

## Appendix H2

### Soil Vapor Investigation Summary Memo



## Memorandum

Date: 20 February 2020

To: David W. Shepherd, Lennar Homes

From: Veryl Wittig, PG, CHG, Geosyntec Consultants

Subject: Soil Vapor Investigation Summary  
Sunbow Proposed Development  
Chula Vista, California

---

Geosyntec has prepared this technical memorandum (memo) summarizing the results of the limited soil vapor investigation conducted at the approximately 136-acre property comprised of two parcels in the City of Chula Vista with Assessor's Parcel Numbers 644-011-06-00 and 644-020-11-00 (i.e., the "site"; Figure 1). The investigation was conducted in support of Lennar's pre-purchase due diligence process, and was conducted to address potential environmental concerns related to the operating Republic Services Otay Mesa Class III Landfill located adjoining south and southeast of the site (Figure 2). The potential environmental concerns were identified during a Phase I Environmental Site Assessment (ESA) recently conducted for the site.

### BACKGROUND AND OBJECTIVE

Portions of the Otay Class III Landfill adjoin the site to the south and southeast, and the Otay Class III landfill surrounds the adjoining Otay Class I Landfill (Figure 2). Both the Class I and Class III landfills have groundwater monitoring networks, which are monitored semiannually under orders issued by the San Diego Regional Water Quality Control Board (SDRWQCB). Groundwater flow at both landfills is generally to the south-southwest away from the site, and there are no indications of groundwater impacts beneath the site attributable to the two adjoining landfills. The Class III landfill is equipped with a landfill gas control system (LFGCS) and a perimeter probe monitoring network that is routinely monitored under the direction of the County of San Diego Local Enforcement Agency (LEA). Methane has not been detected above 1% by volume at the perimeter probes closest to the Site.

A draft Phase I Environmental Site Assessment (ESA) was prepared for the site in January 2020, which revealed no evidence of recognized environmental conditions (RECs) in connection with the site. However, the following REC was identified in the draft Phase I ESA report:

*"Historical investigations performed in the 1990s to assess potential impacts to the site from the adjoining landfill properties identified subsurface methane which had migrated beneath the site"*

*from the Class III landfill at concentrations up to 3,300 parts per million (ppm) methane, which is more than an order of magnitude lower than the lower explosive limit (LEL) of methane (50,000 ppm, or 5% by volume). As required by Title 27 of the California Code of Regulations, the landfill owner/operator is required to install and operate a LFGCS and install and monitor a network of perimeter monitoring probes. Operation of the LFGCS at the adjoining Class III landfill is ongoing, and methane has not been detected above 1% by volume at perimeter probes closest to the site, and has been detected at concentrations of 0.10% in only two probes since January 2018. Therefore, the engineering controls on the adjoining Class III landfill property appear to be effectively controlling subsurface methane migration from the landfill property to the site.”*

The absence of recent soil vapor data for the site was noted as a data gap in the draft Phase I ESA. Available data for the Class III landfill perimeter monitoring network indicates that gas concentrations at the landfill boundary adjoining the site are below regulatory thresholds, and historical data collected at the site in the 1990s indicated that the methane LEL in the subsurface was not exceeded. However, recent data regarding the potential presence of volatile organic compounds (VOCs; e.g., benzene, tetrachloroethene [PCE], trichloroethene [TCE]) commonly associated with landfill gas are not available to evaluate potential vapor intrusion concerns for future structures planned for construction at the site. Therefore, the objective of the investigation described herein was to address this data gap by conducting a soil vapor survey at the site to evaluate current onsite subsurface soil vapor conditions and potential subsurface impacts attributable to the adjoining Otay Class III landfill.

## METHODOLOGY

### Temporary Soil Vapor Probe Construction

Five triple-nested soil vapor probes (SVPs) were constructed using a track-mounted direct-push drilling rig on 24 January 2020 near the perimeter of the property, where the site adjoins the Otay Class III landfill (Figure 3). The triple-nested SVPs were constructed inside 2-inch diameter borings with probes at 5 and 10 feet below ground surface (ft bgs). Four of the five SVPs (SVP-1 through SVP-4) had their deepest probe installed at 19.5 ft bgs. Due to refusal encountered at a depth of 15 feet in SVP-5, the deepest probe at that location was 15 ft bgs.

Each probe interval consists of a 6-inch long by ½-inch diameter stainless-steel-screened vapor probe with dedicated ¼-inch Teflon tubing extending to the ground surface. An approximately 1-foot interval of the borehole surrounding the probe (i.e., approximately 3 inches above and below the vapor probe screen) was backfilled with clean #3 sand. Approximately 6 inches of dry granular bentonite was placed above the sand layer, followed by placement of hydrated bentonite to create a seal between the probe intervals. The remainder of the borehole above the upper probe interval at each location was backfilled with hydrated granular bentonite to the surface.

## Soil Vapor Sampling Methodology

The SVPs were sampled on 27 January 2020 in general accordance with the current State of California Department of Toxic Substances Control (DTSC) Advisory for Active Soil Gas Investigations (DTSC Advisory) [DTSC, 2015]. Leak checks involving “shut-in” and tracer tests were performed using a conservative tracer gas (e.g. helium) to monitor that fittings in the sampling train did not leak at an applied vacuum of up to 100 inches of water column. After leak checks were performed (and any leaks detected were remedied), three ‘dead space’ pore volumes were purged prior to sample collection. Field screening of vapor samples to assess subsurface fixed gas concentrations (i.e., methane, oxygen, and carbon dioxide) was conducted using a LANDTEC® GEM5000 landfill gas monitor.

Soil-vapor samples were collected in 1-Liter Tedlar® bags and forwarded to Eurofins Calscience, Inc. (Calscience) of Garden Grove, California, a California Department of Public Health (CDPH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Samples were analyzed for VOCs by United States Environmental Protection Agency (EPA) Method TO-15, and for fixed gases (methane, carbon dioxide, carbon monoxide, nitrogen, and oxygen + argon) by EPA Method D1946.

## RESULTS

Constituents detected in soil vapor samples collected during the investigation are summarized in Table 1, and the associated laboratory analytical report is included as Attachment 1. Detected constituents were compared to San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Tier 1 Environmental Screening Levels for Residential Sub-slab / Soil Gas (Tier 1 ESLs) [SFBRWQCB, 2019]. These screening levels are based on an excess lifetime cancer risk (ELCR) of “one-in-a-million” (denoted as  $1 \times 10^{-6}$ ) as an acceptable risk level, and were derived based on a generic conservative conceptual site model designed for use at most sites for site screening purposes. If a Tier 1 ESL has not been established for a given analyte, then the analytes were compared to their respective EPA Regional Screening Levels (RSLs) for indoor air quality in a residential setting [EPA, 2019]. To calculate an EPA RSL for sub-slab / subsurface soil vapor using the EPA RSL for residential indoor air, the conservative default 0.03 attenuation factor (recently adopted for use by the SFBRWQCB) was applied. To calculate an EPA RSL, the 0.03 attenuation factor is divided into the analyte’s RSL for indoor air. For example, the EPA RSL for TCE in residential indoor air is  $0.48 \mu\text{g}/\text{m}^3$ . Applying the conservative default attenuation factor of 0.03 results in an EPA RSL of  $16 \mu\text{g}/\text{m}^3$  for samples collected from sub-slab / subsurface soil vapor. Similar to Tier 1 ESLs, the 0.03 attenuation factor is generally applied for conservative site screening purposes to determine if additional assessment is warranted.

In general, the presence of a constituent in soil vapor at a concentration below the Tier I ESLs can be assumed to not pose a significant health risk for residential receptors. Likewise, the presence of a constituent in soil vapor at a concentration above the Tier I ESLs does not indicate that adverse

impacts to human health are occurring or will occur in the future, but may indicate that additional evaluation of potential risk to human health is warranted.

The following analytes were detected during the investigation in excess of their respective Tier 1 ESL or EPA RSL (using the conservative default 0.03 attenuation factor) for soil vapor samples collected at the site:

- Benzene was detected above the Tier 1 ESL of 3.2 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) in six samples, at concentrations ranging from  $3.9 \mu\text{g}/\text{m}^3$  (SVP1-19.5) to  $20 \mu\text{g}/\text{m}^3$  (SVP3-19.5);
- Bromodichloromethane was detected above the Tier 1 ESL of  $2.5 \mu\text{g}/\text{m}^3$  in one sample, at a concentration of  $5.3 \mu\text{g}/\text{m}^3$  (SVP3-19.5);
- Chloroform was detected above the Tier 1 ESL of  $2.4 \mu\text{g}/\text{m}^3$  in one sample, at a concentration of  $7.0 \mu\text{g}/\text{m}^3$  (SVP3-19.5); and
- Vinyl chloride was detected above the Tier 1 ESL of  $0.32 \mu\text{g}/\text{m}^3$  in one sample, at a concentration of  $1.8 \mu\text{g}/\text{m}^3$  (SVP1-5).

Methane was not detected in samples above the laboratory screening level, and was not detected during field screening, indicating that the LFGCS is effectively controlling offsite migration of methane from the landfill.

## DISCUSSION

The analytes noted above were detected at concentrations marginally exceeding their respective Tier 1 ESLs or EPA RSLs for sub-slab/subsurface soil vapor in a residential site scenario. However, these screening levels do not account for additional attenuation with depth into the soil column, quality of the overlying concrete slab, or other site-specific factors, and are therefore overly conservative for use at the site. Instead, comparison to default DTSC screening levels (SLs) for future residential structures is more appropriate. Default DTSC-SLs for preliminary screening evaluations differentiate between samples collected from the interval immediately below the slab and samples collected from SVPs screened within the vadose zone, because VOCs in soil vapor at depth are additionally inhibited from upward migration due to inherent properties of the overlying soils (such as permeability and moisture content). Further, the DTSC-SLs for future residential structures more appropriately account for additional attenuation resulting from the use of modern construction methods, earthwork/grading activities, and new, competent concrete slab pours.

Recent communication with DTSC indicates that DTSC intends to continue to recommend use of their default attenuation factor of 0.001 for the subsurface-to-indoor pathway for new residential construction [DTSC, 2011]. To calculate a DTSC-SL for future residential structures, this attenuation factor is applied to the corresponding DTSC-modified screening levels for residential indoor air, many of which (including benzene) are modified to be additionally conservative

# Soil Vapor Investigation Summary

20 February 2020

Page 5

compared to EPA RSLs. The calculated default DTSC-SLs for subsurface soil vapor are as follows:

Constituent	Residential Ambient Air Screening Level ( $\mu\text{g}/\text{m}^3$ )	DTSC Recommended Future Residential Attenuation Factor	DTSC-SL for Subsurface Soil Vapor Future Residential Scenario ( $\mu\text{g}/\text{m}^3$ )
Benzene	0.097	0.001	97
Bromodichloromethane	0.076	0.001	76
Chloroform	0.12	0.001	120
Vinyl Chloride	0.0095	0.001	9.5

Using the DTSC-recommended default attenuation factors, no analytes were detected in excess of the calculated DTSC-SLs for subsurface soil vapor beneath future residential structures.

Methane was not detected at measurable concentrations during the investigation. It is Geosyntec's understanding that the City of Chula Vista does not currently have building standards that require building protection systems (such as a vapor barrier with passive sub-slab ventilation) for the new construction of occupied structures within 1,000 feet of a Class III landfill.

## SUMMARY AND CONCLUSIONS

The soil vapor investigation conducted on 24 and 27 January 2020 documented methane was not detected in the samples, indicating that the LFGCS is effectively controlling the migration of methane from the adjoining Class III landfill. Low-level concentrations of VOCs were detected in soil vapor samples collected at the site, including four analytes detected in one or more samples at concentrations above their respective Tier 1 ESLs or EPA RSLs for a residential site scenario. However, none of these analyte concentrations exceeded calculated DTSC-SLs for future residential construction. Therefore, with the understanding that the adjoining Class III landfill owner/operator will continue to operate the LFGCS in accordance with Title 27 requirements, future earth-moving activities in preparation for site development and construction will likely result in dissipation of residual VOC concentrations in shallow soil vapor, and future structures will be constructed using modern building practices with competent concrete slabs, there is no apparent unacceptable risk to future residential site occupants due to methane and/or VOC-impacted soil vapor.

\* \* \* \* \*

**REFERENCES:**

- DTSC, 2011. *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*. October.
- DTSC, 2015. *Advisory for Active Soil Gas Investigations California Environmental Protection Agency Department of Toxic Substances Control*. July.
- DTSC, 2019. *Human Health Risk Assessment Note 3 – DTSC-Modified Screening Levels (DTSC-SLs), April 2019 Update*. April.
- EPA, 2019. *Regional Screening Level (RSL) Composite Worker Ambient Air Table (TR=1E-06, HQ=1)*. November.
- SFBRWQCB, 2019. *San Francisco Bay Regional Water Quality Control Board Tier 1 Environmental Screening Levels, 2019 (Rev. 2)*.

**ATTACHMENTS:**

Table 1 – Summary of Soil Vapor Sample Detections

Figure 1 – Site Location

Figure 2 – Site Vicinity Map

Figure 3 – Soil Vapor Probe Locations

Attachment 1 – Laboratory Analytical Report

cc: Ryan Green, Lennar

**Table 1**  
 Summary of Soil Vapor Sample Detections  
 Sunbow Proposed Development  
 Chula Vista, California

Analyte	RL	SFBRWQCB SL	DTSC-SL	Units	SVP1-5	SVP1-10	SVP1-19.5	SVP2-5	SVP2-10	SVP2-19.5	SVP3-5	SVP3-10	SVP3-19.5	SVP4-5	SVP4-10	SVP4-19.5	SVP5-5	SVP5-10	SVP5-15
1,3,5-Trimethylbenzene	2.5	2100	63000	µg/m³	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone	4.4	170000	5200000	µg/m³	16	19	14	11	10	9.3	8.0	9.6	10	12	14	10	14	14	
4-Ethyltoluene	2.5	NE	NE	µg/m³	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND	ND	ND	
Acetone	12	1066667	32000000	µg/m³	77	66	48	48	37	35	47	46	48	45	62	57	48	50	42
Benzene	1.6	3.2	97	µg/m³	<b>4.2</b>	<b>5.8</b>	<b>3.9</b>	2.3	ND	ND	2.4	<b>3.7</b>	<b>20</b>	2.3	2.5	<b>9.4</b>	ND	ND	ND
Bromodichloromethane	3.4	2.5	76	µg/m³	ND	ND	ND	ND	ND	ND	ND	<b>5.3</b>	ND	ND	ND	ND	ND	ND	
Carbon disulfide	16	2433	730000	µg/m³	16	26	ND	ND	ND	ND	ND	44	ND	ND	25	ND	ND	ND	
Chloroform	2.4	4.1	120	µg/m³	ND	ND	ND	3.7	2.5	ND	ND	ND	<b>7.0</b>	2.8	ND	3.2	ND	ND	
Chloromethane	1.0	3100	94000	µg/m³	ND	1.1	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	
Dichlorodifluoromethane	2.8	3333	100000	µg/m³	2.8	7.4	10	10	11	12	2.5	ND	7.8	13	8.5	14	5.5	7.0	6.8
Ethylbenzene	2.8	37	1100	µg/m³	2.8	3.2	ND	4.8	ND	ND	3.5	7.0	ND	2.8	3.1	ND	ND	ND	
o-Xylene	2.2	3333	100000	µg/m³	3.5	3.5	ND	6.5	ND	ND	4.1	20	2.3	ND	2.7	ND	2.2	ND	
m,p-Xylene	8.7	3333	100000	µg/m³	ND	ND	ND	18	ND	ND	ND	11	27.0	ND	ND	ND	ND	ND	
Total Xylenes	-	3500	100000	µg/m³	3.5	3.5	ND	24.5	ND	ND	ND	15.1	47.0	2.3	ND	2.7	ND	2.2	ND
Tetrachloroethene	3.4	15	2000	µg/m³	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	26	10000	310000	µg/m³	26	27	22	28	ND	ND	20	28	53	24	250	27	ND	20	ND
Vinyl Chloride	1.3	0.32	9.5	µg/m³	<b>1.8</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Dioxide	0.5	NE	NE	% v/v	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.82	1.3	0.67	ND	ND
Methane	0.5	NE	NE	% v/v	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Nitrogen	0.5	NE	NE	% v/v	76	78	76	78	78	77	79	78	77	77	78	76	76	77	76
Oxygen + Argon	0.5	NE	NE	% v/v	23	24	23	23	23	22	21	21	21	21	22	21	22	23	22

**Notes:**

SFBRWQCB SLs - San Francisco Regional Water Quality Control Board (SFBRWQCB) Tier 1 (residential) Environmental Screening Levels (ESLs) for sub-slab / soil vapor, based on a generic conceptual site model designed for use at most sites. USEPA Regional Screening Levels (RSLs) for residential sub-slab / soil vapor (April 2019) used where no Tier 1 ESL has been established. USEPA RSLs were calculated by dividing the RSL for residential indoor air quality by the conservative default 0.03 attenuation factor.

DTSC-SL - California Department of Toxic Substances Control (DTSC) screening level for future residential structures, calculated by applying the default 0.001 attenuation factor for future residential construction to the DTSC modified screening level for residential indoor air or the USEPA RSL for residential indoor air, whichever is more conservative.

Values in **bold** were detected above the SFBRWQCB SL but below the DTSC-SL

RL - laboratory reporting limit

µg/m³ - micrograms per cubic meter

% v/v - percent volume per volume

NE indicates there is not an established SFBRWQCB ESL, USEPA RSL, or DTSC-SL for this analyte

ND indicates compound was not detected at the laboratory reporting limit (RL)

Samples were analyzed for volatile organic compounds (57 compounds) by USEPA Method TO-15

\*\*\*Only analytes detected in one or more sample above the RL are shown\*\*\*



#### Legend

Site Location



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

0 500 1,000 2,000 Feet

#### Site Location Map

Sunbow Chula Vista,  
Chula Vista, California

**Geosyntec**  
consultants

**Figure**

**1**

SC1029 January 2020

**Legend**

- Approximate Site Boundary
- Approximate Wetland Easement

Imagery courtesy of Google Earth, 2018.

Notes:  
All locations are approximate.

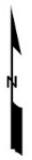
N

0 300 600 1,200  
Feet

**Site Vicinity Map**  
Sunbow Chula Vista,  
Chula Vista, California

**Geosyntec**  
consultants

**Figure**  
**2**



SVP-03

SVP-02

SVP-01

SVP-04

SVP-05

520 260 0 520 Feet

#### Soil Vapor Probe Locations

Sunbow Development  
APNs 644-011-06-00 and 644-020-11-00  
Chula Vista, California

#### Legend

Soil Vapor Probe Location

**Geosyntec**  
consultants

**Figure**

**3**

SC1029

January 2020

## ANALYTICAL REPORT

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

Laboratory Job ID: 570-19024-1  
Client Project/Site: SC1029-02  
Revision: 1

For:  
Geosyntec Consultants, Inc.  
16644 West Bernardo Drive  
Suite 301  
San Diego, California 92127

Attn: Christopher Lieder



Authorized for release by:  
1/30/2020 10:50:58 AM  
Stephen Nowak, Project Manager I  
(714)895-5494  
[stephen.nowak@eurofinsus.com](mailto:stephen.nowak@eurofinsus.com)

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

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

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

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions/Glossary .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	10
Surrogate Summary .....	36
QC Sample Results .....	37
QC Association Summary .....	55
Lab Chronicle .....	57
Certification Summary .....	61
Method Summary .....	62
Sample Summary .....	63
Chain of Custody .....	64
Receipt Checklists .....	67

# Definitions/Glossary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Qualifiers

### Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

**Job ID: 570-19024-1**

**Laboratory: Eurofins Calscience LLC**

## Narrative

**Job Narrative  
570-19024-1**

## Comments

No additional comments.

