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## PHASE II ENVIRONMENTAL SITE INVESTIGATION

**10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and  
12120 Florence Ave, Santa Fe Springs, CA 90670**

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**08 April 2022  
Langan Project No. 721033501**

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## 1.0 INTRODUCTION AND BACKGROUND

Langan Engineering & Environmental Services, Inc. (Langan) has prepared this report on behalf of Florence SFS, LLC (Client) to document results of a Phase II Environmental Site Investigation (ESI) completed between March 2 and April 2, 2022 at 10801-10859 Norwalk Boulevard and 10819-10858 Koontz Avenue, Santa Fe Springs, CA 90670 (the Site). A Site Location Map is provided as Figure 1.

The Site is identified as Los Angeles County Parcel Number 8009-023-027 and is comprised of a single parcel of land which is divided into nine (9) leased subdivisions each having its own individual address, size, occupants, developments, and use as described below.

Site Address	Size (square-feet, sf)	Current Development	Current Use/Occupant
10801 Norwalk Boulevard	21,000	2,500-sf single story wood construction commercial building	Silverio's Party Rentals - rents and sells party supplies
10825 Norwalk Boulevard	11,000	580-sf cinder block building; 250-sf portable office building	West Coast Enterprises - truck storage pending sale
10845 Norwalk Boulevard	22,500	2,900-sf wood construction office building	Quality Lift Equipment - forklift rental, sale, and repair
10859 Norwalk Boulevard	60,000	9,000-sf concrete tilt-up building	Mako Equipment - scissor lift rental company
10819 Koontz Avenue	20,700	7,000-sf corrugated metal sided building	La Habra Welding - welding and steel fabrication
10845 Koontz Avenue	60,000	4,600-sf concrete loading dock with attached 800-sf wood construction office; 1,000-sf corrugated metal sided maintenance building	MJB Freight - transport company
10858 Koontz Avenue	33,500	5,200-sf corrugated metal sided building; 350-sf wood building with corrugated metal roof	LenPar Rolling - steel rolling and fabrication; Roufs Machine - machine and hydraulic repair
10850 Koontz Avenue	10,000	No structures	Paramount Roll & Forming - storage
12120 East Florence Avenue	68,000-sf divided into an eastern and western section by Koontz Avenue	15,600-sf corrugated metal sided building	Paramount Roll & Forming - steel rolling

## **1.1 Purpose**

The purpose of this Phase II ESI was to attempt to investigate soil, soil gas, and groundwater impacts at the Site based on the results of the Phase I conducted for the Site.. This Phase II ESI was preformed to further evaluate the Recognized Environmental Conditions (RECs) and Business Environmental Risks (BERs) identified in the Phase I ESA dated 07 April 2022.

The Site and surrounding properties have historically been for industrial use, including the use, storage, and disposal of hazardous substances and petroleum products. The above referenced 2022 Phase I ESA identified several RECs associated with the Site which are attributed to both onsite and offsite sources. The northeast portion of the Site was identified with a historical petroleum release from a leaking underground storage tank (LUST) in June 1998 which subsequently received a closure letter from the Santa Fe Fire Department in March 1999.

However, a subsurface investigation conducted by AdvancedGeo, Inc. (AGI) in 2019 encountered residual petroleum impacts in soil at concentrations above applicable screening levels between 20 and 30 feet below ground surface (bgs) near the location of the former UST excavation pit. Additionally, a soil vapor assessment conducted at the Site in 2019 identified concentrations of chlorinated solvents including trichloroethylene (TCE) and tetrachloroethylene (PCE) in soil vapor at various depths above applicable screening levels. Concentrations of the detected chlorinated solvents in soil vapor samples appeared to increase with depth.

The Site also contains two abandoned oil production wells which were mapped at 10819 Koontz Avenue and 10850 Koontz Avenue. The wells produced crude oil and were abandoned in 1974 and 2000 under regulatory well abandonment standards at the time. However, these wells may not be plugged to current California Geologic Energy Management Division (CalGEM, previously DOGGR) standards, and may have to be re-abandoned as part of the permitting process for future development.

In addition to the various REC's observed at the Site, the 2022 Phase I ESA identified a BER associated with historical agricultural use at the Site. Historical agricultural use may have resulted in residual pesticides, herbicides, and heavy metals such as lead and arsenic in onsite soils.

## **1.2 Historical Document Review**

Based on historical document review from the Phase I ESA dated April 7, 2022, Continental Heat Treating (CHT) and Former ExxonMobil Jalk Fee (EJF) are two cleanup program (CP) sites north of the Site that are under a with Los Angeles Regional Water Quality Control Board (LARWQCB). The CHT CP includes ongoing active remediation of a solvent plume, which includes tetrachloroethylene (PCE) and trichloroethylene (TCE), among other volatile organic compounds (VOCs). The plume extends to the south towards the Site, and has a groundwater monitoring program that includes a cluster of wells in the northwest portion of the Site. Wells MW-8d, MW-8m, and MW-8s (Figure 2) found to the west of Koontz Avenue, are on Site and were installed in 2019. The following exceedances were measured within these nested groundwater wells:

- 1,1-DCA (8.1 to 18.6 µg/L) exceeded the screening level of 2.75 µg/L in four of the six pre-existing wells.
- 1,1-Dichloroethene (1,1-DCE) (50.9 to 198 µg/L) exceeded the screening level of 10 µg/L in two of the six pre-existing wells.
- 1,2-DCA (2.21 µg/L) exceeded the screening level of 0.17 µg/L in two of the six pre-existing wells.
- Cis-1,2-DCA (54 to 304 µg/L) exceeded the screening level of 11.41 µg/L in two of the six pre-existing wells.
- PCE (4.69 to 100 µg/L) exceeded the screening level of 0.06 µg/L in four of the six pre-existing wells.
- TCE (84.9 to 220 µg/L) exceeded the screening level of 0.49 µg/L in all six of the pre-existing wells.
- Vinyl chloride (14.3 to 80.4 µg/L) exceeded the screening level of 0.01 µg/L in three of the six of the pre-existing wells.

## 2.0 FIELD INVESTIGATION SUMMARY

The Phase II ESI, implemented between March 2 through April 2, 2022, included a geophysical survey, installation and sampling of seven soil borings, 20 nested temporary soil vapor points, and three groundwater monitoring wells.

Soil samples were preserved with laboratory-supplied chemical preservatives where necessary, and placed in an ice-chilled cooler for during delivery to the laboratory. The samples were delivered by Langan personnel to Advanced Technology Labs of Signal Hill, California for analysis. The soil samples were analyzed for the following parameters:

- VOCs and oxygenates via Environmental Protection Agency (EPA) Method 8260B
- TPH – GRO, diesel range organics (DRO), and oil range organics (ORO) via EPA Method 8015M.

Additionally, soil samples collected from the upper-most sampled interval in each boring location were analyzed for the following parameter:

- Pesticides via EPA Method 8081A

Soil vapor samples were collected into Tedlar® Sampling Bags and analyzed for VOCs via EPA Method 8260B and methane on-site in mobile laboratory vehicles. The samples were then taken back to the main laboratory to be analyzed for methane via Modified ASTM D-1946.

Groundwater sample was collected from each well and submitted for laboratory analysis. The groundwater samples were analyzed for:

- VOCs and oxygenates via EPA Method 8260B;
- Semivolatile organic compounds (SVOCs) via EPA Method 8270C;
- Polychlorinated biphenyls (PCBs) via EPA Method 8082;
- Pesticides via EPA Method 8081A;
- Title 22 Metals and mercury via EPA Method 6010B and 7470A; and
- TPH – GRO, DRO, and ORO via EPA Method 8015M.

## **2.1 Los Angeles County Permitting**

Prior to performing on-site intrusive activities, permit applications were submitted for the drilling subcontractor to drill groundwater monitoring wells at the Site. The permits were submitted to the Los Angeles County Department of Public Health. The permits were approved on 2 March, 2022 and 03 March, 2022 (Appendix A).

## **2.2 Geophysical Survey**

Prior to performing any on-site intrusive activities, 811 “Underground Service Alert of Southern California” was contacted to clear the boring locations. Additionally, a utility survey was conducted by SoCal Locators to attempt to clear the boring locations of subsurface utilities or obstructions. SoCal Locators used a combination of ground penetrating radar (GPR) and electromagnetic induction (EMI) equipment.

On 02 April, 2022, Ground Penetrating Radar Solutions (GPRS) also conducted a geophysical survey utilizing GPR and EMI on the northern portion of the Site to attempt to identify the potential presence of abandoned oil lines. The geophysical survey identified two parallel metallic anomalies approximately 1 foot in diameter located immediately north of the plugged/abandoned oil well located at the northwest portion of the Site. The location of the identified subsurface piping is shown on Figure 2. These lines appear to extend northward before making a right turn to the east, crossing through Koontz Avenue. An additional metallic anomaly approximately 1 foot in diameter was detected cross-cutting the parallel oil lines immediately north of the plugged/abandoned oil well on the northwest portion of the Site.

## **2.3 Subsurface Investigation**

The Phase II ESI included the installation and sampling of seven soil borings (SB-1 to SB-7), 20 temporary nested soil vapor points (SV-1 to SV-20), and three groundwater monitoring wells

(MW-1, MW-3, and MW-5). The approximate locations of the sampling points are shown on Figure 2.

### 2.3.1 Soil Sampling Procedure

Seven direct push soil borings (SB-1 to SB-7) were advanced by Cascade Drilling, of Santa Ana, California (Figure 3). The direct push soil borings were advanced using Geoprobe® drilling equipment to 35 ft bgs. Soil was collected in five (5)-foot intervals in acetate liners. Boring logs were prepared to describe observed soil types and geologic deposits and visual or olfactory observations regarding the materials recovered. Recovered soil was also field-screened for volatile organic vapors at approximately 1-foot intervals using a photo-ionization detector (PID) field-calibrated to 100 parts per million (ppm) of isobutylene gas. Also included in the boring logs were the times and dates of the boring activities, the equipment used and the amounts of soil (by length) recovered in each sleeve. Soil boring logs are provided in Appendix B.

For Soil Borings SB-1 to SB-2 and SB-4 to SB-7, two soil samples were collected from each boring at approximately 10 ft bgs and at approximately 35 ft bgs. For Soil Boring SB-3, three samples were collected at approximately seven, 15, and 35 ft bgs due to staining observed.

Samples collected for analysis of VOCs and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) were collected using a TerraCore™ core sampler. To collect the TerraCore™ soil sample, the sampler was pushed into the soil until the coring body was approximately full. The sampler was then removed from the soil and the plunger depressed to deposit the sample into the sample vial. For other analyses, soil from the specified depth was collected using a sterile nitrile glove and placed into laboratory supplied bottle ware. After sample collection, the soil borings were backfilled with hydrated bentonite pellets and restored flush to the existing grade with an asphalt patch.

A chain-of-custody form was completed in the field and accompanied the samples to document acquisition, transport, possession, and analysis. The environmental laboratory data package is included as Appendix C.

### 2.3.2 Soil Vapor Sampling Procedure

Twenty direct push boreholes (SV-1 to SV-20) were advanced by Cascade Drilling and ABC Drilling using Geoprobe® direct-push drilling equipment (Figure 4). Twelve boreholes were drilled to 20 and eight boreholes were drilled to 50 ft bgs. Soil was collected in five foot intervals in acetate liners. Boring logs were prepared as described above and are included in Appendix B.

For the 20 ft borings, nested soil vapor probes were set at five and 15 ft bgs. For the 50 ft borings, nested soil vapor probes were set at five, 25, and 45 ft bgs. Two of the 50 foot borings (SV-5 and SV-17) had soil vapor probes set at five, 25 and 40 feet bgs due to encountering refusal during drilling. The soil vapor points were set in one foot of sand, followed by a one foot thick

hydrated bentonite seal. Dry bentonite was then used to backfill to the next probe interval or to ground surface.

Jones Environmental Laboratory, of Santa Fe Springs, California was on-site on March 10<sup>th</sup>, March 11<sup>th</sup>, and April 2<sup>nd</sup> to collect soil vapor samples. The samples were collected in accordance with the California Environmental Protection Agency, Department of Toxic Substances Control, Advisory - Active Soil Gas Investigations, dated July 2015. Following installation, the soil vapor points were allowed to equilibrate for approximately two hours before sampling. Also prior to sample collection, a shut in test and nitrogen leak test were performed on each soil vapor point, after which each point was purged to evacuate approximately three pore volumes. The monitoring data for the soil vapor samples are included in Table 2. Field data and in the chains of custody for soil vapor samples are included in Appendix C.

After sampling, the soil vapor points were removed and the ground surface was restored with asphalt or concrete patch.

A chain-of-custody form was completed in the field and accompanied the samples to document acquisition, transport, possession, and analysis. The environmental laboratory data package is included as Appendix C.

### 2.3.3 Groundwater Sampling Procedure

Three hollow stem auger (HSA) boreholes (MW-1, MW-3, and MW-5) were advanced by ABC Liovin Drilling, of Signal Hill, California (Figure 5). The boreholes were advanced using a CME-75 truck-mounted drill rig to approximately 132, 131, and 132 ft bgs, respectively. The soil cuttings were screened approximately every five ft. Boring logs were prepared as described above and are included in Appendix B. Groundwater was encountered at approximately 120 feet in each of the three wells during drilling. A 2-inch diameter PVC casing, with 10 feet of machine-slotted PVC, was installed into each borehole from approximately 131 or 132 to 122 ft bgs. Boreholes were then backfilled with sand to approximately 2 feet above the top of the screened interval, followed by approximately two feet of hydrated bentonite, and then grouted to ground surface. A well box was installed around the well and locked.

Prior to sampling, the wells were developed using a surge block, bailers, and a submersible pump. The development continued until the following parameters were approximately stabilized through the use of a Horiba multi-parameter water quality meter: pH, specific conductivity, redox potential, dissolved oxygen, turbidity, and temperature.

A chain-of-custody form was completed in the field and accompanied the samples to document acquisition, transport, possession, and analysis. The environmental laboratory data package is included as Appendix C.

The depth to groundwater was also measured prior to sampling with a water level meter at each location. The depths to groundwater for MW-1, MW-3, and MW-5 were measured from the top

of the PVC casing installed and resulted in depths of 116.5, 121.9, and 118.6 ft bgs respectively. The groundwater elevations are included on Figure 6. Groundwater sampling logs are included as Appendix D.

