1,170**	<20	**2,590,000**	**7,380**	**19,500**	<20	29	<20	<40	<20	<20	<20	1,760	<60	**487**	<40	<40	16,600
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-99	5	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
	15	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
	30	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
	45	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
	65	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
	80	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<40	<40	<40	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-100	5	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	15	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	30	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	45	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	65	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	80	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-101	5	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	No Flow
	15	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	74	<60	<20	<40	<40	<40
	30	4/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	260	<60	<20	<40	<40	<40
	45	4/22/20	<20	**59**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,350	<60	<20	<40	<40	<40
		DUP	<20	**61**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,290	<60	<20	<40	<40	<40
	65	4/22/20	<20	**42**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	896	<60	<20	<40	<40	<40
	80	4/22/20	<20	**51**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,180	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-102	5	4/21/20	No Flow																		
		5/7/20	<85	<85	<20	<85	<85	<85	<85	<85	<85	<85	<85	<85	<85	<85	<85	<170	--	--	<170	<85
	15	4/21/20	<20	**47**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	124	<60	<20	<40	<40	<40
	30	4/21/20	<20	**361**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	6,440	<60	<20	<40	<40	<40
	45	4/21/20	<20	**469**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	7,020	<60	<20	<40	<40	<40
	65	4/21/20	<20	**557**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	7,970	<60	<20	<40	<40	<40
	80	4/21/20	<20	**444**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	6,750	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-103	5	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	15	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	30	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	658.0	<60	<20	<40	<40	<40
	45	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	710.0	<60	<20	<40	<40	<40
	65	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	810.0	<60	<20	<40	<40	<40
		REP	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	792.0	<60	<20	<40	<40	<40
	80	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	694.0	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-104	5	4/22/20	Tracer in Probe																		
		5/7/20	<80	<80	<20	<80	<80	<80	<80	<80	<80	<80	<80	<80	<80	<80	38	<160	--	--	<160	<80
	15	4/22/20	<20	**69**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	22,400	<60	<20	<40	<40	<40
	30	4/22/20	<20	**113**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	24,500	<60	<20	<40	<40	<40
	45	4/22/20	<20	**205**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	23,300	<60	<20	<40	<40	<40
	65	4/22/20	<20	**379**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	30,700	<60	<20	<40	<40	<40
	80	4/22/20	<20	**396**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	23,500	<60	<20	<40	<40	<40
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-105	5	12/26/19	<3.1	<2.4	<17	<2.7	<2.7	<2.0	<2.0	<3.4	<2.3	<4.3	<2.5	<2.3	<2.3	<4.5	17.0	<16	<6.9	<6.9	<15	<5.6
	15	12/26/19	<3.1	<2.4	<17	<2.7	<2.7	<2.0	<2.0	<3.4	<2.3	<4.3	2.6	<2.3	<2.3	<4.5	<11	<16	<6.9	<6.9	<15	<5.6
	30	12/26/19	<31	<24	<170	<27	<27	<20	<20	<34	<23	<43	<25	<23	<23	<45	1,900	<160	<69	<69	<150	240
	45	12/26/19	<3.1	<2.4	<17	<2.7	<2.7	<2.0	<2.0	<3.4	<2.3	<4.3	2.5	<2.3	<2.3	<4.5	<11	<16	<6.9	<6.9	<15	<5.6
		DUP	<16	<12	<87	<14	<14	<10	<10	<17	<12	<21	<12	<12	<11	<23	550	<80	<34	<34	<74	67
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-106	5	3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	48.0	<60	<20	<40	<40	<20
	15	3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	98.0	<60	<20	<40	<40	44.0
	30	3/3/20	<20	20.0	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	1,760.0	<60	<20	<40	<40	319.0
		REP	<20	26.0	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	1,840.0	<60	<20	<40	<40	372.0
	45	3/5/20	<20	27.0	<20	64	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,510.0	<60	<20	<40	<40	441.0
		REP	<20	27.0	<20	56	22	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,920.0	<60	<20	<40	<40	505.0
	53	3/5/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	322.0	<60	<20	<40	<40	68.0
		Summa	<800	<800	<1600	<800	<800	<800	<800	<800	<800	<800	<800	<800	<800	<800	1,700.0	<1600	--	<800	<1600	<800
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-107	5	1/28/20	<20	**95**	<20	<20	292	<20	20	<20	<20	<20	<20	<20	<20	<20	929	<60	<20	<40	<40	54
		DUP	<20	**99**	<20	<20	307	<20	21	<20	<20	<20	<20	<20	<20	<20	1,010	<60	<20	<40	<40	54
	15	1/28/20	**72**	**254**	162	<20	1,690	<20	**359**	<20	<20	<20	<20	<20	<20	<20	1,550	<60	<20	<40	<40	120
	25	1/28/20	**22,000**	**2,810**	**5,370**	<20	29,700	629	**8,170**	31.0	30	<20	<20	<20	<20	<20	7,330	<60	194	<40	<40	897
	30	1/28/20	**1,890**	**1,350**	**1,280**	<20	23,800	1,120	**4,680**	<20	133	<20	<20	<20	<20	<20	2,670	<60	1,110	<40	<40	1,160
	45	1/28/20	**1,890**	**1,200**	**1,170**	<20	16,200	963	**4,600**	<20	109	<20	<20	<20	<20	<20	2,520	<60	921	<40	<40	1,190
	65	1/28/20	**1,770**	**1,030**	**864**	<20	27,200	975	**4,060**	<20	122	<20	<20	<20	<20	<20	2,990	<60	1,130	<40	<40	1,140
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-108	5	1/27/20	<20	**52**	60	<20	180	<20	124	<20	<20	<20	<40	<20	<20	<20	1,150.0	<60	<20	<40	<40	218
		DUP	<590	<390	<370	<440	<440	<330	<440	<620	<510	<670	<590	<470	<360	<470	<610	<3,900	NS	<1,700	<900	<470
	15	1/27/20	**218**	**374**	60	<20	1,930	<20	**1,380**	<20	<20	<20	<40	<20	<20	<20	7,860.0	<60	<20	<40	<40	2,980
	30	1/27/20	**2,370**	**1,080**	60	<20	58,400	30	**18,700**	28	26	<20	<40	<20	<20	<20	5,290.0	<60	<20	<40	<40	10,800
	45	1/27/20	**285**	**265**	27	<20	7,500	27	**3,140**	<20	<20	<20	<40	<20	<20	<20	5,440.0	<60	<20	<40	<40	1,340
	54	1/27/20	<20	**52**	<20	<20	<20	35	36	<20	<20	<20	<40	<20	<20	<20	<40	<60	<20	<40	<40	<40
VP-109	5	1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	59	<60	<20	<40	<40	<40
	15	3/2/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	115	<60	<20	<40	<40	<40
	30	3/2/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	122	<60	<20	<40	<40	<40
	45	3/2/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	163	<60	<20	<40	<40	<40
		DUP	<800	<800	<1600	<800	<800	<800	<800	<800	<800	<800	<800	<800	<800	<800	280	<1600	--	<800	<800	<800
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-113	5	3/2/20	<20	<20	<20	<20	24	<20	<20	<20	<20	<20	<20	<20	<20	<20	894	<60	<20	<40	<40	51
		REP	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,160	<60	<20	<40	<40	82
	15	3/2/20	<20	**62**	<20	<20	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,020	<60	<20	<40	<40	129
	30	3/2/20	**401**	**148**	<20	<20	599	<20	91	<20	<20	<20	<20	<20	<20	<20	8,740	<60	<20	<40	<40	1,310
	45	3/2/20	**1,070**	**298**	<20	<20	2,880	<20	**509**	<20	<20	<20	<20	<20	<20	<20	5,060	<60	<20	<40	<40	2,090
	60	3/2/20	**648**	**1,320**	59	<20	1,830	**414**	**5,030**	<20	<20	<20	<20	<20	<20	<20	4,070	<60	<20	<40	<40	3,690
VP-114	5	3/3/20	<20	34	<20	<20	282	<20	33	<20	<20	<20	<40	<20	<20	<20	<60	<20	<20	<40	<40	<40
	15	3/3/20	**169**	**275**	<20	<20	4,470	<20	**717**	<20	<20	<20	<40	<20	<20	<20	<60	<20	<20	<40	<40	489
		REP	**207**	**292**	<20	<20	4,590	<20	**773**	<20	<20	<20	<40	<20	<20	<20	<60	<20	<20	<40	<40	469
	30	3/3/20	**1,950**	**1,500**	132	<20	106,000	<20	**7,170**	<20	<20	<20	<40	<20	<20	<20	<60	**132**	<20	<40	<40	1,100
	45	3/3/20	**8,290**	**4,730**	**1,550**	<20	1,210,000	**308**	**18,600**	<20	49	<20	<40	<20	<20	<20	<60	**1,550**	**167**	<40	<40	2,850
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-132	5	4/23/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<60	<20	<40	<40	<40
	15	4/23/20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	43	<60	<20	<40	<40	<40
	30	4/23/20	<20	**218**	<20	<20	<20	<20	**962**	<20	<20	<20	<20	<20	<20	<20	893	<60	**216**	<40	<40	<40
		REP	<20	**208**	<20	<20	<20	<20	**898**	<20	<20	<20	<20	<20	<20	<20	919	<60	**213**	<40	<40	<40
	45	4/23/20	<20	**81**	<20	<20	<20	<20	171	<20	<20	<20	<20	<20	<20	<20	1,260	<60	31	<40	<40	<40
	65	4/23/20	<20	**480**	<20	<20	<20	<20	**996**	<20	<20	<20	<20	<20	<20	<20	12,000	<60	**108**	<40	<40	<40
	80	4/23/20	<20	**579**	<20	<20	<20	<20	**1,110**	<20	<20	<20	<20	<20	<20	<20	12,000	<60	**145**	<40	<40	99
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2B
Hi-Shear Corporation Project
Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other Chlorinated VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)																		
			CT	CF	MC	1,1,2-TCA	1,1,1-TCA	1,2-DCA	1,1-DCA	BDCM	CB	DBCM	DCDFM	1,2-DCP	cis-1,3-DCP	trans-1,3-DCP	Freon 113 (aka 1,1,2-TC-1,2,2-TFA)	HCB	1,1,1,2-PCA	1,1,2,2-PCA	1,2,4-TCB	TCFM
VP-133	5	12/26/19	<3.1	<2.4	<17	<2.7	<2.7	<2.0	<2.0	<3.4	<2.3	<4.3	<2.5	<2.3	<2.3	<4.5	<11	<16	<6.9	<6.9	<15	<5.6
	15	12/26/19	<3.1	3	<17	<2.7	<2.7	<2.0	13	<3.4	<2.3	<4.3	2.9	<2.3	<2.3	<4.5	<11	<16	<6.9	<6.9	<15	<5.6
	30	12/26/19	<130	**160**	<690	<110	<110	<81	**2,400**	<130	<92	<170	<99	<92	<91	<180	1,000	<640	<270	<270	<590	<220
	45	12/26/19	<130	**260**	<690	<110	<110	<81	**2,900**	**830**	<92	<170	<99	<92	<91	<180	6,400	<640	<270	<270	<590	<220
	65	12/26/19	<130	**410**	<690	<110	<110	<81	**1,200**	<130	<92	<170	<99	<92	<91	<180	14,000	<640	<270	<270	<590	<220
	85	12/26/19	<50	**270**	<280	<44	<44	<32	**750**	<54	<37	<68	<40	<37	<36	<73	9,500	<260	<110	<110	<240	94
		DUP	<50	**390**	<280	<44	<44	<32	**990**	<54	<37	<68	<40	<37	<36	<73	12,000	<260	<110	<110	<240	130
Commercial Screening Level (α=0.03)			**67**	**18**	**400**	**26**	**146,667**	**16**	**257**	**11**	**7,333**	**NA**	**14,667**	**110**	**103**	**103**	**733,333**	**19**	**57**	**7**	**57**	**176,667**

NOTES:

- "feet bgs" - feet below ground surface
- "**Bold**"- concentration exceeds the commercial screening level
- "ND" - Non-detect
- "*" - Screening levels obtained from HHRA Note No. 3 (April 2019) or EPA Region 9 RSL (April 2019) with attenuation factor of 0.03
- "DBCM" - Dibromochloromethane
- "BDCM" - Bromodichloromethane
- "CT" - Carbon tetrachloride
- "CB" - Chlorobenzene
- "CF" - Chloroform
- "1,2-DCP" - 1,2-dichloropropane
- "cis-1,3-DCP" - cis-1,3-dichloropropane
- "trans -1,3-DCP" - trans-1,3-dichloropropane
- "HCB" - Hexachlorobutadiene
- "MC" - Methylene chloride
- "1,1,1,2-PCA" - 1,1,1,2-tetrachloroethane
- "1,1,2,2-PCA" - 1,1,2,2-tetrachloroethane
- "1,1,1-TCA" - 1,1,1-trichloroethane
- "1,1,2-TCA" - 1,1,2-trichloroethane
- "TCFM" - Trichlorofluoromethane
- "1,2,4-TCB" - 1,2,3-trichlorobenzene
- "1,1-DCA" - 1,1-dichloroethane
- "1,2-TCA" - 1,2-dichloroethane