## Receipt

The samples were received on 1/27/2020 7:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 22.0° C.

## Air Toxics

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

# Detection Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Client Sample ID: SVP1-5

## Lab Sample ID: 570-19024-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	16		4.4	ug/m3	1		TO-15	Total/NA
Acetone	77		12	ug/m3	1		TO-15	Total/NA
Benzene	4.2		1.6	ug/m3	1		TO-15	Total/NA
Carbon disulfide	16		16	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.8		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.8		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	3.5		2.2	ug/m3	1		TO-15	Total/NA
Toluene	26		19	ug/m3	1		TO-15	Total/NA
Vinyl chloride	1.8		1.3	ug/m3	1		TO-15	Total/NA
Nitrogen	76		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		D1946	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP1-10

## Lab Sample ID: 570-19024-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	19		4.4	ug/m3	1		TO-15	Total/NA
Acetone	66		12	ug/m3	1		TO-15	Total/NA
Benzene	5.8		1.6	ug/m3	1		TO-15	Total/NA
Carbon disulfide	26		16	ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	7.4		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	3.2		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	3.5		2.2	ug/m3	1		TO-15	Total/NA
Toluene	27		19	ug/m3	1		TO-15	Total/NA
Nitrogen	78		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	24		0.50	% v/v	1		D1946	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP1-19.5

## Lab Sample ID: 570-19024-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	14		4.4	ug/m3	1		TO-15	Total/NA
Acetone	48		12	ug/m3	1		TO-15	Total/NA
Benzene	3.9		1.6	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	10		2.5	ug/m3	1		TO-15	Total/NA
Tetrachloroethylene	3.5		3.4	ug/m3	1		TO-15	Total/NA
Toluene	22		19	ug/m3	1		TO-15	Total/NA
Nitrogen	76		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		D1946	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP2-5

## Lab Sample ID: 570-19024-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	2.9		2.5	ug/m3	1		TO-15	Total/NA
2-Butanone	11		4.4	ug/m3	1		TO-15	Total/NA
Acetone	48		12	ug/m3	1		TO-15	Total/NA
Benzene	2.3		1.6	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Client Sample ID: SVP2-5 (Continued)

## Lab Sample ID: 570-19024-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.7		2.4	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	10		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	4.8		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	6.5		2.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	18		8.7	ug/m3	1		TO-15	Total/NA
Toluene	28		19	ug/m3	1		TO-15	Total/NA
Nitrogen	78		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		D1946	Total/NA
Nitrogen	78		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP2-10

## Lab Sample ID: 570-19024-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	10		4.4	ug/m3	1		TO-15	Total/NA
Acetone	37		12	ug/m3	1		TO-15	Total/NA
Chloroform	2.5		2.4	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	11		2.5	ug/m3	1		TO-15	Total/NA
Nitrogen	78		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		D1946	Total/NA
Nitrogen	78		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP2-19.5

## Lab Sample ID: 570-19024-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	9.3		4.4	ug/m3	1		TO-15	Total/NA
Acetone	35		12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	12		2.5	ug/m3	1		TO-15	Total/NA
Nitrogen	77		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		D1946	Total/NA
Nitrogen	78		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP3-5

## Lab Sample ID: 570-19024-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	8.0		4.4	ug/m3	1		TO-15	Total/NA
Acetone	47		12	ug/m3	1		TO-15	Total/NA
Benzene	2.4		1.6	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.5		2.5	ug/m3	1		TO-15	Total/NA
Toluene	20		19	ug/m3	1		TO-15	Total/NA
Nitrogen	79		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		D1946	Total/NA
Nitrogen	79		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP3-10

## Lab Sample ID: 570-19024-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	9.6		4.4	ug/m3	1		TO-15	Total/NA
Acetone	46		12	ug/m3	1		TO-15	Total/NA
Benzene	3.7		1.6	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Client Sample ID: SVP3-10 (Continued)

## Lab Sample ID: 570-19024-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	3.5		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	4.1		2.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	11		8.7	ug/m3	1		TO-15	Total/NA
Toluene	28		19	ug/m3	1		TO-15	Total/NA
Nitrogen	78		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		D1946	Total/NA
Nitrogen	79		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP3-19.5

## Lab Sample ID: 570-19024-9

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	10		4.4	ug/m3	1		TO-15	Total/NA
Acetone	48		12	ug/m3	1		TO-15	Total/NA
Benzene	20		1.6	ug/m3	1		TO-15	Total/NA
Bromodichloromethane	5.3		3.4	ug/m3	1		TO-15	Total/NA
Carbon disulfide	44		16	ug/m3	1		TO-15	Total/NA
Chloromethane	7.0		1.0	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.5		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	7.8		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	7.0		2.2	ug/m3	1		TO-15	Total/NA
m,p-Xylene	20		8.7	ug/m3	1		TO-15	Total/NA
Toluene	53		19	ug/m3	1		TO-15	Total/NA
Nitrogen	77		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		D1946	Total/NA
Nitrogen	78		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP4-5

## Lab Sample ID: 570-19024-10

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	12		4.4	ug/m3	1		TO-15	Total/NA
Acetone	45		12	ug/m3	1		TO-15	Total/NA
Benzene	2.3		1.6	ug/m3	1		TO-15	Total/NA
Chloroform	2.8		2.4	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	13		2.5	ug/m3	1		TO-15	Total/NA
o-Xylene	2.3		2.2	ug/m3	1		TO-15	Total/NA
Toluene	24		19	ug/m3	1		TO-15	Total/NA
Carbon dioxide	1.1		0.50	% v/v	1		D1946	Total/NA
Nitrogen	77		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		D1946	Total/NA
Carbon dioxide	1.1		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP4-10

## Lab Sample ID: 570-19024-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	14		4.4	ug/m3	1		TO-15	Total/NA
4-Ethyltoluene	36		2.5	ug/m3	1		TO-15	Total/NA
Acetone	62		12	ug/m3	1		TO-15	Total/NA
Benzene	2.5		1.6	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Client Sample ID: SVP4-10 (Continued)

## Lab Sample ID: 570-19024-11

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	8.5		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	2.8		2.2	ug/m3	1		TO-15	Total/NA
Toluene	250		19	ug/m3	1		TO-15	Total/NA
Carbon dioxide	0.82		0.50	% v/v	1		D1946	Total/NA
Nitrogen	78		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		D1946	Total/NA
Carbon dioxide	0.82		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP4-19.5

## Lab Sample ID: 570-19024-12

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	10		4.4	ug/m3	1		TO-15	Total/NA
Acetone	57		12	ug/m3	1		TO-15	Total/NA
Benzene	9.4		1.6	ug/m3	1		TO-15	Total/NA
Carbon disulfide	25		16	ug/m3	1		TO-15	Total/NA
Chloroform	3.2		2.4	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	14		2.5	ug/m3	1		TO-15	Total/NA
Ethylbenzene	3.1		2.2	ug/m3	1		TO-15	Total/NA
o-Xylene	2.7		2.2	ug/m3	1		TO-15	Total/NA
Toluene	27		19	ug/m3	1		TO-15	Total/NA
Carbon dioxide	1.3		0.50	% v/v	1		D1946	Total/NA
Nitrogen	76		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		D1946	Total/NA
Carbon dioxide	1.3		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Nitrogen	78		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	21		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP5-5

## Lab Sample ID: 570-19024-13

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	14		4.4	ug/m3	1		TO-15	Total/NA
Acetone	48		12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	5.5		2.5	ug/m3	1		TO-15	Total/NA
Carbon dioxide	0.67		0.50	% v/v	1		D1946	Total/NA
Nitrogen	76		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		D1946	Total/NA
Carbon dioxide	0.68		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP5-10

## Lab Sample ID: 570-19024-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	14		4.4	ug/m3	1		TO-15	Total/NA
Acetone	50		12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	7.0		2.5	ug/m3	1		TO-15	Total/NA
o-Xylene	2.2		2.2	ug/m3	1		TO-15	Total/NA
Toluene	20		19	ug/m3	1		TO-15	Total/NA
Nitrogen	77		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		D1946	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Detection Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Client Sample ID: SVP5-10 (Continued)

## Lab Sample ID: 570-19024-14

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		Fixed Gas Norm	Total/NA

## Client Sample ID: SVP5-15

## Lab Sample ID: 570-19024-15

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	13		4.4	ug/m3	1		TO-15	Total/NA
Acetone	42		12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	6.8		2.5	ug/m3	1		TO-15	Total/NA
Nitrogen	76		0.50	% v/v	1		D1946	Total/NA
Oxygen + Argon	22		0.50	% v/v	1		D1946	Total/NA
Nitrogen	77		0.50	% v/v	1		Fixed Gas Norm	Total/NA
Oxygen + Argon	23		0.50	% v/v	1		Fixed Gas Norm	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: SVP1-5**

**Date Collected: 01/27/20 14:05**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 20:19	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 20:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 20:19	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 20:19	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 20:19	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 20:19	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 20:19	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 20:19	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 20:19	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 20:19	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 20:19	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:19	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 20:19	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 20:19	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/28/20 20:19	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:19	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:19	1
<b>2-Butanone</b>	<b>16</b>		4.4	ug/m3			01/28/20 20:19	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 20:19	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 20:19	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 20:19	1
<b>Acetone</b>	<b>77</b>		12	ug/m3			01/28/20 20:19	1
<b>Benzene</b>	<b>4.2</b>		1.6	ug/m3			01/28/20 20:19	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 20:19	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 20:19	1
Bromoform	ND		5.2	ug/m3			01/28/20 20:19	1
Bromomethane	ND		1.9	ug/m3			01/28/20 20:19	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 20:19	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 20:19	1
<b>Carbon disulfide</b>	<b>16</b>		16	ug/m3			01/28/20 20:19	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 20:19	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 20:19	1
Chloroethane	ND		1.3	ug/m3			01/28/20 20:19	1
Chloroform	ND		2.4	ug/m3			01/28/20 20:19	1
Chloromethane	ND		1.0	ug/m3			01/28/20 20:19	1
Dibromochloromethane	ND		4.3	ug/m3			01/28/20 20:19	1
<b>Dichlorodifluoromethane</b>	<b>2.8</b>		2.5	ug/m3			01/28/20 20:19	1
Dichlorotetrafluoroethane	ND		14	ug/m3			01/28/20 20:19	1
<b>Ethylbenzene</b>	<b>2.8</b>		2.2	ug/m3			01/28/20 20:19	1
Hexachloro-1,3-butadiene	ND		16	ug/m3			01/28/20 20:19	1
Isopropanol	ND		120	ug/m3			01/28/20 20:19	1
Methylene Chloride	ND		17	ug/m3			01/28/20 20:19	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3			01/28/20 20:19	1
n-Butylbenzene	ND		8.2	ug/m3			01/28/20 20:19	1
<b>o-Xylene</b>	<b>3.5</b>		2.2	ug/m3			01/28/20 20:19	1
m,p-Xylene	ND		8.7	ug/m3			01/28/20 20:19	1
sec-Butylbenzene	ND		8.2	ug/m3			01/28/20 20:19	1
Styrene	ND		6.4	ug/m3			01/28/20 20:19	1
trans-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 20:19	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Client Sample ID: SVP1-5				Lab Sample ID: 570-19024-1				
Date Collected: 01/27/20 14:05				Matrix: Air				
Date Received: 01/27/20 19:10								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		4.5	ug/m3			01/28/20 20:19	1
tert-Butylbenzene	ND		8.2	ug/m3			01/28/20 20:19	1
Tetrachloroethene	ND		3.4	ug/m3			01/28/20 20:19	1
<b>Toluene</b>	<b>26</b>		19	ug/m3			01/28/20 20:19	1
Trichloroethene	ND		2.7	ug/m3			01/28/20 20:19	1
Trichlorofluoromethane	ND		5.6	ug/m3			01/28/20 20:19	1
Vinyl acetate	ND		7.0	ug/m3			01/28/20 20:19	1
<b>Vinyl chloride</b>	<b>1.8</b>		1.3	ug/m3			01/28/20 20:19	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	114		47 - 137				01/28/20 20:19	1
4-Bromofluorobenzene (Surr)	101		57 - 129				01/28/20 20:19	1
Toluene-d8 (Surr)	102		78 - 156				01/28/20 20:19	1

Client Sample ID: SVP1-10  
Date Collected: 01/27/20 14:25  
Date Received: 01/27/20 19:10

Lab Sample ID: 570-19024-2  
Matrix: Air

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 17:53	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 17:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 17:53	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 17:53	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 17:53	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 17:53	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 17:53	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 17:53	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 17:53	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 17:53	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 17:53	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 17:53	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 17:53	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 17:53	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/28/20 17:53	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 17:53	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 17:53	1
<b>2-Butanone</b>	<b>19</b>		4.4	ug/m3			01/28/20 17:53	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 17:53	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 17:53	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 17:53	1
<b>Acetone</b>	<b>66</b>		12	ug/m3			01/28/20 17:53	1
<b>Benzene</b>	<b>5.8</b>		1.6	ug/m3			01/28/20 17:53	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 17:53	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 17:53	1
Bromoform	ND		5.2	ug/m3			01/28/20 17:53	1
Bromomethane	ND		1.9	ug/m3			01/28/20 17:53	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 17:53	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 17:53	1
<b>Carbon disulfide</b>	<b>26</b>		16	ug/m3			01/28/20 17:53	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 17:53	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 17:53	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP1-10**

**Date Collected: 01/27/20 14:25**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	ug/m3		01/28/20 17:53		1
Chloroform	ND		2.4	ug/m3		01/28/20 17:53		1
<b>Chloromethane</b>	<b>1.1</b>		1.0	ug/m3		01/28/20 17:53		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 17:53		1
<b>Dichlorodifluoromethane</b>	<b>7.4</b>		2.5	ug/m3		01/28/20 17:53		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 17:53		1
<b>Ethylbenzene</b>	<b>3.2</b>		2.2	ug/m3		01/28/20 17:53		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 17:53		1
Isopropanol	ND		120	ug/m3		01/28/20 17:53		1
Methylene Chloride	ND		17	ug/m3		01/28/20 17:53		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 17:53		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 17:53		1
<b>o-Xylene</b>	<b>3.5</b>		2.2	ug/m3		01/28/20 17:53		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 17:53		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 17:53		1
Styrene	ND		6.4	ug/m3		01/28/20 17:53		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 17:53		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 17:53		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 17:53		1
Tetrachloroethene	ND		3.4	ug/m3		01/28/20 17:53		1
<b>Toluene</b>	<b>27</b>		19	ug/m3		01/28/20 17:53		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 17:53		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 17:53		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 17:53		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 17:53		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	118		47 - 137			01/28/20 17:53		1
4-Bromofluorobenzene (Surr)	100		57 - 129			01/28/20 17:53		1
Toluene-d8 (Surr)	101		78 - 156			01/28/20 17:53		1

**Client Sample ID: SVP1-19.5**

**Date Collected: 01/27/20 14:41**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-3**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/28/20 21:59		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/28/20 21:59		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/28/20 21:59		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/28/20 21:59		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/28/20 21:59		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:59		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/28/20 21:59		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/28/20 21:59		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/28/20 21:59		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/28/20 21:59		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/28/20 21:59		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:59		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/28/20 21:59		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/28/20 21:59		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/28/20 21:59		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP1-19.5**

**Date Collected: 01/27/20 14:41**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-3**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:59		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:59		1
<b>2-Butanone</b>	<b>14</b>		4.4	ug/m3		01/28/20 21:59		1
2-Hexanone	ND		6.1	ug/m3		01/28/20 21:59		1
4-Ethyltoluene	ND		2.5	ug/m3		01/28/20 21:59		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/28/20 21:59		1
<b>Acetone</b>	<b>48</b>		12	ug/m3		01/28/20 21:59		1
<b>Benzene</b>	<b>3.9</b>		1.6	ug/m3		01/28/20 21:59		1
Benzyl chloride	ND		7.8	ug/m3		01/28/20 21:59		1
Bromodichloromethane	ND		3.4	ug/m3		01/28/20 21:59		1
Bromoform	ND		5.2	ug/m3		01/28/20 21:59		1
Bromomethane	ND		1.9	ug/m3		01/28/20 21:59		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:59		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/28/20 21:59		1
Carbon disulfide	ND		16	ug/m3		01/28/20 21:59		1
Carbon tetrachloride	ND		3.1	ug/m3		01/28/20 21:59		1
Chlorobenzene	ND		2.3	ug/m3		01/28/20 21:59		1
Chloroethane	ND		1.3	ug/m3		01/28/20 21:59		1
Chloroform	ND		2.4	ug/m3		01/28/20 21:59		1
Chloromethane	ND		1.0	ug/m3		01/28/20 21:59		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 21:59		1
<b>Dichlorodifluoromethane</b>	<b>10</b>		2.5	ug/m3		01/28/20 21:59		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 21:59		1
Ethylbenzene	ND		2.2	ug/m3		01/28/20 21:59		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 21:59		1
Isopropanol	ND		120	ug/m3		01/28/20 21:59		1
Methylene Chloride	ND		17	ug/m3		01/28/20 21:59		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 21:59		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:59		1
o-Xylene	ND		2.2	ug/m3		01/28/20 21:59		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 21:59		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:59		1
Styrene	ND		6.4	ug/m3		01/28/20 21:59		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:59		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 21:59		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:59		1
<b>Tetrachloroethene</b>	<b>3.5</b>		3.4	ug/m3		01/28/20 21:59		1
<b>Toluene</b>	<b>22</b>		19	ug/m3		01/28/20 21:59		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 21:59		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 21:59		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 21:59		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 21:59		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	111		47 - 137		01/28/20 21:59		1	
4-Bromofluorobenzene (Surr)	100		57 - 129		01/28/20 21:59		1	
Toluene-d8 (Surr)	100		78 - 156		01/28/20 21:59		1	

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: SVP2-5**

**Date Collected: 01/27/20 12:22**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-4**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 22:51	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 22:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 22:51	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 22:51	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 22:51	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 22:51	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 22:51	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 22:51	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 22:51	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 22:51	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 22:51	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 22:51	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 22:51	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 22:51	1
<b>1,3,5-Trimethylbenzene</b>	<b>2.9</b>		2.5	ug/m3			01/28/20 22:51	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 22:51	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 22:51	1
<b>2-Butanone</b>	<b>11</b>		4.4	ug/m3			01/28/20 22:51	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 22:51	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 22:51	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 22:51	1
<b>Acetone</b>	<b>48</b>		12	ug/m3			01/28/20 22:51	1
<b>Benzene</b>	<b>2.3</b>		1.6	ug/m3			01/28/20 22:51	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 22:51	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 22:51	1
Bromoform	ND		5.2	ug/m3			01/28/20 22:51	1
Bromomethane	ND		1.9	ug/m3			01/28/20 22:51	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 22:51	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 22:51	1
Carbon disulfide	ND		16	ug/m3			01/28/20 22:51	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 22:51	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 22:51	1
Chloroethane	ND		1.3	ug/m3			01/28/20 22:51	1
<b>Chloroform</b>	<b>3.7</b>		2.4	ug/m3			01/28/20 22:51	1
Chloromethane	ND		1.0	ug/m3			01/28/20 22:51	1
Dibromochloromethane	ND		4.3	ug/m3			01/28/20 22:51	1
<b>Dichlorodifluoromethane</b>	<b>10</b>		2.5	ug/m3			01/28/20 22:51	1
Dichlorotetrafluoroethane	ND		14	ug/m3			01/28/20 22:51	1
<b>Ethylbenzene</b>	<b>4.8</b>		2.2	ug/m3			01/28/20 22:51	1
Hexachloro-1,3-butadiene	ND		16	ug/m3			01/28/20 22:51	1
Isopropanol	ND		120	ug/m3			01/28/20 22:51	1
Methylene Chloride	ND		17	ug/m3			01/28/20 22:51	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3			01/28/20 22:51	1
n-Butylbenzene	ND		8.2	ug/m3			01/28/20 22:51	1
<b>o-Xylene</b>	<b>6.5</b>		2.2	ug/m3			01/28/20 22:51	1
<b>m,p-Xylene</b>	<b>18</b>		8.7	ug/m3			01/28/20 22:51	1
sec-Butylbenzene	ND		8.2	ug/m3			01/28/20 22:51	1
Styrene	ND		6.4	ug/m3			01/28/20 22:51	1
trans-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 22:51	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP2-5**