#### 2.3.4 Groundwater Flow

Groundwater flow was assessed by subtracting the measured depth to groundwater, measured from the well casing from the surveyed elevation of the well casings at Monitoring Wells MW-1, MW-3, and MW-5. Casing elevations, depths to water, and water elevations are shown on the following table and well survey information is included in Table 4. Depth to groundwater was measured after well development when water levels had stabilized. Measurements were taken at least 18 hours after groundwater had been sampled, allowing for water levels to equilibrate. The interface probe was field cleaned with Alconox detergent and rinsed with distilled water prior to use at each well.

GUIDA Surveying surveyed the elevation of each casing top for monitoring wells MW-1, MW-3, and MW-5. Water elevation was then calculated as the difference between the casing top elevation and water depth and the potentiometric surface gradient was mapped from these three points (Figure 6).

Well ID	Casing Elevation (feet)	Water Depth (Feet below Casing top)	Water Elevation (Feet)
MW-1	136.07	116.5	19.57
MW3	134.48	121.9	12.58
MW-5	135.565	118.6	16.96

The potentiometric gradient was calculated at 0.0147 at the Site flowing towards the southeast.

### **3.0 OBSERVATIONS AND RESULTS SUMMARY**

#### **3.1 Field Investigation Observations**

Subsurface soil at the Site generally consisted of brown, red-brown, tan, and grey to grey-brown silty sand, clayey sand, silty clay, clayey silt, sand, and clay. Small lenses of gravel were also observed at various depths around the Site. The highest PID readings were observed in the northeast corner of the Site in SB-3 and MW-1 with the highest measured reading of 589 parts per million (ppm) measured in Soil Boring SB-3 at 21 ft bgs.

Groundwater was encountered between 116 and 121 ft bgs with the groundwater flow estimated to be to the southwest.

### **3.2 Soil Sample Results**

The soil sample analytical results were compared against the lesser of the Department of Toxic Substances (DTSC) Soil Commercial/Industrial Screening Levels (SLs), Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number 3 (June 2020) and the EPA Regional Screening Level (RSL) Industrial Soil Table (THQ=1.0) (November 2021). The analytical results are summarized in Table 1 and results that exceed the respective screening levels are shown on Figure 3. Copies of the laboratory analytical reports are included in Appendix C.

Below is a summary of compounds detected in soil samples at concentrations exceeding applicable screening levels:

- TPH GRO (810 mg/kg) exceeded the screening level of 420 mg/kg in sample SB-03.
- Naphthalene (13 mg/kg) exceeded the screening level of 6.5 mg/kg in sample SB-03.
- Pesticides were not detected in soil samples collected.

### **3.3 Soil Vapor Sample Results**

The soil vapor sample analytical results were compared against the lesser of the DTSC Ambient Air Commercial/Industrial SLs, HERO HHRA Note Number 3 divided by an attenuation factor of 0.03 (June 2020) and the EPA Commercial Vapor Intrusion Screening Levels (VISLs) (THQ=1.0) (generated March 15, 2022). The analytical results are summarized in Table 2 and results that exceed the respective screening levels are shown on Figure 4. Copies of the laboratory analytical reports are included in Appendix C.

Below is a summary of compounds detected in soil vapor samples at concentrations exceeding applicable screening levels:

- 1,1-Dichloroethane (1,1-DCA) (9 to 215 µg/m<sup>3</sup>) exceeded the screening level of 7.67 µg/m<sup>3</sup> in six of the 48 samples analyzed.
- Benzene (9 to 26 µg/m<sup>3</sup>) exceeded the screening level of 1.57 µg/m<sup>3</sup> in nine of the 48 samples analyzed .
- Chloroform (10 to 34 µg/m<sup>3</sup>) exceeded the screening level of 0.533 µg/m<sup>3</sup> in four of the 48 samples analyzed .
- Ethylbenzene (8 to 223 µg/m<sup>3</sup>) exceeded the screening level of 4.91 µg/m<sup>3</sup> in four of the 48 samples analyzed .
- PCE (52 to 22,400 µg/m<sup>3</sup>) exceeded the screening level of 47.2 µg/m<sup>3</sup> in 30 of the 48 samples analyzed .

- TCE (15 to 1,840 µg/m<sup>3</sup>) exceeded the screening level of 2.99 µg/m<sup>3</sup> in 20 of the 48 samples analyzed.
- Vinyl chloride (18 to 1,890 µg/m<sup>3</sup>) exceeded the screening level of 2.79 µg/m<sup>3</sup> in four of the 48 samples analyzed.

Methane was analyzed in all soil vapor probes and not detected in any samples.

### **3.4 Groundwater Sample Results**

The groundwater sample analytical results were compared against the RWQCB Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard (2019 Rev 2). The analytical results are summarized in Table 3 and results that exceed the respective screening levels are shown on Figure 5. Copies of the laboratory analytical reports are included in Appendix C.

Below is a summary of compounds detected in soil samples at concentrations exceeding applicable screening levels from monitoring wells installed as part of this investigation:

- 1,1-DCA (6.7 to 11 µg/L) exceeded the screening level of 2.75 µg/L in three of the samples.
- 1,1-Dichloroethene (1,1-DCE) (14 to 100 µg/L) exceeded the screening level of 10 µg/L in all three of the samples.
- 1,2-DCA (1.6 to 2.3 µg/L) exceeded the screening level of 0.17 µg/L in two of the three samples.
- Chloroform (3.7 µg/L) exceeded the screening level of 0.22 µg/L in samples MW-5.
- Cis-1,2-DCE (42 to 290 µg/L) exceeded the screening level of 11.41 µg/L in two of three the samples.
- PCE (0.52 to 74 µg/L) exceeded the screening level of 0.06 µg/L in three of the samples.
- TCE (8.6 to 160 µg/L) exceeded the screening level of 0.49 µg/L in three of the samples.
- Vinyl chloride (1.3 to 76 µg/L) exceeded the screening level of 0.01 µg/L in two of the three samples.
- TPH DRO (230 µg/L) exceeded the screening level of 199.39 µg/L in sample MW-5.
- Beryllium (4.9 µg/L) exceeded the screening level of 1 µg/L in sample MW-1.
- Cobalt (15 µg/L) exceeded the screening level of 6.01 µg/L in sample MW-1.
- Lead (6.6 µg/L) exceeded the screening level of 0.2 µg/L in sample MW-1.

- Nickel (58 µg/L) exceeded the screening level of 12 µg/L in sample MW-1.
- Vanadium (86 µg/L) exceeded the screening level of 50 µg/L in sample MW-1.
- Mercury (0.28 and 0.4 µg/L) exceeded the screening level of 0.06 µg/L in samples MW-3 and MW-1, respectively.

SVOCs and PCBs were analyzed in all groundwater samples were not detected.

## **4.0 CONCLUSIONS**

Chlorinated solvents, petroleum hydrocarbon compounds, and metals were the constituents of concern measured above applicable screening levels at the Site. Soil samples exceeded screening levels for petroleum compounds in one soil boring, SB-3, in the northeast corner of the Site. Soil vapor samples throughout the site exceeded applicable screening levels for hydrocarbon compounds and chlorinated solvents including 1-DCA, benzene, chloroform, and ethylbenzene, PCE, TCE and vinyl chloride. The measured concentrations of these constituents of concern in soil vapor are highest in the northwest corner of the Site and chlorinated solvents appear to increase with depth.

Groundwater samples exceeded screening levels for hydrocarbon compounds, chlorinated solvents, and metals. Chlorinated solvents and hydrocarbon compounds exceedances were measured in groundwater samples with concentrations generally decreasing towards the southeast. Furthermore, metal exceedances were observed only on the western side of the Site in monitoring wells MW-1 and MW-3.

## **5.0 DISCLAIMER**

The environmental and geochemical conditions that Langan interprets to exist between sampling points will differ from those that actually exist. The user of this report recognizes that actual conditions will vary from those encountered at the locations where sampling, surveys, observations or explorations are made by Langan and that the data, interpretation, and recommendations of Langan are based solely on the information available to it. Furthermore, the user of this report recognizes that passage of time, natural occurrences, and/or direct or indirect human intervention at or near the Site may substantially alter discovered conditions. Langan shall not be responsible for interpretations by others of the information it develops or provides to the user of this report.

## **6.0 RELIANCE**

This Phase II ESI is prepared for the exclusive use and reliance of the client (Florence SFS, LLC). Use or reliance by any other party is prohibited without written authorization of Florence SFS, LLC and Langan. Reliance on this Phase II ESI by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the 'Proposal – Phase I and II ESA Investigation' authorized on 10 January 2022.

**TABLE 1**

**Soil Sample Results Summary**

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-01				SB-01			
Sample Name			SB-01-10'				SB-01-35'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-01				2200309-02			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.1	0.74	1	ND	0.11	0.84	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	3.6	10	1
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	ND	3.6	10	1	11	3.6	10	1

Notes

Screening Level is the minimum of the June 2020 DTSC Soil Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

Industrial Soil Table (THQ=1.0).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

mg/kg - milligrams per kilogram

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

**##** - Sample exceeds respective screening level

**##** - Screening level exceeded

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-02				SB-02			
Sample Name			SB-02-10'				SB-02-35'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-03				2200309-04			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.09	0.68	1	ND	0.12	0.89	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	3.6	10	1
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	11	3.6	10	1	11	3.6	10	1

Notes

Screening Level is the minimum of the June 2020 DTSC Soil Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

Industrial Soil Table (THQ=1.0).

DTSC - Department of Toxic Substances Control

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mg/kg - milligrams per kilogram

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**##** - Sample exceeds respective screening level

**##** - Screening level exceeded

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-03				SB-03			
Sample Name			SB-03-7'				SB-03-15'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-05				2200309-06			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	<b>810</b>	4.7	36	50	8	0.12	0.89	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	120	3.6	10	1	370	3.6	10	1
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	ND	3.6	10	1	29	3.6	10	1

Notes

Screening Level is the minimum of the June 2020 DTSC Soil

Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

Industrial Soil Table (THQ=1.0).

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**##** - Sample exceeds respective screening level

**##** - Screening level exceeded

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-03				SB-04			
Sample Name			SB-03-35'				SB-04-10'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-07				2200309-08			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.1	0.78	1	ND	0.13	0.98	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	36	100	10
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	10	3.6	10	1	260	36	100	10

Notes

Screening Level is the minimum of the June 2020 DTSC Soil

Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

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**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-04				SB-05			
Sample Name			SB-04-35'				SB-05-10'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-09				2200309-10			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.13	0.98	1	ND	0.11	0.88	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	36	100	10
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	11	3.6	10	1	200	36	100	10

Notes

Screening Level is the minimum of the June 2020 DTSC Soil

Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

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**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-05				SB-06			
Sample Name			SB-05-35'				SB-06-9'			
Sample Date			3/7/2022				3/7/2022			
Laboratory Report			2200309-11				2200309-12			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.12	0.96	1	ND	0.1	0.75	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	3.6	10	1
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	12	3.6	10	1	12	3.6	10	1

Notes

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3 and the November 2021 EPA Regional Screening Level (RSL)

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**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-06				SB-07			
Sample Name			SB-06-35'				SB-07-10'			
Sample Date			3/7/2022				3/8/2022			
Laboratory Report			2200309-13				2200318-01			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.11	0.86	1	ND	0.13	1	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	7.1	20	2	ND	3.6	10	1
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	44	7.1	20	2	12	3.6	10	1

Notes

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Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

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**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			SB-07				SB-5-10'			
Sample Name			SB-07-35'				DUP-SS-1A			
Sample Date			3/8/2022				3/7/2022			
Laboratory Report			2200318-02				2200309-14			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>										
Gasoline Range Organics (C4-C12)	<b>420.00</b>	mg/kg	ND	0.12	0.96	1	ND	0.12	0.9	1
Diesel Range Organics (C13-C22)	420.00	mg/kg	ND	3.6	10	1	ND	7.1	20	2
Motor Oil Range Organics (C23-C32)	420.00	mg/kg	12	3.6	10	1	60	7.1	20	2