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-25	5	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/5/20	27	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/3/20	**143**	<20	<20	<20	<20	<20	<20	<20	<40	<20
		Summa	**390**	<1600	<820	<820	<820	180	<820	<820	<820	<820
	45	8/9/14	**404**	<20	<20	<20	<20	<20	<20	<20	--	<20
		DUP	**390**	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/5/20	**242**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	55	8/9/14	**604**	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/5/20	**275**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	65	8/9/14	**440**	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/5/20	**269**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	85	8/9/14	**584**	<20	<20	<20	<20	<20	<20	<20	--	<20
		3/5/20	**270**	<20	<20	<20	<20	<20	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-26	5	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<31	<160	<78	<78	<78	20	<78	<78	23	<78
	15	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<34	<170	<84	<84	<84	18.0	<84	<84	22	<84
	30	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<3,100	**<16,000**	<7,800	<7,800	<7,800	<3,100	<7,800	<7,800	<7,800	<7,800
	45	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<33	**<160**	<82	<82	<82	<33	<82	<82	<82	<82
	65	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<3,300	**<17,000**	<8,400	<8,400	<8,400	<3,300	<8,400	<8,400	<8,400	<8,400
	80	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		5/7/20	<3,600	**<18,000**	<9,000	<9,000	<9,000	<3,600	<9,000	<9,000	<9,000	<9,000
		DUP	<3,200	**<16,000**	<8,000	<8,000	<8,000	<3,200	<8,000	<8,000	<8,000	<8,000
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-31	5	8/9/14	<20	**1,100**	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
		Summa	<2.4	<11	<6.3	<5.5	<5.8	17.0	<9.8	<23	14	<8.1
	15	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	21	<20	<20	<20	<20	<20	<20	<40	<20
	45	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	65	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	85	8/9/14	<20	<20	<20	<20	<20	<20	<20	<20	--	<20
		1/31/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-42	5	6/7/16	<8	<8	<8	<8	<8	70	<8	<8	--	<8
	15	6/7/16	<8	<8	<8	<8	<8	60	42	<8	--	<8
	25	6/7/16	<8	<8	<8	<8	<8	58	47	<8	--	<8
	45	6/7/16	<8	<8	<8	<8	<8	25	30	<8	--	<8
		1/22/20	<20	<20	<20	33	<20	<20	<20	<20	84	<20
	55	6/7/16	<8	<8	<8	<8	<8	38	38	<8	--	<8
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-46	5	6/9/16	**51**	<8	<8	<8	<8	56	135	<8	--	<8
		1/27/20	**124**	<20	<20	<20	<20	<20	<20	<20	<40	<20
		DUP	**129**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	6/9/16	38	<8	<8	<8	<8	43	134	<8	--	<8
		1/27/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	5/31/16	<8	<8	<8	<8	<8	32	<8	<8	--	<8
		1/27/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	45	5/31/16	<8	<8	<8	<8	<8	22	<8	<8	--	<8
		1/27/20	80	<20	<20	<20	33	<20	<20	<20	<40	<20
	65	5/31/16	<8	<8	<8	<8	<8	32	<8	<8	--	<8
		1/27/20	120	<20	<20	<20	<20	<20	<20	<20	<40	<20
	85	5/31/16	<8	<8	<8	<8	<8	30	<8	<8	--	<8
		1/27/20	**111**	<20	<20	160	<20	38	75	43	353	51
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-47	5	6/8/16	<8	<8	<8	<8	<8	38	38	<8	--	<8
		3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	6/8/16	<8	<8	<8	<8	<8	26	32	<8	--	<8
		3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	6/8/16	<8	<8	<8	<8	<8	66	51	<8	--	<8
		3/3/20	**166**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	45	6/8/16	**331**	<8	<8	52	<8	295	61	<8	--	115
		DUP	**290**	<8	<8	51	<8	294	56	<8	--	98
		3/4/20	**384**	<20	<20	<20	<20	29	<20	<20	<40	<20
	65	6/8/16	**343**	<8	<8	<8	<8	141	50	<8	--	<8
		3/4/20	**47**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	85	6/8/16	**351**	<8	<8	<8	<8	127	44	<8	--	<8
		3/4/20	**398**	<20	<20	<20	<20	23	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-48	5	6/1/16	<8	<8	<8	<8	<8	61	60	<8	--	<8
		1/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
		DUP	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	6/1/16	<8	<8	<8	45	<8	147	95	<8	--	174
		1/22/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	6/1/16	<8	<8	<8	46	<8	207	82	<8	--	123
		1/22/20	**23**	<20	<20	<20	<20	<20	<20	<20	<40	<20
		Summa	**29**	<14	<8.4	<7.3	<7.8	<3.9	<13	<31	<17	<11
	45	6/3/16	<8	<8	<8	<8	<8	202	56	<8	--	<8
		1/22/20	**55**	<20	<20	<20	<20	45	<20	<20	<40	<20
	65	6/3/16	<8	<8	<8	<8	<8	644	43	<8	--	<8
		1/24/20	**130**	<20	<20	<20	<20	998	<20	<20	<40	<20
		DUP	**121**	<20	<20	<20	<20	955	<20	<20	<40	<20
	85	6/3/16	<8	<8	<8	<8	<8	786	40	<8	--	<8
		1/24/20	**145**	<20	<20	<20	<20	916	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-49	5	6/3/16	<8	<8	<8	11	<8	1,140	39	<8	--	<8
		1/22/20	**111**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	6/7/16	<8	<8	<8	46	<8	1,540	61	<8	--	<8
		1/22/20	**133**	<20	<20	<20	<20	102	<20	<20	<40	<20
	25	6/7/16	<8	<8	<8	37	<8	1,280	46	<8	--	14
		1/22/20	**227**	<20	<20	<20	<20	107	<20	<20	<40	<20
	45	6/7/16	101	<8	<8	12	<8	658	34	<8	--	<8
		1/22/20	**443**	<20	<20	30	<20	82	<20	<20	<40	<20
		Summa	<310	<780	<800	<700	<740	<370	<1,200	<2,900	<1,600	<1,000
	65	6/7/16	<8	<8	<8	54	<8	2,730	58	<8	--	<8
		DUP	**<8**	<8	<8	53	<8	2,660	58	<8	--	<8
		1/22/20	**26**	<20	<20	<20	<20	618	<20	<20	<40	<20
	85	6/7/16	<8	<8	<8	15	<8	2,000	30	<8	--	<8
		1/22/20	**91**	<20	<20	<20	<20	734	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration (µg/m³)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-50	5	6/8/16	<8	<8	<8	<8	<8	16	<8	<8	--	<8
		1/24/20	**24**	<20	<20	<20	<20	<20	<20	<20	<40	<20
		Summa	<270	<1,200	<680	<600	<630	<320	<1,100	<2,500	<1,400	<880
	15	6/8/16	<8	<8	<8	<8	<8	258	30	<8	--	<8
		1/24/20	**30**	<20	<20	<20	<20	<20	<20	<20	<40	<20
	25	6/8/16	<8	<8	<8	<8	<8	253	30	<8	--	<8
		1/24/20	<20	<20	<20	<20	<20	22	<20	<20	<40	<20
	45	6/9/16	<8	<8	<8	<8	<8	212	131	<8	--	<8
		1/24/20	**21**	<20	<20	<20	<20	26	<20	<20	<40	<20
	53	6/9/16	<8	<8	<8	62	<8	709	129	<8	--	<8
		DUP	<8	<8	<8	62	<8	660	129	<8	--	<8
		1/24/20	**164**	<20	<20	232	<20	103	75	37	302	53
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-99	5	4/22/20	<20	<20	<20	<20	<20	112	<20	<20	<40	<20
	15	4/22/20	**26**	<20	<20	<20	<20	1,830	<20	<20	62	22
	30	4/22/20	<20	<20	<20	<20	<20	1,790	<20	<20	<40	<20
	45	4/22/20	<20	<20	<20	<20	<20	3,250	<20	<20	<40	<20
	65	4/22/20	<20	<20	<20	<20	<20	1,160	<20	<20	<40	<20
	80	4/22/20	<20	<20	<20	<20	<20	2,220	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-100	5	4/21/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	4/21/20	<20	<20	<20	<20	<20	379	<20	<20	<40	<20
	30	4/21/20	**144**	<20	<20	116	<20	6,330	142	42	310	174
	45	4/21/20	<20	<20	<20	<20	<20	360	<20	<20	<40	<20
	65	4/21/20	<20	<20	<20	<20	<20	251	<20	<20	<40	<20
	80	4/21/20	<20	<20	<20	<20	<20	230	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-101	5	4/22/20	**47**	<20	<20	<20	<20	218	<20	<20	<40	<20
	15	4/22/20	**183**	<20	<20	<20	<20	411	149	<20	<40	<20
	30	4/22/20	**76**	<20	<20	<20	<20	211	<20	<20	<40	<20
	45	4/22/20	<20	<20	<20	<20	<20	346	<20	<20	<40	<20
		REP	<20	<20	<20	<20	<20	335	<20	<20	<40	<20
	65	4/22/20	<20	<20	<20	<20	<20	2,450	<20	<20	<40	<20
	80	4/22/20	<20	<20	<20	<20	<20	84	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-102	5	4/21/20	No Flow									
		5/7/20	<34	<170	<8,000	<85	<20	1,140	30	<85	140	57
	15	4/21/20	<20	<20	<20	<20	<20	1,140	<20	<20	<40	<20
	30	4/21/20	**144**	<20	<20	<20	<20	850	28	<20	41	<20
	45	4/21/20	<20	<20	<20	<20	<20	167	<20	<20	<40	<20
	65	4/21/20	<20	<20	<20	<20	<20	178	<20	<20	<40	<20
	80	4/21/20	<20	<20	<20	<20	<20	33	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-103	5	4/21/20	<20	<20	<20	<20	<20	79	<20	<20	<40	<20
	15	4/21/20	<20	<20	<20	<20	<20	653	<20	<20	<40	<20
	30	4/21/20	<20	<20	<20	<20	<20	529	<20	<20	<40	<20
	45	4/21/20	<20	<20	<20	<20	<20	578	<20	<20	<40	<20
	65	4/21/20	<20	<20	<20	<20	<20	2,410	<20	<20	<40	<20
		REP	<20	<20	<20	<20	<20	4,750	<20	<20	<40	<20
	80	4/21/20	<20	<20	<20	<20	<20	407	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-104	5	4/22/20	Tracer in Probe									
			<32	<160	<80	<80	<80	41	31	<80	83	31
	15	4/22/20	**31**	<20	<20	<20	<20	4,050	<20	<20	72	<20
	30	4/22/20	<20	<20	<20	<20	<20	2,250	<20	<20	25	<20
	45	4/22/20	<20	<20	<20	<20	<20	1,960	<20	<20	<40	<20
	65	4/22/20	<20	<20	<20	<20	<20	887	<20	<20	<40	<20
	80	4/22/20	<20	<20	<20	<20	<20	1,100	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-105	5	12/26/19	<1.6	<5.2	<3.8	<2.2	<6.4	<1.9	<7.4	<2.5	<8.7	<2.2
	15	12/26/19	<1.6	<5.2	<3.8	<2.2	<6.4	3.4	<7.4	<2.5	<8.7	<2.2
	30	12/26/19	<16	<52	<38	<22	<64	<19	<74	<25	<87	<22
	45	12/26/19	<1.6	<5.2	<3.8	<2.2	<6.4	3.3	<7.4	<2.5	<8.7	<2.2
		DUP	<8.0	<26	<19	<11	<32	73	<37	<12	<43	<41
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-106	5	3/3/20	**190**	<20	<20	<20	<20	39.0	<20	<20	<40	<20
	15	3/3/20	**62**	<20	<20	<20	<20	91.0	<20	<20	<40	<20
	30	3/3/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
		REP	<20	<20	<20	<20	<20	83	<20	<20	<40	<20
	45	3/5/20	**25**	<20	<20	<20	<20	55	<20	<20	<40	<20
		REP	**33**	<20	<20	<20	<20	220	<20	<20	<40	<20
	53	3/5/20	<20	<20	<20	<20	<20	116	<20	<20	<40	<20
		Summa	<320	<1600	<800	<800	<800	200	<800	<800	<800	<800
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-107	5	1/28/20	**158**	<20	<20	<20	<20	128	23	<20	71	27
		DUP	**153**	<20	<20	<20	<20	133	23	<20	74	24
	15	1/28/20	**197**	<20	<20	31	<20	248	36	<20	112	35
	25	1/28/20	**207**	<20	<20	25	<20	456	<20	<20	22	<20
	30	1/28/20	**122**	<20	<20	27	<20	1,660	<20	<20	32	<20
	45	1/28/20	**114**	<20	<20	25	<20	1,570	<20	37	<40	<20
	65	1/28/20	**120**	<20	<20	29	<20	3,440	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-108	5	1/27/20	**194**	<20	<20	34	<20	223	35	<20	<40	<20
		Summa	<250	<1,100	<640	<560	<590	<300	<1,000	<2,300	<1,300	<830
	15	1/27/20	**121**	<20	<20	<20	<20	162	<20	<20	<40	<20
	30	1/27/20	**328**	<20	<20	<20	<20	165	<20	<20	<40	<20
	40	1/27/20	**81**	<20	<20	28	<20	285	<20	<20	86	<20
	54	1/27/20	<20	<20	<20	<20	<20	207	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-109	5	1/31/20	<20	<20	<20	43.0	<20	92.0	34.0	214	<40	180
	15	3/2/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	30	3/2/20	<20	<20	<20	<20	<20	20.0	<20	<20	<40	<20
	45	3/2/20	<20	<20	<20	<20	<20	32.0	<20	<20	<40	<20
		Summa	<320	<1600	<800	<800	<800	140	<800	<800	<800	<800
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-113	5	3/2/20	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
		REP	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20
	15	3/2/20	**155**	<20	<20	<20	<20	54	<20	<20	<40	<20
	30	3/2/20	**108**	<20	<20	<20	<20	63	<20	<20	<40	<20
	45	3/2/20	**59**	<20	<20	<20	<20	41	<20	<20	<40	<20
	60	3/2/20	**148**	<20	<20	37	<20	761	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-114	5	3/3/20	**63**	<20	<20	<20	<20	283	<20	<20	<40	<20
	15	3/3/20	**293**	<20	<20	<20	<20	294	<20	<20	<40	<20
		REP	**290**	<20	<20	<20	<20	246	<20	<20	<40	<20
	30	3/3/20	**333**	<20	<20	100	<20	2,450	<20	41	<40	74
	45	3/3/20	**188**	<20	<20	108	<20	321	<20	<20	<40	27
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-132	5	4/23/20	**44**	<20	<20	<20	<20	434	<20	<20	<40	<20
	15	4/23/20	<20	<20	<20	<20	<20	573	<20	<20	<40	<20
	30	4/23/20	**50**	<20	<20	<20	<20	131	36	<20	<40	<20
		REP	**46**	<20	<20	<20	<20	125	41	<20	<40	<20
	45	4/23/20	<20	<20	<20	<20	<20	336	<20	<20	<40	<20
	65	4/23/20	**61**	<20	<20	<20	<20	86	<20	<20	<40	<20
	80	4/23/20	**70**	<20	<20	<20	<20	288	<20	<20	<40	<20
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