**Date Collected: 01/27/20 12:22**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-4**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		4.5	ug/m3			01/28/20 22:51	1
tert-Butylbenzene	ND		8.2	ug/m3			01/28/20 22:51	1
Tetrachloroethene	ND		3.4	ug/m3			01/28/20 22:51	1
<b>Toluene</b>	<b>28</b>		19	ug/m3			01/28/20 22:51	1
Trichloroethene	ND		2.7	ug/m3			01/28/20 22:51	1
Trichlorofluoromethane	ND		5.6	ug/m3			01/28/20 22:51	1
Vinyl acetate	ND		7.0	ug/m3			01/28/20 22:51	1
Vinyl chloride	ND		1.3	ug/m3			01/28/20 22:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	111		47 - 137				01/28/20 22:51	1
4-Bromofluorobenzene (Surr)	102		57 - 129				01/28/20 22:51	1
Toluene-d8 (Surr)	98		78 - 156				01/28/20 22:51	1

**Client Sample ID: SVP2-10**

**Date Collected: 01/27/20 13:14**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-5**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 23:43	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 23:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 23:43	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 23:43	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 23:43	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 23:43	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 23:43	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 23:43	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 23:43	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 23:43	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 23:43	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 23:43	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 23:43	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 23:43	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/28/20 23:43	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 23:43	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 23:43	1
<b>2-Butanone</b>	<b>10</b>		4.4	ug/m3			01/28/20 23:43	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 23:43	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 23:43	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 23:43	1
<b>Acetone</b>	<b>37</b>		12	ug/m3			01/28/20 23:43	1
Benzene	ND		1.6	ug/m3			01/28/20 23:43	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 23:43	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 23:43	1
Bromoform	ND		5.2	ug/m3			01/28/20 23:43	1
Bromomethane	ND		1.9	ug/m3			01/28/20 23:43	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 23:43	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 23:43	1
Carbon disulfide	ND		16	ug/m3			01/28/20 23:43	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 23:43	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 23:43	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP2-10**

**Date Collected: 01/27/20 13:14**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-5**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	ug/m3		01/28/20 23:43		1
<b>Chloroform</b>	<b>2.5</b>		2.4	ug/m3		01/28/20 23:43		1
Chloromethane	ND		1.0	ug/m3		01/28/20 23:43		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 23:43		1
<b>Dichlorodifluoromethane</b>	<b>11</b>		2.5	ug/m3		01/28/20 23:43		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 23:43		1
Ethylbenzene	ND		2.2	ug/m3		01/28/20 23:43		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 23:43		1
Isopropanol	ND		120	ug/m3		01/28/20 23:43		1
Methylene Chloride	ND		17	ug/m3		01/28/20 23:43		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 23:43		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 23:43		1
o-Xylene	ND		2.2	ug/m3		01/28/20 23:43		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 23:43		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 23:43		1
Styrene	ND		6.4	ug/m3		01/28/20 23:43		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 23:43		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 23:43		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 23:43		1
Tetrachloroethene	ND		3.4	ug/m3		01/28/20 23:43		1
Toluene	ND		19	ug/m3		01/28/20 23:43		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 23:43		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 23:43		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 23:43		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 23:43		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	110		47 - 137			01/28/20 23:43		1
4-Bromofluorobenzene (Surr)	102		57 - 129			01/28/20 23:43		1
Toluene-d8 (Surr)	100		78 - 156			01/28/20 23:43		1

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/29/20 00:35		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/29/20 00:35		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/29/20 00:35		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/29/20 00:35		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/29/20 00:35		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/29/20 00:35		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/29/20 00:35		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/29/20 00:35		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/29/20 00:35		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/29/20 00:35		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/29/20 00:35		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 00:35		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/29/20 00:35		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/29/20 00:35		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/29/20 00:35		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 00:35		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 00:35		1
<b>2-Butanone</b>	<b>9.3</b>		4.4	ug/m3		01/29/20 00:35		1
2-Hexanone	ND		6.1	ug/m3		01/29/20 00:35		1
4-Ethyltoluene	ND		2.5	ug/m3		01/29/20 00:35		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/29/20 00:35		1
<b>Acetone</b>	<b>35</b>		12	ug/m3		01/29/20 00:35		1
Benzene	ND		1.6	ug/m3		01/29/20 00:35		1
Benzyl chloride	ND		7.8	ug/m3		01/29/20 00:35		1
Bromodichloromethane	ND		3.4	ug/m3		01/29/20 00:35		1
Bromoform	ND		5.2	ug/m3		01/29/20 00:35		1
Bromomethane	ND		1.9	ug/m3		01/29/20 00:35		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 00:35		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/29/20 00:35		1
Carbon disulfide	ND		16	ug/m3		01/29/20 00:35		1
Carbon tetrachloride	ND		3.1	ug/m3		01/29/20 00:35		1
Chlorobenzene	ND		2.3	ug/m3		01/29/20 00:35		1
Chloroethane	ND		1.3	ug/m3		01/29/20 00:35		1
Chloroform	ND		2.4	ug/m3		01/29/20 00:35		1
Chloromethane	ND		1.0	ug/m3		01/29/20 00:35		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 00:35		1
<b>Dichlorodifluoromethane</b>	<b>12</b>		2.5	ug/m3		01/29/20 00:35		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 00:35		1
Ethylbenzene	ND		2.2	ug/m3		01/29/20 00:35		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 00:35		1
Isopropanol	ND		120	ug/m3		01/29/20 00:35		1
Methylene Chloride	ND		17	ug/m3		01/29/20 00:35		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 00:35		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 00:35		1
o-Xylene	ND		2.2	ug/m3		01/29/20 00:35		1
m,p-Xylene	ND		8.7	ug/m3		01/29/20 00:35		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 00:35		1
Styrene	ND		6.4	ug/m3		01/29/20 00:35		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 00:35		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 00:35		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 00:35		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 00:35		1
Toluene	ND		19	ug/m3		01/29/20 00:35		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 00:35		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 00:35		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 00:35		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 00:35		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	110		47 - 137			01/29/20 00:35		1
4-Bromofluorobenzene (Surr)	100		57 - 129			01/29/20 00:35		1
Toluene-d8 (Surr)	100		78 - 156			01/29/20 00:35		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: SVP3-5**

**Date Collected: 01/27/20 10:57**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-7**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 02:14	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 02:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 02:14	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 02:14	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 02:14	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 02:14	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 02:14	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 02:14	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 02:14	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 02:14	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 02:14	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 02:14	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 02:14	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 02:14	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 02:14	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 02:14	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 02:14	1
<b>2-Butanone</b>	<b>8.0</b>		4.4	ug/m3			01/29/20 02:14	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 02:14	1
4-Ethyltoluene	ND		2.5	ug/m3			01/29/20 02:14	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/29/20 02:14	1
<b>Acetone</b>	<b>47</b>		12	ug/m3			01/29/20 02:14	1
<b>Benzene</b>	<b>2.4</b>		1.6	ug/m3			01/29/20 02:14	1
Benzyl chloride	ND		7.8	ug/m3			01/29/20 02:14	1
Bromodichloromethane	ND		3.4	ug/m3			01/29/20 02:14	1
Bromoform	ND		5.2	ug/m3			01/29/20 02:14	1
Bromomethane	ND		1.9	ug/m3			01/29/20 02:14	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 02:14	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/29/20 02:14	1
Carbon disulfide	ND		16	ug/m3			01/29/20 02:14	1
Carbon tetrachloride	ND		3.1	ug/m3			01/29/20 02:14	1
Chlorobenzene	ND		2.3	ug/m3			01/29/20 02:14	1
Chloroethane	ND		1.3	ug/m3			01/29/20 02:14	1
Chloroform	ND		2.4	ug/m3			01/29/20 02:14	1
Chloromethane	ND		1.0	ug/m3			01/29/20 02:14	1
Dibromochloromethane	ND		4.3	ug/m3			01/29/20 02:14	1
<b>Dichlorodifluoromethane</b>	<b>2.5</b>		2.5	ug/m3			01/29/20 02:14	1
Dichlorotetrafluoroethane	ND		14	ug/m3			01/29/20 02:14	1
Ethylbenzene	ND		2.2	ug/m3			01/29/20 02:14	1
Hexachloro-1,3-butadiene	ND		16	ug/m3			01/29/20 02:14	1
Isopropanol	ND		120	ug/m3			01/29/20 02:14	1
Methylene Chloride	ND		17	ug/m3			01/29/20 02:14	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3			01/29/20 02:14	1
n-Butylbenzene	ND		8.2	ug/m3			01/29/20 02:14	1
o-Xylene	ND		2.2	ug/m3			01/29/20 02:14	1
m,p-Xylene	ND		8.7	ug/m3			01/29/20 02:14	1
sec-Butylbenzene	ND		8.2	ug/m3			01/29/20 02:14	1
Styrene	ND		6.4	ug/m3			01/29/20 02:14	1
trans-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 02:14	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP3-5**

**Date Collected: 01/27/20 10:57**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-7**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		4.5	ug/m3			01/29/20 02:14	1
tert-Butylbenzene	ND		8.2	ug/m3			01/29/20 02:14	1
Tetrachloroethene	ND		3.4	ug/m3			01/29/20 02:14	1
<b>Toluene</b>	<b>20</b>		19	ug/m3			01/29/20 02:14	1
Trichloroethene	ND		2.7	ug/m3			01/29/20 02:14	1
Trichlorofluoromethane	ND		5.6	ug/m3			01/29/20 02:14	1
Vinyl acetate	ND		7.0	ug/m3			01/29/20 02:14	1
Vinyl chloride	ND		1.3	ug/m3			01/29/20 02:14	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	112		47 - 137				01/29/20 02:14	1
4-Bromofluorobenzene (Surr)	102		57 - 129				01/29/20 02:14	1
Toluene-d8 (Surr)	103		78 - 156				01/29/20 02:14	1

**Client Sample ID: SVP3-10**

**Date Collected: 01/27/20 11:20**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-8**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 03:05	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 03:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 03:05	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 03:05	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 03:05	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 03:05	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 03:05	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 03:05	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 03:05	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 03:05	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 03:05	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:05	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 03:05	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 03:05	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 03:05	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:05	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:05	1
<b>2-Butanone</b>	<b>9.6</b>		4.4	ug/m3			01/29/20 03:05	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 03:05	1
4-Ethyltoluene	ND		2.5	ug/m3			01/29/20 03:05	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/29/20 03:05	1
<b>Acetone</b>	<b>46</b>		12	ug/m3			01/29/20 03:05	1
<b>Benzene</b>	<b>3.7</b>		1.6	ug/m3			01/29/20 03:05	1
Benzyl chloride	ND		7.8	ug/m3			01/29/20 03:05	1
Bromodichloromethane	ND		3.4	ug/m3			01/29/20 03:05	1
Bromoform	ND		5.2	ug/m3			01/29/20 03:05	1
Bromomethane	ND		1.9	ug/m3			01/29/20 03:05	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 03:05	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/29/20 03:05	1
Carbon disulfide	ND		16	ug/m3			01/29/20 03:05	1
Carbon tetrachloride	ND		3.1	ug/m3			01/29/20 03:05	1
Chlorobenzene	ND		2.3	ug/m3			01/29/20 03:05	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP3-10**

**Date Collected: 01/27/20 11:20**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-8**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	ug/m3		01/29/20 03:05		1
Chloroform	ND		2.4	ug/m3		01/29/20 03:05		1
Chloromethane	ND		1.0	ug/m3		01/29/20 03:05		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 03:05		1
Dichlorodifluoromethane	ND		2.5	ug/m3		01/29/20 03:05		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 03:05		1
<b>Ethylbenzene</b>	<b>3.5</b>		2.2	ug/m3		01/29/20 03:05		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 03:05		1
Isopropanol	ND		120	ug/m3		01/29/20 03:05		1
Methylene Chloride	ND		17	ug/m3		01/29/20 03:05		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 03:05		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 03:05		1
<b>o-Xylene</b>	<b>4.1</b>		2.2	ug/m3		01/29/20 03:05		1
<b>m,p-Xylene</b>	<b>11</b>		8.7	ug/m3		01/29/20 03:05		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 03:05		1
Styrene	ND		6.4	ug/m3		01/29/20 03:05		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 03:05		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 03:05		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 03:05		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 03:05		1
<b>Toluene</b>	<b>28</b>		19	ug/m3		01/29/20 03:05		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 03:05		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 03:05		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 03:05		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 03:05		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	110		47 - 137			01/29/20 03:05		1
4-Bromofluorobenzene (Surr)	103		57 - 129			01/29/20 03:05		1
Toluene-d8 (Surr)	99		78 - 156			01/29/20 03:05		1

**Client Sample ID: SVP3-19.5**

**Date Collected: 01/27/20 11:49**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-9**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/29/20 04:51		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/29/20 04:51		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/29/20 04:51		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/29/20 04:51		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/29/20 04:51		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/29/20 04:51		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/29/20 04:51		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/29/20 04:51		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/29/20 04:51		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/29/20 04:51		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/29/20 04:51		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 04:51		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/29/20 04:51		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/29/20 04:51		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/29/20 04:51		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP3-19.5**

**Date Collected: 01/27/20 11:49**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-9**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 04:51		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 04:51		1
<b>2-Butanone</b>	<b>10</b>		4.4	ug/m3		01/29/20 04:51		1
2-Hexanone	ND		6.1	ug/m3		01/29/20 04:51		1
4-Ethyltoluene	ND		2.5	ug/m3		01/29/20 04:51		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/29/20 04:51		1
<b>Acetone</b>	<b>48</b>		12	ug/m3		01/29/20 04:51		1
<b>Benzene</b>	<b>20</b>		1.6	ug/m3		01/29/20 04:51		1
Benzyl chloride	ND		7.8	ug/m3		01/29/20 04:51		1
<b>Bromodichloromethane</b>	<b>5.3</b>		3.4	ug/m3		01/29/20 04:51		1
Bromoform	ND		5.2	ug/m3		01/29/20 04:51		1
Bromomethane	ND		1.9	ug/m3		01/29/20 04:51		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 04:51		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/29/20 04:51		1
<b>Carbon disulfide</b>	<b>44</b>		16	ug/m3		01/29/20 04:51		1
Carbon tetrachloride	ND		3.1	ug/m3		01/29/20 04:51		1
Chlorobenzene	ND		2.3	ug/m3		01/29/20 04:51		1
Chloroethane	ND		1.3	ug/m3		01/29/20 04:51		1
Chloroform	ND		2.4	ug/m3		01/29/20 04:51		1
<b>Chloromethane</b>	<b>7.0</b>		1.0	ug/m3		01/29/20 04:51		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 04:51		1
<b>Dichlorodifluoromethane</b>	<b>2.5</b>		2.5	ug/m3		01/29/20 04:51		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 04:51		1
<b>Ethylbenzene</b>	<b>7.8</b>		2.2	ug/m3		01/29/20 04:51		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 04:51		1
Isopropanol	ND		120	ug/m3		01/29/20 04:51		1
Methylene Chloride	ND		17	ug/m3		01/29/20 04:51		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 04:51		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 04:51		1
<b>o-Xylene</b>	<b>7.0</b>		2.2	ug/m3		01/29/20 04:51		1
<b>m,p-Xylene</b>	<b>20</b>		8.7	ug/m3		01/29/20 04:51		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 04:51		1
Styrene	ND		6.4	ug/m3		01/29/20 04:51		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 04:51		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 04:51		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 04:51		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 04:51		1
<b>Toluene</b>	<b>53</b>		19	ug/m3		01/29/20 04:51		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 04:51		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 04:51		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 04:51		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 04:51		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	118		47 - 137		01/29/20 04:51		1	
4-Bromofluorobenzene (Surr)	102		57 - 129		01/29/20 04:51		1	
Toluene-d8 (Surr)	97		78 - 156		01/29/20 04:51		1	

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: SVP4-5**

**Date Collected: 01/27/20 14:59**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-10**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 03:58	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 03:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 03:58	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 03:58	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 03:58	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 03:58	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 03:58	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 03:58	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 03:58	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 03:58	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 03:58	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:58	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 03:58	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 03:58	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 03:58	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:58	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 03:58	1
<b>2-Butanone</b>	<b>12</b>		4.4	ug/m3			01/29/20 03:58	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 03:58	1
4-Ethyltoluene	ND		2.5	ug/m3			01/29/20 03:58	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/29/20 03:58	1
<b>Acetone</b>	<b>45</b>		12	ug/m3			01/29/20 03:58	1
<b>Benzene</b>	<b>2.3</b>		1.6	ug/m3			01/29/20 03:58	1
Benzyl chloride	ND		7.8	ug/m3			01/29/20 03:58	1
Bromodichloromethane	ND		3.4	ug/m3			01/29/20 03:58	1
Bromoform	ND		5.2	ug/m3			01/29/20 03:58	1
Bromomethane	ND		1.9	ug/m3			01/29/20 03:58	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 03:58	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/29/20 03:58	1
Carbon disulfide	ND		16	ug/m3			01/29/20 03:58	1
Carbon tetrachloride	ND		3.1	ug/m3			01/29/20 03:58	1
Chlorobenzene	ND		2.3	ug/m3			01/29/20 03:58	1
Chloroethane	ND		1.3	ug/m3			01/29/20 03:58	1
<b>Chloroform</b>	<b>2.8</b>		2.4	ug/m3			01/29/20 03:58	1
Chloromethane	ND		1.0	ug/m3			01/29/20 03:58	1
Dibromochloromethane	ND		4.3	ug/m3			01/29/20 03:58	1
<b>Dichlorodifluoromethane</b>	<b>13</b>		2.5	ug/m3			01/29/20 03:58	1
Dichlorotetrafluoroethane	ND		14	ug/m3			01/29/20 03:58	1
Ethylbenzene	ND		2.2	ug/m3			01/29/20 03:58	1
Hexachloro-1,3-butadiene	ND		16	ug/m3			01/29/20 03:58	1
Isopropanol	ND		120	ug/m3			01/29/20 03:58	1
Methylene Chloride	ND		17	ug/m3			01/29/20 03:58	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3			01/29/20 03:58	1
n-Butylbenzene	ND		8.2	ug/m3			01/29/20 03:58	1
<b>o-Xylene</b>	<b>2.3</b>		2.2	ug/m3			01/29/20 03:58	1
m,p-Xylene	ND		8.7	ug/m3			01/29/20 03:58	1
sec-Butylbenzene	ND		8.2	ug/m3			01/29/20 03:58	1
Styrene	ND		6.4	ug/m3			01/29/20 03:58	1
trans-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 03:58	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP4-5**