Notes

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**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Location		SB-01			SB-01			SB-02			SB-02							
Sample Name		SB-01-10*			SB-01-35			SB-02-10*			SB-02-35							
Sample Date		3/7/2022			3/7/2022			3/7/2022			3/7/2022							
Laboratory Report		2200309-01			2200309-02			2200309-03			2200309-04							
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF				
<b>Volatile Organic Compounds (EPA 8260B)</b>																		
1,1,2-Tetrachloroethane	8.80	mg/kg	ND	0.00042	0.004	1	ND	0.00038	0.0037	1	ND	0.00038	0.0037	1	ND	0.00048	0.0046	1
1,1,1-Trichloroethane	7200.00	mg/kg	ND	0.00021	0.004	1	ND	0.00019	0.0037	1	ND	0.00019	0.0037	1	ND	0.00024	0.0046	1
1,1,2,2-Tetrachloroethane	2.70	mg/kg	ND	0.00017	0.004	1	ND	0.00015	0.0037	1	ND	0.00015	0.0037	1	ND	0.00019	0.0046	1
1,1,2-Trichloroethane	5.00	mg/kg	ND	0.00032	0.004	1	ND	0.0003	0.0037	1	ND	0.0003	0.0037	1	ND	0.00037	0.0046	1
1,1-Dichloroethane	16.00	mg/kg	ND	0.0011	0.004	1	ND	0.001	0.0037	1	ND	0.001	0.0037	1	ND	0.0012	0.0046	1
1,1-Dichloroethene	350.00	mg/kg	ND	0.0015	0.004	1	ND	0.0014	0.0037	1	ND	0.0014	0.0037	1	ND	0.0017	0.0046	1
1,1-Dichloropropene	NS	mg/kg	ND	0.00043	0.004	1	ND	0.0004	0.0037	1	ND	0.0004	0.0037	1	ND	0.00049	0.0046	1
1,2,3-Trichlorobenzene	300.00	mg/kg	ND	0.00066	0.004	1	ND	0.00061	0.0037	1	ND	0.00061	0.0037	1	ND	0.00076	0.0046	1
1,2,3-Trichloropropane	0.02	mg/kg	ND	0.00002	0.004	1	ND	0.00002	0.0037	1	ND	0.00002	0.0037	1	ND	0.00003	0.0046	1
1,2,4-Trichlorobenzene	35.00	mg/kg	ND	0.00094	0.004	1	ND	0.0009	0.0037	1	ND	0.0009	0.0037	1	ND	0.00074	0.0046	1
1,2,4-Trimethylbenzene	1800.00	mg/kg	ND	0.00073	0.004	1	ND	0.00067	0.0037	1	ND	0.00067	0.0037	1	ND	0.00083	0.0046	1
1,2-Dibromo-3-chloropropane	0.05	mg/kg	ND	0.00099	0.003	1	ND	0.00092	0.0037	1	ND	0.00092	0.0037	1	ND	0.001	0.0029	1
1,2-Dibromoethane	0.16	mg/kg	ND	0.00032	0.004	1	ND	0.0003	0.0037	1	ND	0.0003	0.0037	1	ND	0.00037	0.0046	1
1,2-Dibromoethane	9300.00	mg/kg	ND	0.00017	0.004	1	ND	0.00016	0.0037	1	ND	0.00016	0.0037	1	ND	0.0002	0.0046	1
1,2-Dichloroethane	2.00	mg/kg	ND	0.0004	0.004	1	ND	0.00037	0.0037	1	ND	0.00037	0.0037	1	ND	0.00048	0.0046	1
1,2-Dichloropropane	11.00	mg/kg	ND	0.00037	0.004	1	ND	0.00034	0.0037	1	ND	0.00034	0.0037	1	ND	0.00042	0.0046	1
1,3,5-Trimethylbenzene	1500.00	mg/kg	ND	0.00056	0.004	1	ND	0.00052	0.0037	1	ND	0.00052	0.0037	1	ND	0.00064	0.0046	1
1,3-Dichlorobenzene	NS	mg/kg	ND	0.00029	0.004	1	ND	0.00027	0.0037	1	ND	0.00027	0.0037	1	ND	0.00032	0.0046	1
1,3-Dichloropropane	2200.00	mg/kg	ND	0.00039	0.004	1	ND	0.00036	0.0037	1	ND	0.00036	0.0037	1	ND	0.00045	0.0046	1
1,4-Dichlorobenzene	11.00	mg/kg	ND	0.00022	0.004	1	ND	0.0002	0.0037	1	ND	0.0002	0.0037	1	ND	0.00025	0.0046	1
2,2-Dichloropropane	NS	mg/kg	ND	0.00022	0.004	1	ND	0.0002	0.0037	1	ND	0.0002	0.0037	1	ND	0.00025	0.0046	1
2-Chlorotoluene	2500.00	mg/kg	ND	0.00042	0.004	1	ND	0.00039	0.0037	1	ND	0.00039	0.0037	1	ND	0.00048	0.0046	1
4-Chlorotoluene	2300.00	mg/kg	ND	0.00032	0.004	1	ND	0.00029	0.0037	1	ND	0.00029	0.0037	1	ND	0.00037	0.0046	1
4-Isopropyltoluene	NS	mg/kg	ND	0.00065	0.004	1	ND	0.0006	0.0037	1	ND	0.0006	0.0037	1	ND	0.00074	0.0046	1
Benzene	1.40	mg/kg	ND	0.00028	0.004	1	0.014	0.00026	0.0037	1	ND	0.00026	0.0037	1	ND	0.00033	0.0046	1
Bromobenzene	1800.00	mg/kg	ND	0.00065	0.004	1	ND	0.00064	0.0037	1	ND	0.00064	0.0037	1	ND	0.00057	0.0046	1
Bromochloromethane	630.00	mg/kg	ND	0.00024	0.004	1	ND	0.00022	0.0037	1	ND	0.00022	0.0037	1	ND	0.00027	0.0046	1
Bromodichloromethane	1.30	mg/kg	ND	0.00042	0.004	1	ND	0.00039	0.0037	1	ND	0.00039	0.0037	1	ND	0.00048	0.0046	1
Bromoform	86.00	mg/kg	ND	0.0011	0.004	1	ND	0.001	0.0037	1	ND	0.001	0.0037	1	ND	0.0013	0.0046	1
Bromomethane	30.00	mg/kg	ND	0.0002	0.004	1	ND	0.00018	0.0037	1	ND	0.00018	0.0037	1	ND	0.00023	0.0046	1
Carbon disulfide	3500.00	mg/kg	ND	0.00075	0.004	1	ND	0.00069	0.0037	1	ND	0.00069	0.0037	1	ND	0.00086	0.0046	1
Carbon tetrachloride	2.90	mg/kg	ND	0.00059	0.004	1	ND	0.00054	0.0037	1	ND	0.00054	0.0037	1	ND	0.00067	0.0046	1
Chlorobenzene	1300.00	mg/kg	ND	0.00034	0.004	1	ND	0.00031	0.0037	1	ND	0.00031	0.0037	1	ND	0.00039	0.0046	1
Chloroethane	23000.00	mg/kg	ND	0.0012	0.004	1	ND	0.0011	0.0037	1	ND	0.0011	0.0037	1	ND	0.0014	0.0046	1
Chloroform	1.40	mg/kg	ND	0.00019	0.004	1	ND	0.00017	0.0037	1	ND	0.00018	0.0037	1	ND	0.00022	0.0046	1
Chloromethane	460.00	mg/kg	ND	0.00088	0.004	1	ND	0.00081	0.0037	1	ND	0.00081	0.0037	1	ND	0.001	0.0046	1
cis-1,2-Dichloroethene	84.00	mg/kg	ND	0.00016	0.004	1	ND	0.00015	0.0037	1	ND	0.00015	0.0037	1	ND	0.00018	0.0046	1
cis-1,3-Dichloropropene	NS	mg/kg	ND	0.00031	0.004	1	ND	0.00029	0.0037	1	ND	0.00029	0.0037	1	ND	0.00036	0.0046	1
Dibromochloromethane	4.10	mg/kg	ND	0.00065	0.004	1	ND	0.00059	0.0037	1	ND	0.00059	0.0037	1	ND	0.00074	0.0046	1
Dibromomethane	99.00	mg/kg	ND	0.00018	0.004	1	ND	0.00017	0.0037	1	ND	0.00017	0.0037	1	ND	0.00021	0.0046	1
Dichlorodifluoromethane	370.00	mg/kg	ND	0.00012	0.004	1	ND	0.00011	0.0037	1	ND	0.00011	0.0037	1	ND	0.00013	0.0046	1
Di-isopropyl ether	9400.00	mg/kg	ND	0.0015	0.004	1	ND	0.0014	0.0037	1	ND	0.0014	0.0037	1	ND	0.0018	0.0046	1
Ethy Acetate	2600.00	mg/kg	ND	0.0056	0.04	1	ND	0.0051	0.037	1	ND	0.0052	0.037	1	ND	0.0064	0.046	1
Ethy Ether	10000.00	mg/kg	ND	0.014	0.04	1	ND	0.013	0.037	1	ND	0.013	0.037	1	ND	0.016	0.046	1
Ethy-tert-butyl ether	560.00	mg/kg	ND	0.00068	0.004	1	ND	0.00062	0.0037	1	ND	0.00063	0.0037	1	ND	0.00078	0.0046	1
Ethybenzene	25.00	mg/kg	ND	0.00035	0.004	1	ND	0.00032	0.0037	1	ND	0.00032	0.0037	1	ND	0.0004	0.0046	1
Freon-113	28000.00	mg/kg	ND	0.001	0.004	1	ND	0.00094	0.0037	1	ND	0.00094	0.0037	1	ND	0.0012	0.0046	1
Hexachlorobutadiene	5.30	mg/kg	ND	0.00032	0.004	1	ND	0.00029	0.0037	1	ND	0.00029	0.0037	1	ND	0.00036	0.0046	1
Isopropylbenzene	9900.00	mg/kg	ND	0.00064	0.004	1	ND	0.00058	0.0037	1	ND	0.00058	0.0037	1	ND	0.00073	0.0046	1
m,p-Xylene	NS	mg/kg	ND	0.00079	0.008	1	ND	0.00072	0.0037	1	ND	0.00073	0.0074	1	ND	0.0009	0.0092	1
Methylene chloride	26.00	mg/kg	ND	0.0017	0.004	1	ND	0.0016	0.0037	1	ND	0.0016	0.0037	1	ND	0.002	0.0046	1
MTBE	210.00	mg/kg	ND	0.00065	0.004	1	ND	0.0006	0.0037	1	ND	0.0006	0.0037	1	ND	0.00075	0.0046	1
Naphthalene	<b>6.59</b>	mg/kg	ND	0.0005	0.004	1	ND	0.00048	0.0037	1	ND	0.00048	0.0037	1	ND	0.001	0.0046	1
n-Butylbenzene	18900.00	mg/kg	ND	0.00034	0.004	1	ND	0.0003	0.0037	1	ND	0.0003	0.0037	1	ND	0.0011	0.0046	1
n-Propylbenzene	24000.00	mg/kg	ND	0.0003	0.004	1	ND	0.00027	0.0037	1	ND	0.00028	0.0037	1	ND	0.0072	0.0046	1
o-Xylene	2900.00	mg/kg	ND	0.00054	0.004	1	ND	0.00049	0.0037	1	ND	0.00049	0.0037	1	ND	0.0062	0.0046	1
sec-Butylbenzene	1200.00	mg/kg	ND	0.0006	0.004	1	ND	0.00046	0.0037	1	ND	0.00046	0.0037	1	ND	0.0058	0.0046	1
Styrene	32000.00	mg/kg	ND	0.00036	0.004	1	ND	0.00033	0.0037	1	ND	0.00033</td						