GENESIS ENGINEERING & REDEVELOPMENT

Table 2C

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Other VOC Concentrations in Soil Vapor

Boring	Sample Depth	Sampling Date	Concentration ($\mu g/m^3$)									
			Benzene	Bromoform	1,2-Dibromoethane	Ethylbenzene	Styrene	Toluene	1,2,4-TMB	1,3,5-TMB	m,p-Xylene	o-Xylene
VP-133	5	12/26/19	2	<5.2	<3.8	2	<6.4	12	<7.4	<2.5	9	3
	15	12/26/19	13	<5.2	<3.8	18	<6.4	41	<7.4	4	19	22
	30	12/26/19	<64	<210	<150	<87	<260	130	<290	<98	<350	<87
	45	12/26/19	**67**	<210	<150	140	<260	190	<290	<98	<350	<87
	65	12/26/19	<64	<210	<150	<87	<260	<75	<290	<98	<350	<87
	85	12/26/19	**43**	<83	<61	<35	<100	<30	<120	<39	<140	<35
		DUP	**56**	<83	<61	<35	<100	<30	<120	<39	<140	<35
Commercial Screening Level (α=0.03)			**14**	**367**	**0.67**	**163**	**130,000**	**43,333**	**8,667**	**8,667**	**14,667**	**14,667**

NOTES:

- "feet bgs" - feet below ground surface
- "**Bold**"- concentration exceeds the residential screening level
- "ND" - Non-detect
- "*" - Screening levels obtained from HHRA Note No. 3 (April 2019) or EPA Region 9 RSL (April 2019) with attenuation factor of 0.03

GENESIS ENGINEERING & REDEVELOPMENT

Table 3A

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

COPC Concentrations in Soil

Sample ID	Depth (*ft bgs*)	Sampling Date	Concentration (*mg/kg*)					
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-107	27	1/15/20	0.0099	<0.0022	<0.0018	<0.0019	0.0032	<0.0018
	39	1/16/20	0.11	0.021	<0.0018	<0.0019	0.026	<0.0019
	45.5	1/16/20	0.15	0.047	<0.0018	<0.0019	0.076	<0.0019
VP-108	26	1/8/20	0.0035	<0.0022	<0.0018	<0.0019	<0.0021	<0.0019
	33	1/8/20	<0.0022	<0.0022	<0.0018	<0.0019	<0.0021	<0.0019
	40	1/8/20	0.079	0.0028	<0.0018	<0.0019	<0.0021	<0.0019
VP-114	50	1/8/20	0.003	<0.0022	<0.0018	<0.0019	<0.0021	<0.0019
	60	1/8/20	0.02	<0.0022	<0.0018	<0.0019	<0.0021	<0.0019
VP-133	5	12/7/19	<0.0022	<0.0022	<0.0018	<0.0019	<0.0021	<0.0019
	15	12/7/19	<0.0015	<0.0015	<0.0012	<0.0013	<0.0014	<0.0013
	15	DUP-1	<0.0015	<0.0015	<0.0013	<0.0013	<0.0015	<0.0013
	30	12/7/19	0.002	0.0035	<0.0015	<0.0015	<0.0017	<0.0015
	45	12/7/19	0.0029	<0.0016	<0.0013	<0.0014	<0.0015	<0.0014
	65	12/7/19	0.0074	0.0073	<0.0016	<0.0017	<0.0019	<0.0017
	85	12/7/19	0.01	0.013	<0.0018	<0.0019	<0.0021	<0.0019
Commercial Screening Level*			**2.7**	**6.0**	**84**	**600**	**1,000**	**0.15**

Notes:

- "PCE" - tetrachloroethene
- "TCE" - trichloroethene
- "1,1-DCE" - 1,1-dichloroethene
- "mg'kg" - milligrams per kilogram
- "cis-1,2-DCE" - cis-1,2-dichloroethene
- "trans-1,2-DCE" - trans-1,2-dichloroethene
- "feet bgs" - feet below the ground surface
- "ND" - Not Detected
- "*" - Screening levels obtained from HHRA Note No. 3 (April 2019), EPA Region 9 RSL (April 2019)

GENESIS ENGINEERING & REDEVELOPMENT

Table 3B

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Historical COPC Concentrations in Soil

Sample ID	Depth (*ft bgs*)	Sampling Date	Concentration (*mg/kg*)				
			PCE	TCE	cis-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-35	5	4/26/16	<0.002	<0.001	<0.005	<0.005	<0.005
	35	4/28/16	<0.002	<0.001	<0.005	<0.005	<0.005
	75	4/28/16	<0.002	<0.001	<0.005	<0.005	<0.005
VP-42	5	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	10	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	15	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	20	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	25	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	30	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	35	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	40	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	45	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	50	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	55	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	60	5/18/16	0.012	<0.001	<0.005	<0.005	<0.005
	65	5/18/16	0.004	0.006	<0.005	0.013	<0.005
VP-46	5	5/17/16	0.011	0.006	<0.005	<0.005	<0.005
	10	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	15	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	20	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	25	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	30	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	35	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	40	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	45	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	50	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	55	5/17/16	0.006	0.002	<0.005	<0.005	<0.005
	60	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	65	5/17/16	0.002	<0.001	<0.005	<0.005	<0.005
	70	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	75	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	80	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	85	5/17/16	0.008	0.002	<0.005	<0.005	<0.005
Commercial Screening Level*			**2.7**	**6.0**	**84**	**1,000**	**0.15**

GENESIS ENGINEERING & REDEVELOPMENT

Table 3B

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Historical COPC Concentrations in Soil

Sample ID	Depth (*ft bgs*)	Sampling Date	Concentration (*mg/kg*)				
			PCE	TCE	cis-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-47	5	5/16/16	0.017	0.002	<0.005	<0.005	<0.005
	10	5/16/16	0.003	<0.001	<0.005	<0.005	<0.005
	15	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	20	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	25	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	30	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	35	5/16/16	0.020	0.010	<0.005	<0.005	<0.005
	45	5/16/16	0.024	0.026	<0.005	<0.005	<0.005
	50	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	55	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	60	5/16/16	0.027	0.030	<0.005	<0.005	<0.005
	65	5/16/16	0.010	0.009	<0.005	<0.005	<0.005
	70	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	75	5/16/16	0.013	0.008	<0.005	<0.005	<0.005
	80	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
	85	5/16/16	<0.002	<0.001	<0.005	<0.005	<0.005
VP-48	5	5/17/16	<0.002	0.003	<0.005	<0.005	<0.005
	10	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	15	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	20	5/17/16	<0.002	0.002	<0.005	<0.005	<0.005
	25	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	30	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	35	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	40	5/17/16	<0.002	<0.001	<0.005	<0.005	<0.005
	45	5/17/16	<0.002	0.005	<0.005	<0.005	<0.005
	60	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	70	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	75	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
	80	5/18/16	<0.002	<0.001	<0.005	<0.005	<0.005
VP-49	5	5/12/16	0.025	<0.001	<0.005	<0.005	<0.005
	10	5/12/16	0.071	0.003	<0.005	0.021	<0.005
	15	5/12/16	0.017	<0.001	<0.005	<0.005	<0.005
	20	5/12/16	0.025	0.002	<0.005	0.008	<0.005
	25	5/12/16	<0.002	<0.001	<0.005	<0.005	<0.005
	30	5/12/16	0.002	<0.001	<0.005	<0.005	<0.005
	35	5/12/16	0.032	0.003	<0.005	0.041	<0.005
	40	5/12/16	0.077	0.003	<0.005	0.017	<0.005
	45	5/12/16	0.117	0.006	<0.005	0.052	<0.005
	50	5/12/16	0.635	0.078	0.007	1.170	<0.005
	55	5/12/16	0.852	0.073	0.006	0.181	<0.005
	60	5/12/16	0.747	0.067	0.005	0.168	<0.005
	65	5/12/16	0.441	0.042	<0.005	0.304	<0.005
	70	5/12/16	0.039	0.002	<0.005	0.009	<0.005
	75	5/12/16	0.034	0.002	<0.005	<0.005	<0.005
	80	5/12/16	0.085	0.004	<0.005	0.011	<0.005
	85	5/12/16	0.047	0.002	<0.005	0.005	<0.005
Commercial Screening Level*			**2.7**	**6.0**	**84**	**1,000**	**0.15**

GENESIS ENGINEERING & REDEVELOPMENT

Table 3B

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

Historical COPC Concentrations in Soil

Sample ID	Depth (*ft bgs*)	Sampling Date	Concentration (*mg/kg*)				
			PCE	TCE	cis-1,2-DCE	1,1-DCE	Vinyl Chloride
VP-50	5	5/11/16	0.011	0.002	<0.005	<0.005	<0.005
	10	5/11/16	0.027	0.005	<0.005	0.022	<0.005
	15	5/11/16	0.004	<0.001	<0.005	<0.005	<0.005
	20	5/11/16	0.010	0.002	<0.005	<0.005	<0.005
	25	5/11/16	0.014	0.004	<0.005	<0.005	<0.005
	30	5/11/16	0.113	0.026	<0.005	0.229	<0.005
	35	5/11/16	0.006	0.002	<0.005	0.008	<0.005
	40	5/11/16	0.005	<0.001	<0.005	0.008	<0.005
	45	5/11/16	0.005	<0.005	<0.005	0.006	<0.005
	50	5/11/16	0.018	0.004	<0.005	0.022	<0.005
	55	5/11/16	**3.390**	0.083	<0.005	6.320	<0.005
	60	5/11/16	0.450	0.089	<0.005	0.392	<0.005
Commercial Screening Level*			**2.7**	**6.0**	**84**	**1,000**	**0.15**

Notes:

- "PCE" - tetrachloroethene
- "TCE" - trichloroethene
- "1,1-DCE" - 1,1-dichloroethene
- "cis-1,2-DCE" - cis-1,2-dichloroethene
- "mg'kg" - milligrams per kilogram
- "feet bgs" - feet below the ground surface
- "*" - Screening levels obtained from HHRA Note No. 3 (April 2019), EPA Region 9 RSL (April 2019)

GENESIS ENGINEERING & REDEVELOPMENT

Table 4

Soil, Soil Vapor, and Groundwater Delineation - Interim Module III Report

VOC Concentrations in Perched Groundwater

Well ID	Sampling Date	Concentration (µg/L)											
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Benzene	CT	1,2-DCA	MC	1,1,1-TCA	1,1,2-TCA
VP-42-GW	5/19/16	**2,550**	**90**	<25	<25	**1,680**	--	<25	--	--	--	<25	--
VP-50-GW	5/11/16	**36,600**	**2,870**	<250	<250	**56,000**	--	<250	--	--	--	**22,600**	--
VP-106-GW	1/14/20	<0.13	1.0	<0.085	<0.15	1.0	<0.12	<0.083	<0.18	<0.17	<0.48	<0.11	<0.16
VP-108-GW	1/8/20	**1,900**	**110**	10	0.87	**2,400**	0.2	0.54	0.64	3.5	<0.48	7.2	2.1
VP-109-GW	1/2/20	0.39	<0.085	<0.085	<0.15	0.52	<0.12	0.18	<0.18	<0.17	<0.48	<0.11	<0.16
VP-113-GW	1/6/20	**5,200**	**600**	67	4.6	**4,800**	**1.3**	**1.7**	**2.9**	**33**	0.84	4.1	**9.8**
VP-114-GW	1/8/20	**15,000**	**1,000**	59	5.9	**16,000**	**0.51**	0.96	**8.1**	**30**	**54**	**230**	**9.9**
	MCL*	**5**	**5**	**6**	**10**	**6**	**0.5**	**1**	**0.5**	**5**	**5**	**200**	**5**

NOTES:

- "feet bgs" - feet below ground surface
- "PCE" - tetrachloroethene
- "TCE" - trichloroethene
- "cis-1,2-DCE" - cis-1,2-dichloroethene
- "trans-1,2-DCE" - trans-1,2-dichloroethene
- "CT" - carbon tetrachloride
- "MC" - methylene chloride
- "1,1-DCA" - 1,1-dichloroethane
- "1,1,1-TCA" - 1,1,1-trichloroethane
- "1,1,2-TCA" - 1,1,2-trichloroethane
- "-" - not analyzed
- "**Bold**"- concentration exceeds the residential screening level
- "*" - State Water Resources Control Board Maximum Contaminant Level (Oct. 2019)

APPENDIX C
Initial Building Survey

Building Survey Form

Type in or select answers from drop-down lists in the righthand column.
Upload answers to GeoTracker database for criteria marked with an asterisks (*).
See Table 1 in the *Guidance on Uploading Vapor Intrusion Information into GeoTracker* (Attachment 4 of Supplemental Vapor Intrusion Guidance) for a description of Building Design Type input choices.