**Date Collected: 01/27/20 14:59**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-10**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		4.5	ug/m3			01/29/20 03:58	1
tert-Butylbenzene	ND		8.2	ug/m3			01/29/20 03:58	1
Tetrachloroethene	ND		3.4	ug/m3			01/29/20 03:58	1
<b>Toluene</b>	<b>24</b>		19	ug/m3			01/29/20 03:58	1
Trichloroethene	ND		2.7	ug/m3			01/29/20 03:58	1
Trichlorofluoromethane	ND		5.6	ug/m3			01/29/20 03:58	1
Vinyl acetate	ND		7.0	ug/m3			01/29/20 03:58	1
Vinyl chloride	ND		1.3	ug/m3			01/29/20 03:58	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	110			47 - 137			01/29/20 03:58	1
4-Bromofluorobenzene (Surr)	103			57 - 129			01/29/20 03:58	1
Toluene-d8 (Surr)	100			78 - 156			01/29/20 03:58	1

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 17:13	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 17:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 17:13	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 17:13	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 17:13	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 17:13	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 17:13	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 17:13	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 17:13	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 17:13	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 17:13	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 17:13	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 17:13	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 17:13	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 17:13	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 17:13	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 17:13	1
<b>2-Butanone</b>	<b>14</b>		4.4	ug/m3			01/29/20 17:13	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 17:13	1
<b>4-Ethyltoluene</b>	<b>36</b>		2.5	ug/m3			01/29/20 17:13	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/29/20 17:13	1
<b>Acetone</b>	<b>62</b>		12	ug/m3			01/29/20 17:13	1
<b>Benzene</b>	<b>2.5</b>		1.6	ug/m3			01/29/20 17:13	1
Benzyl chloride	ND		7.8	ug/m3			01/29/20 17:13	1
Bromodichloromethane	ND		3.4	ug/m3			01/29/20 17:13	1
Bromoform	ND		5.2	ug/m3			01/29/20 17:13	1
Bromomethane	ND		1.9	ug/m3			01/29/20 17:13	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 17:13	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/29/20 17:13	1
Carbon disulfide	ND		16	ug/m3			01/29/20 17:13	1
Carbon tetrachloride	ND		3.1	ug/m3			01/29/20 17:13	1
Chlorobenzene	ND		2.3	ug/m3			01/29/20 17:13	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	ug/m3		01/29/20 17:13		1
Chloroform	ND		2.4	ug/m3		01/29/20 17:13		1
Chloromethane	ND		1.0	ug/m3		01/29/20 17:13		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 17:13		1
<b>Dichlorodifluoromethane</b>	<b>8.5</b>		2.5	ug/m3		01/29/20 17:13		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 17:13		1
<b>Ethylbenzene</b>	<b>2.8</b>		2.2	ug/m3		01/29/20 17:13		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 17:13		1
Isopropanol	ND		120	ug/m3		01/29/20 17:13		1
Methylene Chloride	ND		17	ug/m3		01/29/20 17:13		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 17:13		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:13		1
o-Xylene	ND		2.2	ug/m3		01/29/20 17:13		1
m,p-Xylene	ND		8.7	ug/m3		01/29/20 17:13		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:13		1
Styrene	ND		6.4	ug/m3		01/29/20 17:13		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 17:13		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 17:13		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:13		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 17:13		1
<b>Toluene</b>	<b>250</b>		19	ug/m3		01/29/20 17:13		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 17:13		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 17:13		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 17:13		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 17:13		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		47 - 137			01/29/20 17:13		1
4-Bromofluorobenzene (Surr)	113		57 - 129			01/29/20 17:13		1
Toluene-d8 (Surr)	96		78 - 156			01/29/20 17:13		1

**Client Sample ID: SVP4-19.5**

**Date Collected: 01/27/20 15:27**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-12**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/29/20 17:03		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/29/20 17:03		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/29/20 17:03		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/29/20 17:03		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/29/20 17:03		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/29/20 17:03		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/29/20 17:03		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/29/20 17:03		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/29/20 17:03		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/29/20 17:03		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/29/20 17:03		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 17:03		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/29/20 17:03		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/29/20 17:03		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/29/20 17:03		1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP4-19.5**

**Date Collected: 01/27/20 15:27**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-12**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 17:03		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/29/20 17:03		1
<b>2-Butanone</b>	<b>10</b>		4.4	ug/m3		01/29/20 17:03		1
2-Hexanone	ND		6.1	ug/m3		01/29/20 17:03		1
4-Ethyltoluene	ND		2.5	ug/m3		01/29/20 17:03		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/29/20 17:03		1
<b>Acetone</b>	<b>57</b>		12	ug/m3		01/29/20 17:03		1
<b>Benzene</b>	<b>9.4</b>		1.6	ug/m3		01/29/20 17:03		1
Benzyl chloride	ND		7.8	ug/m3		01/29/20 17:03		1
Bromodichloromethane	ND		3.4	ug/m3		01/29/20 17:03		1
Bromoform	ND		5.2	ug/m3		01/29/20 17:03		1
Bromomethane	ND		1.9	ug/m3		01/29/20 17:03		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 17:03		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/29/20 17:03		1
<b>Carbon disulfide</b>	<b>25</b>		16	ug/m3		01/29/20 17:03		1
Carbon tetrachloride	ND		3.1	ug/m3		01/29/20 17:03		1
Chlorobenzene	ND		2.3	ug/m3		01/29/20 17:03		1
Chloroethane	ND		1.3	ug/m3		01/29/20 17:03		1
<b>Chloroform</b>	<b>3.2</b>		2.4	ug/m3		01/29/20 17:03		1
Chloromethane	ND		1.0	ug/m3		01/29/20 17:03		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 17:03		1
<b>Dichlorodifluoromethane</b>	<b>14</b>		2.5	ug/m3		01/29/20 17:03		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 17:03		1
<b>Ethylbenzene</b>	<b>3.1</b>		2.2	ug/m3		01/29/20 17:03		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 17:03		1
Isopropanol	ND		120	ug/m3		01/29/20 17:03		1
Methylene Chloride	ND		17	ug/m3		01/29/20 17:03		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 17:03		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:03		1
<b>o-Xylene</b>	<b>2.7</b>		2.2	ug/m3		01/29/20 17:03		1
m,p-Xylene	ND		8.7	ug/m3		01/29/20 17:03		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:03		1
Styrene	ND		6.4	ug/m3		01/29/20 17:03		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 17:03		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 17:03		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 17:03		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 17:03		1
<b>Toluene</b>	<b>27</b>		19	ug/m3		01/29/20 17:03		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 17:03		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 17:03		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 17:03		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 17:03		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	110		47 - 137		01/29/20 17:03		1	
4-Bromofluorobenzene (Surr)	115		57 - 129		01/29/20 17:03		1	
Toluene-d8 (Surr)	102		78 - 156		01/29/20 17:03		1	

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Client Sample ID: SVP5-5**

**Date Collected: 01/27/20 15:48**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-13**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 19:22	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 19:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 19:22	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 19:22	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 19:22	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 19:22	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 19:22	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 19:22	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 19:22	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 19:22	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 19:22	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 19:22	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 19:22	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 19:22	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/28/20 19:22	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 19:22	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 19:22	1
<b>2-Butanone</b>	<b>14</b>		4.4	ug/m3			01/28/20 19:22	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 19:22	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 19:22	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 19:22	1
<b>Acetone</b>	<b>48</b>		12	ug/m3			01/28/20 19:22	1
Benzene	ND		1.6	ug/m3			01/28/20 19:22	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 19:22	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 19:22	1
Bromoform	ND		5.2	ug/m3			01/28/20 19:22	1
Bromomethane	ND		1.9	ug/m3			01/28/20 19:22	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 19:22	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 19:22	1
Carbon disulfide	ND		16	ug/m3			01/28/20 19:22	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 19:22	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 19:22	1
Chloroethane	ND		1.3	ug/m3			01/28/20 19:22	1
Chloroform	ND		2.4	ug/m3			01/28/20 19:22	1
Chloromethane	ND		1.0	ug/m3			01/28/20 19:22	1
Dibromochloromethane	ND		4.3	ug/m3			01/28/20 19:22	1
<b>Dichlorodifluoromethane</b>	<b>5.5</b>		2.5	ug/m3			01/28/20 19:22	1
Dichlorotetrafluoroethane	ND		14	ug/m3			01/28/20 19:22	1
Ethylbenzene	ND		2.2	ug/m3			01/28/20 19:22	1
Hexachloro-1,3-butadiene	ND		16	ug/m3			01/28/20 19:22	1
Isopropanol	ND		120	ug/m3			01/28/20 19:22	1
Methylene Chloride	ND		17	ug/m3			01/28/20 19:22	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3			01/28/20 19:22	1
n-Butylbenzene	ND		8.2	ug/m3			01/28/20 19:22	1
o-Xylene	ND		2.2	ug/m3			01/28/20 19:22	1
m,p-Xylene	ND		8.7	ug/m3			01/28/20 19:22	1
sec-Butylbenzene	ND		8.2	ug/m3			01/28/20 19:22	1
Styrene	ND		6.4	ug/m3			01/28/20 19:22	1
trans-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 19:22	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP5-5**

**Date Collected: 01/27/20 15:48**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-13**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		4.5	ug/m3			01/28/20 19:22	1
tert-Butylbenzene	ND		8.2	ug/m3			01/28/20 19:22	1
Tetrachloroethene	ND		3.4	ug/m3			01/28/20 19:22	1
Toluene	ND		19	ug/m3			01/28/20 19:22	1
Trichloroethene	ND		2.7	ug/m3			01/28/20 19:22	1
Trichlorofluoromethane	ND		5.6	ug/m3			01/28/20 19:22	1
Vinyl acetate	ND		7.0	ug/m3			01/28/20 19:22	1
Vinyl chloride	ND		1.3	ug/m3			01/28/20 19:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103		47 - 137				01/28/20 19:22	1
4-Bromofluorobenzene (Surr)	102		57 - 129				01/28/20 19:22	1
Toluene-d8 (Surr)	97		78 - 156				01/28/20 19:22	1

**Client Sample ID: SVP5-10**

**Date Collected: 01/27/20 16:08**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-14**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/28/20 20:12	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/28/20 20:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/28/20 20:12	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/28/20 20:12	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/28/20 20:12	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/28/20 20:12	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/28/20 20:12	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/28/20 20:12	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/28/20 20:12	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/28/20 20:12	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/28/20 20:12	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:12	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/28/20 20:12	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/28/20 20:12	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/28/20 20:12	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:12	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/28/20 20:12	1
<b>2-Butanone</b>	<b>14</b>		4.4	ug/m3			01/28/20 20:12	1
2-Hexanone	ND		6.1	ug/m3			01/28/20 20:12	1
4-Ethyltoluene	ND		2.5	ug/m3			01/28/20 20:12	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/28/20 20:12	1
<b>Acetone</b>	<b>50</b>		12	ug/m3			01/28/20 20:12	1
Benzene	ND		1.6	ug/m3			01/28/20 20:12	1
Benzyl chloride	ND		7.8	ug/m3			01/28/20 20:12	1
Bromodichloromethane	ND		3.4	ug/m3			01/28/20 20:12	1
Bromoform	ND		5.2	ug/m3			01/28/20 20:12	1
Bromomethane	ND		1.9	ug/m3			01/28/20 20:12	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/28/20 20:12	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/28/20 20:12	1
Carbon disulfide	ND		16	ug/m3			01/28/20 20:12	1
Carbon tetrachloride	ND		3.1	ug/m3			01/28/20 20:12	1
Chlorobenzene	ND		2.3	ug/m3			01/28/20 20:12	1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP5-10**

**Date Collected: 01/27/20 16:08**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-14**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	ug/m3		01/28/20 20:12		1
Chloroform	ND		2.4	ug/m3		01/28/20 20:12		1
Chloromethane	ND		1.0	ug/m3		01/28/20 20:12		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 20:12		1
<b>Dichlorodifluoromethane</b>	<b>7.0</b>		2.5	ug/m3		01/28/20 20:12		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 20:12		1
Ethylbenzene	ND		2.2	ug/m3		01/28/20 20:12		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 20:12		1
Isopropanol	ND		120	ug/m3		01/28/20 20:12		1
Methylene Chloride	ND		17	ug/m3		01/28/20 20:12		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 20:12		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 20:12		1
<b>o-Xylene</b>	<b>2.2</b>		2.2	ug/m3		01/28/20 20:12		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 20:12		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 20:12		1
Styrene	ND		6.4	ug/m3		01/28/20 20:12		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 20:12		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 20:12		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 20:12		1
Tetrachloroethene	ND		3.4	ug/m3		01/28/20 20:12		1
<b>Toluene</b>	<b>20</b>		19	ug/m3		01/28/20 20:12		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 20:12		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 20:12		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 20:12		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 20:12		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		47 - 137			01/28/20 20:12		1
4-Bromofluorobenzene (Surr)	100		57 - 129			01/28/20 20:12		1
Toluene-d8 (Surr)	97		78 - 156			01/28/20 20:12		1

**Client Sample ID: SVP5-15**

**Date Collected: 01/27/20 16:24**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-15**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/28/20 21:02		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/28/20 21:02		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/28/20 21:02		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/28/20 21:02		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/28/20 21:02		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:02		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/28/20 21:02		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/28/20 21:02		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/28/20 21:02		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/28/20 21:02		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/28/20 21:02		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:02		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/28/20 21:02		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/28/20 21:02		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/28/20 21:02		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Client Sample ID: SVP5-15**

**Date Collected: 01/27/20 16:24**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-15**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:02		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 21:02		1
<b>2-Butanone</b>	<b>13</b>		4.4	ug/m3		01/28/20 21:02		1
2-Hexanone	ND		6.1	ug/m3		01/28/20 21:02		1
4-Ethyltoluene	ND		2.5	ug/m3		01/28/20 21:02		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/28/20 21:02		1
<b>Acetone</b>	<b>42</b>		12	ug/m3		01/28/20 21:02		1
Benzene	ND		1.6	ug/m3		01/28/20 21:02		1
Benzyl chloride	ND		7.8	ug/m3		01/28/20 21:02		1
Bromodichloromethane	ND		3.4	ug/m3		01/28/20 21:02		1
Bromoform	ND		5.2	ug/m3		01/28/20 21:02		1
Bromomethane	ND		1.9	ug/m3		01/28/20 21:02		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:02		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/28/20 21:02		1
Carbon disulfide	ND		16	ug/m3		01/28/20 21:02		1
Carbon tetrachloride	ND		3.1	ug/m3		01/28/20 21:02		1
Chlorobenzene	ND		2.3	ug/m3		01/28/20 21:02		1
Chloroethane	ND		1.3	ug/m3		01/28/20 21:02		1
Chloroform	ND		2.4	ug/m3		01/28/20 21:02		1
Chloromethane	ND		1.0	ug/m3		01/28/20 21:02		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 21:02		1
<b>Dichlorodifluoromethane</b>	<b>6.8</b>		2.5	ug/m3		01/28/20 21:02		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 21:02		1
Ethylbenzene	ND		2.2	ug/m3		01/28/20 21:02		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 21:02		1
Isopropanol	ND		120	ug/m3		01/28/20 21:02		1
Methylene Chloride	ND		17	ug/m3		01/28/20 21:02		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 21:02		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:02		1
o-Xylene	ND		2.2	ug/m3		01/28/20 21:02		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 21:02		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:02		1
Styrene	ND		6.4	ug/m3		01/28/20 21:02		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 21:02		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 21:02		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 21:02		1
Tetrachloroethene	ND		3.4	ug/m3		01/28/20 21:02		1
Toluene	ND		19	ug/m3		01/28/20 21:02		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 21:02		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 21:02		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 21:02		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 21:02		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		47 - 137			01/28/20 21:02		1
4-Bromofluorobenzene (Surr)	108		57 - 129			01/28/20 21:02		1
Toluene-d8 (Surr)	98		78 - 156			01/28/20 21:02		1

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: D1946 - Fixed Gases in Air (GC)

**Client Sample ID: SVP1-5**

**Date Collected: 01/27/20 14:05**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 10:58	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 10:58	1
Methane	ND		0.50	% v/v			01/28/20 10:58	1
Nitrogen	76		0.50	% v/v			01/28/20 10:58	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 10:58	1

**Client Sample ID: SVP1-10**

**Date Collected: 01/27/20 14:25**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 11:36	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 11:36	1
Methane	ND		0.50	% v/v			01/28/20 11:36	1
Nitrogen	78		0.50	% v/v			01/28/20 11:36	1
Oxygen + Argon	24		0.50	% v/v			01/28/20 11:36	1

**Client Sample ID: SVP1-19.5**

**Date Collected: 01/27/20 14:41**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-3**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 11:54	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 11:54	1
Methane	ND		0.50	% v/v			01/28/20 11:54	1
Nitrogen	76		0.50	% v/v			01/28/20 11:54	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 11:54	1

**Client Sample ID: SVP2-5**

**Date Collected: 01/27/20 12:22**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-4**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:13	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:13	1
Methane	ND		0.50	% v/v			01/28/20 12:13	1
Nitrogen	78		0.50	% v/v			01/28/20 12:13	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 12:13	1

**Client Sample ID: SVP2-10**

**Date Collected: 01/27/20 13:14**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-5**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:31	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:31	1
Methane	ND		0.50	% v/v			01/28/20 12:31	1
Nitrogen	78		0.50	% v/v			01/28/20 12:31	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 12:31	1

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:49	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: D1946 - Fixed Gases in Air (GC) (Continued)

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:49	1
Methane	ND		0.50	% v/v			01/28/20 12:49	1
Nitrogen	77		0.50	% v/v			01/28/20 12:49	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 12:49	1

**Client Sample ID: SVP3-5**

**Date Collected: 01/27/20 10:57**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-7**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:07	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:07	1
Methane	ND		0.50	% v/v			01/28/20 13:07	1
Nitrogen	79		0.50	% v/v			01/28/20 13:07	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 13:07	1

**Client Sample ID: SVP3-10**

**Date Collected: 01/27/20 11:20**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-8**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:26	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:26	1
Methane	ND		0.50	% v/v			01/28/20 13:26	1
Nitrogen	78		0.50	% v/v			01/28/20 13:26	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 13:26	1

**Client Sample ID: SVP3-19.5**

**Date Collected: 01/27/20 11:49**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-9**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:43	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:43	1
Methane	ND		0.50	% v/v			01/28/20 13:43	1
Nitrogen	77		0.50	% v/v			01/28/20 13:43	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 13:43	1

**Client Sample ID: SVP4-5**

**Date Collected: 01/27/20 14:59**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-10**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1.1		0.50	% v/v			01/28/20 14:01	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:01	1
Methane	ND		0.50	% v/v			01/28/20 14:01	1
Nitrogen	77		0.50	% v/v			01/28/20 14:01	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 14:01	1

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	0.82		0.50	% v/v			01/28/20 14:19	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:19	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: D1946 - Fixed Gases in Air (GC) (Continued)

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50	% v/v			01/28/20 14:19	1
Nitrogen	78		0.50	% v/v			01/28/20 14:19	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 14:19	1

**Client Sample ID: SVP4-19.5**

**Date Collected: 01/27/20 15:27**

**Date Received: 01/27/20 19:10**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1.3		0.50	% v/v			01/28/20 14:37	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:37	1
Methane	ND		0.50	% v/v			01/28/20 14:37	1
Nitrogen	76		0.50	% v/v			01/28/20 14:37	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 14:37	1

**Client Sample ID: SVP5-5**

**Date Collected: 01/27/20 15:48**

**Date Received: 01/27/20 19:10**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	0.67		0.50	% v/v			01/28/20 14:54	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:54	1
Methane	ND		0.50	% v/v			01/28/20 14:54	1
Nitrogen	76		0.50	% v/v			01/28/20 14:54	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 14:54	1