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Location	SB-03			SB-03			SB-03			SB-03			SB-04					
Sample Name	SB-03-7'			SB-03-15'			SB-03-35'			SB-04-10'								
Sample Date	3/7/2022			3/7/2022			3/7/2022			3/7/2022								
Laboratory Report	2200309-05			2200309-06			2200309-07			2200309-08								
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Volatile Organic Compounds (EPA 8260B)</b>																		
1,1,2-Tetrachloroethane	8.80	mg/kg	ND	0.019	0.18	50	ND	0.023	0.23	50	ND	0.00036	0.0034	1	ND	0.00047	0.0045	1
1,1,1-Trichloroethane	7200.00	mg/kg	ND	0.0096	0.18	50	ND	0.012	0.23	50	ND	0.00018	0.0034	1	ND	0.00024	0.0045	1
1,1,2,2-Tetrachloroethane	2.70	mg/kg	ND	0.0075	0.18	50	ND	0.0093	0.23	50	ND	0.00014	0.0034	1	ND	0.00019	0.0045	1
1,1,2-Trichloroethane	5.00	mg/kg	ND	0.015	0.18	50	ND	0.018	0.23	50	ND	0.00028	0.0034	1	ND	0.00036	0.0045	1
1,1-Dichloroethane	16.00	mg/kg	ND	0.05	0.18	50	ND	0.061	0.23	50	ND	0.00093	0.0034	1	ND	0.0012	0.0045	1
1,1-Dichloroethene	350.00	mg/kg	ND	0.068	0.18	50	ND	0.085	0.23	50	ND	0.0013	0.0034	1	ND	0.0017	0.0045	1
1,1-Dichloropropene	NS	mg/kg	ND	0.02	0.18	50	ND	0.024	0.23	50	ND	0.00037	0.0034	1	ND	0.00049	0.0045	1
1,2,3-Trichlorobenzene	300.00	mg/kg	ND	0.03	0.18	50	ND	0.037	0.23	50	ND	0.00057	0.0034	1	ND	0.00075	0.0045	1
1,2,3-Trichloropropane	0.02	mg/kg	ND	0.014	0.18	50	ND	0.018	0.23	50	ND	0.00041	0.0034	1	ND	0.00060	0.0045	1
1,2,4-Trichlorobenzene	35.00	mg/kg	ND	0.029	0.18	50	ND	0.036	0.23	50	ND	0.00055	0.0034	1	ND	0.00072	0.0045	1
1,2,4-Timethylbenzene	1800.00	mg/kg	54	0.33	1.6	500	0.38	0.041	0.23	50	ND	0.00062	0.0034	1	ND	0.00082	0.0045	1
1,2-Dibromo-3-chloropropane	0.5	mg/kg	ND	0.041	0.18	50	ND	0.05	0.45	50	ND	0.00076	0.0034	1	ND	0.001	0.0045	1
1,2-Dibromoethane	0.16	mg/kg	ND	0.015	0.18	50	ND	0.018	0.23	50	ND	0.00028	0.0034	1	ND	0.00037	0.0045	1
1,2-Dibromoethane	9300.00	mg/kg	ND	0.0078	0.18	50	ND	0.0096	0.23	50	ND	0.00018	0.0034	1	ND	0.00019	0.0045	1
1,2-Dichloroethane	2.00	mg/kg	ND	0.019	0.18	50	ND	0.023	0.23	50	ND	0.00035	0.0034	1	ND	0.00046	0.0045	1
1,2-Dichloropropane	11.00	mg/kg	ND	0.017	0.18	50	ND	0.021	0.23	50	ND	0.00032	0.0034	1	ND	0.00042	0.0045	1
1,3,5-Trimethylbenzene	1500.00	mg/kg	8.4	0.26	0.18	50	ND	0.032	0.23	50	ND	0.00048	0.0034	1	ND	0.00064	0.0045	1
1,3-Dichlorobenzene	NS	mg/kg	ND	0.013	0.18	50	ND	0.016	0.23	50	ND	0.00025	0.0034	1	ND	0.00033	0.0045	1
1,3-Dichloropropane	2200.00	mg/kg	ND	0.018	0.18	50	ND	0.022	0.23	50	ND	0.00034	0.0034	1	ND	0.00045	0.0045	1
1,4-Dichlorobenzene	11.00	mg/kg	ND	0.0099	0.18	50	ND	0.012	0.23	50	ND	0.00019	0.0034	1	ND	0.00025	0.0045	1
2,2-Dichloropropane	NS	mg/kg	ND	0.01	0.18	50	ND	0.012	0.23	50	ND	0.00019	0.0034	1	ND	0.00025	0.0045	1
2-Chlorotoluene	2500.00	mg/kg	ND	0.019	0.18	50	ND	0.024	0.23	50	ND	0.00036	0.0034	1	ND	0.00048	0.0045	1
4-Chlorotoluene	2300.00	mg/kg	ND	0.014	0.18	50	ND	0.018	0.23	50	ND	0.00027	0.0034	1	ND	0.00036	0.0045	1
4-Isopropyltoluene	NS	mg/kg	0.84	0.03	0.18	50	ND	0.037	0.23	50	ND	0.00056	0.0034	1	ND	0.00073	0.0045	1
Benzene	1.40	mg/kg	ND	0.013	0.18	50	ND	0.016	0.23	50	ND	0.00024	0.0034	1	ND	0.00032	0.0045	1
Bromobenzene	1800.00	mg/kg	ND	0.023	0.18	50	ND	0.028	0.23	50	ND	0.00043	0.0034	1	ND	0.00057	0.0045	1
Bromochloromethane	630.00	mg/kg	ND	0.011	0.18	50	ND	0.013	0.23	50	ND	0.0002	0.0034	1	ND	0.00027	0.0045	1
Bromodichloromethane	1.30	mg/kg	ND	0.019	0.18	50	ND	0.024	0.23	50	ND	0.00036	0.0034	1	ND	0.00048	0.0045	1
Bromoform	86.00	mg/kg	ND	0.05	0.18	50	ND	0.062	0.23	50	ND	0.00094	0.0034	1	ND	0.0012	0.0045	1
Bromomethane	30.00	mg/kg	ND	0.09	0.18	50	ND	0.11	0.23	50	ND	0.0017	0.0034	1	ND	0.0022	0.0045	1
Carbon disulfide	3500.00	mg/kg	ND	0.034	0.18	50	ND	0.042	0.23	50	ND	0.00065	0.0034	1	ND	0.00085	0.0045	1
Carbon tetrachloride	2.90	mg/kg	ND	0.027	0.18	50	ND	0.033	0.23	50	ND	0.0005	0.0034	1	ND	0.00066	0.0045	1
Chlorobenzene	1300.00	mg/kg	ND	0.015	0.18	50	ND	0.019	0.23	50	ND	0.00029	0.0034	1	ND	0.00038	0.0045	1
Chloroethane	23000.00	mg/kg	ND	0.056	0.18	50	ND	0.069	0.23	50	ND	0.0011	0.0034	1	ND	0.0014	0.0045	1
Chloroform	1.40	mg/kg	ND	0.0087	0.18	50	ND	0.011	0.23	50	ND	0.00016	0.0034	1	ND	0.00022	0.0045	1
Chloromethane	460.00	mg/kg	ND	0.04	0.18	50	ND	0.05	0.23	50	ND	0.00076	0.0034	1	ND	0.001	0.0045	1
cis-1,2-Dichloroethene	84.00	mg/kg	ND	0.0072	0.18	50	ND	0.009	0.23	50	ND	0.00014	0.0034	1	ND	0.00018	0.0045	1
cis-1,3-Dichloropropene	NS	mg/kg	ND	0.014	0.18	50	ND	0.018	0.23	50	ND	0.00027	0.0034	1	ND	0.00035	0.0045	1
Dibromochloromethane	4.10	mg/kg	ND	0.029	0.18	50	ND	0.036	0.23	50	ND	0.00055	0.0034	1	ND	0.00073	0.0045	1
Dibromomethane	99.00	mg/kg	ND	0.0083	0.18	50	ND	0.01	0.23	50	ND	0.00016	0.0034	1	ND	0.00021	0.0045	1
Dichlorodifluoromethane	370.00	mg/kg	ND	0.0053	0.18	50	ND	0.0065	0.23	50	ND	0.0001	0.0034	1	ND	0.00013	0.0045	1
Di-isopropyl ether	9400.00	mg/kg	ND	0.07	0.18	50	ND	0.087	0.23	50	ND	0.0013	0.0034	1	ND	0.0017	0.0045	1
Ethy Acetate	2600.00	mg/kg	ND	0.25	1.8	50	ND	0.32	2.3	50	ND	0.0048	0.034	1	ND	0.0063	0.045	1
Ethy Ether	10000.00	mg/kg	ND	0.64	1.8	50	ND	0.79	2.3	50	ND	0.012	0.034	1	ND	0.016	0.045	1
Ethy tert-butyl ether	560.00	mg/kg	ND	0.031	0.18	50	ND	0.038	0.23	50	ND	0.00058	0.0034	1	ND	0.00077	0.0045	1
Ethybenzene	25.00	mg/kg	3.1	0.016	0.18	50	ND	0.02	0.23	50	ND	0.00034	0.0034	1	ND	0.00039	0.0045	1
Freon-113	28000.00	mg/kg	ND	0.047	0.18	50	ND	0.058	0.23	50	ND	0.00088	0.0034	1	ND	0.0012	0.0045	1
Hexachlorobutadiene	5.30	mg/kg	ND	0.014	0.18	50	ND	0.018	0.23	50	ND	0.00027	0.0034	1	ND	0.00036	0.0045	1
Isopropylbenzene	9900.00	mg/kg	0.87	0.029	0.18	50	ND	0.036	0.23	50	ND	0.00055	0.0034	1	ND	0.00072	0.0045	1
m,p-Xylene	NS	mg/kg	2.7	0.036	0.18	50	ND	0.044	0.45	50	ND	0.00068	0.0069	1	ND	0.00069	0.0091	1
Methylene chloride	26.00	mg/kg	ND	0.079	0.18	50	ND	0.098	0.23	50	ND	0.0015	0.0034	1	ND	0.002	0.0045	1
MTBE	210.00	mg/kg	ND	0.03	0.18	50	ND	0.037	0.23	50	ND	0.00056	0.0034	1	ND	0.00074	0.0045	1
Naphthalene	<b>6.59</b>	mg/kg	<b>13</b>	0.043	1.8	500	1.5	0.051	0.23	50	ND	0.00077	0.0034	1	ND	0.001	0.0045	1
n-Butylbenzene	18900.00	mg/kg	9.2	0.043	0.18	50	0.62	0.053	0.23	50	ND	0.00091	0.0034	1	ND	0.0011	0.0045	1
n-Propylbenzene	24000.00	mg/kg	2	0.028	0.18	50	0.28	0.036	0.23	50	ND	0.00054	0.0034	1	ND	0.00071	0.0045	1
o-Xylene	2900.00	mg/kg	0.46	0.024	0.18	50	ND	0.03	0.23	50	ND	0.00046	0.0034	1	ND	0.00061	0.0045	1
sec-Butylbenzene	12000.00	mg/kg	1.3	0.023	0.18	50	ND	0.028	0.23	50	ND	0.00043	0.0034	1	ND	0.00057	0.0045	1
Styrene	32000.00	mg/kg	ND	0.016	0.18	50	ND	0.02	0.23	50	ND	0.00031	0.0034	1	ND	0.00041	0.0045	1
tert-Amyl methyl ether	NS	mg/kg	ND	0.04	0.18													

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Location		SB-04			SB-06			SB-05			SB-06							
Sample Name		SB-04-36*			SB-05-10*			SB-05-35			SB-06-9							
Sample Date		3/7/2022			3/7/2022			3/7/2022			3/7/2022							
Analyte		Laboratory Report			2200309-09			2200309-10			2200309-11							
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF				
<b>Volatile Organic Compounds (EPA 8260B)</b>																		
1,1,2-Tetrachloroethane	8.80	mg/kg	ND	0.00046	0.0045	1	ND	0.00047	0.0045	1	ND	0.00053	0.0051	1	ND	0.00043	0.0042	1
1,1,1-Trichloroethane	7200.00	mg/kg	ND	0.00023	0.0045	1	ND	0.00024	0.0045	1	ND	0.00027	0.0051	1	ND	0.00022	0.0042	1
1,1,2,2-Tetrachloroethane	2.70	mg/kg	ND	0.00018	0.0045	1	ND	0.00019	0.0045	1	ND	0.00021	0.0051	1	ND	0.00017	0.0042	1
1,1,2-Trichloroethane	5.00	mg/kg	ND	0.00036	0.0045	1	ND	0.00036	0.0045	1	ND	0.00041	0.0051	1	ND	0.00033	0.0042	1
1,1-Dichloroethane	16.00	mg/kg	ND	0.0012	0.0045	1	ND	0.0012	0.0045	1	ND	0.0014	0.0051	1	ND	0.0011	0.0042	1
1,1-Dichloroethene	350.00	mg/kg	ND	0.0017	0.0045	1	ND	0.0017	0.0045	1	ND	0.0019	0.0051	1	ND	0.0016	0.0042	1
1,1-Dichloropropene	NS	mg/kg	ND	0.00043	0.0045	1	ND	0.00049	0.0045	1	ND	0.00065	0.0051	1	ND	0.00045	0.0042	1
1,2,3-Trichlorobenzene	300.00	mg/kg	ND	0.00044	0.0045	1	ND	0.00075	0.0045	1	ND	0.00085	0.0051	1	ND	0.00069	0.0042	1
1,2,3-Trichloropropane	0.02	mg/kg	ND	0.00038	0.0045	1	ND	0.00036	0.0045	1	ND	0.00041	0.0051	1	ND	0.00032	0.0042	1
1,2,4-Trimethylbenzene	35.00	mg/kg	ND	0.00072	0.0045	1	ND	0.00073	0.0045	1	ND	0.00083	0.0051	1	ND	0.00067	0.0042	1
1,2,4-Trimethylbenzene	1800.00	mg/kg	ND	0.00081	0.0045	1	ND	0.00082	0.0045	1	ND	0.00093	0.0051	1	ND	0.00076	0.0042	1
1,2-Dibromo-3-chloropropane	0.5	mg/kg	ND	0.00099	0.0045	1	ND	0.001	0.0045	1	ND	0.0011	0.0051	1	ND	0.00093	0.0042	1
1,2-Dibromoethane	0.16	mg/kg	ND	0.00036	0.0045	1	ND	0.00037	0.0045	1	ND	0.00041	0.0051	1	ND	0.00034	0.0042	1
1,2-Dibromoethane	9300.00	mg/kg	ND	0.00019	0.0045	1	ND	0.00019	0.0045	1	ND	0.00022	0.0051	1	ND	0.00018	0.0042	1
1,2-Dibromoethane	2.00	mg/kg	ND	0.00049	0.0045	1	ND	0.00046	0.0045	1	ND	0.00052	0.0051	1	ND	0.00042	0.0042	1
1,2-Dibromoethane	11.00	mg/kg	ND	0.00041	0.0045	1	ND	0.00042	0.0045	1	ND	0.00047	0.0051	1	ND	0.00038	0.0042	1
1,3,5-Trimethylbenzene	1500.00	mg/kg	ND	0.00063	0.0045	1	ND	0.00064	0.0045	1	ND	0.00072	0.0051	1	ND	0.00058	0.0042	1
1,3-Dichlorobenzene	NS	mg/kg	ND	0.00032	0.0045	1	ND	0.00033	0.0045	1	ND	0.00037	0.0051	1	ND	0.0003	0.0042	1
1,3-Dichloropropane	2200.00	mg/kg	ND	0.00044	0.0045	1	ND	0.00045	0.0045	1	ND	0.00051	0.0051	1	ND	0.00041	0.0042	1
1,4-Dichlorobenzene	11.00	mg/kg	ND	0.00024	0.0045	1	ND	0.00025	0.0045	1	ND	0.00028	0.0051	1	ND	0.00023	0.0042	1
2,2-Dichloropropane	NS	mg/kg	ND	0.00025	0.0045	1	ND	0.00025	0.0045	1	ND	0.00028	0.0051	1	ND	0.00023	0.0042	1
2-Chlorotoluene	2500.00	mg/kg	ND	0.00047	0.0045	1	ND	0.00048	0.0045	1	ND	0.00054	0.0051	1	ND	0.00044	0.0042	1
4-Chlorotoluene	2300.00	mg/kg	ND	0.00038	0.0045	1	ND	0.00039	0.0045	1	ND	0.00041	0.0051	1	ND	0.00033	0.0042	1
4-Isopropyltoluene	NS	mg/kg	ND	0.00072	0.0045	1	ND	0.00074	0.0045	1	ND	0.00083	0.0051	1	ND	0.00067	0.0042	1
Benzene	1.40	mg/kg	ND	0.00032	0.0045	1	ND	0.00032	0.0045	1	ND	0.00037	0.0051	1	ND	0.0003	0.0042	1
Bromobenzene	1800.00	mg/kg	ND	0.00056	0.0045	1	ND	0.00057	0.0045	1	ND	0.00064	0.0051	1	ND	0.00052	0.0042	1
Bromochloromethane	630.00	mg/kg	ND	0.00026	0.0045	1	ND	0.00027	0.0045	1	ND	0.0003	0.0051	1	ND	0.00025	0.0042	1
Bromodichloromethane	1.30	mg/kg	ND	0.00047	0.0045	1	ND	0.00048	0.0045	1	ND	0.00054	0.0051	1	ND	0.00044	0.0042	1
Bromoform	86.00	mg/kg	ND	0.0012	0.0045	1	ND	0.0012	0.0045	1	ND	0.0014	0.0051	1	ND	0.0011	0.0042	1
Bromomethane	30.00	mg/kg	ND	0.00022	0.0045	1	ND	0.00022	0.0045	1	ND	0.00025	0.0051	1	ND	0.00021	0.0042	1
Carbon disulfide	3500.00	mg/kg	ND	0.00084	0.0045	1	ND	0.00085	0.0045	1	ND	0.00097	0.0051	1	ND	0.00078	0.0042	1
Carbon tetrachloride	2.90	mg/kg	ND	0.00068	0.0045	1	ND	0.00067	0.0045	1	ND	0.00075	0.0051	1	ND	0.00061	0.0042	1
Chlorobenzene	1300.00	mg/kg	ND	0.00038	0.0045	1	ND	0.00038	0.0045	1	ND	0.00043	0.0051	1	ND	0.00035	0.0042	1
Chloroethane	23000.00	mg/kg	ND	0.0014	0.0045	1	ND	0.0014	0.0045	1	ND	0.0016	0.0051	1	ND	0.0013	0.0042	1
Chloroform	1.40	mg/kg	ND	0.00021	0.0045	1	ND	0.00022	0.0045	1	ND	0.00024	0.0051	1	ND	0.0002	0.0042	1
Chloromethane	460.00	mg/kg	ND	0.00098	0.0045	1	ND	0.001	0.0045	1	ND	0.0011	0.0051	1	ND	0.00092	0.0042	1
cis-1,2-Dichloroethene	84.00	mg/kg	ND	0.00018	0.0045	1	ND	0.00018	0.0045	1	ND	0.0002	0.0051	1	ND	0.00017	0.0042	1
cis-1,3-Dichloropropene	NS	mg/kg	ND	0.00035	0.0045	1	ND	0.00035	0.0045	1	ND	0.0004	0.0051	1	ND	0.00032	0.0042	1
Dibromochloromethane	4.10	mg/kg	ND	0.00072	0.0045	1	ND	0.00073	0.0045	1	ND	0.00083	0.0051	1	ND	0.00067	0.0042	1
Dibromomethane	99.00	mg/kg	ND	0.0002	0.0045	1	ND	0.00021	0.0045	1	ND	0.00023	0.0051	1	ND	0.00019	0.0042	1
Dichlorodifluoromethane	370.00	mg/kg	ND	0.00013	0.0045	1	ND	0.00013	0.0045	1	ND	0.00015	0.0051	1	ND	0.00012	0.0042	1
Di-isopropyl ether	9400.00	mg/kg	ND	0.0017	0.0045	1	ND	0.0018	0.0045	1	ND	0.002	0.0051	1	ND	0.0016	0.0042	1
Ethy Acetate	2600.00	mg/kg	ND	0.0062	0.045	1	ND	0.0066	0.045	1	ND	0.0072	0.051	1	ND	0.0068	0.042	1
Ethy Ether	10000.00	mg/kg	ND	0.016	0.045	1	ND	0.016	0.045	1	ND	0.018	0.051	1	ND	0.015	0.042	1
Ethy-tert-butyl ether	560.00	mg/kg	ND	0.00076	0.045	1	ND	0.00077	0.045	1	ND	0.00087	0.051	1	ND	0.00071	0.042	1
Ethybenzene	25.00	mg/kg	ND	0.00039	0.045	1	ND	0.00039	0.045	1	ND	0.00044	0.051	1	ND	0.00036	0.042	1
Freon-113	28000.00	mg/kg	ND	0.0011	0.045	1	ND	0.0012	0.045	1	ND	0.0013	0.051	1	ND	0.0011	0.042	1
Hexachlorobutadiene	5.30	mg/kg	ND	0.00035	0.045	1	ND	0.00036	0.045	1	ND	0.00041	0.051	1	ND	0.00033	0.042	1
Isopropylbenzene	9900.00	mg/kg	ND	0.00071	0.045	1	ND	0.00072	0.045	1	ND	0.00082	0.051	1	ND	0.00066	0.042	1
m,p-Xylene	NS	mg/kg	ND	0.00088	0.045	1	ND	0.00089	0.045	1	ND	0.001	0.051	1	ND	0.00082	0.042	1
Methylene chloride	26.00	mg/kg	ND	0.0019	0.045	1	ND	0.002	0.045	1	ND	0.0022	0.051	1	ND	0.0018	0.042	1
MTBE	210.00	mg/kg	ND	0.00072	0.045	1	ND	0.00074	0.045	1	ND	0.00083	0.051	1	ND	0.00068	0.042	1
Naphthalene	<b>6.59</b>	mg/kg	ND	0.0001	0.045	1	ND	0.0001	0.045	1	ND	0.00012	0.051	1	ND	0.00009	0.042	1
n-Butylbenzene	18900.00	mg/kg	ND	0.001	0.045	1	ND	0.0011	0.045	1	ND	0.0016	0.051	1	ND	0.00098	0.042	1
n-Propylbenzene	24000.00	mg/kg	ND	0.0007	0.045	1	ND	0.00071	0.045	1	ND	0.00086	0.051	1	ND	0.00062	0.042	1
o-Xylene	2900.00	mg/kg	ND	0.0006	0.045	1	ND	0.00061	0.045	1	ND	0.00069	0.051	1	ND	0.00056	0.042	1
sec-Butylbenzene	12000.00	mg/kg	ND	0.00056	0.045	1	ND	0.00057	0.045	1	ND	0.00064	0.051	1	ND	0.00052	0.042	1
Styrene	32000.00	mg/kg	ND	0.0004	0.045	1	ND	0.00041	0.045	1	ND	0.0004						