Person Conducting Survey	Input
Name:	Kelly C. Brown
Company:	Stantec Consulting Services Inc.
Phone Number:	714 470-6494
Email:	kelly.brown@stantec.com

Building Contact Information	Input
Name:	Daniel Quintero
Contact Title:	Manager
Phone Number:	310 326-2277 x247
Email:	daniel@dascoeng.com
Building Occupant Interviewed?	Yes

Building Information	Input
Date of Building Survey (dd/mm/yy):	January 27, 2021
*Building Name:	Dasco Engineering Corp
*Building Address (Street, City):	24747 Crenshaw Blvd. Torrance, CA
Coordinates for Center of Building (Latitude, Longitude; decimal degrees to 0.00000):	33.800960 -118.329051
*Building Location Onsite/Offsite with respect to Site/Facility:	Onsite
*Year Built (yyyy; approximate if unsure):	early 1950s
*Building Occupants:	Onsite

Building Survey Form

Building Dimensions	Input
*Building Footprint Area (within enclosed space; square feet [Ft2]):	~50,000
Building Dimensions (at grade; feet by feet):	Main portion: 210' x 190'
*Ceiling Height of Ground Floor (Feet):	~20'-25
*Number of Floors (excluding the basement):	1 main area, 2-floors in office area

Building Design	Input
*Building Design Type:	Manufacturing facility
Has the design been modified?	Yes
*Foundation Type:	Slab-on-Grade
*Building Vapor Intrusion Mitigation System:	None
*Heating, Ventilation, & Air Conditioning (HVAC) System:	None
Type of Energy Used in Building?	More Than One Type
Energy Primarily Used For?	Commercial/Industrial Processes
Number of Units for Multi-Unit Buildings:	N/A
Number of Rooms (average per unit for multi-unit buildings):	N/A
Number of Exterior Doors:	6, 1 door to offices
Number of Elevators:	0
Number of Active Exhaust Fans (e.g., kitchen/bathroom):	3 - bathrooms
Chimney or Other Vertical Draft Source?	Yes

Building Slab	Input
Slab Thickness (inches; approximate if unsure):	~4-6"
Large Slab Penetrations (> 1 Foot Diameter):	None
Soil Type 0 to 3 Feet Below Building:	Unknown
Evidence of moisture intrusion from Below Slab?	N/A

Manufacturing building as 14 passive vents on roof.
Could not determine if there were slab penetrations

Building Survey Form

Building Windows	Input
Number of Windows:	large series of windows along E side
Weather Sealed Windows and Exterior Doors?	Some Sealed
Average Area of Window Open to Outside Air (Feet2):	5' high
Ventilation During Sampling:	-

Building Crawl Space	Input
Crawl Space Height (Feet):	N/A
Number Crawl Space Vents:	N/A
Average Area per Crawl Space Vent (Feet2):	N/A
Evidence of moisture intrusion into Crawl Space from Soil?	N/A

Building Basement	Input
Basement Height (Feet):	N/A
Basement Footprint Area (Feet2):	N/A
Basement Wall Area Below Ground Surface (Feet2):	N/A
Exposed Basement above grade?	N/A
Vents or Windows above-grade in exposed basement?	N/A
Unfinished Basement?	N/A
Evidence of moisture intrusion into Basement from Soil?	N/A

Windows in manufacturing area are on the E side of building. Single pane, sealed.
Window are ~5 ft high.
Couldn't determine actual length. Estimate to be ~150 ft long

Building Survey Form

Factors Potentially Influencing Indoor Air Quality	Input
Is there an attached garage?	No
Is there smoking in the building?	No
Is there new carpet or furniture?	No
Have clothes or drapes been recently dry cleaned?	N/A
Has painting or staining been done within the last six months?	No
Has the building been recently remodeled?	No
Has the building ever had a fire?	No
Is there a hobby or craft area in the building?	No
Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?	Yes
Is there a fuel oil tank on the property?	No
Is there a septic tank on the property?	No
Has the building been fumigated or sprayed for pests recently?	No
Historically the building was primarily used for?	Manufacturing
Do current building occupants use solvents at another location (e.g., work, hobby)?	Industrial Degreasing/Cleaning

Meteorological Conditions	Input
Weather:	
Outdoor Temperature - High (°F):	
Outdoor Temperature - Low (°F):	
Indoor Temperature (°F):	
Barometric Pressure Reading (mmHg):	
Wind Direction:	-
Average Wind Speed (mph):	
HVAC Setting for Current Season:	-

(End of Form)

Building Survey Form Drop Down Lists

Building Contact Information

Contact Title:
Owner
Manager
Occupant
Other

Building Occupant Interviewed?
Yes
No

Building Information

***Building Location Onsite/Offsite/Offsite with respect to Site/Facility**
Onsite
Offsite

***Building Occupants:**
Residential
Commercial
Residential Unit over Commercial Unit
Sensitive Use (e.g. Child Care or Medical Facility)

Building Design

***Building Design Type:**
Single Unit Residential
Multi-Unit Residential (e.g. duplex, apartments)
Single Unit Commercial
Multi-Unit Commercial (e.g. strip mall)
Multi-Unit Mixed Use
Auditorium (e.g. church, theater)
School
Industrial
Manufacturing Facility
Warehouse
Other

Has the design been modified?
Yes
No
Unknown

***Foundation Type:**
Slab-on-Grade
Crawl Space
Partial Crawl Space
Basement
Partial Basement
Podium
Earthen
Secondary Slab Pour
Other

***Building Vapor Intrusion Mitigation System:**
Vapor Intrusion Barrier Only
Passive Vented System
Active Vented System
Subslab Depressurization System
Other
None

***Heating Ventilation, & Air Conditioning (HVAC) System:**
Heating Only
Cooling Only
Heating & Cooling
None

Type of Energy Used in Building?
Natural Gas
Fuel Oil
Propane
Electricity
Wood
Kerosene
More Than One Type
Other
None
Unknown

Energy Primarily Used For?
Space Heating
Water Heating
Cooking
Drying Laundry (Interior)
Commercial/Industrial Processes
Other
Unknown

Chimney or Other Vertical Draft Source?
Yes
No

Building Slab

Large Slab Penetrations (> 1 Foot Diameter):
Sump
Elevator Shaft
Floor Drain
Other
None

Soil Type 0 to 3 Feet Below Building:
Fine
Coarse
Fine and Coarse
Unknown

Evidence of moisture intrusion from Below Slab?
Yes
No
N/A

Building Windows

Weather Sealed Windows and Exterior Doors?
All Sealed
Some Sealed
None Sealed
Unknown

Ventilation During Sampling:
Open Windows
Closed Windows
Some Windows Open

Building Crawl Space

Evidence of moisture intrusion into Crawl Space from Soil?
Yes
No
N/A

Building Basement

Exposed Basement above grade?
Yes

No
N/A

Vents or Windows above-grade in exposed basement?
Yes
No
N/A

Unfinished Basement?
Yes
No
N/A

Evidence of moisture intrusion into Basement from Soil?
Yes
No
N/A

Factors Potentially Influencing Indoor Air Quality

Is there an attached garage?
Yes
No
N/A

Is there smoking in the building?
Yes
No

Is there new carpet or furniture?
Yes
No
N/A

Have clothes or drapes been recently dry cleaned?
Yes
No
N/A

Has painting or staining been done within the last six months?
Yes
No
N/A

Has the building been recently remodeled?
Yes
No
N/A

Has the building ever had a fire?
Yes
No
N/A

Is there a hobby or craft area in the building?
Yes
No
N/A

Are cleaning solvents stored in the building (e.g., spot cleaner, gun cleaner?)
Yes
No
N/A

Is there a fuel oil tank on the property?
Yes
No
N/A

Is there a septic tank on the property?
Yes
No
N/A

Has the building been fumigated or sprayed for pests recently?
Yes
No
N/A

Historically the building was primarily used for?
Dy Cleaner
Industrial Degreasing/Cleaning
Laboratory
Manufacturing
Painting/Finishing
Other
None

Do current building occupants use solvents at another location (e.g., work, hobby)?
Dy Cleaner
Industrial Degreasing/Cleaning
Laboratory
Manufacturing

Painting/Finishing
Other
None

Meteorological Conditions

Wind Direction:
N
NW
NE
W
S
SW
SE
E

HVAC Setting for Current Season?
Heating
Cooling
Off

APPENDIX D

Laboratory Analytical & Data Validation Reports

Mobile Geochemistry Inc.

12 February 2021

Lewis Simons
Stantec - Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361

H&P Project: ST020821-13
Client Project: 185804980 / Crenshaw Blvd

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 05-Feb-21 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,

Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H& P is approved as an Environmental Testing Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency . Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/about/certifications. Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
IA-8	E102029-01	Vapor	05-Feb-21	05-Feb-21
IA-10	E102029-02	Vapor	05-Feb-21	05-Feb-21
IA-9	E102029-03	Vapor	05-Feb-21	05-Feb-21
IA-7	E102029-04	Vapor	05-Feb-21	05-Feb-21
IA-6	E102029-05	Vapor	05-Feb-21	05-Feb-21
IA-5	E102029-06	Vapor	05-Feb-21	05-Feb-21
IA-4	E102029-07	Vapor	05-Feb-21	05-Feb-21
IA-3	E102029-08	Vapor	05-Feb-21	05-Feb-21
AA-2	E102029-09	Vapor	05-Feb-21	05-Feb-21
IA-2	E102029-10	Vapor	05-Feb-21	05-Feb-21
IA-2 DUP	E102029-11	Vapor	05-Feb-21	05-Feb-21
IA-1	E102029-12	Vapor	05-Feb-21	05-Feb-21
AA-3	E102029-13	Vapor	05-Feb-21	05-Feb-21
AA-1	E102029-14	Vapor	05-Feb-21	05-Feb-21

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DETECTIONS SUMMARY

Sample ID: **IA-8** Laboratory ID: **E102029-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.5**	0.41	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.4**	1.1	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.99**	0.71	ug/m3	EPA TO-15	
2-Butanone (MEK)	**220**	1.2	ug/m3	EPA TO-15	E
Chloroform	**0.69**	0.49	ug/m3	EPA TO-15	
Benzene	**0.91**	0.32	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.64**	0.64	ug/m3	EPA TO-15	
Toluene	**3.5**	1.5	ug/m3	EPA TO-15	
Tetrachloroethene	**1.4**	1.4	ug/m3	EPA TO-15	
m,p-Xylene	**3.3**	0.88	ug/m3	EPA TO-15	
o-Xylene	**1.3**	0.88	ug/m3	EPA TO-15	

Sample ID: **IA-10** Laboratory ID: **E102029-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.5**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.4**	0.56	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**1.6**	0.77	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.95**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**230**	0.60	ug/m3	EPA TO-15	E
Chloroform	**0.89**	0.25	ug/m3	EPA TO-15	
Benzene	**0.94**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.64**	0.32	ug/m3	EPA TO-15	
Trichloroethene	**0.71**	0.55	ug/m3	EPA TO-15	
4-Methyl-2-pentanone (MIBK)	**0.83**	0.83	ug/m3	EPA TO-15	
Toluene	**4.2**	0.76	ug/m3	EPA TO-15	
Tetrachloroethene	**1.9**	0.69	ug/m3	EPA TO-15	
Ethylbenzene	**0.97**	0.44	ug/m3	EPA TO-15	
m,p-Xylene	**3.6**	0.44	ug/m3	EPA TO-15	
Styrene	**0.91**	0.43	ug/m3	EPA TO-15	
o-Xylene	**1.3**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.95**	0.50	ug/m3	EPA TO-15	
1,4-Dichlorobenzene	**0.79**	0.61	ug/m3	EPA TO-15	