**Client Sample ID: SVP5-10**

**Date Collected: 01/27/20 16:08**

**Date Received: 01/27/20 19:10**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 15:12	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 15:12	1
Methane	ND		0.50	% v/v			01/28/20 15:12	1
Nitrogen	77		0.50	% v/v			01/28/20 15:12	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 15:12	1

**Client Sample ID: SVP5-15**

**Date Collected: 01/27/20 16:24**

**Date Received: 01/27/20 19:10**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 15:30	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 15:30	1
Methane	ND		0.50	% v/v			01/28/20 15:30	1
Nitrogen	76		0.50	% v/v			01/28/20 15:30	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 15:30	1

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

**Lab Sample ID: 570-19024-12**

**Matrix: Air**

**Lab Sample ID: 570-19024-13**

**Matrix: Air**

**Lab Sample ID: 570-19024-14**

**Matrix: Air**

**Lab Sample ID: 570-19024-15**

**Matrix: Air**

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: Fixed Gas Norm - Fixed Gases from Stationary Sources

**Client Sample ID: SVP1-5**

**Date Collected: 01/27/20 14:05**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-1**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 10:58	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 10:58	1
Methane	ND		0.50	% v/v			01/28/20 10:58	1
Nitrogen	77		0.50	% v/v			01/28/20 10:58	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 10:58	1

**Client Sample ID: SVP1-10**

**Date Collected: 01/27/20 14:25**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-2**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 11:36	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 11:36	1
Methane	ND		0.50	% v/v			01/28/20 11:36	1
Nitrogen	77		0.50	% v/v			01/28/20 11:36	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 11:36	1

**Client Sample ID: SVP1-19.5**

**Date Collected: 01/27/20 14:41**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-3**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 11:54	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 11:54	1
Methane	ND		0.50	% v/v			01/28/20 11:54	1
Nitrogen	77		0.50	% v/v			01/28/20 11:54	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 11:54	1

**Client Sample ID: SVP2-5**

**Date Collected: 01/27/20 12:22**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-4**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:13	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:13	1
Methane	ND		0.50	% v/v			01/28/20 12:13	1
Nitrogen	78		0.50	% v/v			01/28/20 12:13	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 12:13	1

**Client Sample ID: SVP2-10**

**Date Collected: 01/27/20 13:14**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-5**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:31	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:31	1
Methane	ND		0.50	% v/v			01/28/20 12:31	1
Nitrogen	78		0.50	% v/v			01/28/20 12:31	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 12:31	1

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 12:49	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: Fixed Gas Norm - Fixed Gases from Stationary Sources (Continued)

**Client Sample ID: SVP2-19.5**

**Date Collected: 01/27/20 13:39**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon monoxide	ND		0.50	% v/v			01/28/20 12:49	1
Methane	ND		0.50	% v/v			01/28/20 12:49	1
Nitrogen	78		0.50	% v/v			01/28/20 12:49	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 12:49	1

**Client Sample ID: SVP3-5**

**Date Collected: 01/27/20 10:57**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-7**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:07	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:07	1
Methane	ND		0.50	% v/v			01/28/20 13:07	1
Nitrogen	79		0.50	% v/v			01/28/20 13:07	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 13:07	1

**Client Sample ID: SVP3-10**

**Date Collected: 01/27/20 11:20**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-8**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:26	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:26	1
Methane	ND		0.50	% v/v			01/28/20 13:26	1
Nitrogen	79		0.50	% v/v			01/28/20 13:26	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 13:26	1

**Client Sample ID: SVP3-19.5**

**Date Collected: 01/27/20 11:49**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-9**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 13:43	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 13:43	1
Methane	ND		0.50	% v/v			01/28/20 13:43	1
Nitrogen	78		0.50	% v/v			01/28/20 13:43	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 13:43	1

**Client Sample ID: SVP4-5**

**Date Collected: 01/27/20 14:59**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-10**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1.1		0.50	% v/v			01/28/20 14:01	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:01	1
Methane	ND		0.50	% v/v			01/28/20 14:01	1
Nitrogen	77		0.50	% v/v			01/28/20 14:01	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 14:01	1

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	0.82		0.50	% v/v			01/28/20 14:19	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:19	1

Eurofins Calscience LLC

# Client Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: Fixed Gas Norm - Fixed Gases from Stationary Sources (Continued)

**Client Sample ID: SVP4-10**

**Date Collected: 01/27/20 15:12**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.50	% v/v			01/28/20 14:19	1
Nitrogen	77		0.50	% v/v			01/28/20 14:19	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 14:19	1

**Client Sample ID: SVP4-19.5**

**Date Collected: 01/27/20 15:27**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-12**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1.3		0.50	% v/v			01/28/20 14:37	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:37	1
Methane	ND		0.50	% v/v			01/28/20 14:37	1
Nitrogen	78		0.50	% v/v			01/28/20 14:37	1
Oxygen + Argon	21		0.50	% v/v			01/28/20 14:37	1

**Client Sample ID: SVP5-5**

**Date Collected: 01/27/20 15:48**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-13**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	0.68		0.50	% v/v			01/28/20 14:54	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 14:54	1
Methane	ND		0.50	% v/v			01/28/20 14:54	1
Nitrogen	77		0.50	% v/v			01/28/20 14:54	1
Oxygen + Argon	22		0.50	% v/v			01/28/20 14:54	1

**Client Sample ID: SVP5-10**

**Date Collected: 01/27/20 16:08**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-14**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 15:12	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 15:12	1
Methane	ND		0.50	% v/v			01/28/20 15:12	1
Nitrogen	77		0.50	% v/v			01/28/20 15:12	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 15:12	1

**Client Sample ID: SVP5-15**

**Date Collected: 01/27/20 16:24**

**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-15**

**Matrix: Air**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 15:30	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 15:30	1
Methane	ND		0.50	% v/v			01/28/20 15:30	1
Nitrogen	77		0.50	% v/v			01/28/20 15:30	1
Oxygen + Argon	23		0.50	% v/v			01/28/20 15:30	1

# Surrogate Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (47-137)	BFB (57-129)	TOL (78-156)
570-19024-1	SVP1-5	114	101	102
570-19024-2	SVP1-10	118	100	101
570-19024-3	SVP1-19.5	111	100	100
570-19024-4	SVP2-5	111	102	98
570-19024-5	SVP2-10	110	102	100
570-19024-6	SVP2-19.5	110	100	100
570-19024-7	SVP3-5	112	102	103
570-19024-8	SVP3-10	110	103	99
570-19024-9	SVP3-19.5	118	102	97
570-19024-10	SVP4-5	110	103	100
570-19024-11	SVP4-10	100	113	96
570-19024-12	SVP4-19.5	110	115	102
570-19024-13	SVP5-5	103	102	97
570-19024-14	SVP5-10	109	100	97
570-19024-15	SVP5-15	105	108	98
LCS 570-46977/3	Lab Control Sample	101	97	105
LCS 570-47027/3	Lab Control Sample	112	95	98
LCS 570-47256/3	Lab Control Sample	107	97	102
LCS 570-47260/3	Lab Control Sample	88	93	97
LCSD 570-46977/4	Lab Control Sample Dup	109	91	102
LCSD 570-47027/4	Lab Control Sample Dup	111	95	97
LCSD 570-47256/4	Lab Control Sample Dup	102	88	94
LCSD 570-47260/4	Lab Control Sample Dup	91	93	98
MB 570-46977/5	Method Blank	97	94	96
MB 570-47027/6	Method Blank	113	99	97
MB 570-47256/5	Method Blank	100	100	96
MB 570-47260/6	Method Blank	100	93	97

### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air

**Lab Sample ID: MB 570-46977/5**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1,2-Trichloroethane	ND		2.7	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1-Dichloroethane	ND		2.0	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1-Dichloroethene	ND		2.0	ug/m <sup>3</sup>			01/28/20 12:53	1
1,1-Difluoroethane	ND		5.4	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2,4-Trichlorobenzene	ND		15	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2-Dibromoethane	ND		3.8	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2-Dichlorobenzene	ND		3.0	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2-Dichloroethane	ND		2.0	ug/m <sup>3</sup>			01/28/20 12:53	1
1,2-Dichloropropane	ND		2.3	ug/m <sup>3</sup>			01/28/20 12:53	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m <sup>3</sup>			01/28/20 12:53	1
1,3-Dichlorobenzene	ND		3.0	ug/m <sup>3</sup>			01/28/20 12:53	1
1,4-Dichlorobenzene	ND		3.0	ug/m <sup>3</sup>			01/28/20 12:53	1
2-Butanone	ND		4.4	ug/m <sup>3</sup>			01/28/20 12:53	1
2-Hexanone	ND		6.1	ug/m <sup>3</sup>			01/28/20 12:53	1
4-Ethyltoluene	ND		2.5	ug/m <sup>3</sup>			01/28/20 12:53	1
4-Methyl-2-pentanone	ND		6.1	ug/m <sup>3</sup>			01/28/20 12:53	1
Acetone	ND		12	ug/m <sup>3</sup>			01/28/20 12:53	1
Benzene	ND		1.6	ug/m <sup>3</sup>			01/28/20 12:53	1
Benzyl chloride	ND		7.8	ug/m <sup>3</sup>			01/28/20 12:53	1
Bromodichloromethane	ND		3.4	ug/m <sup>3</sup>			01/28/20 12:53	1
Bromoform	ND		5.2	ug/m <sup>3</sup>			01/28/20 12:53	1
Bromomethane	ND		1.9	ug/m <sup>3</sup>			01/28/20 12:53	1
cis-1,2-Dichloroethene	ND		2.0	ug/m <sup>3</sup>			01/28/20 12:53	1
cis-1,3-Dichloropropene	ND		2.3	ug/m <sup>3</sup>			01/28/20 12:53	1
Carbon disulfide	ND		16	ug/m <sup>3</sup>			01/28/20 12:53	1
Carbon tetrachloride	ND		3.1	ug/m <sup>3</sup>			01/28/20 12:53	1
Chlorobenzene	ND		2.3	ug/m <sup>3</sup>			01/28/20 12:53	1
Chloroethane	ND		1.3	ug/m <sup>3</sup>			01/28/20 12:53	1
Chloroform	ND		2.4	ug/m <sup>3</sup>			01/28/20 12:53	1
Chloromethane	ND		1.0	ug/m <sup>3</sup>			01/28/20 12:53	1
Dibromochloromethane	ND		4.3	ug/m <sup>3</sup>			01/28/20 12:53	1
Dichlorodifluoromethane	ND		2.5	ug/m <sup>3</sup>			01/28/20 12:53	1
Dichlorotetrafluoroethane	ND		14	ug/m <sup>3</sup>			01/28/20 12:53	1
Ethylbenzene	ND		2.2	ug/m <sup>3</sup>			01/28/20 12:53	1
Hexachloro-1,3-butadiene	ND		16	ug/m <sup>3</sup>			01/28/20 12:53	1
Isopropanol	ND		120	ug/m <sup>3</sup>			01/28/20 12:53	1
Methylene Chloride	ND		17	ug/m <sup>3</sup>			01/28/20 12:53	1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m <sup>3</sup>			01/28/20 12:53	1
n-Butylbenzene	ND		8.2	ug/m <sup>3</sup>			01/28/20 12:53	1
o-Xylene	ND		2.2	ug/m <sup>3</sup>			01/28/20 12:53	1
m,p-Xylene	ND		8.7	ug/m <sup>3</sup>			01/28/20 12:53	1
sec-Butylbenzene	ND		8.2	ug/m <sup>3</sup>			01/28/20 12:53	1
Styrene	ND		6.4	ug/m <sup>3</sup>			01/28/20 12:53	1

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-46977/5**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 12:53		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 12:53		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 12:53		1
Tetrachloroethene	ND		3.4	ug/m3		01/28/20 12:53		1
Toluene	ND		19	ug/m3		01/28/20 12:53		1
Trichloroethene	ND		2.7	ug/m3		01/28/20 12:53		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 12:53		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 12:53		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 12:53		1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		47 - 137		01/28/20 12:53	1
4-Bromofluorobenzene (Surr)	94		57 - 129		01/28/20 12:53	1
Toluene-d8 (Surr)	96		78 - 156		01/28/20 12:53	1

**Lab Sample ID: LCS 570-46977/3**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,1,1-Trichloroethane	136	140.8		ug/m3		103	50 - 150	
1,1,2,2-Tetrachloroethane	172	155.9		ug/m3		91	50 - 150	
1,1,2-Trichloro-1,2,2-trifluoroethane	192	175.5		ug/m3		92	50 - 150	
1,1,2-Trichloroethane	136	131.5		ug/m3		96	65 - 149	
1,1-Dichloroethane	101	97.31		ug/m3		96	50 - 150	
1,1-Dichloroethene	99.1	95.58		ug/m3		96	50 - 150	
1,1-Difluoroethane	67.5	57.62		ug/m3		85	60 - 140	
1,2,4-Trichlorobenzene	186	157.3		ug/m3		85	50 - 150	
1,2,4-Trimethylbenzene	123	110.2		ug/m3		90	50 - 150	
1,2-Dibromo-3-Chloropropane	242	226.7		ug/m3		94	60 - 140	
1,2-Dibromoethane	192	189.1		ug/m3		98	54 - 144	
1,2-Dichlorobenzene	150	140.5		ug/m3		93	34 - 160	
1,2-Dichloroethane	101	100.6		ug/m3		99	69 - 153	
1,2-Dichloropropane	116	109.4		ug/m3		95	67 - 157	
1,3,5-Trimethylbenzene	123	115.0		ug/m3		94	50 - 150	
1,3-Dichlorobenzene	150	140.5		ug/m3		93	50 - 150	
1,4-Dichlorobenzene	150	139.1		ug/m3		93	36 - 156	
2-Butanone	73.7	68.90		ug/m3		93	50 - 150	
2-Hexanone	102	94.29		ug/m3		92	50 - 150	
4-Ethyltoluene	123	117.9		ug/m3		96	50 - 150	
4-Methyl-2-pentanone	102	96.05		ug/m3		94	50 - 150	
Acetone	59.4	57.74		ug/m3		97	50 - 150	
Benzene	79.9	85.77		ug/m3		107	60 - 156	
Benzyl chloride	129	110.4		ug/m3		85	50 - 150	
Bromodichloromethane	168	171.4		ug/m3		102	50 - 150	
Bromoform	258	258.7		ug/m3		100	50 - 150	
Bromomethane	97.1	93.82		ug/m3		97	50 - 150	
cis-1,2-Dichloroethene	99.1	96.30		ug/m3		97	50 - 150	

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-46977/3**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	113	107.0		ug/m3		94	61 - 157
Carbon disulfide	77.9	81.33		ug/m3		104	50 - 150
Carbon tetrachloride	157	154.3		ug/m3		98	64 - 154
Chlorobenzene	115	108.6		ug/m3		94	50 - 150
Chloroethane	66.0	59.40		ug/m3		90	50 - 150
Chloroform	122	116.2		ug/m3		95	50 - 150
Chloromethane	51.6	47.65		ug/m3		92	50 - 150
Dibromochloromethane	213	206.4		ug/m3		97	50 - 150
Dichlorodifluoromethane	124	127.9		ug/m3		103	50 - 150
Dichlorotetrafluoroethane	175	165.1		ug/m3		94	50 - 150
Ethylbenzene	109	109.3		ug/m3		101	52 - 154
Hexachloro-1,3-butadiene	267	218.6		ug/m3		82	50 - 150
Isopropanol	61.5	54.36	J	ug/m3		88	50 - 150
Methylene Chloride	86.8	79.44		ug/m3		91	50 - 150
Methyl-t-Butyl Ether (MTBE)	90.1	77.56		ug/m3		86	50 - 150
n-Butylbenzene	137	130.5		ug/m3		95	50 - 150
o-Xylene	109	106.5		ug/m3		98	52 - 148
m,p-Xylene	217	204.1		ug/m3		94	42 - 156
sec-Butylbenzene	137	118.6		ug/m3		86	50 - 150
Styrene	106	102.2		ug/m3		96	50 - 150
trans-1,2-Dichloroethene	99.1	103.0		ug/m3		104	50 - 150
trans-1,3-Dichloropropene	113	115.9		ug/m3		102	50 - 150
tert-Butylbenzene	137	123.9		ug/m3		90	50 - 150
Tetrachloroethene	170	162.2		ug/m3		96	56 - 152
Toluene	94.2	90.53		ug/m3		96	56 - 146
Trichloroethene	134	128.5		ug/m3		96	63 - 159
Trichlorofluoromethane	140	146.2		ug/m3		104	50 - 150
Vinyl acetate	88.0	81.00		ug/m3		92	50 - 150
Vinyl chloride	63.9	59.42		ug/m3		93	45 - 177

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		47 - 137
4-Bromofluorobenzene (Surr)	97		57 - 129
Toluene-d8 (Surr)	105		78 - 156

**Lab Sample ID: LCSD 570-46977/4**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	136	143.2		ug/m3		105	50 - 150	2	35
1,1,2,2-Tetrachloroethane	172	145.2		ug/m3		85	50 - 150	7	35
1,1,2-Trichloro-1,2,2-trifluoroethane	192	189.7		ug/m3		99	50 - 150	8	35
1,1,2-Trichloroethane	136	136.2		ug/m3		100	65 - 149	3	37
1,1-Dichloroethane	101	104.7		ug/m3		103	50 - 150	7	35
1,1-Dichloroethene	99.1	96.65		ug/m3		98	50 - 150	1	35
1,1-Difluoroethane	67.5	62.24		ug/m3		92	60 - 140	8	30
1,2,4-Trichlorobenzene	186	152.8		ug/m3		82	50 - 150	3	35