**Table 1**  
**Summary of Soil Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Location		SB-06			SB-07			SB-07			SB-5-10'							
Sample Name		SB-06-35'			SB-07-10'			SB-07-35'			DUP-SS-1A							
Sample Date		3/7/2022			3/8/2022			3/8/2022			3/7/2022							
Laboratory Report		2200309-13			2200318-01			2200318-02			2200309-14							
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF				
<b>Volatile Organic Compounds (EPA 8260B)</b>																		
1,1,2-Tetrachloroethane	8.80	mg/kg	ND	0.00052	0.005	1	ND	0.00054	0.0052	1	ND	0.00049	0.0047	1	ND	0.00043	0.0041	1
1,1,1-Trichloroethane	7200.00	mg/kg	ND	0.00026	0.005	1	ND	0.00027	0.0052	1	ND	0.00025	0.0047	1	ND	0.00022	0.0041	1
1,1,2,2-Tetrachloroethane	2.70	mg/kg	ND	0.00021	0.005	1	ND	0.00022	0.0052	1	ND	0.00019	0.0047	1	ND	0.00017	0.0041	1
1,1,2-Trichloroethane	5.00	mg/kg	ND	0.0004	0.005	1	ND	0.00042	0.0052	1	ND	0.00038	0.0047	1	ND	0.00033	0.0041	1
1,1-Dichloroethane	16.00	mg/kg	ND	0.0014	0.005	1	ND	0.0014	0.0052	1	ND	0.0013	0.0047	1	ND	0.0011	0.0041	1
1,1-Dichloroethene	350.00	mg/kg	ND	0.0019	0.005	1	ND	0.002	0.0052	1	ND	0.0018	0.0047	1	ND	0.0016	0.0041	1
1,1-Dichloropropene	NS	mg/kg	ND	0.00054	0.005	1	ND	0.00056	0.0052	1	ND	0.0005	0.0047	1	ND	0.00044	0.0041	1
1,2,3-Trichlorobenzene	300.00	mg/kg	ND	0.00083	0.005	1	ND	0.00086	0.0052	1	ND	0.00077	0.0047	1	ND	0.00068	0.0041	1
1,2,3-Trichloropropane	0.02	mg/kg	ND	0.0001	0.005	1	ND	0.00012	0.0052	1	ND	0.00007	0.0047	1	ND	0.00006	0.0041	1
1,2,4-Trimethylbenzene	35.00	mg/kg	ND	0.0009	0.005	1	ND	0.00094	0.0052	1	ND	0.00075	0.0047	1	ND	0.00069	0.0041	1
1,2,4,4-Tetramethylbenzene	1800.00	mg/kg	ND	0.00091	0.005	1	ND	0.00095	0.0052	1	ND	0.00085	0.0047	1	ND	0.00075	0.0041	1
1,2-Dibromo-3-chloropropane	0.05	mg/kg	ND	0.0011	0.005	1	ND	0.0012	0.0052	1	ND	0.001	0.0047	1	ND	0.00093	0.0041	1
1,2-Dibromoethane	0.16	mg/kg	ND	0.0004	0.005	1	ND	0.00042	0.0052	1	ND	0.00038	0.0047	1	ND	0.00033	0.0041	1
1,2-Dibromoethane	9300.00	mg/kg	ND	0.00021	0.005	1	ND	0.00022	0.0052	1	ND	0.0002	0.0047	1	ND	0.00018	0.0041	1
1,2-Dichloroethane	2.00	mg/kg	ND	0.0006	0.005	1	ND	0.00052	0.0052	1	ND	0.00047	0.0047	1	ND	0.00042	0.0041	1
1,2-Dichloropropane	11.00	mg/kg	ND	0.00046	0.005	1	ND	0.00048	0.0052	1	ND	0.00043	0.0047	1	ND	0.00038	0.0041	1
1,3,5-Trimethylbenzene	1500.00	mg/kg	ND	0.0007	0.005	1	ND	0.00073	0.0052	1	ND	0.00066	0.0047	1	ND	0.00058	0.0041	1
1,3-Dichlorobenzene	NS	mg/kg	ND	0.00036	0.005	1	ND	0.00038	0.0052	1	ND	0.00034	0.0047	1	ND	0.0003	0.0041	1
1,3-Dichloropropane	2200.00	mg/kg	ND	0.00049	0.005	1	ND	0.00051	0.0052	1	ND	0.00046	0.0047	1	ND	0.00041	0.0041	1
1,4-Dichlorobenzene	11.00	mg/kg	ND	0.00027	0.005	1	ND	0.00028	0.0052	1	ND	0.00026	0.0047	1	ND	0.00023	0.0041	1
2,2-Dichloropropane	NS	mg/kg	ND	0.00028	0.005	1	ND	0.00029	0.0052	1	ND	0.00026	0.0047	1	ND	0.00023	0.0041	1
2-Chlorotoluene	2500.00	mg/kg	ND	0.00053	0.005	1	ND	0.00055	0.0052	1	ND	0.00049	0.0047	1	ND	0.00043	0.0041	1
4-Chlorotoluene	2300.00	mg/kg	ND	0.0004	0.005	1	ND	0.00041	0.0052	1	ND	0.00037	0.0047	1	ND	0.00033	0.0041	1
4-Isopropyltoluene	NS	mg/kg	ND	0.00081	0.005	1	ND	0.00088	0.0052	1	ND	0.00076	0.0047	1	ND	0.00067	0.0041	1
Benzene	1.40	mg/kg	ND	0.0036	0.005	1	ND	0.0037	0.0052	1	ND	0.0033	0.0047	1	ND	0.0029	0.0041	1
Bromobenzene	1800.00	mg/kg	ND	0.00062	0.005	1	ND	0.00065	0.0052	1	ND	0.00058	0.0047	1	ND	0.00051	0.0041	1
Bromochloromethane	630.00	mg/kg	ND	0.0003	0.005	1	ND	0.00031	0.0052	1	ND	0.00028	0.0047	1	ND	0.00024	0.0041	1
Bromodichloromethane	1.30	mg/kg	ND	0.00052	0.005	1	ND	0.00055	0.0052	1	ND	0.00049	0.0047	1	ND	0.00043	0.0041	1
Bromoform	86.00	mg/kg	ND	0.0014	0.005	1	ND	0.0014	0.0052	1	ND	0.0013	0.0047	1	ND	0.0011	0.0041	1
Bromomethane	30.00	mg/kg	ND	0.0025	0.005	1	ND	0.0026	0.0052	1	ND	0.0023	0.0047	1	ND	0.002	0.0041	1
Carbon disulfide	3500.00	mg/kg	ND	0.00094	0.005	1	ND	0.00098	0.0052	1	ND	0.00088	0.0047	1	ND	0.00078	0.0041	1
Carbon tetrachloride	2.90	mg/kg	ND	0.00073	0.005	1	ND	0.00076	0.0052	1	ND	0.00069	0.0047	1	ND	0.00061	0.0041	1
Chlorobenzene	1300.00	mg/kg	ND	0.00042	0.005	1	ND	0.00044	0.0052	1	ND	0.00039	0.0047	1	ND	0.00035	0.0041	1
Chloroethane	23000.00	mg/kg	ND	0.0015	0.005	1	ND	0.0016	0.0052	1	ND	0.0014	0.0047	1	ND	0.0013	0.0041	1
Chloroform	1.40	mg/kg	ND	0.00024	0.005	1	ND	0.00025	0.0052	1	ND	0.00022	0.0047	1	ND	0.0002	0.0041	1
Chloromethane	460.00	mg/kg	ND	0.0011	0.005	1	ND	0.0011	0.0052	1	ND	0.001	0.0047	1	ND	0.00091	0.0041	1
cis-1,2-Dichloroethene	84.00	mg/kg	ND	0.0002	0.005	1	ND	0.00021	0.0052	1	ND	0.00019	0.0047	1	ND	0.00016	0.0041	1
cis-1,3-Dichloropropene	NS	mg/kg	ND	0.00039	0.005	1	ND	0.00041	0.0052	1	ND	0.00036	0.0047	1	ND	0.00032	0.0041	1
Dibromochloromethane	4.10	mg/kg	ND	0.00081	0.005	1	ND	0.00084	0.0052	1	ND	0.00075	0.0047	1	ND	0.00067	0.0041	1
Dibromomethane	99.00	mg/kg	ND	0.00023	0.005	1	ND	0.00024	0.0052	1	ND	0.00021	0.0047	1	ND	0.00019	0.0041	1
Dichlorodifluoromethane	370.00	mg/kg	ND	0.00014	0.005	1	ND	0.00015	0.0052	1	ND	0.00014	0.0047	1	ND	0.00012	0.0041	1
Di-isopropyl ether	9400.00	mg/kg	ND	0.0019	0.005	1	ND	0.002	0.0052	1	ND	0.0018	0.0047	1	ND	0.0016	0.0041	1
Ethy Acetate	2600.00	mg/kg	ND	0.007	0.05	1	ND	0.0073	0.052	1	ND	0.0065	0.047	1	ND	0.0058	0.041	1
Ethy Ether	10000.00	mg/kg	ND	0.017	0.05	1	ND	0.018	0.052	1	ND	0.016	0.047	1	ND	0.014	0.041	1
Ethy-tert-butyl ether	560.00	mg/kg	ND	0.00085	0.005	1	ND	0.00089	0.0052	1	ND	0.00079	0.0047	1	ND	0.0007	0.0041	1
Ethybenzene	25.00	mg/kg	ND	0.00043	0.005	1	ND	0.00045	0.0052	1	ND	0.0004	0.0047	1	ND	0.00036	0.0041	1
Freon-113	28000.00	mg/kg	ND	0.0013	0.005	1	ND	0.0013	0.0052	1	ND	0.0012	0.0047	1	ND	0.0011	0.0041	1
Hexachlorobutadiene	5.30	mg/kg	ND	0.0004	0.005	1	ND	0.00041	0.0052	1	ND	0.00037	0.0047	1	ND	0.00033	0.0041	1
Isopropylbenzene	9900.00	mg/kg	ND	0.00079	0.005	1	ND	0.00083	0.0052	1	ND	0.00074	0.0047	1	ND	0.00066	0.0041	1
m,p-Xylene	NS	mg/kg	ND	0.00098	0.01	1	ND	0.001	0.01	1	ND	0.00092	0.0093	1	ND	0.00081	0.0083	1
Methylene chloride	26.00	mg/kg	ND	0.0022	0.005	1	ND	0.0023	0.0052	1	ND	0.002	0.0047	1	ND	0.0018	0.0041	1
MTBE	210.00	mg/kg	ND	0.00081	0.005	1	ND	0.00085	0.0052	1	ND	0.00076	0.0047	1	ND	0.00067	0.0041	1
Naphthalene	<b>6.59</b>	mg/kg	ND	0.0011	0.005	1	ND	0.0012	0.0052	1	ND	0.0011	0.0047	1	ND	0.00099	0.0041	1
n-Butylbenzene	18900.00	mg/kg	ND	0.0012	0.005	1	ND	0.0012	0.0052	1	ND	0.0011	0.0047	1	ND	0.00097	0.0041	1
n-Propylbenzene	24000.00	mg/kg	ND	0.0013	0.005	1	ND	0.0013	0.0052	1	ND	0.0012	0.0047	1	ND	0.00104	0.0041	1
o-Xylene	2900.00	mg/kg	ND	0.00087	0.005	1	ND	0.00088	0.0052	1	ND	0.00083	0.0047	1	ND	0.00055	0.0041	1
sec-Butylbenzene	1200.00	mg/kg	ND	0.00083	0.005	1	ND	0.00086	0.0052	1	ND	0.00069	0.0047	1	ND	0.00052	0.0041	1
Styrene	32000.00	mg/kg	ND	0.00045	0.005	1	ND	0.00047	0.0052	1	ND	0.00042	0.004					