Sample ID: **IA-9** Laboratory ID: **E102029-03**

Analyte	Result	Reporting Limit	Units	Method	Notes

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Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Sample ID: **IA-9** Laboratory ID: **E102029-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.2**	0.56	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**0.93**	0.77	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.74**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**390**	0.60	ug/m3	EPA TO-15	E
Chloroform	**0.44**	0.25	ug/m3	EPA TO-15	
Benzene	**0.81**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.57**	0.32	ug/m3	EPA TO-15	
4-Methyl-2-pentanone (MIBK)	**1.2**	0.83	ug/m3	EPA TO-15	
Toluene	**3.5**	0.76	ug/m3	EPA TO-15	
Ethylbenzene	**1.5**	0.44	ug/m3	EPA TO-15	
m,p-Xylene	**5.7**	0.44	ug/m3	EPA TO-15	
o-Xylene	**1.9**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**1.2**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-7** Laboratory ID: **E102029-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.2**	0.56	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**0.77**	0.77	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.60**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**300**	0.60	ug/m3	EPA TO-15	E
Chloroform	**0.59**	0.25	ug/m3	EPA TO-15	
Benzene	**0.81**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.57**	0.32	ug/m3	EPA TO-15	
Trichloroethene	**1.3**	0.55	ug/m3	EPA TO-15	
4-Methyl-2-pentanone (MIBK)	**4.1**	0.83	ug/m3	EPA TO-15	
Toluene	**5.1**	0.76	ug/m3	EPA TO-15	
Tetrachloroethene	**1.7**	0.69	ug/m3	EPA TO-15	
Ethylbenzene	**8.3**	0.44	ug/m3	EPA TO-15	
m,p-Xylene	**30**	0.44	ug/m3	EPA TO-15	
o-Xylene	**8.2**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.65**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-6** Laboratory ID: **E102029-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.1**	0.21	ug/m3	EPA TO-15	

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Sample ID: **IA-6** Laboratory ID: **E102029-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**0.85**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.56**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**120**	0.60	ug/m3	EPA TO-15	E
Chloroform	**1.7**	0.25	ug/m3	EPA TO-15	
Benzene	**0.68**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.9**	0.76	ug/m3	EPA TO-15	
Ethylbenzene	**0.57**	0.44	ug/m3	EPA TO-15	
m,p-Xylene	**2.2**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.79**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.60**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-5** Laboratory ID: **E102029-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**0.95**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**0.85**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.53**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**45**	0.60	ug/m3	EPA TO-15	
Benzene	**0.61**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.45**	0.32	ug/m3	EPA TO-15	
Toluene	**1.2**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.1**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.44**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.55**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-4** Laboratory ID: **E102029-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**0.90**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.56**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**52**	0.60	ug/m3	EPA TO-15	
Benzene	**0.68**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.4**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.4**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.53**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.65**	0.50	ug/m3	EPA TO-15	

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Sample ID: **IA-3** Laboratory ID: **E102029-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.3**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.2**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.56**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**32**	0.60	ug/m3	EPA TO-15	
Benzene	**0.65**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.4**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.2**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.53**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.70**	0.50	ug/m3	EPA TO-15	

Sample ID: **AA-2** Laboratory ID: **E102029-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**0.96**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.53**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**3.9**	0.60	ug/m3	EPA TO-15	
Benzene	**0.65**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.5**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.1**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.48**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.60**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-2** Laboratory ID: **E102029-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.1**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**0.96**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.56**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**86**	0.60	ug/m3	EPA TO-15	E
Chloroform	**0.30**	0.25	ug/m3	EPA TO-15	
Benzene	**0.74**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.3**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.2**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.48**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.55**	0.50	ug/m3	EPA TO-15	

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Sample ID: **IA-2 DUP** Laboratory ID: **E102029-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.0**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.1**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.49**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**85**	0.60	ug/m3	EPA TO-15	E
Chloroform	**0.30**	0.25	ug/m3	EPA TO-15	
Benzene	**0.61**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.3**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.2**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.53**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.65**	0.50	ug/m3	EPA TO-15	

Sample ID: **IA-1** Laboratory ID: **E102029-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**0.96**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.56**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**74**	0.60	ug/m3	EPA TO-15	
Benzene	**0.71**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.8**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.5**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.62**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.85**	0.50	ug/m3	EPA TO-15	

Sample ID: **AA-3** Laboratory ID: **E102029-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.2**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.63**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**5.9**	0.60	ug/m3	EPA TO-15	
Benzene	**0.91**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**2.1**	0.76	ug/m3	EPA TO-15	
Ethylbenzene	**0.48**	0.44	ug/m3	EPA TO-15	
m,p-Xylene	**1.7**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.70**	0.44	ug/m3	EPA TO-15	

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Sample ID: **AA-3** Laboratory ID: **E102029-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,2,4-Trimethylbenzene	**0.70**	0.50	ug/m3	EPA TO-15	

Sample ID: **AA-1** Laboratory ID: **E102029-14**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**1.2**	0.21	ug/m3	EPA TO-15	
Trichlorofluoromethane (F11)	**1.2**	0.56	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**0.71**	0.35	ug/m3	EPA TO-15	
2-Butanone (MEK)	**1.2**	0.60	ug/m3	EPA TO-15	
Benzene	**0.81**	0.16	ug/m3	EPA TO-15	
Carbon tetrachloride	**0.51**	0.32	ug/m3	EPA TO-15	
Toluene	**1.6**	0.76	ug/m3	EPA TO-15	
m,p-Xylene	**1.1**	0.44	ug/m3	EPA TO-15	
o-Xylene	**0.44**	0.44	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**0.50**	0.50	ug/m3	EPA TO-15	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-8 (E102029-01) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									**R-02**
Dichlorodifluoromethane (F12)	ND	2.0	ug/m3	2	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.5**	0.41	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	1.4	"	"	"	"	"	"	
Vinyl chloride	ND	0.26	"	"	"	"	"	"	
Bromomethane	ND	0.79	"	"	"	"	"	"	
Chloroethane	ND	0.54	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.4**	1.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.80	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	1.5	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.99**	0.71	"	"	"	"	"	"	
Carbon disulfide	ND	0.63	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.80	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.82	"	"	"	"	"	"	
2-Butanone (MEK)	**220**	1.2	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.80	"	"	"	"	"	"	
Chloroform	**0.69**	0.49	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.1	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.82	"	"	"	"	"	"	
Benzene	**0.91**	0.32	"	"	"	"	"	"	
Carbon tetrachloride	**0.64**	0.64	"	"	"	"	"	"	
Trichloroethene	ND	1.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.94	"	"	"	"	"	"	
Bromodichloromethane	ND	1.4	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.92	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	1.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.92	"	"	"	"	"	"	
Toluene	**3.5**	1.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.1	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	1.7	"	"	"	"	"	"	
Dibromochloromethane	ND	3.5	"	"	"	"	"	"	
Tetrachloroethene	**1.4**	1.4	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.94	"	"	"	"	"	"	
Ethylbenzene	ND	0.88	"	"	"	"	"	"	
m,p-Xylene	**3.3**	0.88	"	"	"	"	"	"	
Styrene	ND	0.86	"	"	"	"	"	"	
o-Xylene	**1.3**	0.88	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-8 (E102029-01) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									**R-02**
Bromoform	ND	2.1	ug/m3	2	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	1.4	"	"	"	"	"	"	
4-Ethyltoluene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.4	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.2 %*		*77-127*	"	"	"	"	
IA-10 (E102029-02) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.5**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.4**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**1.6**	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.95**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**230**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**0.89**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.94**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.64**	0.32	"	"	"	"	"	"	
Trichloroethene	**0.71**	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-10 (E102029-02) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**0.83**	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**4.2**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	**1.9**	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	**0.97**	0.44	"	"	"	"	"	"	
m,p-Xylene	**3.6**	0.44	"	"	"	"	"	"	
Styrene	**0.91**	0.43	"	"	"	"	"	"	
o-Xylene	**1.3**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.95**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	**0.79**	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*103 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.3 %*		*77-127*	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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IA-9 (E102029-03) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.2**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**0.93**	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.74**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**390**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**0.44**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.81**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.57**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**1.2**	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**3.5**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	**1.5**	0.44	"	"	"	"	"	"	
m,p-Xylene	**5.7**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**1.9**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-9 (E102029-03) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**1.2**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.6 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*77-127*	"	"	"	"	
IA-7 (E102029-04) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.2**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**0.77**	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.60**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**300**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**0.59**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.81**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.57**	0.32	"	"	"	"	"	"	
Trichloroethene	**1.3**	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-7 (E102029-04) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**4.1**	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**5.1**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	**1.7**	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	**8.3**	0.44	"	"	"	"	"	"	
m,p-Xylene	**30**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**8.2**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.65**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*77-127*	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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IA-6 (E102029-05) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.1**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.85**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.56**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**120**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**1.7**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.68**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.9**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	**0.57**	0.44	"	"	"	"	"	"	
m,p-Xylene	**2.2**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.79**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-6 (E102029-05) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.60**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.3 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*77-127*	"	"	"	"	
IA-5 (E102029-06) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**0.95**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.85**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.53**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**45**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.61**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.45**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-5 (E102029-06) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.2**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.1**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.44**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.55**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.6 %*		*76-134*	*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*100 %*		*78-125*	*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*110 %*		*77-127*	*"*	*"*	*"*	*"*	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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IA-4 (E102029-07) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.90**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.56**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**52**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.68**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.4**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.4**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.53**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-4 (E102029-07) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.65**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*		*77-127*	"	"	"	"	
IA-3 (E102029-08) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.3**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.2**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.56**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**32**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.65**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-3 (E102029-08) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.4**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.2**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.53**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.70**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.1 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*77-127*	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA-2 (E102029-09) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.96**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.53**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**3.9**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.65**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.5**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.1**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.48**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA-2 (E102029-09) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.60**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.4 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.7 %*		*77-127*	"	"	"	"	
IA-2 (E102029-10) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.1**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.96**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.56**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**86**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**0.30**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.74**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-2 (E102029-10) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.3**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.2**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.48**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.55**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.1 %*		*76-134*	*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*103 %*		*78-125*	*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*106 %*		*77-127*	*"*	*"*	*"*	*"*	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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IA-2 DUP (E102029-11) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.0**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.1**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.49**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**85**	0.60	"	"	"	"	"	"	E
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	**0.30**	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.61**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.3**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.2**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.53**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-2 DUP (E102029-11) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.65**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.9 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*77-127*	"	"	"	"	
IA-1 (E102029-12) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**0.96**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.56**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**74**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.71**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA-1 (E102029-12) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.8**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.5**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.62**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.85**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.7 %*		*76-134*	*"*	*"*	*"*	*"*	
Surrogate: Toluene-d8		*101 %*		*78-125*	*"*	*"*	*"*	*"*	
Surrogate: 4-Bromofluorobenzene		*109 %*		*77-127*	*"*	*"*	*"*	*"*	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA-3 (E102029-13) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.2**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.63**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**5.9**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.91**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	
Bromodichloromethane	ND	0.68	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**2.1**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	**0.48**	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.7**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.70**	0.44	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA-3 (E102029-13) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Bromoform	ND	1.0	ug/m3	1	EB11006	10-Feb-21	10-Feb-21	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.70**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.1 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.3 %*		*77-127*	"	"	"	"	
AA-1 (E102029-14) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21									
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3	1	EB11006	10-Feb-21	11-Feb-21	EPA TO-15	
Chloromethane	**1.2**	0.21	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.71	"	"	"	"	"	"	
Vinyl chloride	ND	0.13	"	"	"	"	"	"	
Bromomethane	ND	0.39	"	"	"	"	"	"	
Chloroethane	ND	0.27	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**1.2**	0.56	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.71**	0.35	"	"	"	"	"	"	
Carbon disulfide	ND	0.32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.41	"	"	"	"	"	"	
2-Butanone (MEK)	**1.2**	0.60	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.55	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.41	"	"	"	"	"	"	
Benzene	**0.81**	0.16	"	"	"	"	"	"	
Carbon tetrachloride	**0.51**	0.32	"	"	"	"	"	"	
Trichloroethene	ND	0.55	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.47	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

AA-1 (E102029-14) Vapor Sampled: 05-Feb-21 Received: 05-Feb-21

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Bromodichloromethane	ND	0.68	ug/m3	1	EB11006	10-Feb-21	11-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.83	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.46	"	"	"	"	"	"	
Toluene	**1.6**	0.76	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.55	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.83	"	"	"	"	"	"	
Dibromochloromethane	ND	1.7	"	"	"	"	"	"	
Tetrachloroethene	ND	0.69	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.78	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
Chlorobenzene	ND	0.47	"	"	"	"	"	"	
Ethylbenzene	ND	0.44	"	"	"	"	"	"	
m,p-Xylene	**1.1**	0.44	"	"	"	"	"	"	
Styrene	ND	0.43	"	"	"	"	"	"	
o-Xylene	**0.44**	0.44	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.70	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.50	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**0.50**	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.7	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.8 %*		*77-127*	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