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-46977/4**

**Matrix: Air**

**Analysis Batch: 46977**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	123	113.2		ug/m3		92	50 - 150	3	35
1,2-Dibromo-3-Chloropropane	242	206.1		ug/m3		85	60 - 140	10	30
1,2-Dibromoethane	192	171.6		ug/m3		89	54 - 144	10	36
1,2-Dichlorobenzene	150	136.3		ug/m3		91	34 - 160	3	47
1,2-Dichloroethane	101	110.1		ug/m3		109	69 - 153	9	35
1,2-Dichloropropane	116	112.3		ug/m3		97	67 - 157	3	35
1,3,5-Trimethylbenzene	123	107.9		ug/m3		88	50 - 150	6	35
1,3-Dichlorobenzene	150	131.8		ug/m3		88	50 - 150	6	35
1,4-Dichlorobenzene	150	131.7		ug/m3		88	36 - 156	5	47
2-Butanone	73.7	72.53		ug/m3		98	50 - 150	5	35
2-Hexanone	102	98.52		ug/m3		96	50 - 150	4	35
4-Ethyltoluene	123	106.8		ug/m3		87	50 - 150	10	35
4-Methyl-2-pentanone	102	96.10		ug/m3		94	50 - 150	0	35
Acetone	59.4	59.53		ug/m3		100	50 - 150	3	35
Benzene	79.9	82.15		ug/m3		103	60 - 156	4	40
Benzyl chloride	129	105.1		ug/m3		81	50 - 150	5	35
Bromodichloromethane	168	164.7		ug/m3		98	50 - 150	4	35
Bromoform	258	244.9		ug/m3		95	50 - 150	5	38
Bromomethane	97.1	98.57		ug/m3		102	50 - 150	5	35
cis-1,2-Dichloroethene	99.1	103.5		ug/m3		104	50 - 150	7	35
cis-1,3-Dichloropropene	113	103.9		ug/m3		92	61 - 157	3	35
Carbon disulfide	77.9	87.11		ug/m3		112	50 - 150	7	35
Carbon tetrachloride	157	154.9		ug/m3		99	64 - 154	0	32
Chlorobenzene	115	106.7		ug/m3		93	50 - 150	2	35
Chloroethane	66.0	68.11		ug/m3		103	50 - 150	14	35
Chloroform	122	128.6		ug/m3		105	50 - 150	10	35
Chloromethane	51.6	49.70		ug/m3		96	50 - 150	4	35
Dibromochloromethane	213	197.2		ug/m3		93	50 - 150	5	35
Dichlorodifluoromethane	124	135.4		ug/m3		110	50 - 150	6	35
Dichlorotetrafluoroethane	175	175.4		ug/m3		100	50 - 150	6	35
Ethylbenzene	109	103.1		ug/m3		95	52 - 154	6	38
Hexachloro-1,3-butadiene	267	200.4		ug/m3		75	50 - 150	9	35
Isopropanol	61.5	57.75 J		ug/m3		94	50 - 150	6	35
Methylene Chloride	86.8	81.08		ug/m3		93	50 - 150	2	35
Methyl-t-Butyl Ether (MTBE)	90.1	88.74		ug/m3		98	50 - 150	13	35
n-Butylbenzene	137	121.6		ug/m3		89	50 - 150	7	30
o-Xylene	109	100.5		ug/m3		93	52 - 148	6	38
m,p-Xylene	217	201.9		ug/m3		93	42 - 156	1	41
sec-Butylbenzene	137	118.2		ug/m3		86	50 - 150	0	30
Styrene	106	96.67		ug/m3		91	50 - 150	6	35
trans-1,2-Dichloroethene	99.1	103.9		ug/m3		105	50 - 150	1	35
trans-1,3-Dichloropropene	113	116.8		ug/m3		103	50 - 150	1	35
tert-Butylbenzene	137	124.4		ug/m3		91	50 - 150	0	30
Tetrachloroethene	170	157.8		ug/m3		93	56 - 152	3	40
Toluene	94.2	90.71		ug/m3		96	56 - 146	0	43
Trichloroethene	134	131.4		ug/m3		98	63 - 159	2	34
Trichlorofluoromethane	140	148.4		ug/m3		106	50 - 150	1	35
Vinyl acetate	88.0	84.48		ug/m3		96	50 - 150	4	35
Vinyl chloride	63.9	61.68		ug/m3		97	45 - 177	4	36

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		47 - 137
4-Bromofluorobenzene (Surr)	91		57 - 129
Toluene-d8 (Surr)	102		78 - 156

Lab Sample ID: MB 570-47027/6

Matrix: Air

Analysis Batch: 47027

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

Analyte	MB Result	MB Qualifier	MB RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3		01/28/20 14:28		1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3		01/28/20 14:28		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3		01/28/20 14:28		1
1,1,2-Trichloroethane	ND		2.7	ug/m3		01/28/20 14:28		1
1,1-Dichloroethane	ND		2.0	ug/m3		01/28/20 14:28		1
1,1-Dichloroethene	ND		2.0	ug/m3		01/28/20 14:28		1
1,1-Difluoroethane	ND		5.4	ug/m3		01/28/20 14:28		1
1,2,4-Trichlorobenzene	ND		15	ug/m3		01/28/20 14:28		1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3		01/28/20 14:28		1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3		01/28/20 14:28		1
1,2-Dibromoethane	ND		3.8	ug/m3		01/28/20 14:28		1
1,2-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 14:28		1
1,2-Dichloroethane	ND		2.0	ug/m3		01/28/20 14:28		1
1,2-Dichloropropane	ND		2.3	ug/m3		01/28/20 14:28		1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3		01/28/20 14:28		1
1,3-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 14:28		1
1,4-Dichlorobenzene	ND		3.0	ug/m3		01/28/20 14:28		1
2-Butanone	ND		4.4	ug/m3		01/28/20 14:28		1
2-Hexanone	ND		6.1	ug/m3		01/28/20 14:28		1
4-Ethyltoluene	ND		2.5	ug/m3		01/28/20 14:28		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/28/20 14:28		1
Acetone	ND		12	ug/m3		01/28/20 14:28		1
Benzene	ND		1.6	ug/m3		01/28/20 14:28		1
Benzyl chloride	ND		7.8	ug/m3		01/28/20 14:28		1
Bromodichloromethane	ND		3.4	ug/m3		01/28/20 14:28		1
Bromoform	ND		5.2	ug/m3		01/28/20 14:28		1
Bromomethane	ND		1.9	ug/m3		01/28/20 14:28		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 14:28		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/28/20 14:28		1
Carbon disulfide	ND		16	ug/m3		01/28/20 14:28		1
Carbon tetrachloride	ND		3.1	ug/m3		01/28/20 14:28		1
Chlorobenzene	ND		2.3	ug/m3		01/28/20 14:28		1
Chloroethane	ND		1.3	ug/m3		01/28/20 14:28		1
Chloroform	ND		2.4	ug/m3		01/28/20 14:28		1
Chloromethane	ND		1.0	ug/m3		01/28/20 14:28		1
Dibromochloromethane	ND		4.3	ug/m3		01/28/20 14:28		1
Dichlorodifluoromethane	ND		2.5	ug/m3		01/28/20 14:28		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/28/20 14:28		1
Ethylbenzene	ND		2.2	ug/m3		01/28/20 14:28		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/28/20 14:28		1
Isopropanol	ND		120	ug/m3		01/28/20 14:28		1
Methylene Chloride	ND		17	ug/m3		01/28/20 14:28		1

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-47027/6**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/28/20 14:28		1
n-Butylbenzene	ND		8.2	ug/m3		01/28/20 14:28		1
o-Xylene	ND		2.2	ug/m3		01/28/20 14:28		1
m,p-Xylene	ND		8.7	ug/m3		01/28/20 14:28		1
sec-Butylbenzene	ND		8.2	ug/m3		01/28/20 14:28		1
Styrene	ND		6.4	ug/m3		01/28/20 14:28		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/28/20 14:28		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/28/20 14:28		1
tert-Butylbenzene	ND		8.2	ug/m3		01/28/20 14:28		1
Tetrachloroethylene	ND		3.4	ug/m3		01/28/20 14:28		1
Toluene	ND		19	ug/m3		01/28/20 14:28		1
Trichloroethylene	ND		2.7	ug/m3		01/28/20 14:28		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/28/20 14:28		1
Vinyl acetate	ND		7.0	ug/m3		01/28/20 14:28		1
Vinyl chloride	ND		1.3	ug/m3		01/28/20 14:28		1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		47 - 137			01/28/20 14:28		1
4-Bromofluorobenzene (Surr)	99		57 - 129			01/28/20 14:28		1
Toluene-d8 (Surr)	97		78 - 156			01/28/20 14:28		1

**Lab Sample ID: LCS 570-47027/3**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	136	133.8		ug/m3		98	50 - 150
1,1,2,2-Tetrachloroethane	172	144.0		ug/m3		84	50 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	192	178.1		ug/m3		93	50 - 150
ne							
1,1,2-Trichloroethane	136	120.8		ug/m3		89	65 - 149
1,1-Dichloroethane	101	94.71		ug/m3		94	50 - 150
1,1-Dichloroethylene	99.1	89.14		ug/m3		90	50 - 150
1,1-Difluoroethane	67.5	64.90		ug/m3		96	60 - 140
1,2,4-Trichlorobenzene	186	150.0		ug/m3		81	50 - 150
1,2,4-Trimethylbenzene	123	102.5		ug/m3		83	50 - 150
1,2-Dibromo-3-Chloropropane	242	206.8		ug/m3		86	60 - 140
1,2-Dibromoethane	192	168.8		ug/m3		88	54 - 144
1,2-Dichlorobenzene	150	124.1		ug/m3		83	34 - 160
1,2-Dichloroethane	101	96.59		ug/m3		95	69 - 153
1,2-Dichloropropane	116	100.9		ug/m3		87	67 - 157
1,3,5-Trimethylbenzene	123	105.0		ug/m3		85	50 - 150
1,3-Dichlorobenzene	150	123.1		ug/m3		82	50 - 150
1,4-Dichlorobenzene	150	124.0		ug/m3		83	36 - 156
2-Butanone	73.7	66.86		ug/m3		91	50 - 150
2-Hexanone	102	89.10		ug/m3		87	50 - 150
4-Ethyltoluene	123	104.9		ug/m3		85	50 - 150
4-Methyl-2-pentanone	102	88.75		ug/m3		87	50 - 150
Acetone	59.4	57.26		ug/m3		96	50 - 150

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-47027/3**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	79.9	73.36		ug/m3		92	60 - 156
Benzyl chloride	129	105.2		ug/m3		81	50 - 150
Bromodichloromethane	168	149.8		ug/m3		89	50 - 150
Bromoform	258	229.3		ug/m3		89	50 - 150
Bromomethane	97.1	94.06		ug/m3		97	50 - 150
cis-1,2-Dichloroethene	99.1	96.78		ug/m3		98	50 - 150
cis-1,3-Dichloropropene	113	99.20		ug/m3		87	61 - 157
Carbon disulfide	77.9	78.63		ug/m3		101	50 - 150
Carbon tetrachloride	157	141.5		ug/m3		90	64 - 154
Chlorobenzene	115	98.95		ug/m3		86	50 - 150
Chloroethane	66.0	62.71		ug/m3		95	50 - 150
Chloroform	122	113.9		ug/m3		93	50 - 150
Chloromethane	51.6	49.93		ug/m3		97	50 - 150
Dibromochloromethane	213	184.0		ug/m3		86	50 - 150
Dichlorodifluoromethane	124	124.3		ug/m3		101	50 - 150
Dichlorotetrafluoroethane	175	170.8		ug/m3		98	50 - 150
Ethylbenzene	109	98.21		ug/m3		90	52 - 154
Hexachloro-1,3-butadiene	267	217.1		ug/m3		81	50 - 150
Isopropanol	61.5	51.61 J		ug/m3		84	50 - 150
Methylene Chloride	86.8	73.84		ug/m3		85	50 - 150
Methyl-t-Butyl Ether (MTBE)	90.1	86.20		ug/m3		96	50 - 150
n-Butylbenzene	137	117.0		ug/m3		85	50 - 150
o-Xylene	109	96.22		ug/m3		89	52 - 148
m,p-Xylene	217	192.2		ug/m3		89	42 - 156
sec-Butylbenzene	137	111.8		ug/m3		81	50 - 150
Styrene	106	94.18		ug/m3		88	50 - 150
trans-1,2-Dichloroethene	99.1	98.79		ug/m3		100	50 - 150
trans-1,3-Dichloropropene	113	103.2		ug/m3		91	50 - 150
tert-Butylbenzene	137	115.2		ug/m3		84	50 - 150
Tetrachloroethene	170	142.9		ug/m3		84	56 - 152
Toluene	94.2	82.95		ug/m3		88	56 - 146
Trichloroethene	134	118.8		ug/m3		88	63 - 159
Trichlorofluoromethane	140	135.1		ug/m3		96	50 - 150
Vinyl acetate	88.0	77.64		ug/m3		88	50 - 150
Vinyl chloride	63.9	60.11		ug/m3		94	45 - 177

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		47 - 137
4-Bromofluorobenzene (Surr)	95		57 - 129
Toluene-d8 (Surr)	98		78 - 156

**Lab Sample ID: LCSD 570-47027/4**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	136	134.3		ug/m3		98	50 - 150	0	35
1,1,2,2-Tetrachloroethane	172	146.1		ug/m3		85	50 - 150	1	35

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-47027/4**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	192	180.5		ug/m3	94	50 - 150	1	35	
1,1,2-Trichloroethane	136	122.0		ug/m3	89	65 - 149	1	37	
1,1-Dichloroethane	101	95.97		ug/m3	95	50 - 150	1	35	
1,1-Dichloroethene	99.1	90.74		ug/m3	92	50 - 150	2	35	
1,1-Difluoroethane	67.5	64.24		ug/m3	95	60 - 140	1	30	
1,2,4-Trichlorobenzene	186	149.2		ug/m3	80	50 - 150	0	35	
1,2,4-Trimethylbenzene	123	102.9		ug/m3	84	50 - 150	0	35	
1,2-Dibromo-3-Chloropropane	242	206.5		ug/m3	85	60 - 140	0	30	
1,2-Dibromoethane	192	171.7		ug/m3	89	54 - 144	2	36	
1,2-Dichlorobenzene	150	124.4		ug/m3	83	34 - 160	0	47	
1,2-Dichloroethane	101	96.15		ug/m3	95	69 - 153	0	35	
1,2-Dichloropropane	116	101.7		ug/m3	88	67 - 157	1	35	
1,3,5-Trimethylbenzene	123	105.8		ug/m3	86	50 - 150	1	35	
1,3-Dichlorobenzene	150	122.8		ug/m3	82	50 - 150	0	35	
1,4-Dichlorobenzene	150	124.5		ug/m3	83	36 - 156	0	47	
2-Butanone	73.7	68.79		ug/m3	93	50 - 150	3	35	
2-Hexanone	102	88.62		ug/m3	86	50 - 150	1	35	
4-Ethyltoluene	123	106.0		ug/m3	86	50 - 150	1	35	
4-Methyl-2-pentanone	102	89.20		ug/m3	87	50 - 150	1	35	
Acetone	59.4	58.27		ug/m3	98	50 - 150	2	35	
Benzene	79.9	74.27		ug/m3	93	60 - 156	1	40	
Benzyl chloride	129	104.7		ug/m3	81	50 - 150	0	35	
Bromodichloromethane	168	150.9		ug/m3	90	50 - 150	1	35	
Bromoform	258	230.5		ug/m3	89	50 - 150	1	38	
Bromomethane	97.1	95.09		ug/m3	98	50 - 150	1	35	
cis-1,2-Dichloroethene	99.1	98.54		ug/m3	99	50 - 150	2	35	
cis-1,3-Dichloropropene	113	100.4		ug/m3	88	61 - 157	1	35	
Carbon disulfide	77.9	79.48		ug/m3	102	50 - 150	1	35	
Carbon tetrachloride	157	141.8		ug/m3	90	64 - 154	0	32	
Chlorobenzene	115	100.5		ug/m3	87	50 - 150	2	35	
Chloroethane	66.0	63.58		ug/m3	96	50 - 150	1	35	
Chloroform	122	115.2		ug/m3	94	50 - 150	1	35	
Chloromethane	51.6	49.58		ug/m3	96	50 - 150	1	35	
Dibromochloromethane	213	187.7		ug/m3	88	50 - 150	2	35	
Dichlorodifluoromethane	124	122.6		ug/m3	99	50 - 150	1	35	
Dichlorotetrafluoroethane	175	172.5		ug/m3	99	50 - 150	1	35	
Ethylbenzene	109	98.65		ug/m3	91	52 - 154	0	38	
Hexachloro-1,3-butadiene	267	213.3		ug/m3	80	50 - 150	2	35	
Isopropanol	61.5	53.38 J		ug/m3	87	50 - 150	3	35	
Methylene Chloride	86.8	77.31		ug/m3	89	50 - 150	5	35	
Methyl-t-Butyl Ether (MTBE)	90.1	87.66		ug/m3	97	50 - 150	2	35	
n-Butylbenzene	137	116.3		ug/m3	85	50 - 150	1	30	
o-Xylene	109	97.35		ug/m3	90	52 - 148	1	38	
m,p-Xylene	217	193.8		ug/m3	89	42 - 156	1	41	
sec-Butylbenzene	137	112.0		ug/m3	82	50 - 150	0	30	
Styrene	106	95.96		ug/m3	90	50 - 150	2	35	
trans-1,2-Dichloroethene	99.1	99.73		ug/m3	101	50 - 150	1	35	
trans-1,3-Dichloropropene	113	103.5		ug/m3	91	50 - 150	0	35	

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-47027/4**

**Matrix: Air**

**Analysis Batch: 47027**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
tert-Butylbenzene	137	115.7		ug/m3		84	50 - 150	0	30
Tetrachloroethene	170	144.7		ug/m3		85	56 - 152	1	40
Toluene	94.2	83.98		ug/m3		89	56 - 146	1	43
Trichloroethene	134	120.4		ug/m3		90	63 - 159	1	34
Trichlorofluoromethane	140	136.2		ug/m3		97	50 - 150	1	35
Vinyl acetate		88.0	79.37	ug/m3		90	50 - 150	2	35
Vinyl chloride		63.9	60.59	ug/m3		95	45 - 177	1	36

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	111		47 - 137
4-Bromofluorobenzene (Surr)	95		57 - 129
Toluene-d8 (Surr)	97		78 - 156

**Lab Sample ID: MB 570-47256/5**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 13:05	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 13:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 13:05	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 13:05	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 13:05	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 13:05	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 13:05	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 13:05	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 13:05	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 13:05	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 13:05	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:05	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 13:05	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 13:05	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 13:05	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:05	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:05	1
2-Butanone	ND		4.4	ug/m3			01/29/20 13:05	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 13:05	1
4-Ethyltoluene	ND		2.5	ug/m3			01/29/20 13:05	1
4-Methyl-2-pentanone	ND		6.1	ug/m3			01/29/20 13:05	1
Acetone	ND		12	ug/m3			01/29/20 13:05	1
Benzene	ND		1.6	ug/m3			01/29/20 13:05	1
Benzyl chloride	ND		7.8	ug/m3			01/29/20 13:05	1
Bromodichloromethane	ND		3.4	ug/m3			01/29/20 13:05	1
Bromoform	ND		5.2	ug/m3			01/29/20 13:05	1
Bromomethane	ND		1.9	ug/m3			01/29/20 13:05	1
cis-1,2-Dichloroethene	ND		2.0	ug/m3			01/29/20 13:05	1
cis-1,3-Dichloropropene	ND		2.3	ug/m3			01/29/20 13:05	1
Carbon disulfide	ND		16	ug/m3			01/29/20 13:05	1

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-47256/5**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		3.1	ug/m3		01/29/20 13:05		1
Chlorobenzene	ND		2.3	ug/m3		01/29/20 13:05		1
Chloroethane	ND		1.3	ug/m3		01/29/20 13:05		1
Chloroform	ND		2.4	ug/m3		01/29/20 13:05		1
Chloromethane	ND		1.0	ug/m3		01/29/20 13:05		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 13:05		1
Dichlorodifluoromethane	ND		2.5	ug/m3		01/29/20 13:05		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 13:05		1
Ethylbenzene	ND		2.2	ug/m3		01/29/20 13:05		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 13:05		1
Isopropanol	ND		120	ug/m3		01/29/20 13:05		1
Methylene Chloride	ND		17	ug/m3		01/29/20 13:05		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 13:05		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:05		1
o-Xylene	ND		2.2	ug/m3		01/29/20 13:05		1
m,p-Xylene	ND		8.7	ug/m3		01/29/20 13:05		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:05		1
Styrene	ND		6.4	ug/m3		01/29/20 13:05		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 13:05		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 13:05		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:05		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 13:05		1
Toluene	ND		19	ug/m3		01/29/20 13:05		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 13:05		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 13:05		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 13:05		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 13:05		1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		47 - 137		01/29/20 13:05	1
4-Bromofluorobenzene (Surr)	100		57 - 129		01/29/20 13:05	1
Toluene-d8 (Surr)	96		78 - 156		01/29/20 13:05	1

**Lab Sample ID: LCS 570-47256/3**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
1,1,1-Trichloroethane	136	157.7		ug/m3		116	50 - 150
1,1,2,2-Tetrachloroethane	172	158.5		ug/m3		92	50 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	192	199.7		ug/m3		104	50 - 150
1,1,2-Trichloroethane	136	131.9		ug/m3		97	65 - 149
1,1-Dichloroethane	101	109.6		ug/m3		108	50 - 150
1,1-Dichloroethene	99.1	109.6		ug/m3		111	50 - 150
1,1-Difluoroethane	67.5	62.71		ug/m3		93	60 - 140
1,2,4-Trichlorobenzene	186	159.2		ug/m3		86	50 - 150
1,2,4-Trimethylbenzene	123	117.3		ug/m3		95	50 - 150
1,2-Dibromo-3-Chloropropane	242	218.1		ug/m3		90	60 - 140