**Table 1**  
**Summary of Soil Results**  
Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660

Location		SB-01			SB-01			SB-02			SB-02			
Sample Name		SB-01-10'			SB-01-35'			SB-02-10'			SB-02-35'			
Sample Date		3/7/2022			3/7/2022			3/7/2022			3/7/2022			
Laboratory Report		2200309-01			2200309-02			2200309-03			2200309-04			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Pesticides (EPA 8081A)</b>														
4,4'-DDD	6.20	mg/kg	ND	0.00008	0.002	1	NA	-	-	-	ND	0.00008	0.002	1
4,4'-DDE	9.30	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	ND	0.00009	0.002	1
4,4'-DDT	7.10	mg/kg	ND	0.0001	0.002	1	NA	-	-	-	ND	0.0001	0.002	1
Aldrin	0.18	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	ND	0.00009	0.001	1
alpha-BHC	0.24	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	ND	0.00011	0.001	1
alpha-Chlordane	500.00	mg/kg	ND	0.0001	0.001	1	NA	-	-	-	ND	0.0001	0.001	1
beta-BHC	0.82	mg/kg	ND	0.00015	0.001	1	NA	-	-	-	ND	0.00015	0.001	1
Chlordane	NS	mg/kg	ND	0.0011	0.0085	1	NA	-	-	-	ND	0.0011	0.0085	1
delta-BHC	NS	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	ND	0.00011	0.001	1
Dieldrin	0.09	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	ND	0.00009	0.002	1
Endosulfan I	0.00	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	ND	0.00009	0.001	1
Endosulfan II	NS	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	ND	0.00009	0.002	1
Endosulfan sulfate	3200.00	mg/kg	ND	0.00011	0.002	1	NA	-	-	-	ND	0.00011	0.002	1
Endrin	160.00	mg/kg	ND	0.00007	0.002	1	NA	-	-	-	ND	0.00007	0.002	1
Endrin aldehyde	NS	mg/kg	ND	0.00018	0.002	1	NA	-	-	-	ND	0.00018	0.002	1
Endrin ketone	NS	mg/kg	ND	0.00006	0.002	1	NA	-	-	-	ND	0.00006	0.002	1
gamma-BHC	2.00	mg/kg	ND	0.00012	0.001	1	NA	-	-	-	ND	0.00012	0.001	1
gamma-Chlordane	500.00	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	ND	0.00011	0.001	1
Heptachlor	0.63	mg/kg	ND	0.0001	0.001	1	NA	-	-	-	ND	0.0001	0.001	1
Heptachlor epoxide	0.33	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	ND	0.00009	0.001	1
Methoxychlor	2600.00	mg/kg	ND	0.00014	0.005	1	NA	-	-	-	ND	0.00014	0.005	1
Toxaphene	1.20	mg/kg	ND	0.0036	0.05	1	NA	-	-	-	ND	0.0036	0.05	1

Notes

Screening Level is the minimum of the June 2020 DTSC Soil

Commercial/Industrial Screening Levels (SLS), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

Industrial Soil Table (THQ=1.0).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

mg/kg - milligrams per kilogram

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

NA - Not Analyzed

## - Sample exceeds respective screening level

## - Screening level exceeded

**Table 1**  
**Summary of Soil Results**  
Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660

Location		SB-03			SB-03			SB-03			SB-04			
Sample Name		SB-03-7'			SB-03-15'			SB-03-35'			SB-04-10'			
Sample Date		3/7/2022			3/7/2022			3/7/2022			3/7/2022			
Laboratory Report		2200309-05			2200309-06			2200309-07			2200309-08			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Pesticides (EPA 8081A)</b>														
4,4'-DDD	6.20	mg/kg	ND	0.00008	0.002	1	NA	-	-	-	NA	-	-	ND 0.0016 0.04 20
4,4'-DDE	9.30	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	ND 0.0019 0.04 20
4,4'-DDT	7.10	mg/kg	ND	0.0001	0.002	1	NA	-	-	-	NA	-	-	ND 0.002 0.04 20
Aldrin	0.18	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	ND 0.0017 0.02 20
alpha-BHC	0.24	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	ND 0.0022 0.02 20
alpha-Chlordane	500.00	mg/kg	ND	0.0001	0.001	1	NA	-	-	-	NA	-	-	ND 0.0021 0.02 20
beta-BHC	0.82	mg/kg	ND	0.00015	0.001	1	NA	-	-	-	NA	-	-	ND 0.003 0.02 20
Chlordane	NS	mg/kg	ND	0.0011	0.0085	1	NA	-	-	-	NA	-	-	ND 0.022 0.17 20
delta-BHC	NS	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	ND 0.0022 0.02 20
Dieldrin	0.09	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	ND 0.0018 0.04 20
Endosulfan I	0.00	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	ND 0.0018 0.02 20
Endosulfan II	NS	mg/kg	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	ND 0.0018 0.04 20
Endosulfan sulfate	3200.00	mg/kg	ND	0.00011	0.002	1	NA	-	-	-	NA	-	-	ND 0.0021 0.04 20
Endrin	160.00	mg/kg	ND	0.00007	0.002	1	NA	-	-	-	NA	-	-	ND 0.0014 0.04 20
Endrin aldehyde	NS	mg/kg	ND	0.00018	0.002	1	NA	-	-	-	NA	-	-	ND 0.0037 0.04 20
Endrin ketone	NS	mg/kg	ND	0.00006	0.002	1	NA	-	-	-	NA	-	-	ND 0.0012 0.04 20
gamma-BHC	2.00	mg/kg	ND	0.00012	0.001	1	NA	-	-	-	NA	-	-	ND 0.0025 0.02 20
gamma-Chlordane	500.00	mg/kg	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	ND 0.0022 0.02 20
Heptachlor	0.63	mg/kg	ND	0.0001	0.001	1	NA	-	-	-	NA	-	-	ND 0.002 0.02 20
Heptachlor epoxide	0.33	mg/kg	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	ND 0.0018 0.02 20
Methoxychlor	2600.00	mg/kg	ND	0.00014	0.005	1	NA	-	-	-	NA	-	-	ND 0.0029 0.1 20
Toxaphene	1.20	mg/kg	ND	0.0036	0.05	1	NA	-	-	-	NA	-	-	ND 0.072 1 20

Notes

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**Table 1**  
**Summary of Soil Results**  
Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660

Location		SB-04			SB-05			SB-05			SB-06						
Sample Name		SB-04-35'			SB-05-10'			SB-05-35'			SB-06-9'						
Sample Date		3/7/2022			3/7/2022			3/7/2022			3/7/2022						
Laboratory Report		2200309-09			2200309-10			2200309-11			2200309-12						
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF			
<b>Pesticides (EPA 8081A)</b>																	
4,4'-DDD	6.20	mg/kg	NA	-	-	-	ND	0.00016	0.004	2	NA	-	-	ND	0.00008	0.002	1
4,4'-DDE	9.30	mg/kg	NA	-	-	-	ND	0.00019	0.004	2	NA	-	-	ND	0.00009	0.002	1
4,4'-DDT	7.10	mg/kg	NA	-	-	-	ND	0.0002	0.004	2	NA	-	-	ND	0.0001	0.002	1
Aldrin	0.18	mg/kg	NA	-	-	-	ND	0.00017	0.002	2	NA	-	-	ND	0.00009	0.001	1
alpha-BHC	0.24	mg/kg	NA	-	-	-	ND	0.00022	0.002	2	NA	-	-	ND	0.00011	0.001	1
alpha-Chlordane	500.00	mg/kg	NA	-	-	-	ND	0.00021	0.002	2	NA	-	-	ND	0.0001	0.001	1
beta-BHC	0.82	mg/kg	NA	-	-	-	ND	0.0003	0.002	2	NA	-	-	ND	0.00015	0.001	1
Chlordane	NS	mg/kg	NA	-	-	-	ND	0.0022	0.017	2	NA	-	-	ND	0.0011	0.0085	1
delta-BHC	NS	mg/kg	NA	-	-	-	ND	0.00022	0.002	2	NA	-	-	ND	0.00011	0.001	1
Dieldrin	0.09	mg/kg	NA	-	-	-	ND	0.00018	0.004	2	NA	-	-	ND	0.00009	0.002	1
Endosulfan I	0.00	mg/kg	NA	-	-	-	ND	0.00018	0.002	2	NA	-	-	ND	0.00009	0.001	1
Endosulfan II	NS	mg/kg	NA	-	-	-	ND	0.00018	0.004	2	NA	-	-	ND	0.00009	0.002	1
Endosulfan sulfate	3200.00	mg/kg	NA	-	-	-	ND	0.00021	0.004	2	NA	-	-	ND	0.00011	0.002	1
Endrin	160.00	mg/kg	NA	-	-	-	ND	0.00014	0.004	2	NA	-	-	ND	0.00007	0.002	1
Endrin aldehyde	NS	mg/kg	NA	-	-	-	ND	0.00037	0.004	2	NA	-	-	ND	0.00018	0.002	1
Endrin ketone	NS	mg/kg	NA	-	-	-	ND	0.00012	0.004	2	NA	-	-	ND	0.00006	0.002	1
gamma-BHC	2.00	mg/kg	NA	-	-	-	ND	0.00025	0.002	2	NA	-	-	ND	0.00012	0.001	1
gamma-Chlordane	500.00	mg/kg	NA	-	-	-	ND	0.00022	0.002	2	NA	-	-	ND	0.00011	0.001	1
Heptachlor	0.63	mg/kg	NA	-	-	-	ND	0.0002	0.002	2	NA	-	-	ND	0.0001	0.001	1
Heptachlor epoxide	0.33	mg/kg	NA	-	-	-	ND	0.00018	0.002	2	NA	-	-	ND	0.00009	0.001	1
Methoxychlor	2600.00	mg/kg	NA	-	-	-	ND	0.00029	0.01	2	NA	-	-	ND	0.00014	0.005	1
Toxaphene	1.20	mg/kg	NA	-	-	-	ND	0.0072	0.1	2	NA	-	-	ND	0.0036	0.05	1

Notes

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Table 1  
Summary of Soil Results  
Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660

Location			SB-06			SB-07			SB-07			SB-5-10'						
Sample Name			SB-06-35'			SB-07-10'			SB-07-35'			DUP-SS-1A						
Sample Date			3/7/2022			3/8/2022			3/8/2022			3/7/2022						
Laboratory Report			2200309-13			2200318-01			2200318-02			2200309-14						
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Pesticides (EPA 8081A)</b>																		
4,4'-DDD	6.20	mg/kg	NA	-	-	-	ND	0.00008	0.002	1	NA	-	-	-	NA	-	-	-
4,4'-DDE	9.30	mg/kg	NA	-	-	-	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	-
4,4'-DDT	7.10	mg/kg	NA	-	-	-	ND	0.0001	0.002	1	NA	-	-	-	NA	-	-	-
Aldrin	0.18	mg/kg	NA	-	-	-	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	-
alpha-BHC	0.24	mg/kg	NA	-	-	-	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	-
alpha-Chlordane	500.00	mg/kg	NA	-	-	-	ND	0.0001	0.001	1	NA	-	-	-	NA	-	-	-
beta-BHC	0.82	mg/kg	NA	-	-	-	ND	0.00015	0.001	1	NA	-	-	-	NA	-	-	-
Chlordane	NS	mg/kg	NA	-	-	-	ND	0.0011	0.0085	1	NA	-	-	-	NA	-	-	-
delta-BHC	NS	mg/kg	NA	-	-	-	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	-
Dieldrin	0.09	mg/kg	NA	-	-	-	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	-
Endosulfan I	0.00	mg/kg	NA	-	-	-	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	-
Endosulfan II	NS	mg/kg	NA	-	-	-	ND	0.00009	0.002	1	NA	-	-	-	NA	-	-	-
Endosulfan sulfate	3200.00	mg/kg	NA	-	-	-	ND	0.00011	0.002	1	NA	-	-	-	NA	-	-	-
Endrin	160.00	mg/kg	NA	-	-	-	ND	0.00007	0.002	1	NA	-	-	-	NA	-	-	-
Endrin aldehyde	NS	mg/kg	NA	-	-	-	ND	0.00018	0.002	1	NA	-	-	-	NA	-	-	-
Endrin ketone	NS	mg/kg	NA	-	-	-	ND	0.00006	0.002	1	NA	-	-	-	NA	-	-	-
gamma-BHC	2.00	mg/kg	NA	-	-	-	ND	0.00012	0.001	1	NA	-	-	-	NA	-	-	-
gamma-Chlordane	500.00	mg/kg	NA	-	-	-	ND	0.00011	0.001	1	NA	-	-	-	NA	-	-	-
Heptachlor	0.63	mg/kg	NA	-	-	-	ND	0.0001	0.001	1	NA	-	-	-	NA	-	-	-
Heptachlor epoxide	0.33	mg/kg	NA	-	-	-	ND	0.00009	0.001	1	NA	-	-	-	NA	-	-	-
Methoxychlor	2600.00	mg/kg	NA	-	-	-	ND	0.00014	0.005	1	NA	-	-	-	NA	-	-	-
Toxaphene	1.20	mg/kg	NA	-	-	-	ND	0.0036	0.05	1	NA	-	-	-	NA	-	-	-

Notes

Screening Level is the minimum of the June 2020 DTSC Soil

Commercial/Industrial Screening Levels (SLS), HERO HHRA Note No.