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
Batch EB11006 - TO-15										
Blank (EB11006-BLK1)				Prepared & Analyzed: 10-Feb-21						
Dichlorodifluoromethane (F12)	ND	1.0	ug/m3							
Chloromethane	ND	0.21	"							
Dichlorotetrafluoroethane (F114)	ND	0.71	"							
Vinyl chloride	ND	0.13	"							
Bromomethane	ND	0.39	"							
Chloroethane	ND	0.27	"							
Trichlorofluoromethane (F11)	ND	0.56	"							
1,1-Dichloroethene	ND	0.40	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.77	"							
Methylene chloride (Dichloromethane)	ND	0.35	"							
Carbon disulfide	ND	0.32	"							
trans-1,2-Dichloroethene	ND	0.40	"							
1,1-Dichloroethane	ND	0.41	"							
2-Butanone (MEK)	ND	0.60	"							
cis-1,2-Dichloroethene	ND	0.40	"							
Chloroform	ND	0.25	"							
1,1,1-Trichloroethane	ND	0.55	"							
1,2-Dichloroethane (EDC)	ND	0.41	"							
Benzene	ND	0.16	"							
Carbon tetrachloride	ND	0.32	"							
Trichloroethene	ND	0.55	"							
1,2-Dichloropropane	ND	0.47	"							
Bromodichloromethane	ND	0.68	"							
cis-1,3-Dichloropropene	ND	0.46	"							
4-Methyl-2-pentanone (MIBK)	ND	0.83	"							
trans-1,3-Dichloropropene	ND	0.46	"							
Toluene	ND	0.76	"							
1,1,2-Trichloroethane	ND	0.55	"							
2-Hexanone (MBK)	ND	0.83	"							
Dibromochloromethane	ND	1.7	"							
Tetrachloroethene	ND	0.69	"							
1,2-Dibromoethane (EDB)	ND	0.78	"							
1,1,1,2-Tetrachloroethane	ND	0.70	"							
Chlorobenzene	ND	0.47	"							

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

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
Batch EB11006 - TO-15										
Blank (EB11006-BLK1)				Prepared & Analyzed: 10-Feb-21						
Ethylbenzene	ND	0.44	ug/m3							
m,p-Xylene	ND	0.44	"							
Styrene	ND	0.43	"							
o-Xylene	ND	0.44	"							
Bromoform	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	0.70	"							
4-Ethyltoluene	ND	0.50	"							
1,3,5-Trimethylbenzene	ND	0.50	"							
1,2,4-Trimethylbenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.61	"							
1,4-Dichlorobenzene	ND	0.61	"							
1,2-Dichlorobenzene	ND	0.61	"							
1,2,4-Trichlorobenzene	ND	1.9	"							
Hexachlorobutadiene	ND	2.7	"							
Surrogate: 1,2-Dichloroethane-d4	*44.3*		*"*	*42.7*		*104*	*76-134*			
Surrogate: Toluene-d8	*43.9*		*"*	*41.6*		*106*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*65.2*		*"*	*72.6*		*89.8*	*77-127*			
LCS (EB11006-BS1)				Prepared & Analyzed: 10-Feb-21						
Dichlorodifluoromethane (F12)	17.3	1.0	ug/m3	20.2		85.9	59-128			
Vinyl chloride	8.9	0.13	"	10.4		85.5	64-127			
Chloroethane	9.0	0.27	"	10.7		83.6	63-127			
Trichlorofluoromethane (F11)	18.5	0.56	"	22.6		81.7	62-126			
1,1-Dichloroethene	13.6	0.40	"	16.2		84.1	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	25.7	0.77	"	31.0		82.8	66-126			
Methylene chloride (Dichloromethane)	10.5	0.35	"	14.2		74.4	62-115			
trans-1,2-Dichloroethene	13.0	0.40	"	16.2		80.2	67-124			
1,1-Dichloroethane	12.9	0.41	"	16.5		78.2	68-126			
cis-1,2-Dichloroethene	13.3	0.40	"	16.0		83.2	70-121			
Chloroform	16.3	0.25	"	19.8		82.3	68-123			
1,1,1-Trichloroethane	18.9	0.55	"	22.2		84.8	68-125			
1,2-Dichloroethane (EDC)	13.8	0.41	"	16.5		83.5	65-128			
Benzene	10.5	0.16	"	13.0		81.4	69-119			

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

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
Batch EB11006 - TO-15										
LCS (EB11006-BS1)				Prepared & Analyzed: 10-Feb-21						
Carbon tetrachloride	21.5	0.32	ug/m3	25.6		83.8	68-132			
Trichloroethene	18.8	0.55	"	21.9		85.8	71-123			
Toluene	12.8	0.76	"	15.4		83.5	66-119			
1,1,2-Trichloroethane	18.3	0.55	"	22.2		82.1	73-119			
Tetrachloroethene	22.0	0.69	"	27.6		79.6	66-124			
1,1,1,2-Tetrachloroethane	23.3	0.70	"	28.0		83.4	67-129			
Ethylbenzene	14.3	0.44	"	17.7		80.8	70-124			
m,p-Xylene	15.0	0.44	"	17.7		85.0	61-134			
o-Xylene	14.0	0.44	"	17.7		79.3	67-125			
1,1,2,2-Tetrachloroethane	19.0	0.70	"	28.0		67.9	65-127			
Surrogate: 1,2-Dichloroethane-d4	*42.8*		*"*	*42.7*		*100*	*76-134*			
Surrogate: Toluene-d8	*42.1*		*"*	*41.6*		*101*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*68.9*		*"*	*72.6*		*94.9*	*77-127*			

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Stantec - Thousand Oaks	Project: ST020821-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	12-Feb-21 10:45

Notes and Definitions

R-02	This sample was diluted due to limited sample volume, resulting in elevated reporting limits.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
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, 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.

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VAPOR / AIR Chain of Custody

DATE: 02/05/21
Page 3 of 4

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd Torrance
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): lewis.simons@stantec.com
Lab Client City, State, Zip: Thousand Oaks, CA 91361	ban.chevlen@stantec
Phone Number: 562-799-9866	

Reporting Requirements

- [x] Standard Report ☐ Level III ☐ Level IV
- ☐ Excel EDD ☐ Other EDD:
- ☐ CA Geotracker Global ID:

Turnaround Time

- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- ☐ **Rush** (specify):

Sampler Information

Sampler(s): J.Arellano B.Villa
Signature:
Date: 02/05/21

Sample Receipt (Lab Use Only)

Date Rec'd: 2/8/21	Control #: 210085.04
H&P Project #: STD2821-R13	
Lab Work Order #: E102D29	
Sample Intact: [x] Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60204	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: WB	

Additional Instructions to Laboratory:

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

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
1A-8		02/05/21	1725	1A	6L	483	-13.43	X												
1A-10			1729	1A	6L	320	-5.33	X												
1A-9			1729	1A	6L	336	-5.64	X												
1A-7			1726	1A	6L	279	-1.39	X												
1A-6			1848	1A	6L	278	-.78	X												
1A-5			1847	1A	6L	479	-1.35	X												
1A-4			1846	1A	6L	454	-1.62	X												
1A-3			1842	1A	6L	478	-2.16	X												
AA-2			1914	AA	6L	477	-4.80	X												
1A-1			1849	1A	6L	448	-3.17	X												

Approved/Relinquished by: Emily Medler	Company: Stantec	Date: 2/5/21	Time: 1925	Received by:	Company: H&P	Date: 02/05/21	Time: 1925
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*

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VAPOR / AIR Chain of Custody

DATE: 02/05/21
Page 4 of 4

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd Torrance
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): ben.cherlen@stantec.com lewis.simon@stantec.com
Lab Client City, State, Zip: Thousand Oaks, CA 91361	
Phone Number: 562-799-9866	

Reporting Requirements

- [x] Standard Report [ ] Level III [ ] Level IV
- [ ] Excel EDD [ ] Other EDD:
- [ ] CA Geotracker Global ID:

Turnaround Time

- [x] **Standard** (7 days for preliminary report, 10 days for final report)
- [ ] **Rush** (specify):

Sampler Information

Sampler(s): J. Arellano B. Villa
Signature:
Date: 02/05/21

Sample Receipt (Lab Use Only)

Date Rec'd: 2/8/21	Control #: 210085.04
H&P Project # STO20821-R13	
Lab Work Order # E102029	
Sample Intact: [ ] Yes [ ] No [ ] See Notes Below	
Receipt Gauge ID: 60204	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: MB	

Additional Instructions to Laboratory:

** Preferred VOC units (please choose one):*
[ ] µg/L [x] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [ ] 8260SV [x] TO-15	VOCs Short List / Project List [ ] 8260SV [ ] TO-15	Oxygenates [ ] 8260SV [ ] TO-15	Naphthalene [ ] 8260SV [ ] TO-15	TPHv as Gas [ ] 8260SVm [ ] TO-15m	Aromatic/Aliphatic Fractions [ ] 8260SVm [ ] TO-15m	Leak Check Compound [ ] DFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2				
IA-2 DUP		02/05/21	1844	IA	6L	452	-2.03	X													
IA-1		"	1843	IA	6L	480	-3.43	X													
AA-3		"	1901	AA	6L	481	-3.24	X													
AA-1		"	1859	AA	6L	296	-2.86	X													

Approved/Relinquished by: Emily Mealer	Company: Stantec	Date: 2/5/21	Time: 1925	Received by:	Company: H&P	Date: 02/05/21	Time: 1925
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*

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, LA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa

Reviewed: EC
Scanned: TTom s

		SAMPLE ID: 1A-8							
Summa ID #:	483	Start Date:	~~2-5-21~~ 1027	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F195	Start Time:	1027	Check Time:	1306	Check Time:	1647	End Time:	1728
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-24	Check Vac ("Hg):	-16	End Vac ("Hg):	-14

*See note

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):
Photos sent to PM

Note:
*Access to building cut off before 8HRS.
- E.C. 2/9/21

Outdoor Temp Hi (F):	64	Barometric Pressure:	30 in Hg	Weather Conditions: A.M. Overcast P.M.- Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

Mobile Geochemistry Inc.

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa
Reviewed: EC
Scanned: [illegible]

		SAMPLE ID:	IA-10						
Summa ID #:	320	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F133	Start Time:	1029	Check Time:	1307	Check Time:	1647	End Time:	1729
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-25	Check Vac ("Hg):	-12	End Vac ("Hg):	-10 * see note

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

* Access to building cut off before 8 HRs.
- E.C. 2/9/21

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM- Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	P.M.- Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

Mobile Geochemistry Inc.

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521 - TECH
Site Address: 24747 Crenshaw Blvd. Torrance, CA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa

Reviewed: EC
Scanned: Thomas

		SAMPLE ID:	IA-9						
Summa ID #:	336	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F204	Start Time:	1031	Check Time:	1308	Check Time:	1648	End Time:	1731 29
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-22	Check Vac ("Hg):	-8	End Vac ("Hg):	-7 * see note

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

*Access to building not allowed before 8HR shut off.
-E.C. 2/9/21

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM - Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4mph	PM - Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521 - TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa
Reviewed: EC
Scanned: Thom

		SAMPLE ID:	IA-7						
Summa ID #:	279	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F189	Start Time:	1035	Check Time:	1300	Check Time:	1632	End Time:	1726
Flow Rate (hrs or cc/min):	8	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-19	Check Vac ("Hg):	-4	End Vac ("Hg):	-3

*See note

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

* Access to building not allowed before 8 HR shut off. - Can filled fast. OK - EC. 2/9/21

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM - Overcast PM - Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521 - TECH
Site Address: 24747 Crenshaw Blvd Torrance, LA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano B. Villa

Reviewed: EC
Scanned: TMorris

		SAMPLE ID:	IA - 6						
Summa ID #:	278	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F134	Start Time:	1038	Check Time:	1257	Check Time:	1634	End Time:	1848
Flow Rate (hrs or cc/min):	8hr	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-22	Check Vac ("Hg):	-7	End Vac ("Hg):	-3

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM - Overcast PM - Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd. Torrance, LA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano B. Villa

Reviewed: EC
Scanned: Flores

		SAMPLE ID:	1A-5						
Summa ID #:	479	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F185	Start Time:	1040	Check Time:	1255	Check Time:	1635	End Time:	1847
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-21	Check Vac ("Hg):	-8	End Vac ("Hg):	-2

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM Overcast PM Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J.Arellano B.Villa
Reviewed: EC
Scanned: Plans

		SAMPLE ID:	IA-4						
Summa ID #:	454	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F179	Start Time:	1042	Check Time:	1254	Check Time:	1636	End Time:	1846
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-24	Check Vac ("Hg):	-11	End Vac ("Hg):	-4

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM- Overcast PM- Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521- TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano B. Villa

Reviewed: EC
Scanned: TTorres

		SAMPLE ID:	IA-3						
Summa ID #:	478	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F205	Start Time:	1044	Check Time:	1248	Check Time:	1637	End Time:	1842
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-26	Check Vac ("Hg):	-12	End Vac ("Hg):	-5

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM- Overcast PM- Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals
Cutting oil	
Solvents	

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA 90505

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa

Reviewed: EC
Scanned: TTomas

		SAMPLE ID:	AA-2						
Summa ID #:	477	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F164	Start Time:	1046	Check Time:	1244	Check Time:	1640	End Time:	1914
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-25	Check Vac ("Hg):	-12	End Vac ("Hg):	-7

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):
Photos sent to PM

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM- Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	PM- Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals
Cutting oil	
Diesel Exhaust	

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance LA

Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B Villa

Reviewed: EC
Scanned: TZ

		SAMPLE ID:	1A-2						
Summa ID #:	448	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F191	Start Time:	1049	Check Time:	1252	Check Time:	1639	End Time:	1844
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-23	Check Vac ("Hg):	-10	End Vac ("Hg):	-4

Summa Canister Height above Ground (ft): 5

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):
Photos sent to PM

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM - Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	PM - Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals
Cutting oil/ Solvents	

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: 5T020521- TECH
Site Address: 24747 Crenshaw Blvd, Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B Villa
Reviewed: EC
Scanned: TTorres

		SAMPLE ID:	1A-2 DUP						
Summa ID #:	452	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F209	Start Time:	1049	Check Time:	1252	Check Time:	1639	End Time:	1844
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-20	Check Vac ("Hg):	-6	End Vac ("Hg):	-2

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM- Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	PM- Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals
Cutting oil	
Solvents	

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano B Villa
Reviewed: EC
Scanned: TJones

		SAMPLE ID:	IA-1						
Summa ID #:	480	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F150	Start Time:	1051	Check Time:	1250	Check Time:	1638	End Time:	1843
Flow Rate (hrs or cc/min):	8 hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-25	Check Vac ("Hg):	-12	End Vac ("Hg):	-5

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):
Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	Weather Conditions: AM- Overcast PM- Sunny
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals
Cutting oils	
Solvents	

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location

H&P Mobile Geochemistry Inc.