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-47256/3**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	192	185.3		ug/m3		96	54 - 144
1,2-Dichlorobenzene	150	150.0		ug/m3		100	34 - 160
1,2-Dichloroethane	101	120.5		ug/m3		119	69 - 153
1,2-Dichloropropane	116	107.1		ug/m3		93	67 - 157
1,3,5-Trimethylbenzene	123	120.1		ug/m3		98	50 - 150
1,3-Dichlorobenzene	150	147.8		ug/m3		98	50 - 150
1,4-Dichlorobenzene	150	145.7		ug/m3		97	36 - 156
2-Butanone	73.7	73.99		ug/m3		100	50 - 150
2-Hexanone	102	97.54		ug/m3		95	50 - 150
4-Ethyltoluene	123	119.4		ug/m3		97	50 - 150
4-Methyl-2-pentanone	102	90.30		ug/m3		88	50 - 150
Acetone	59.4	66.16		ug/m3		111	50 - 150
Benzene	79.9	83.46		ug/m3		104	60 - 156
Benzyl chloride	129	115.1		ug/m3		89	50 - 150
Bromodichloromethane	168	168.8		ug/m3		101	50 - 150
Bromoform	258	260.0		ug/m3		101	50 - 150
Bromomethane	97.1	109.9		ug/m3		113	50 - 150
cis-1,2-Dichloroethene	99.1	105.7		ug/m3		107	50 - 150
cis-1,3-Dichloropropene	113	99.92		ug/m3		88	61 - 157
Carbon disulfide	77.9	90.43		ug/m3		116	50 - 150
Carbon tetrachloride	157	166.1		ug/m3		106	64 - 154
Chlorobenzene	115	107.4		ug/m3		93	50 - 150
Chloroethane	66.0	66.29		ug/m3		100	50 - 150
Chloroform	122	132.3		ug/m3		108	50 - 150
Chloromethane	51.6	51.44		ug/m3		100	50 - 150
Dibromochloromethane	213	213.7		ug/m3		100	50 - 150
Dichlorodifluoromethane	124	154.7		ug/m3		125	50 - 150
Dichlorotetrafluoroethane	175	184.9		ug/m3		106	50 - 150
Ethylbenzene	109	106.7		ug/m3		98	52 - 154
Hexachloro-1,3-butadiene	267	222.0		ug/m3		83	50 - 150
Isopropanol	61.5	60.80 J		ug/m3		99	50 - 150
Methylene Chloride	86.8	89.74		ug/m3		103	50 - 150
Methyl-t-Butyl Ether (MTBE)	90.1	97.27		ug/m3		108	50 - 150
n-Butylbenzene	137	127.2		ug/m3		93	50 - 150
o-Xylene	109	105.5		ug/m3		97	52 - 148
m,p-Xylene	217	202.5		ug/m3		93	42 - 156
sec-Butylbenzene	137	123.1		ug/m3		90	50 - 150
Styrene	106	103.3		ug/m3		97	50 - 150
trans-1,2-Dichloroethene	99.1	105.5		ug/m3		106	50 - 150
trans-1,3-Dichloropropene	113	112.6		ug/m3		99	50 - 150
tert-Butylbenzene	137	129.8		ug/m3		95	50 - 150
Tetrachloroethene	170	166.6		ug/m3		98	56 - 152
Toluene	94.2	90.65		ug/m3		96	56 - 146
Trichloroethene	134	133.2		ug/m3		99	63 - 159
Trichlorofluoromethane	140	174.7		ug/m3		124	50 - 150
Vinyl acetate	88.0	87.91		ug/m3		100	50 - 150
Vinyl chloride	63.9	63.56		ug/m3		99	45 - 177

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-47256/3**

**Matrix: Air**

**Analysis Batch: 47256**

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

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107				47 - 137
4-Bromofluorobenzene (Surr)	97				57 - 129
Toluene-d8 (Surr)	102				78 - 156

**Lab Sample ID: LCSD 570-47256/4**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	136	146.1		ug/m3		107	50 - 150	8	35
1,1,2,2-Tetrachloroethane	172	148.9		ug/m3		87	50 - 150	6	35
1,1,2-Trichloro-1,2,2-trifluoroethane	192	179.6		ug/m3		94	50 - 150	11	35
1,1,2-Trichloroethane	136	127.7		ug/m3		94	65 - 149	3	37
1,1-Dichloroethane	101	101.0		ug/m3		100	50 - 150	8	35
1,1-Dichloroethene	99.1	95.88		ug/m3		97	50 - 150	13	35
1,1-Difluoroethane	67.5	57.53		ug/m3		85	60 - 140	9	30
1,2,4-Trichlorobenzene	186	154.8		ug/m3		83	50 - 150	3	35
1,2,4-Trimethylbenzene	123	109.9		ug/m3		89	50 - 150	6	35
1,2-Dibromo-3-Chloropropane	242	210.8		ug/m3		87	60 - 140	3	30
1,2-Dibromoethane	192	176.8		ug/m3		92	54 - 144	5	36
1,2-Dichlorobenzene	150	135.3		ug/m3		90	34 - 160	10	47
1,2-Dichloroethane	101	110.3		ug/m3		109	69 - 153	9	35
1,2-Dichloropropane	116	108.1		ug/m3		94	67 - 157	1	35
1,3,5-Trimethylbenzene	123	108.8		ug/m3		89	50 - 150	10	35
1,3-Dichlorobenzene	150	134.3		ug/m3		89	50 - 150	10	35
1,4-Dichlorobenzene	150	135.7		ug/m3		90	36 - 156	7	47
2-Butanone	73.7	71.22		ug/m3		97	50 - 150	4	35
2-Hexanone	102	84.75		ug/m3		83	50 - 150	14	35
4-Ethyltoluene	123	108.1		ug/m3		88	50 - 150	10	35
4-Methyl-2-pentanone	102	89.75		ug/m3		88	50 - 150	1	35
Acetone	59.4	57.16		ug/m3		96	50 - 150	15	35
Benzene	79.9	79.68		ug/m3		100	60 - 156	5	40
Benzyl chloride	129	103.3		ug/m3		80	50 - 150	11	35
Bromodichloromethane	168	167.6		ug/m3		100	50 - 150	1	35
Bromoform	258	251.6		ug/m3		97	50 - 150	3	38
Bromomethane	97.1	95.35		ug/m3		98	50 - 150	14	35
cis-1,2-Dichloroethene	99.1	98.87		ug/m3		100	50 - 150	7	35
cis-1,3-Dichloropropene	113	102.1		ug/m3		90	61 - 157	2	35
Carbon disulfide	77.9	80.50		ug/m3		103	50 - 150	12	35
Carbon tetrachloride	157	159.7		ug/m3		102	64 - 154	4	32
Chlorobenzene	115	104.3		ug/m3		91	50 - 150	3	35
Chloroethane	66.0	62.40		ug/m3		95	50 - 150	6	35
Chloroform	122	128.8		ug/m3		106	50 - 150	3	35
Chloromethane	51.6	45.86		ug/m3		89	50 - 150	11	35
Dibromochloromethane	213	200.3		ug/m3		94	50 - 150	6	35
Dichlorodifluoromethane	124	136.1		ug/m3		110	50 - 150	13	35
Dichlorotetrafluoroethane	175	169.4		ug/m3		97	50 - 150	9	35
Ethylbenzene	109	100.7		ug/m3		93	52 - 154	6	38

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-47256/4**

**Matrix: Air**

**Analysis Batch: 47256**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
Hexachloro-1,3-butadiene	267	202.0		ug/m3	76	50 - 150	9	35	
Isopropanol	61.5	54.05	J	ug/m3	88	50 - 150	12	35	
Methylene Chloride	86.8	81.04		ug/m3	93	50 - 150	10	35	
Methyl-t-Butyl Ether (MTBE)	90.1	91.37		ug/m3	101	50 - 150	6	35	
n-Butylbenzene	137	112.9		ug/m3	82	50 - 150	12	30	
o-Xylene	109	101.3		ug/m3	93	52 - 148	4	38	
m,p-Xylene	217	198.1		ug/m3	91	42 - 156	2	41	
sec-Butylbenzene	137	112.0		ug/m3	82	50 - 150	9	30	
Styrene	106	96.77		ug/m3	91	50 - 150	7	35	
trans-1,2-Dichloroethene	99.1	103.6		ug/m3	104	50 - 150	2	35	
trans-1,3-Dichloropropene	113	110.5		ug/m3	97	50 - 150	2	35	
tert-Butylbenzene	137	120.4		ug/m3	88	50 - 150	7	30	
Tetrachloroethene	170	155.2		ug/m3	92	56 - 152	7	40	
Toluene	94.2	86.12		ug/m3	91	56 - 146	5	43	
Trichloroethene	134	128.1		ug/m3	95	63 - 159	4	34	
Trichlorofluoromethane	140	158.8		ug/m3	113	50 - 150	10	35	
Vinyl acetate		88.0	80.79	ug/m3	92	50 - 150	8	35	
Vinyl chloride		63.9	58.57	ug/m3	92	45 - 177	8	36	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		47 - 137
4-Bromofluorobenzene (Surr)	88		57 - 129
Toluene-d8 (Surr)	94		78 - 156

**Lab Sample ID: MB 570-47260/6**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	ug/m3			01/29/20 13:48	1
1,1,2,2-Tetrachloroethane	ND		6.9	ug/m3			01/29/20 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		11	ug/m3			01/29/20 13:48	1
1,1,2-Trichloroethane	ND		2.7	ug/m3			01/29/20 13:48	1
1,1-Dichloroethane	ND		2.0	ug/m3			01/29/20 13:48	1
1,1-Dichloroethene	ND		2.0	ug/m3			01/29/20 13:48	1
1,1-Difluoroethane	ND		5.4	ug/m3			01/29/20 13:48	1
1,2,4-Trichlorobenzene	ND		15	ug/m3			01/29/20 13:48	1
1,2,4-Trimethylbenzene	ND		7.4	ug/m3			01/29/20 13:48	1
1,2-Dibromo-3-Chloropropane	ND		14	ug/m3			01/29/20 13:48	1
1,2-Dibromoethane	ND		3.8	ug/m3			01/29/20 13:48	1
1,2-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:48	1
1,2-Dichloroethane	ND		2.0	ug/m3			01/29/20 13:48	1
1,2-Dichloropropane	ND		2.3	ug/m3			01/29/20 13:48	1
1,3,5-Trimethylbenzene	ND		2.5	ug/m3			01/29/20 13:48	1
1,3-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:48	1
1,4-Dichlorobenzene	ND		3.0	ug/m3			01/29/20 13:48	1
2-Butanone	ND		4.4	ug/m3			01/29/20 13:48	1
2-Hexanone	ND		6.1	ug/m3			01/29/20 13:48	1

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: MB 570-47260/6**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		2.5	ug/m3		01/29/20 13:48		1
4-Methyl-2-pentanone	ND		6.1	ug/m3		01/29/20 13:48		1
Acetone	ND		12	ug/m3		01/29/20 13:48		1
Benzene	ND		1.6	ug/m3		01/29/20 13:48		1
Benzyl chloride	ND		7.8	ug/m3		01/29/20 13:48		1
Bromodichloromethane	ND		3.4	ug/m3		01/29/20 13:48		1
Bromoform	ND		5.2	ug/m3		01/29/20 13:48		1
Bromomethane	ND		1.9	ug/m3		01/29/20 13:48		1
cis-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 13:48		1
cis-1,3-Dichloropropene	ND		2.3	ug/m3		01/29/20 13:48		1
Carbon disulfide	ND		16	ug/m3		01/29/20 13:48		1
Carbon tetrachloride	ND		3.1	ug/m3		01/29/20 13:48		1
Chlorobenzene	ND		2.3	ug/m3		01/29/20 13:48		1
Chloroethane	ND		1.3	ug/m3		01/29/20 13:48		1
Chloroform	ND		2.4	ug/m3		01/29/20 13:48		1
Chloromethane	ND		1.0	ug/m3		01/29/20 13:48		1
Dibromochloromethane	ND		4.3	ug/m3		01/29/20 13:48		1
Dichlorodifluoromethane	ND		2.5	ug/m3		01/29/20 13:48		1
Dichlorotetrafluoroethane	ND		14	ug/m3		01/29/20 13:48		1
Ethylbenzene	ND		2.2	ug/m3		01/29/20 13:48		1
Hexachloro-1,3-butadiene	ND		16	ug/m3		01/29/20 13:48		1
Isopropanol	ND		120	ug/m3		01/29/20 13:48		1
Methylene Chloride	ND		17	ug/m3		01/29/20 13:48		1
Methyl-t-Butyl Ether (MTBE)	ND		7.2	ug/m3		01/29/20 13:48		1
n-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:48		1
o-Xylene	ND		2.2	ug/m3		01/29/20 13:48		1
m,p-Xylene	ND		8.7	ug/m3		01/29/20 13:48		1
sec-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:48		1
Styrene	ND		6.4	ug/m3		01/29/20 13:48		1
trans-1,2-Dichloroethene	ND		2.0	ug/m3		01/29/20 13:48		1
trans-1,3-Dichloropropene	ND		4.5	ug/m3		01/29/20 13:48		1
tert-Butylbenzene	ND		8.2	ug/m3		01/29/20 13:48		1
Tetrachloroethene	ND		3.4	ug/m3		01/29/20 13:48		1
Toluene	ND		19	ug/m3		01/29/20 13:48		1
Trichloroethene	ND		2.7	ug/m3		01/29/20 13:48		1
Trichlorofluoromethane	ND		5.6	ug/m3		01/29/20 13:48		1
Vinyl acetate	ND		7.0	ug/m3		01/29/20 13:48		1
Vinyl chloride	ND		1.3	ug/m3		01/29/20 13:48		1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		47 - 137		01/29/20 13:48	1
4-Bromofluorobenzene (Surr)	93		57 - 129		01/29/20 13:48	1
Toluene-d8 (Surr)	97		78 - 156		01/29/20 13:48	1

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-47260/3**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	136	114.2		ug/m3		84	50 - 150
1,1,2,2-Tetrachloroethane	172	155.1		ug/m3		90	50 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	192	185.1		ug/m3		97	50 - 150
1,1,2-Trichloroethane	136	121.2		ug/m3		89	65 - 149
1,1-Dichloroethane	101	95.24		ug/m3		94	50 - 150
1,1-Dichloroethene	99.1	92.11		ug/m3		93	50 - 150
1,1-Difluoroethane	67.5	47.92		ug/m3		71	60 - 140
1,2,4-Trichlorobenzene	186	131.1		ug/m3		71	50 - 150
1,2,4-Trimethylbenzene	123	107.4		ug/m3		87	50 - 150
1,2-Dibromo-3-Chloropropane	242	190.4		ug/m3		79	60 - 140
1,2-Dibromoethane	192	177.9		ug/m3		93	54 - 144
1,2-Dichlorobenzene	150	125.9		ug/m3		84	34 - 160
1,2-Dichloroethane	101	84.88		ug/m3		84	69 - 153
1,2-Dichloropropane	116	106.7		ug/m3		92	67 - 157
1,3,5-Trimethylbenzene	123	105.9		ug/m3		86	50 - 150
1,3-Dichlorobenzene	150	132.3		ug/m3		88	50 - 150
1,4-Dichlorobenzene	150	128.4		ug/m3		85	36 - 156
2-Butanone	73.7	68.42		ug/m3		93	50 - 150
2-Hexanone	102	92.16		ug/m3		90	50 - 150
4-Ethyltoluene	123	107.9		ug/m3		88	50 - 150
4-Methyl-2-pentanone	102	89.79		ug/m3		88	50 - 150
Acetone	59.4	65.49		ug/m3		110	50 - 150
Benzene	79.9	79.57		ug/m3		100	60 - 156
Benzyl chloride	129	101.2		ug/m3		78	50 - 150
Bromodichloromethane	168	144.4		ug/m3		86	50 - 150
Bromoform	258	239.2		ug/m3		93	50 - 150
Bromomethane	97.1	100.8		ug/m3		104	50 - 150
cis-1,2-Dichloroethene	99.1	96.85		ug/m3		98	50 - 150
cis-1,3-Dichloropropene	113	96.58		ug/m3		85	61 - 157
Carbon disulfide	77.9	90.89		ug/m3		117	50 - 150
Carbon tetrachloride	157	124.6		ug/m3		79	64 - 154
Chlorobenzene	115	103.3		ug/m3		90	50 - 150
Chloroethane	66.0	70.09		ug/m3		106	50 - 150
Chloroform	122	111.2		ug/m3		91	50 - 150
Chloromethane	51.6	53.43		ug/m3		104	50 - 150
Dibromochloromethane	213	189.7		ug/m3		89	50 - 150
Dichlorodifluoromethane	124	106.9		ug/m3		86	50 - 150
Dichlorotetrafluoroethane	175	169.6		ug/m3		97	50 - 150
Ethylbenzene	109	102.6		ug/m3		94	52 - 154
Hexachloro-1,3-butadiene	267	193.1		ug/m3		72	50 - 150
Isopropanol	61.5	57.76 J		ug/m3		94	50 - 150
Methylene Chloride	86.8	84.23		ug/m3		97	50 - 150
Methyl-t-Butyl Ether (MTBE)	90.1	85.75		ug/m3		95	50 - 150
n-Butylbenzene	137	109.2		ug/m3		80	50 - 150
o-Xylene	109	99.07		ug/m3		91	52 - 148
m,p-Xylene	217	207.9		ug/m3		96	42 - 156
sec-Butylbenzene	137	111.3		ug/m3		81	50 - 150
Styrene	106	97.41		ug/m3		91	50 - 150

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCS 570-47260/3**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limts
trans-1,2-Dichloroethene	99.1	104.1		ug/m3		105	50 - 150
trans-1,3-Dichloropropene	113	97.33		ug/m3		86	50 - 150
tert-Butylbenzene	137	118.8		ug/m3		87	50 - 150
Tetrachloroethene	170	149.7		ug/m3		88	56 - 152
Toluene	94.2	92.82		ug/m3		99	56 - 146
Trichloroethene	134	120.3		ug/m3		90	63 - 159
Trichlorofluoromethane	140	122.9		ug/m3		87	50 - 150
Vinyl acetate	88.0	82.65		ug/m3		94	50 - 150
Vinyl chloride	63.9	65.32		ug/m3		102	45 - 177

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		47 - 137
4-Bromofluorobenzene (Surr)	93		57 - 129
Toluene-d8 (Surr)	97		78 - 156