3 and the November 2021 EPA Regional Screening Level (RSL)

Industrial Soil Table (THQ=1.0).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

mg/kg - milligrams per kilogram

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

NA - Not Analyzed

## - Sample exceeds respective screening level

## - Screening level exceeded

**TABLE 2**

**Soil Vapor Sample Results Summary**

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	SV-01			SV-01			SV-02			SV-02			SV-03			SV-03		
			Result	RL	DF															
<b>Volatile Organic Compounds (EPA 8260B)</b>																				
1,1,1,2-Tetrachloroethane	1.66	$\mu\text{g/m}^3$	ND	8	1															
1,1,1-Trichloroethane	21900.000	$\mu\text{g/m}^3$	ND	8	1															
1,1,2,2-Tetrachloroethane	0.211	$\mu\text{g/m}^3$	ND	16	1															
1,1,2-Trichloroethane	0.767	$\mu\text{g/m}^3$	ND	8	1															
1,1-Dichloroethane	<b>7.670</b>	$\mu\text{g/m}^3$	ND	8	1															
1,1-Dichloroethene	876.000	$\mu\text{g/m}^3$	ND	8	1															
1,1-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	10	1															
1,2-Dichlorobenzene	876.000	$\mu\text{g/m}^3$	ND	16	1															
1,2,2-Trichlorobenzene	466.667	$\mu\text{g/m}^3$	ND	16	1															
1,2,3-Trichloropropane	0.053	$\mu\text{g/m}^3$	ND	8	1															
1,2,4-Trichlorobenzene	8.760	$\mu\text{g/m}^3$	ND	16	1															
1,2,4-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1															
1,2-Dibromo-3-chloropropane	0.002	$\mu\text{g/m}^3$	ND	8	1															
1,2-Dibromoethane (EDB)	0.020	$\mu\text{g/m}^3$	ND	8	1															
1,2-Dichloroethane	0.472	$\mu\text{g/m}^3$	ND	8	1															
1,2-Dichloropropane	3.310	$\mu\text{g/m}^3$	ND	8	1															
1,3,5-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1															
1,3-Dichlorobenzene	NS	$\mu\text{g/m}^3$	ND	16	1															
1,3-Dichloropropane	11666.667	$\mu\text{g/m}^3$	ND	8	1															
1,4-Dichlorobenzene	1.110	$\mu\text{g/m}^3$	ND	16	1															
2,2-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	16	1															
2-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1															
4-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1															
4-isopropyltoluene	NS	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	23	8	1	ND	23	8	1	ND	23	8	1
Benzene	<b>1.570</b>	$\mu\text{g/m}^3$	ND	8	1															
Bromobenzene	263.000	$\mu\text{g/m}^3$	ND	8	1															
Bromodichloromethane	0.331	$\mu\text{g/m}^3$	ND	8	1															
Bromoform	11.100	$\mu\text{g/m}^3$	ND	8	1															
Carbon tetrachloride	2.040	$\mu\text{g/m}^3$	ND	8	1															
Chlorobenzene	219.000	$\mu\text{g/m}^3$	ND	8	1															
Chloroform	<b>4.533</b>	$\mu\text{g/m}^3$	ND	8	1															
cis-1,2-Dichloroethene	1166.667	$\mu\text{g/m}^3$	ND	8	1															
cis-1,3-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	8	1															
Dibromochloromethane	19.333	$\mu\text{g/m}^3$	ND	8	1															
Dibromomethane	17.500	$\mu\text{g/m}^3$	ND	8	1															
Dichlorodifluoromethane	438.000	$\mu\text{g/m}^3$	ND	16	1															
Dicloropivalether	3070.000	$\mu\text{g/m}^3$	ND	40	1															
Ethylbenzene	<b>4.910</b>	$\mu\text{g/m}^3$	ND	8	1															
Ethyl-tert-butylether	153.000	$\mu\text{g/m}^3$	ND	40	1															
Freon 113	21900.000	$\mu\text{g/m}^3$	ND	16	1															
Heptachlorobutadiene	0.557	$\mu\text{g/m}^3$	ND	24	1															
Isopropylbenzene	1750.000	$\mu\text{g/m}^3$	ND	8	1															
m,p-Xylene	NS	$\mu\text{g/m}^3$	ND	16	1															
Methylene chloride	400.000	$\mu\text{g/m}^3$	ND	8	1															
MTBE	47.200	$\mu\text{g/m}^3$	ND	40	1															
Naephthalene	0.361	$\mu\text{g/m}^3$	ND	40	1															
n-Butylbenzene	29333.333	$\mu\text{g/m}^3$	ND	12	1															
n-Propylbenzene	4380.000	$\mu\text{g/m}^3$	ND	8	1															
o-Xylene	438.000	$\mu\text{g/m}^3$	ND	8	1															
sec-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1															
Styrene	4380.000	$\mu\text{g/m}^3$	ND	8	1															
tert-Butylmethylether	NS	$\mu\text{g/m}^3$	ND	40	1															
tert-Butylalcohol	21900.000	$\mu\text{g/m}^3$	ND	400	1															
tert-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1															
Tetrachloroethene	<b>47.200</b>	$\mu\text{g/m}^3$	10	8	1	14	8	1	18	8	1	21	8	1	14	8	1	21	8	1
Toluene	21900.000	$\mu\text{g/m}^3$	ND	8	1															
trans-1,2-Dichloroethene	175.000	$\mu\text{g/m}^3$	ND	8	1															
trans-1,3-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	8	1															
Trichloroethene	<b>2.990</b>	$\mu\text{g/m}^3$	ND	8	1															
Trichlorofluoromethane	179666.667	$\mu\text{g/m}^3$	ND	16	1															
Vinyl chloride	<b>2.790</b>	$\mu\text{g/m}^3$	ND	8	1															
<b>Fixed Gases (ASTM D1946)</b>		NS	%	ND	0.030	-	ND	0.030												

Notes  
 Screening Level is the minimum of the June 2020 DTSC Ambient Air Commercial/Industrial Screening Levels (SLs), HERO HTRA No. 3 divided by an attenuation factor of 0.00

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	Location		SV-04		SV-04		SV-05		SV-05		SV-05		SV-05		SV-05	
			Sample ID		SV-04-5		SV-04-15		SV-05-5		SV-05-25		SV-05-40		SV-05-5		SV-06	
			Sample Date		4/2/2023	4/2/2023	4/2/2023		4/2/2023		4/2/2023		4/2/2023		4/2/2023		4/2/2023	
			Laboratory Report		ST-19464		ST-19464		ST-19464		ST-19464		ST-19464		ST-19464		G-0422	
<b>Volatile Organic Compounds (EPA 8260B)</b>																		
1,1,1,2-Tetrachloroethane	1.66	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
	21900.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1,2-Trichloroethane	0.211	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,1,2-Trichloroethane	0.767	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloroethane	<b>7.670</b>	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloroethene	876.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloropropane	NS	µg/m³	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND
1,2-Dichlorobenzene	876.000	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,3-Trichlorobenzene	466.667	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,3-Trichloropropane	0.053	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2,4-Trichlorobenzene	8.760	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,4-Timethylbenzene	263.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,3-Dichlorobenzene	NS	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,3-Dichloropropane	11666.667	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,4-Dichlorobenzene	1.110	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
2,2-Dichloropropane	NS	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
2-Chlorotoluene	11666.667	µg/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
4-Chlorotoluene	11666.667	µg/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
4-Isopropyltoluene	NS	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Benzene	<b>1.570</b>	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Bromobenzene	263.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Bromodichloromethane	0.331	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Bromoform	11.100	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Carbon tetrachloride	2.040	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Chlorobenzene	219.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Chloroform	<b>0.533</b>	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
cis-1,2-Dichloroethene	11666.667	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
cis-1,3-Dichloropropene	NS	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dibromoethane	19.333	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dibromomethane	17.500	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dichlorodifluoromethane	438.000	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
Diisopropylether	307.000	µg/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Ethylbenzene	<b>4.910</b>	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Ethyl-tert-butylether	153.000	µg/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Fraen 113	21900.000	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
Hexachlorobutadiene	0.557	µg/m³	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND
Isopropylbenzene	175.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
m,p-Xylene	NS	µg/m³	21	16	1	31	16	1	853	16	1	82	16	1	1160	16	1	ND
Methylene chloride	400.000	µg/m³	ND	10	8	1	16	8	1	ND	8	1	ND	8	1	ND	8	1
MTBE	47.200	µg/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Naphthalene	0.361	µg/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
o-Butylbenzene	2933.333	µg/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
p-Propylbenzene	4380.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
p-Xylene	438.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
sec-Butylbenzene	6000.000	µg/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
Styrene	4380.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Terti-Butylmethylether	NS	µg/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Terti-Butylbenzene	21900.000	µg/m³	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND
Tetrachloroethene	<b>47.200</b>	µg/m³	<b>69</b>	8	1	<b>78</b>	8	1	19	8	1	<b>126</b>	8	1	<b>195</b>	8	1	17
Toluene	21900.000	µg/m³	27	8	1	90	8	1	508	8	1	68	8	1	926	8	1	44
trans-1,2-Dichloroethene	175.000	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
trans-1,3-Dichloropropene	NS	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Trichloroethene	<b>2.990</b>	µg/m³	ND	8	1	<b>57</b>	8	1	ND	8	1	<b>93</b>	8	1	<b>210</b>	8	1	ND
Trichlorofluoromethane	17666.667	µg/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
Vinyl chloride	<b>2.790</b>	µg/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
<b>Fixed Gases (ASTM D1946)</b>			NS	%	ND	0.023	-	ND	0.023	-	ND	0.023	-	ND	0.023	-	ND	0.030
Methane																		

Notes

Screening Level is the minimum of the June 2020 DTSC Ambient Air Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No. 3 divided by an attenuation factor of 1000 and the EPA Commercial/Industrial Vapor Intrusion Screening Levels (VSLs) as of March 1, 2022 (THD=1.0).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

µg/m³ - micrograms per cubic meter

ND - Not Detected

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

■ - Sample exceeds respective screening level

■■ - Screening level exceeded

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	SV-05			SV-06			SV-07			SV-07			SV-08		
			Sample Results			Sample Results			Sample Results			Sample Results			Sample Results		
			Sample Date	3/10/2023	3/10/2023												
			Laboratory Report	G-0422	G-0422	Laboratory Report	E-1263										
<b>Volatile Organic Compounds (EPA 8260B)</b>																	
1,1,2-Tetrachloroethane	1.66	$\mu\text{g/m}^3$	ND	8	1												
	21900.000																
1,1,1-Trichloroethane	0.211	$\mu\text{g/m}^3$	ND	8	1												
1,1,2,2-Tetrachloroethane	0.767	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	16	1	ND	16	1
1,1,2-Trichloroethane	0.767	$\mu\text{g/m}^3$	ND	8	1												
1,1-Dichloroethane	<b>7.670</b>	$\mu\text{g/m}^3$	ND	8	1	<b>36</b>	8	1	ND	8	1	ND	8	1	ND	8	1
1,1-Dichloroethene	876.000	$\mu\text{g/m}^3$	15	8	1	97	8	1	ND	8	1	12	8	1	28	8	1
1,1-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	10	1												
1,2-Dichlorobenzene	876.000	$\mu\text{g/m}^3$	ND	16	1												
1,2,3-Trichlorobenzene	466.667	$\mu\text{g/m}^3$	ND	16	1												
1,2,3-Trichloropropane	0.053	$\mu\text{g/m}^3$	ND	8	1												
1,2,4-Trichlorobenzene	8.760	$\mu\text{g/m}^3$	ND	16	1												
1,2,4-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1												
1,3-Dichlorobenzene	NS	$\mu\text{g/m}^3$	ND	16	1												
1,3-Dichloropropane	11666.667	$\mu\text{g/m}^3$	ND	8	1												
1,4-Dichlorobenzene	1.110	$\mu\text{g/m}^3$	ND	16	1												
2,2-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	16	1												
2-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1												
4-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1												
4-isopropenyltoluene	NS	$\mu\text{g/m}^3$	32	8	1	16	8	1	24	8	1	74	8	1	28	8	1
Benzene	<b>1.570</b>	$\mu\text{g/m}^3$	ND	8	1	<b>26</b>	8	1									
Bromobenzene	263.000	$\mu\text{g/m}^3$	ND	8	1												
Bromodichromethane	0.331	$\mu\text{g/m}^3$	ND	8	1												
Bromoform	11.100	$\mu\text{g/m}^3$	ND	8	1												
Carbon tetrachloride	2.040	$\mu\text{g/m}^3$	ND	8	1												
Chlorobenzene	219.000	$\mu\text{g/m}^3$	ND	8	1												
Chloroform	<b>0.533</b>	$\mu\text{g/m}^3$	ND	8	1												
cis-1,2-Dichloroethene	1166.667	$\mu\text{g/m}^3$	13	8	1	51	8	1	ND	8	1	ND	8	1	ND	8	1
cis-1,3-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	8	1												
Dibromochloromethane	19.333	$\mu\text{g/m}^3$	ND	8	1												
Dibromomethane	17.500	$\mu\text{g/m}^3$	ND	8	1												
Dichlorodifluoromethane	438.000	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	34	16	1	ND	16	1
Diacetoneether	3070.000	$\mu\text{g/m}^3$	ND	40	1												
Ethylbenzene	<b>4.910</b>	$\mu\text{g/m}^3$	ND	8	1												
Ethyl-tert-butylether	153.000	$\mu\text{g/m}^3$	ND	40	1												
Fracon 113	21900.000	$\mu\text{g/m}^3$	ND	16	1	99	16	1	17	16	1	116	16	1	56	16	1
Hexachlorobutadiene	0.557	$\mu\text{g/m}^3$	ND	24	1												
Isopropylbenzene	1750.000	$\mu\text{g/m}^3$	ND	8	1												
m-Xylene	NS	$\mu\text{g/m}^3$	ND	16	1												
Methylene chloride	400.000	$\mu\text{g/m}^3$	ND	8	1												
MTBE	47.200	$\mu\text{g/m}^3$	ND	40	1												
Naphthalene	0.361	$\mu\text{g/m}^3$	ND	40	1												
o-Biphenyl	29333.333	$\mu\text{g/m}^3$	ND	12	1												
o-Propylbenzene	4380.000	$\mu\text{g/m}^3$	ND	8	1												
p-Xylene	438.000	$\mu\text{g/m}^3$	ND	8	1												
sec-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1												
Styrene	4380.000	$\mu\text{g/m}^3$	ND	8	1												
tert-amylnethylether	NS	$\mu\text{g/m}^3$	ND	40	1												
tert-Butylalcohol	21900.000	$\mu\text{g/m}^3$	ND	400	1												
tert-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1												
Tetrachloroethene	<b>47.200</b>	$\mu\text{g/m}^3$	<b>120</b>	8	1	<b>328</b>	8	1	31	8	1	<b>91</b>	8	1	<b>113</b>	8	1
Toluene	21900.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	14	8	1	8	8	1	12	8	1
trans-1,2-Dichloroethene	175.000	$\mu\text{g/m}^3$	ND	8	1												
trans-1,3-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	8	1												
Trichloroethene	<b>2.890</b>	$\mu\text{g/m}^3$	<b>135</b>	8	1	<b>432</b>	8	1	ND	8	1	<b>41</b>	8	1	<b>124</b>	8	1
Trichlorofuscomethane	17666.667	$\mu\text{g/m}^3$	ND	16	1												
Vinyl chloride	<b>2.790</b>	$\mu\text{g/m}^3$	ND	8	1												
<b>Fixed Gases (ASTM D1946)</b>		NS	%	ND	0.030	-	ND	0.030									
Methane																	