FMS008
Revision: 1
Revised: 10/23/14
Effective: 12/9/14
Page 1 of 1

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B Villa
Reviewed: EC
Scanned: TTowns

		SAMPLE ID: AA-3							
Summa ID #:	481	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F210	Start Time:	1100	Check Time:	1302	Check Time:	1642	End Time:	1901
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30	Check Vac ("Hg):	-24	Check Vac ("Hg):	-12	End Vac ("Hg):	-5

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):

Photos sent to PM

Outdoor Temp Hi (F):	64	Barometric Pressure:	30 "Hg	Weather Conditions:
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location
Car exhaust	

H&P Mobile Geochemistry Inc.

Log Sheet: Indoor/Ambient Air Sampling

H&P Project #: ST020521-TECH
Site Address: 24747 Crenshaw Blvd Torrance, CA
Consultant: Stantec
Consultant Rep: E. Medler
H&P Rep: J. Arellano, B. Villa
Reviewed: EC
Scanned: TTorres

		SAMPLE ID: AA-1							
Summa ID #:	296	Start Date:	2-5-21	Check Date:	2-5-21	Check Date:	2-5-21	End Date:	2-5-21
Flow Cont ID #:	F132	Start Time:	1101	Check Time:	1305	Check Time:	1650	End Time:	1859
Flow Rate (hrs or cc/min):	8hrs	Start Vacuum ("Hg):	-30+	Check Vac ("Hg):	-25	Check Vac ("Hg):	-12	End Vac ("Hg):	-5

Summa Canister Height above Ground (ft): 5'

Description of Summa Canister Placement:

DIAGRAM (and/or send photo to H&P PM):
Photos sent to PM

				Weather Conditions:
Outdoor Temp Hi (F):	64	Barometric Pressure:	30" Hg	AM - Overcast
Outdoor Temp Low (F):	48	Wind Speed:	4 mph	PM - Sunny
Indoor Temp Avg (F):	70	Wind Direction:	NW	

PRODUCT INVENTORY (nearby products that may contain chemicals of concern; continue on back if needed):

Name of Product	List of Chemicals

OUTDOOR SOURCES (possible sources of chemicals of concern from outdoor activities; continue on back if needed):

Source	Location
Car Exhaust	

Mobile Geochemistry Inc.

24 February 2021

Lewis Simons
Stantec - Thousand Oaks
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361

H&P Project: ST021221-13
Client Project: 185804980 / Crenshaw Blvd

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 11-Feb-21 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,

Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H& P is approved as an Environmental Testing Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency . Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/about/certifications. Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.

H&P Mobile
Geochemistry Inc.

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

Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
VP-9	E102048-01	Vapor	11-Feb-21	11-Feb-21
VP-10	E102048-02	Vapor	11-Feb-21	11-Feb-21
VP-8	E102048-03	Vapor	11-Feb-21	11-Feb-21
VP-7	E102048-04	Vapor	11-Feb-21	11-Feb-21
VP-6	E102048-05	Vapor	11-Feb-21	11-Feb-21
VP-5	E102048-06	Vapor	11-Feb-21	11-Feb-21
VP-4	E102048-07	Vapor	11-Feb-21	11-Feb-21
VP-3	E102048-08	Vapor	11-Feb-21	11-Feb-21
VP-2	E102048-09	Vapor	11-Feb-21	11-Feb-21
VP-2 Dup	E102048-10	Vapor	11-Feb-21	11-Feb-21
VP-1	E102048-11	Vapor	11-Feb-21	11-Feb-21

H&P Mobile
Geochemistry Inc.

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

Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

DETECTIONS SUMMARY

Sample ID: **VP-9** Laboratory ID: **E102048-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**10**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**1500**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**150**	30	ug/m3	EPA TO-15	
Trichloroethene	**61**	5.5	ug/m3	EPA TO-15	
4-Methyl-2-pentanone (MIBK)	**9.0**	8.3	ug/m3	EPA TO-15	
Toluene	**16**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**1200**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**12**	8.8	ug/m3	EPA TO-15	

Sample ID: **VP-10** Laboratory ID: **E102048-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**500**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**87**	30	ug/m3	EPA TO-15	
Trichloroethene	**320**	5.5	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**1000**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**9.1**	8.8	ug/m3	EPA TO-15	

Sample ID: **VP-8** Laboratory ID: **E102048-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**25**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**50**	30	ug/m3	EPA TO-15	
Trichloroethene	**16**	5.5	ug/m3	EPA TO-15	
Toluene	**6.6**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**69**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-7** Laboratory ID: **E102048-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**13**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**100**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**920**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**47**	30	ug/m3	EPA TO-15	
Trichloroethene	**310**	5.5	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	

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Sample ID: **VP-7** Laboratory ID: **E102048-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**2200**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**9.5**	8.8	ug/m3	EPA TO-15	

Sample ID: **VP-6** Laboratory ID: **E102048-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1,2-Trichlorotrifluoroethane (F113)	**250**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**42**	30	ug/m3	EPA TO-15	
Trichloroethene	**64**	5.5	ug/m3	EPA TO-15	
Toluene	**9.5**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**900**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-5** Laboratory ID: **E102048-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**12**	5.6	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**1000**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**45**	30	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**43**	5.5	ug/m3	EPA TO-15	
Benzene	**3.2**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**35**	5.5	ug/m3	EPA TO-15	
Toluene	**20**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**2400**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**12**	8.8	ug/m3	EPA TO-15	

Sample ID: **VP-4** Laboratory ID: **E102048-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Helium (LCC)	**0.16**	0.10	%	ASTM D1945M	
Trichlorofluoromethane (F11)	**8.3**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**230**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**560**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**75**	30	ug/m3	EPA TO-15	
Chloroform	**200**	4.9	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**7.8**	5.5	ug/m3	EPA TO-15	
Benzene	**6.8**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**4600**	27	ug/m3	EPA TO-15	
Toluene	**29**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**7300**	34	ug/m3	EPA TO-15	

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Sample ID: **VP-4** Laboratory ID: **E102048-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
m,p-Xylene	**15**	8.8	ug/m3	EPA TO-15	

Sample ID: **VP-3** Laboratory ID: **E102048-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Helium (LCC)	**0.13**	0.10	%	ASTM D1945M	
Trichlorofluoromethane (F11)	**11**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**360**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**290**	7.7	ug/m3	EPA TO-15	
Chloroform	**18**	4.9	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**35**	5.5	ug/m3	EPA TO-15	
Benzene	**13**	3.2	ug/m3	EPA TO-15	
Trichloroethene	**20000**	140	ug/m3	EPA TO-15	
Toluene	**6.8**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**44000**	170	ug/m3	EPA TO-15	

Sample ID: **VP-2** Laboratory ID: **E102048-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Helium (LCC)	**0.13**	0.10	%	ASTM D1945M	
1,1-Dichloroethene	**140**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**190**	7.7	ug/m3	EPA TO-15	
Chloroform	**8.6**	4.9	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**6.6**	5.5	ug/m3	EPA TO-15	
Trichloroethene	**910**	5.5	ug/m3	EPA TO-15	
Toluene	**6.0**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**1800**	6.9	ug/m3	EPA TO-15	

Sample ID: **VP-2 Dup** Laboratory ID: **E102048-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	**130**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**170**	7.7	ug/m3	EPA TO-15	
Chloroform	**8.7**	4.9	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**6.6**	5.5	ug/m3	EPA TO-15	
Trichloroethene	**960**	5.5	ug/m3	EPA TO-15	
Toluene	**6.3**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**1900**	6.9	ug/m3	EPA TO-15	

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Sample ID: **VP-1** Laboratory ID: **E102048-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichlorofluoromethane (F11)	**18**	5.6	ug/m3	EPA TO-15	
1,1-Dichloroethene	**230**	4.0	ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	**450**	7.7	ug/m3	EPA TO-15	
2-Butanone (MEK)	**82**	30	ug/m3	EPA TO-15	
1,1,1-Trichloroethane	**33**	5.5	ug/m3	EPA TO-15	
Trichloroethene	**900**	5.5	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**2700**	6.9	ug/m3	EPA TO-15	

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Soil Vapor/Air Analysis by ASTM D1945M

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9 (E102048-01) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-10 (E102048-02) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-8 (E102048-03) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-7 (E102048-04) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-6 (E102048-05) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-5 (E102048-06) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-4 (E102048-07) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	**0.16**	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-3 (E102048-08) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	**0.13**	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-2 (E102048-09) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	**0.13**	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	

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Soil Vapor/Air Analysis by ASTM D1945M

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2 Dup (E102048-10) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	
VP-1 (E102048-11) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Helium (LCC)	ND	0.10	%	1	EB11714	17-Feb-21	17-Feb-21	ASTM D1945M	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9 (E102048-01) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**10**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**1500**	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)	**150**	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	**61**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**9.0**	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**16**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**1200**	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	**12**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-9 (E102048-01) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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		*97.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.9 %*		*77-127*	"	"	"	"	
VP-10 (E102048-02) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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)	**500**	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)	**87**	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	**320**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-10 (E102048-02) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromodichloromethane	ND	6.8	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**1000**	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	**9.1**	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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.5 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*94.6 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.0 %*		*77-127*	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-8 (E102048-03) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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)	**25**	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)	**50**	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	**16**	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	**6.6**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**69**	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	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-8 (E102048-03) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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		*96.3 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*94.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.6 %*		*77-127*	"	"	"	"	
VP-7 (E102048-04) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**13**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**100**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**920**	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)	**47**	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	**310**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-7 (E102048-04) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromodichloromethane	ND	6.8	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**2200**	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	**9.5**	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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*		*77-127*	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-6 (E102048-05) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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)	**250**	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)	**42**	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	**64**	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	**9.5**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**900**	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	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-6 (E102048-05) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
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		*98.1 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.0 %*		*77-127*	"	"	"	"	
VP-5 (E102048-06) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**12**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**1000**	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)	**45**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**43**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.2**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**35**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-5 (E102048-06) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromodichloromethane	ND	6.8	ug/m3	1	EB12209	20-Feb-21	20-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**20**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**2400**	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	**12**	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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.1 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.4 %*		*77-127*	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-4 (E102048-07) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**8.3**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**230**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**560**	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)	**75**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**200**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**7.8**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.8**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**4600**	27	"	5	"	"	22-Feb-21	"	
1,2-Dichloropropane	ND	9.4	"	1	"	"	21-Feb-21	"	
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	**29**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**7300**	34	"	5	"	"	22-Feb-21	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	1	"	"	21-Feb-21	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**15**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-4 (E102048-07) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
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		*99.0 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.6 %*		*77-127*	"	"	"	"	
VP-3 (E102048-08) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**11**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**360**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**290**	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	**18**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**35**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**13**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**20000**	140	"	25	"	"	22-Feb-21	"	
1,2-Dichloropropane	ND	9.4	"	1	"	"	21-Feb-21	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-3 (E102048-08) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromodichloromethane	ND	6.8	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.8**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**44000**	170	"	25	"	"	22-Feb-21	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	1	"	"	21-Feb-21	"	
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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.0 %*		*77-127*	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2 (E102048-09) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
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	**140**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**190**	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	**8.6**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**6.6**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**910**	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	**6.0**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**1800**	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	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2 (E102048-09) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
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		*98.9 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*		*77-127*	"	"	"	"	
VP-2 Dup (E102048-10) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
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	**130**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**170**	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	**8.7**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**6.6**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**960**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-2 Dup (E102048-10) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromodichloromethane	ND	6.8	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**6.3**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**1900**	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	"	"	"	"	"	"	
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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*99.9 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.8 %*		*77-127*	"	"	"	"	