**Lab Sample ID: LCSD 570-47260/4**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limts	RPD	RPD Limit
1,1,1-Trichloroethane	136	116.7		ug/m3		86	50 - 150	2	35
1,1,2,2-Tetrachloroethane	172	157.0		ug/m3		91	50 - 150	1	35
1,1,2-Trichloro-1,2,2-trifluoroethane	192	188.0		ug/m3		98	50 - 150	2	35
1,1,2-Trichloroethane	136	121.2		ug/m3		89	65 - 149	0	37
1,1-Dichloroethane	101	98.59		ug/m3		97	50 - 150	3	35
1,1-Dichloroethene	99.1	99.33		ug/m3		100	50 - 150	8	35
1,1-Difluoroethane	67.5	49.76		ug/m3		74	60 - 140	4	30
1,2,4-Trichlorobenzene	186	139.2		ug/m3		75	50 - 150	6	35
1,2,4-Trimethylbenzene	123	109.0		ug/m3		89	50 - 150	1	35
1,2-Dibromo-3-Chloropropane	242	196.5		ug/m3		81	60 - 140	3	30
1,2-Dibromoethane	192	176.9		ug/m3		92	54 - 144	1	36
1,2-Dichlorobenzene	150	128.7		ug/m3		86	34 - 160	2	47
1,2-Dichloroethane	101	87.43		ug/m3		86	69 - 153	3	35
1,2-Dichloropropane	116	107.6		ug/m3		93	67 - 157	1	35
1,3,5-Trimethylbenzene	123	107.6		ug/m3		88	50 - 150	2	35
1,3-Dichlorobenzene	150	134.1		ug/m3		89	50 - 150	1	35
1,4-Dichlorobenzene	150	130.2		ug/m3		87	36 - 156	1	47
2-Butanone	73.7	73.81		ug/m3		100	50 - 150	8	35
2-Hexanone	102	93.17		ug/m3		91	50 - 150	1	35
4-Ethyltoluene	123	108.7		ug/m3		88	50 - 150	1	35
4-Methyl-2-pentanone	102	90.44		ug/m3		88	50 - 150	1	35
Acetone	59.4	71.51		ug/m3		120	50 - 150	9	35
Benzene	79.9	80.35		ug/m3		101	60 - 156	1	40
Benzyl chloride	129	104.6		ug/m3		81	50 - 150	3	35
Bromodichloromethane	168	143.3		ug/m3		86	50 - 150	1	35
Bromoform	258	236.7		ug/m3		92	50 - 150	1	38
Bromomethane	97.1	107.4		ug/m3		111	50 - 150	6	35
cis-1,2-Dichloroethene	99.1	100.4		ug/m3		101	50 - 150	4	35

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

**Lab Sample ID: LCSD 570-47260/4**

**Matrix: Air**

**Analysis Batch: 47260**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec Limits	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	113	96.87		ug/m3		85	61 - 157	0	35
Carbon disulfide	77.9	92.99		ug/m3		119	50 - 150	2	35
Carbon tetrachloride	157	123.2		ug/m3		78	64 - 154	1	32
Chlorobenzene	115	103.3		ug/m3		90	50 - 150	0	35
Chloroethane	66.0	75.15		ug/m3		114	50 - 150	7	35
Chloroform	122	114.1		ug/m3		93	50 - 150	3	35
Chloromethane	51.6	55.46		ug/m3		107	50 - 150	4	35
Dibromochloromethane	213	188.6		ug/m3		89	50 - 150	1	35
Dichlorodifluoromethane	124	109.5		ug/m3		89	50 - 150	2	35
Dichlorotetrafluoroethane	175	182.1		ug/m3		104	50 - 150	7	35
Ethylbenzene	109	102.9		ug/m3		95	52 - 154	0	38
Hexachloro-1,3-butadiene	267	204.9		ug/m3		77	50 - 150	6	35
Isopropanol	61.5	61.91	J	ug/m3		101	50 - 150	7	35
Methylene Chloride	86.8	89.98		ug/m3		104	50 - 150	7	35
Methyl-t-Butyl Ether (MTBE)	90.1	88.22		ug/m3		98	50 - 150	3	35
n-Butylbenzene	137	111.6		ug/m3		81	50 - 150	2	30
o-Xylene	109	99.23		ug/m3		91	52 - 148	0	38
m,p-Xylene	217	206.7		ug/m3		95	42 - 156	1	41
sec-Butylbenzene	137	112.8		ug/m3		82	50 - 150	1	30
Styrene	106	96.92		ug/m3		91	50 - 150	1	35
trans-1,2-Dichloroethene	99.1	105.6		ug/m3		107	50 - 150	1	35
trans-1,3-Dichloropropene	113	97.11		ug/m3		86	50 - 150	0	35
tert-Butylbenzene	137	120.5		ug/m3		88	50 - 150	1	30
Tetrachloroethene	170	147.6		ug/m3		87	56 - 152	1	40
Toluene	94.2	92.75		ug/m3		98	56 - 146	0	43
Trichloroethene	134	119.0		ug/m3		89	63 - 159	1	34
Trichlorofluoromethane	140	132.2		ug/m3		94	50 - 150	7	35
Vinyl acetate	88.0	87.02		ug/m3		99	50 - 150	5	35
Vinyl chloride	63.9	68.49		ug/m3		107	45 - 177	5	36

*LCSD    LCSD*

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		47 - 137
4-Bromofluorobenzene (Surr)	93		57 - 129
Toluene-d8 (Surr)	98		78 - 156

## Method: D1946 - Fixed Gases in Air (GC)

**Lab Sample ID: MB 570-47019/4**

**Matrix: Air**

**Analysis Batch: 47019**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.50	% v/v			01/28/20 10:22	1
Carbon monoxide	ND		0.50	% v/v			01/28/20 10:22	1
Methane	ND		0.50	% v/v			01/28/20 10:22	1
Nitrogen	ND		0.50	% v/v			01/28/20 10:22	1
Oxygen + Argon	ND		0.50	% v/v			01/28/20 10:22	1

Eurofins Calscience LLC

# QC Sample Results

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Method: D1946 - Fixed Gases in Air (GC) (Continued)

**Lab Sample ID: LCS 570-47019/2**

**Matrix: Air**

**Analysis Batch: 47019**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Carbon dioxide	15.0	15.62		% v/v		104	80 - 120	
Carbon monoxide	7.02	6.973		% v/v		99	80 - 120	
Methane	4.53	4.542		% v/v		100	80 - 120	
Nitrogen	69.5	66.70		% v/v		96	80 - 120	
Oxygen + Argon	3.99	4.328		% v/v		108	80 - 120	

**Lab Sample ID: LCSD 570-47019/3**

**Matrix: Air**

**Analysis Batch: 47019**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon dioxide	15.0	15.41		% v/v		103	80 - 120	1	20
Carbon monoxide	7.02	6.769		% v/v		96	80 - 120	3	20
Methane	4.53	4.411		% v/v		97	80 - 120	3	20
Nitrogen	69.5	64.79		% v/v		93	80 - 120	3	20
Oxygen + Argon	3.99	4.198		% v/v		105	80 - 120	3	20

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Air - GC/MS VOA

### Analysis Batch: 46977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-13	SVP5-5	Total/NA	Air	TO-15	
570-19024-14	SVP5-10	Total/NA	Air	TO-15	
570-19024-15	SVP5-15	Total/NA	Air	TO-15	
MB 570-46977/5	Method Blank	Total/NA	Air	TO-15	
LCS 570-46977/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-46977/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

### Analysis Batch: 47027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-1	SVP1-5	Total/NA	Air	TO-15	
570-19024-2	SVP1-10	Total/NA	Air	TO-15	
570-19024-3	SVP1-19.5	Total/NA	Air	TO-15	
570-19024-4	SVP2-5	Total/NA	Air	TO-15	
570-19024-5	SVP2-10	Total/NA	Air	TO-15	
570-19024-6	SVP2-19.5	Total/NA	Air	TO-15	
570-19024-7	SVP3-5	Total/NA	Air	TO-15	
570-19024-8	SVP3-10	Total/NA	Air	TO-15	
570-19024-9	SVP3-19.5	Total/NA	Air	TO-15	
570-19024-10	SVP4-5	Total/NA	Air	TO-15	
MB 570-47027/6	Method Blank	Total/NA	Air	TO-15	
LCS 570-47027/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-47027/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

### Analysis Batch: 47256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-11	SVP4-10	Total/NA	Air	TO-15	
MB 570-47256/5	Method Blank	Total/NA	Air	TO-15	
LCS 570-47256/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-47256/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

### Analysis Batch: 47260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-12	SVP4-19.5	Total/NA	Air	TO-15	
MB 570-47260/6	Method Blank	Total/NA	Air	TO-15	
LCS 570-47260/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 570-47260/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

## Air - GC VOA

### Analysis Batch: 47019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-1	SVP1-5	Total/NA	Air	D1946	
570-19024-2	SVP1-10	Total/NA	Air	D1946	
570-19024-3	SVP1-19.5	Total/NA	Air	D1946	
570-19024-4	SVP2-5	Total/NA	Air	D1946	
570-19024-5	SVP2-10	Total/NA	Air	D1946	
570-19024-6	SVP2-19.5	Total/NA	Air	D1946	
570-19024-7	SVP3-5	Total/NA	Air	D1946	
570-19024-8	SVP3-10	Total/NA	Air	D1946	
570-19024-9	SVP3-19.5	Total/NA	Air	D1946	
570-19024-10	SVP4-5	Total/NA	Air	D1946	

# QC Association Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Air - GC VOA (Continued)

### Analysis Batch: 47019 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-11	SVP4-10	Total/NA	Air	D1946	1
570-19024-12	SVP4-19.5	Total/NA	Air	D1946	2
570-19024-13	SVP5-5	Total/NA	Air	D1946	3
570-19024-14	SVP5-10	Total/NA	Air	D1946	4
570-19024-15	SVP5-15	Total/NA	Air	D1946	5
MB 570-47019/4	Method Blank	Total/NA	Air	D1946	6
LCS 570-47019/2	Lab Control Sample	Total/NA	Air	D1946	7
LCSD 570-47019/3	Lab Control Sample Dup	Total/NA	Air	D1946	8

### Analysis Batch: 47145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-19024-1	SVP1-5	Total/NA	Air	Fixed Gas Norm	9
570-19024-2	SVP1-10	Total/NA	Air	Fixed Gas Norm	10
570-19024-3	SVP1-19.5	Total/NA	Air	Fixed Gas Norm	11
570-19024-4	SVP2-5	Total/NA	Air	Fixed Gas Norm	12
570-19024-5	SVP2-10	Total/NA	Air	Fixed Gas Norm	13
570-19024-6	SVP2-19.5	Total/NA	Air	Fixed Gas Norm	14
570-19024-7	SVP3-5	Total/NA	Air	Fixed Gas Norm	15
570-19024-8	SVP3-10	Total/NA	Air	Fixed Gas Norm	
570-19024-9	SVP3-19.5	Total/NA	Air	Fixed Gas Norm	
570-19024-10	SVP4-5	Total/NA	Air	Fixed Gas Norm	
570-19024-11	SVP4-10	Total/NA	Air	Fixed Gas Norm	
570-19024-12	SVP4-19.5	Total/NA	Air	Fixed Gas Norm	
570-19024-13	SVP5-5	Total/NA	Air	Fixed Gas Norm	
570-19024-14	SVP5-10	Total/NA	Air	Fixed Gas Norm	
570-19024-15	SVP5-15	Total/NA	Air	Fixed Gas Norm	

# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

**Client Sample ID: SVP1-5**  
**Date Collected: 01/27/20 14:05**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-1**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/28/20 20:19	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 10:58	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 10:58	XF3K	ECL 2

**Client Sample ID: SVP1-10**  
**Date Collected: 01/27/20 14:25**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-2**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/28/20 17:53	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 11:36	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 11:36	XF3K	ECL 2

**Client Sample ID: SVP1-19.5**  
**Date Collected: 01/27/20 14:41**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-3**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/28/20 21:59	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 11:54	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 11:54	XF3K	ECL 2

**Client Sample ID: SVP2-5**  
**Date Collected: 01/27/20 12:22**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-4**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/28/20 22:51	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 12:13	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 12:13	XF3K	ECL 2

# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

**Client Sample ID: SVP2-10**  
**Date Collected: 01/27/20 13:14**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-5**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/28/20 23:43	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 12:31	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 12:31	XF3K	ECL 2

**Client Sample ID: SVP2-19.5**  
**Date Collected: 01/27/20 13:39**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-6**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/29/20 00:35	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 12:49	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 12:49	XF3K	ECL 2

**Client Sample ID: SVP3-5**  
**Date Collected: 01/27/20 10:57**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-7**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/29/20 02:14	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 13:07	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 13:07	XF3K	ECL 2

**Client Sample ID: SVP3-10**  
**Date Collected: 01/27/20 11:20**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-8**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/29/20 03:05	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 13:26	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 13:26	XF3K	ECL 2

# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

**Client Sample ID: SVP3-19.5**  
**Date Collected: 01/27/20 11:49**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-9**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/29/20 04:51	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 13:43	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 13:43	XF3K	ECL 2

**Client Sample ID: SVP4-5**  
**Date Collected: 01/27/20 14:59**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-10**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSK		1	400 mL	400 mL	47027	01/29/20 03:58	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 14:01	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 14:01	XF3K	ECL 2

**Client Sample ID: SVP4-10**  
**Date Collected: 01/27/20 15:12**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-11**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSAA		1	400 mL	400 mL	47256	01/29/20 17:13	V2NZ	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 14:19	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 14:19	XF3K	ECL 2

**Client Sample ID: SVP4-19.5**  
**Date Collected: 01/27/20 15:27**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-12**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSII		1	400 mL	400 mL	47260	01/29/20 17:03	KA4W	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 14:37	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 14:37	XF3K	ECL 2

# Lab Chronicle

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

**Client Sample ID: SVP5-5**  
**Date Collected: 01/27/20 15:48**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-13**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSAA		1	400 mL	400 mL	46977	01/28/20 19:22	USQD	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 14:54	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 14:54	XF3K	ECL 2

**Client Sample ID: SVP5-10**  
**Date Collected: 01/27/20 16:08**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-14**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSAA		1	400 mL	400 mL	46977	01/28/20 20:12	USQD	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 15:12	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 15:12	XF3K	ECL 2

**Client Sample ID: SVP5-15**  
**Date Collected: 01/27/20 16:24**  
**Date Received: 01/27/20 19:10**

**Lab Sample ID: 570-19024-15**  
**Matrix: Air**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 Instrument ID: GCMSAA		1	400 mL	400 mL	46977	01/28/20 21:02	USQD	ECL 2
Total/NA	Analysis	D1946 Instrument ID: GC65		1	1 mL	1 mL	47019	01/28/20 15:30	XF3K	ECL 2
Total/NA	Analysis	Fixed Gas Norm Instrument ID: GC65		1			47145	01/28/20 15:30	XF3K	ECL 2

## Laboratory References:

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

Eurofins Calscience LLC

# Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

## Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0781	03-13-20
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Hawaii	State	<cert No.>	07-02-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-20

## Method Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	ECL 2
D1946	Fixed Gases in Air (GC)	ASTM	ECL 2
Fixed Gas Norm	Fixed Gases from Stationary Sources	EPA	ECL 2

### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

### Laboratory References:

ECL 2 = Eurofins Calscience LLC Lampson, 7445 Lampson Ave, Garden Grove, CA 92841, TEL (714)895-5494

# Sample Summary

Client: Geosyntec Consultants, Inc.  
Project/Site: SC1029-02

Job ID: 570-19024-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-19024-1	SVP1-5	Air	01/27/20 14:05	01/27/20 19:10	
570-19024-2	SVP1-10	Air	01/27/20 14:25	01/27/20 19:10	
570-19024-3	SVP1-19.5	Air	01/27/20 14:41	01/27/20 19:10	
570-19024-4	SVP2-5	Air	01/27/20 12:22	01/27/20 19:10	
570-19024-5	SVP2-10	Air	01/27/20 13:14	01/27/20 19:10	
570-19024-6	SVP2-19.5	Air	01/27/20 13:39	01/27/20 19:10	
570-19024-7	SVP3-5	Air	01/27/20 10:57	01/27/20 19:10	
570-19024-8	SVP3-10	Air	01/27/20 11:20	01/27/20 19:10	
570-19024-9	SVP3-19.5	Air	01/27/20 11:49	01/27/20 19:10	
570-19024-10	SVP4-5	Air	01/27/20 14:59	01/27/20 19:10	
570-19024-11	SVP4-10	Air	01/27/20 15:12	01/27/20 19:10	
570-19024-12	SVP4-19.5	Air	01/27/20 15:27	01/27/20 19:10	
570-19024-13	SVP5-5	Air	01/27/20 15:48	01/27/20 19:10	
570-19024-14	SVP5-10	Air	01/27/20 16:08	01/27/20 19:10	
570-19024-15	SVP5-15	Air	01/27/20 16:24	01/27/20 19:10	



Calscience

**CHAIN OF CUSTODY RECORD**

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

For courier service / sample drop off information, contact us26\_sales@eurofinsus.com or call us.

LABORATORY CLIENT:

Glossytec

570-19024 Chain of Custody



## CHAIN OF CUSTODY RECORD

		DATE: 1/27/20	
		PAGE: 1 OF 2	
		SAMPLER(S): (PRINT)	
		B. DeJewell & V. Seveno	
CLIENT PROJECT NAME / NUMBER: <b>SC1029 - 02</b>		PROJECT CONTACT:	
STATE: ZIP: Chris Lieder		E-MAIL: chieder@gasynce.com	
REQUESTED ANALYSES			
Please check box or fill in blank as needed.			
<input type="checkbox"/> <b>Hydrocarbons (W/ H4)</b> <input checked="" type="checkbox"/> <b>TD-15</b> <input type="checkbox"/> <b>Cr(VI):</b> □ 7196 □ 7199 □ 218.6 <input type="checkbox"/> <b>T22 Metals:</b> □ 6010/747X □ 6020/747X <input type="checkbox"/> <b>PAHs:</b> □ 8270 □ 8270 SIM <input type="checkbox"/> <b>PCBs (8082)</b> <input type="checkbox"/> <b>Pesticides (8081)</b> <input type="checkbox"/> <b>SVOCs (8270)</b> <input type="checkbox"/> <b>Prep (5035):</b> □ En Core □ Terra Core <input type="checkbox"/> <b>Oxygenates (8260)</b> <input type="checkbox"/> <b>VOCs (8260)</b> <input type="checkbox"/> <b>BTEx / MTBE</b> □ 8260 □ <input type="checkbox"/> <b>TPH</b> <input type="checkbox"/> <b>TPH</b> □ C6-C36 □ C6-C44 <input type="checkbox"/> <b>TPH(g)</b> □ GRO <input type="checkbox"/> <b>□ TPH(g) □ GRO</b> <input type="checkbox"/> <b>DR0</b> <input type="checkbox"/> <b>Field Filtered</b> <input type="checkbox"/> <b>Preserved</b> <input type="checkbox"/> <b>Unpreserved</b>			
SPECIAL INSTRUCTIONS:		LOG CODE:	
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	MATRIX TIME
1	SVP1-5	1/27/20	A:05
2	SVP1-10	1/25	
3	SVP1-19.5	1/24	
4	SVP2-5	12:22	
5	SVP2-10	13:14	
6	SVP2-19.5	13:39	
7	SVP3-5	10:57	
8	SVP3-10	11:20	
9	SVP3-19.5	11:49	
10	SVP4-5	14:51	
Relinquished by: (Signature) <i>M. Lieder</i>		Received by: (Signature/Affiliation) <i>B. DeJewell</i>	
Relinquished by: (Signature) <i>M. Lieder</i>		Received by: (Signature/Affiliation) <i>V. Seveno</i>	
Relinquished by: (Signature) <i>M. Lieder</i>		Received by: (Signature/Affiliation) <i>B. DeJewell</i>	
Relinquished by: (Signature) <i>M. Lieder</i>		Received by: (Signature/Affiliation) <i>V. Seveno</i>	
		Date: 01/27/20	Time: 16:46
		Date: 01/27/20	Time: 16:46
		Date: 01/27/20	Time: 16:46

 06/02/14 Revision  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



## Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 570-19024-1

**Login Number: 19024**

**List Source: Eurofins Calscience**

**List Number: 1**

**Creator: Andujo, Italy**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	