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290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1 (E102048-11) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**18**	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	**230**	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	**450**	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)	**82**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	**33**	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**900**	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	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**2700**	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	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	

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760-804-9159 Fax

Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
VP-1 (E102048-11) Vapor Sampled: 11-Feb-21 Received: 11-Feb-21									
Bromoform	ND	10	ug/m3	1	EB12209	20-Feb-21	21-Feb-21	EPA TO-15	
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		*93.5 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*97.6 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.3 %*		*77-127*	"	"	"	"	

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Soil Vapor/Air Analysis by ASTM D1945M - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB11714 - GC										
Blank (EB11714-BLK1)				Prepared & Analyzed: 17-Feb-21						
Helium (LCC)	ND	0.10	%							

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

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
Batch EB12209 - TO-15										
Blank (EB12209-BLK1)				Prepared & Analyzed: 20-Feb-21						
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
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	"							
Chlorobenzene	ND	4.7	"							

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

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
Batch EB12209 - TO-15										
Blank (EB12209-BLK1)				Prepared & Analyzed: 20-Feb-21						
Ethylbenzene	ND	4.4	ug/m3							
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	"							
Surrogate: 1,2-Dichloroethane-d4	*198*		*"*	*214*		*92.5*	*76-134*			
Surrogate: Toluene-d8	*202*		*"*	*208*		*97.1*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*308*		*"*	*363*		*84.9*	*77-127*			
LCS (EB12209-BS1)				Prepared: 20-Feb-21 Analyzed: 21-Feb-21						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		118	59-128			
Vinyl chloride	58	2.6	"	52.0		111	64-127			
Chloroethane	58	8.0	"	53.6		108	63-127			
Trichlorofluoromethane (F11)	110	5.6	"	113		100	62-126			
1,1-Dichloroethene	82	4.0	"	80.8		101	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	160	7.7	"	155		106	66-126			
Methylene chloride (Dichloromethane)	72	3.5	"	70.8		102	62-115			
trans-1,2-Dichloroethene	77	8.0	"	80.8		94.9	67-124			
1,1-Dichloroethane	82	4.1	"	82.4		100	68-126			
cis-1,2-Dichloroethene	78	4.0	"	80.0		97.9	70-121			
Chloroform	100	4.9	"	99.2		104	68-123			
1,1,1-Trichloroethane	110	5.5	"	111		102	68-125			
1,2-Dichloroethane (EDC)	84	4.1	"	82.4		102	65-128			
Benzene	66	3.2	"	64.8		101	69-119			

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

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
Batch EB12209 - TO-15										
LCS (EB12209-BS1)				Prepared: 20-Feb-21 Analyzed: 21-Feb-21						
Carbon tetrachloride	130	6.4	ug/m3	128		102	68-132			
Trichloroethene	120	5.5	"	110		112	71-123			
Toluene	84	3.8	"	76.8		109	66-119			
1,1,2-Trichloroethane	120	5.5	"	111		107	73-119			
Tetrachloroethene	160	6.9	"	138		118	66-124			
1,1,1,2-Tetrachloroethane	170	7.0	"	140		124	67-129			
Ethylbenzene	110	4.4	"	88.4		126	70-124			QL-1H
m,p-Xylene	110	8.8	"	88.4		125	61-134			
o-Xylene	110	4.4	"	88.4		124	67-125			
1,1,2,2-Tetrachloroethane	160	7.0	"	140		111	65-127			
Surrogate: 1,2-Dichloroethane-d4	*203*		*"*	*214*		*95.2*	*76-134*			
Surrogate: Toluene-d8	*199*		*"*	*208*		*95.7*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*363*		*"*	*363*		*100*	*77-127*			

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Stantec - Thousand Oaks	Project: ST021221-13	
290 Conejo Ridge Avenue, Suite 200	Project Number: 185804980 / Crenshaw Blvd	Reported:
Thousand Oaks, CA 91361	Project Manager: Lewis Simons	24-Feb-21 15:43

Notes and Definitions

QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
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, 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.

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VAPOR / AIR Chain of Custody

DATE: 02-11-21
Page 1 of 2

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): Lewis.simons@stantec.com
Lab Client City, State, Zip: Thousand oaks, CA 91361	Ben.chevlen@stantec.com
Phone Number: (562) 766-1686	

Sample Receipt (Lab Use Only)

Date Rec'd: 2/12	Control #: 216085.08
H&P Project # STO21221-N13	2/12/21
Lab Work Order # E102048	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials: UB

Reporting Requirements

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

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): J. Arellano
Signature:
Date: 02-11-21

Additional Instructions to Laboratory:

* **Preferred VOC units (please choose one):** Confirm with Ben Chevlen per ron Barron
☐ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☒ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-9		02-11-21	1029	SV	450 mL	634	0.26	✓						✓						
VP-10		"	1042	"	"	698	0.41	✓						✓						
VP-8		"	1056	"	"	636	0.46	✓						✓						
VP-7		"	1113	"	"	649	0.28	✓						✓						
VP-6		"	1126	"	"	637	0.17	✓						✓						
VP-5		"	1139	"	"	639	0.37	✓						✓						
VP-4		"	1151	"	"	641	0.21	✓						✓						
VP-3		"	1202	"	"	727	0.38	✓						✓						
VP-2		"	1217	"	"	703	0.39	✓						✓						
VP-2 Dup		"	1217	"	"	701	0.35	✓						✓						

Approved/Relinquished by:	Company: STANTEC	Date: 2/11/21	Time: 1345	Received by: J. Arellano	Company: H&P	Date: 02-11-21	Time: 1345
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

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VAPOR / AIR Chain of Custody

DATE: 02-11-21

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): Lewis.simons@stantec.com
Lab Client City, State, Zip: Thousand Oaks, CA 91361	Ben.chevlen@stantec.com
Phone Number: (562) 766-1686	

Sample Receipt (Lab Use Only)

Date Rec'd: 2/12	Control #: 210085.08
H&P Project #	STO21221-V13 4843112771
Lab Work Order #	EID2048
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials: MB

Reporting Requirements

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

Turnaround Time

☑ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): J. Arellano
Signature:
Date: 02-11-21

Additional Instructions to Laboratory:

* **Preferred VOC units (please choose one):** Confirm with Ben chevlen per Ron Barron
☐ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☒ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-1		02-11-21	1276	V	450mL	638	0.43	✓						✓						

Approved/Relinquished by:	Company: STANTEC	Date: 2/11/21	Time: 1345	Received by: J. Arellano	Company: H&P	Date: 02-11-21	Time: 1745
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

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VAPOR / AIR Chain of Custody

DATE: 02-11-21
Page 1 of 2

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): Lewis.simons@stantec.com
Lab Client City, State, Zip: Thousand oaks, CA 91361	Ben.chevlen@stantec.com
Phone Number: (562) 766-1686	

Sample Receipt (Lab Use Only)

Date Rec'd: 2/12	Control #: 216085.08
H&P Project # STO21221-N13	2/12/21
Lab Work Order # E102048	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials: UB

Reporting Requirements

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

Turnaround Time

☒ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): J. Arellano
Signature:
Date: 02-11-21

Additional Instructions to Laboratory:

* **Preferred VOC units (please choose one):** Confirm with Ben Chevlen per ron Barron
☐ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☒ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-9		02-11-21	1029	SV	450 mL	634	0.26	✓						✓						
VP-10		"	1042	"	"	698	0.41	✓						✓						
VP-8		"	1056	"	"	636	0.46	✓						✓						
VP-7		"	1113	"	"	649	0.28	✓						✓						
VP-6		"	1126	"	"	637	0.17	✓						✓						
VP-5		"	1139	"	"	639	0.37	✓						✓						
VP-4		"	1151	"	"	641	0.21	✓						✓						
VP-3		"	1202	"	"	727	0.38	✓						✓						
VP-2		"	1217	"	"	703	0.39	✓						✓						
VP-2 Dup		"	1217	"	"	701	0.35	✓						✓						

Approved/Relinquished by:	Company: STANTEC	Date: 2/11/21	Time: 1345	Received by: J. Arellano	Company: H&P	Date: 02-11-21	Time: 1345
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

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VAPOR / AIR Chain of Custody

DATE: 02-11-21

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185804980
Lab Client Project Manager: Lewis Simons	Project Location: 24747 Crenshaw Blvd
Lab Client Address: 290 Conejo Ridge Ave	Report E-Mail(s): Lewis.simons@stantec.com
Lab Client City, State, Zip: Thousand Oaks, CA 91361	Ben.chevlen@stantec.com
Phone Number: (562) 766-1686	

Sample Receipt (Lab Use Only)

Date Rec'd: 2/12	Control #: 210085.08
H&P Project #	STO21221-V13 4843112771
Lab Work Order #	EID2048
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials: MB

Reporting Requirements

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

Turnaround Time

☑ **Standard** (7 days for preliminary report, 10 days for final report)
☐ **Rush** (specify): _____

Sampler Information

Sampler(s): J. Arellano
Signature:
Date: 02-11-21

Additional Instructions to Laboratory:

* **Preferred VOC units (please choose one):** Confirm with Ben chevlen per Ron Barron
☐ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15	TPHv as Gas ☐ 8260SVm ☐ TO-15m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☒ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2				
VP-1		02-11-21	1276	V	450mL	638	0.43	✓						✓						

Approved/Relinquished by:	Company: STANTEC	Date: 2/11/21	Time: 1345	Received by: J. Arellano	Company: H&P	Date: 02-11-21	Time: 1745
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

H&P Mobile Geochemistry Inc.

FMS006
Revision: 3
Revised: 1/15/2016
Effective: 1/25/2016
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Helium Shroud

H&P Project #: STO21021-TECH/He
Date: 02-11-21
Site Address: 24747 Crenshaw Blvd (Parco Building)
Page: 1 of 2
Consultant: Stantec
H&P Rep(s): J. Arellano
Reviewed: EC
Consultant Rep(s): Ron Barnes
Scanned: TTom S

Equipment Info	
Inline Gauge ID#:	TOS
Pump ID#:	—
He Meter ID#:	017
Shroud ID#:	047

Purge Volume	
PV Amount:	300 mL
PV Includes:	
☑ Tubing	
☐ Sand 40%	
☐ Dry Bent 50%	

MGD 2002 Helium Detector Calibration	Time	Helium (%)
Calibration Standard	n/a	2.5
Opening Calibration	1009	2.4
Closing Calibration	1248	2.7
Acceptable Range	n/a	2.1 - 2.9

Shroud Procedure: H&P He Shroud SOP

	Sample and Summa Information							Probe Specs							Purge & Collection Information						Shroud Info			
	Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac ("Hg)	End / Sample Time	End Vac ("Hg)	Probe Depth (ft)	Tube Length (ft)	Tube OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min: sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☑ H_2O	He % Before	He % After	Probe ppmv	Probe Pressure
1	VP-9	634	281	1025	-30	1029	0	VP	2	1/8					✓	300	<200	—	<200	0	54.5	51.1	0	0
2	VP-10	698	175	1039	-27.5	1042	0	VP	2	1/8					✓	300	<200	—	<200	0	60.9	51.9	0	0
3	VP-8	636	207	1051	-22	1056	0	VP	2	1/8					✓	300	<200	—	<200	0	56.7	50.8	425	0
4	VP-7	649	177	1109	-26	1113	0	VP	2	1/8					✓	300	<200	—	<200	0	60.9	55.1	0	0
5	VP-6	637	074	1123	-28	1126	0	VP	2	1/8					✓	300	<200	—	<200	0	58.7	51.2	0	0
6	VP-5	639	136	1134	-27	1139	0	VP	2	1/8					✓	300	<200	—	<200	0	57.3	52.4	0	0
7	VP-4	641	073	1147	-28	1151	0	VP	2	1/8					✓	300	<200	—	<200	0	65.9	56.0	0	0
8	VP-3	727	320	1158	-27	1202	0	VP	2	1/8					✓	300	<200	—	<200	0	63.7	56.5	0	0
9	VP-2	703	279	1212	-30+	1217	0	VP	2	1/8					✓	300	<200	—	<200	0	59.4	51.2	0	0
10	VP-2 Dup	701	165	1212	-26.5	1217	0	VP	2	1/8					✓	300	<200	—	<200	0	59.4	51.2	0	0

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

H&P Mobile Geochemistry Inc.

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Page 1 of 1

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Page: 2 of 2
Consultant: Stantec
H&P Rep(s): J. Arellano
Reviewed: EC
Consultant Rep(s): Ron Barron
Scanned: ✓

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Pump ID#:	—
He Meter ID#:	017
Shroud ID#:	047

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PV Includes:	
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☐ Sand 40%	
☐ Dry Bent 50%	

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1	VP-1	638	250	1227	-27.5	1236	0	VP	2	1/8	—	—	—	—	✓	300	4200	—	4200	0	58.9	52.2	0	0
2																								
3																								
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5																								
6																								
7																								
8																								
9																								
10																								

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