Notes

Screening Level is the minimum of the June 2020 DTSC Ambient Air Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No. 3 divided by an attenuation factor of 100 and the EPA Commercial Vapor Intrusion Screening Levels (VSLs) generated on March 15, 2022 (THQ=1.0).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

$\mu\text{g/m}^3$  - micrograms per cubic meter

ND - Not Detected

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

**■** Sample exceeds respective screening level

**■** Screening level exceeded

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	SV-08			SV-09			SV-09			SV-10			SV-10						
			SV-08-15			SV-09-5			SV-09-25			SV-09-45			SV-10-5						
			3/01/2022			3/11/2022			3/11/2022			3/11/2022			3/10/2022						
Laboratory Report:																					
Volatile Organic Compounds (EPA 8260B)	G-0422	E-1263	Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF	
1,1,1,2-Tetrachloroethane	1.66	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1,1-Trichloroethane	2190.00	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1,2,2-Tetrachloroethane	0.211	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,1,2-Trichloroethane	0.767	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloroethane	<b>7.670</b>	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	<b>105</b>	8	1	<b>58</b>	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloroethene	876.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	743	8	1	668	8	1	ND	8	1	ND	8	1	ND
1,1-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND
1,2-Dichlorobenzene	876.000	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,3-Trichlorobenzene	466.667	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,3-Trichloropropene	0.053	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2,4-Trichlorobenzene	8.760	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,2,4-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	20	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2-Dibromo-3-chloropropane	0.002	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2-Dibromoethane (EDB)	0.020	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2-Dibromopropane	0.472	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,2-Dichloropropane	3.310	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,3,5-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	29	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,3-Dichlorobenzene	NS	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
1,3-Dichloropropane	1166.667	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
1,4-Dichlorobenzene	1.110	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
2,2-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND
2-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
4-Chlorotoluene	11666.667	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
4-Isononyltoluene	NS	$\mu\text{g/m}^3$	ND	8	1	34	8	1	84	8	1	11	8	1	38	8	1	12	8	1	ND
Benzene	<b>1.570</b>	$\mu\text{g/m}^3$	ND	8	1	<b>11</b>	8	1	<b>13</b>	8	1	ND	8	1	<b>11</b>	8	1	ND	8	1	ND
Bromobenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Bromodichloromethane	0.331	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Bromoform	11.100	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Carbon tetrachloride	2.040	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Chlorobenzene	219.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Chloroform	<b>0.533</b>	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	<b>34</b>	8	1	<b>33</b>	8	1	ND	8	1	ND	8	1	ND
cis-1,2-Dichloroethene	1166.667	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	358	8	1	274	8	1	ND	8	1	ND	8	1	ND
cis-1,3-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dibromo-chloromethane	19.333	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dibromomethane	17.500	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Dichlorodifluoromethane	438.000	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	79	16	1	181	16	1	ND	16	1	ND	16	1	ND
Di-isopropylether	3070.000	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Ethylenes	<b>4.910</b>	$\mu\text{g/m}^3$	ND	8	1	<b>14</b>	8	1	<b>8</b>	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Ethyl-tert-butylether	153.000	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
Freon 113	21900.000	$\mu\text{g/m}^3$	ND	16	1	29	16	1	211	16	1	375	16	1	ND	16	1	22	16	1	ND
Hexachlorobutadiene	0.557	$\mu\text{g/m}^3$	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND
Isopropylbenzene	1750.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
m,p-Xylene	NS	$\mu\text{g/m}^3$	ND	16	1	59	16	1	27	16	1	ND	16	1	ND	16	1	16	16	1	ND
sec-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
Styrene	4380.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Tetramethylmethylether	NS	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND
tert-Butylalcohol	21900.000	$\mu\text{g/m}^3$	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND
tert-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND
Tetrachloroethene	<b>47.200</b>	$\mu\text{g/m}^3$	<b>98</b>	8	1	<b>65</b>	8	1	<b>1460</b>	8	1	<b>1390</b>	8	1	<b>74</b>	8	1	<b>267</b>	8	1	ND
Toluene	21900.000	$\mu\text{g/m}^3$	ND	8	1	27	8	1	63	8	1	ND	8	1	16	8	1	ND	8	1	ND
trans-1,2-Dichloroethene	175.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	13	8	1	11	8	1	ND	8	1	8	1	ND	8
trans-1,3-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND
Trichloroethene	<b>2.990</b>	$\mu\text{g/m}^3$	<b>35</b>	8	1	ND	8	1	<b>949</b>	8	1	<b>593</b>	8	1	<b>58</b>	8	1	<b>58</b>	8	1	ND
Trichlorofluoromethane	176666.667	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	45	16	1	70	16	1	ND	16	1	16	1	ND	16
Vinyl chloride	<b>2.790</b>	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	<b>18</b>	8	1	ND	8	1	ND	8	1	ND
<b>Fixed Gases (ASTM D1946)</b>		NS	%	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-
Methane		NS	%	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND</								

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 72103501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	SV-11		SV-11'		SV-12		SV-12'		SV-13		SV-13'	
			Sample No.		SV-11-5'		SV-11-15'		SV-12-5'		SV-12-15'		SV-13-5'	
			Sample Date		3/10/2022		3/10/2022		3/10/2022		3/10/2022		3/10/2022	
		Laboratory Report	E-1262		E-1262		E-1263		E-1263		E-1262		G-0422	
<b>Volatile Organic Compounds (EPA 8260B)</b>														
1,1,2-Tetrachloroethane	1.66	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
	21900.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1,2-Trichloroethane	0.211	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,1,2-Trichloroethene	0.767	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1-Dichloroethane	<b>7.670</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1-Dichloroethene	876.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1-Dichloropropane	NS	ug/m³	ND	10	1	ND	10	1	ND	10	1	ND	10	1
1,2-Dichlorobenzene	876.000	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,3-Trichlorobenzene	466.667	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,3-Trichloropropane	0.053	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2,4-Trichlorobenzene	8.760	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,4-Trimethylbenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,3-Dichlorobenzene	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,3-Dichloropropane	11666.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,4-Dichlorobenzene	1.110	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
2,2-Dichloropropane	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
2-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1
4-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1
4-Isopropyltoluene	NS	ug/m³	165	8	1	46	8	1	10	8	1	9	8	1
Benzene	<b>1.570</b>	ug/m³	<b>14</b>	8	1	ND	8	1	ND	8	1	ND	8	1
Bromobenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Bromodichloromethane	0.331	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Bromoform	11.100	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Carbon tetrachloride	2.040	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Chlorobenzene	219.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Chloroform	<b>0.533</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
cis-1,2-Dichloroethene	11666.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
cis-1,3-Dichloropropene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dibromoethane	19.333	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dibromomethane	17.500	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dichlorodifluoromethane	438.000	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
Diisopropylether	307.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Diisobutylene	NS	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Ethylbenzene	<b>4.910</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Ethyl tert-butyl ether	153.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Freon 113	21900.000	ug/m³	ND	16	1	49	16	1	ND	16	1	ND	16	1
Hexachlorobutadiene	0.557	ug/m³	ND	24	1	ND	24	1	ND	24	1	ND	24	1
Isopropylbenzene	175.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
m,p-Xylene	NS	ug/m³	ND	16	1	28	16	1	ND	16	1	ND	16	1
Methylene chloride	400.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
MTBE	47.200	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Naphthalene	0.361	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
n-Butylbenzene	29333.333	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1
n-Propylbenzene	4380.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
p-Xylene	438.000	ug/m³	11	8	1	ND	8	1	ND	8	1	ND	8	1
sec-Butylbenzene	60000.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1
Styrene	4380.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Terti-ethylmethylether	NS	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Terti-Butylalcohol	21900.000	ug/m³	ND	400	1	ND	400	1	ND	400	1	ND	400	1
Terti-Butylbenzene	60000.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1
Tetrachloroethene	<b>47.200</b>	ug/m³	<b>71</b>	8	1	<b>230</b>	8	1	<b>52</b>	8	1	<b>80</b>	8	1
Toluene	21900.000	ug/m³	57	8	1	10	8	1	ND	8	1	11	8	1
trans-1,2-Dichloroethylene	175.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
trans-1,3-Dichloropropene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Trichloroethene	<b>2.990</b>	ug/m³	ND	8	1	<b>15</b>	8	1	ND	8	1	ND	8	1
Trichlorofluoromethane	176666.667	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1
Vinyl chloride	<b>2.790</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1
<b>Fixed Gases (ASTM D1946)</b>														
Methane	NS	%	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-

Notes  
Screening Level is the minimum of the June 2020 DTSC Ambient Air Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No. 3 divided by an attenuation factor of 1000 and the EPA Commercial/Industrial Vapor Intrusion Screening Levels (VILs) calculated on March 11, 2022 (THD=1.0).  
DTSC - Department of Toxic Substances Control  
EPA - Environmental Protection Agency  
ug/m³ - micrograms per cubic meter  
ND - Not Detected  
RL - Reporting Limit  
DF - Dilution Factor  
NS - No Standard  
■ ■ ■ - Sample exceeds respective screening level  
■ ■ - Screening level exceeded

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	SV-14			SV-14			SV-14			SV-15			SV-15			SV-15		
			SV-14			SV-14			SV-15			SV-15			SV-15			SV-15		
			Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF	Result	RL	DF
<b>Volatile Organic Compounds (EPA 8260B)</b>																				
1,1,2-Tetrachloroethane	1.66	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1,2-Trichloroethane	2190.00	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1,2,2-Tetrachloroethane	0.211	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,1,2-Trichloroethene	0.767	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,1-Dichloroethane	<b>7.670</b>	$\mu\text{g/m}^3$	ND	8	1	<b>215</b>	8	1	ND	8	1	ND	8	1	ND	8	1	<b>62</b>	8	1
1,1-Dichloroethene	876.000	$\mu\text{g/m}^3$	ND	8	1	316	8	1	12	8	1	ND	8	1	ND	8	1	215	8	1
1,1-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1
1,2-Dichlorobenzene	876.000	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,3-Trichlorobenzene	466.667	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,3-Trichloropropane	0.053	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2,4-Trichlorobenzene	8.760	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,2,4-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2-Dibromo-3-chloropropane	0.002	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2-Dibromoethane (EDB)	0.020	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2-Dichloropropane	0.472	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,2-Dichloropropane	3.310	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,3,5-Trimethylbenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,3-Dichlorobenzene	NS	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
1,3-Dichloropropane	11666.667	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
1,4-Dichlorobenzene	1.110	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
2,2-Dichloropropane	NS	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1
2-Chirotolene	11666.667	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1
4-Chirotolene	11666.667	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1
4-Isoxyltolene	NS	$\mu\text{g/m}^3$	76	8	1	9	8	1	219	8	1	35	8	1	116	8	1	9	8	1
Benzene	<b>1.570</b>	$\mu\text{g/m}^3$	ND	8	1	<b>22</b>	8	1	<b>14</b>	8	1	ND	8	1	<b>21</b>	8	1	ND	8	1
Bromobenzene	263.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Bromodichloromethane	0.331	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Bromoform	11.100	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Carbon tetrachloride	2.040	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Chlorobenzene	219.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Chloroform	<b>0.533</b>	$\mu\text{g/m}^3$	<b>14</b>	8	1	ND	8	1	<b>10</b>	8	1	ND	8	1	ND	8	1	ND	8	1
cis-1,2-Dichloroethene	1166.667	$\mu\text{g/m}^3$	ND	8	1	635	8	1	28	8	1	ND	8	1	8	8	1	128	8	1
cis-1,3-Dichloroethene	NS	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dibromoethane	19.333	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dibromomethane	17.500	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Dichlorofluoromethane	438.000	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	69	16	1
Disorvosolether	3070.000	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Ethybenzene	<b>4.910</b>	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	<b>16</b>	8	1	ND	8	1
Ethyl-tert-butylether	153.000	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1
Freon 113	21900.000	$\mu\text{g/m}^3$	ND	16	1	424	16	1	77	16	1	67	16	1	428	16	1	1990	16	1
Hexachlorobutadiene	0.557	$\mu\text{g/m}^3$	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1
Isopropylbenzene	1750.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
m,p-Xylene	NS	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	66	16	1	ND	16	1
sec-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1
Styrene	4380.000	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Tetramethylmethylether	NS	$\mu\text{g/m}^3$	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1
tert-Butylalcohol	21900.000	$\mu\text{g/m}^3$	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1
tert-Butylbenzene	60000.000	$\mu\text{g/m}^3$	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1
Tetrachloroethene	<b>47.200</b>	<b>258</b>	8	1	<b>5210</b>	8	1	<b>518</b>	8	1	<b>1260</b>	8	1	<b>6040</b>	8	1	<b>20700</b>	8	1	
Toluene	21900.000	$\mu\text{g/m}^3$	25	8	1	8	8	1	79	8	1	22	8	1	105	8	1	ND	8	1
trans-1,2-Dichloroethene	175.000	$\mu\text{g/m}^3$	ND	8	1	152	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
trans-1,3-Dichloropropene	NS	$\mu\text{g/m}^3$	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1
Trichloroethene	<b>2.990</b>	$\mu\text{g/m}^3$	<b>27</b>	8	1	<b>1840</b>	8	1	<b>73</b>	8	1	<b>25</b>	8	1	<b>153</b>	8	1	<b>1410</b>	8	1
Trichlorofluoromethane	176666.667	$\mu\text{g/m}^3$	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	77	16	1
Vinyl chloride	<b>2.790</b>	$\mu\text{g/m}^3$	ND	8	1	<b>1890</b>	8	1	<b>62</b>	8	1	ND	8	1	ND	8	1	<b>359</b>	8	1
Methane	NS	%	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-	ND	0.030	-

Notes:  
 Screening Level is the minimum of the June 2020 DTSC Ambient Air

Commercial/Industrial Screening Levels (SLs), HERO HHRA Note No. 3 divided by an attenuation factor of 10 and the EPA Commercial Vapor Intrusion Screening Levels

(USL) generated on March 1, 2022 (THD-1).

DTSC - Department of Toxic Substances Control

EPA - Environmental Protection Agency

$\mu\text{g/m}^3$  - micrograms per cubic meter

ND - Not Detected

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

# - Sample exceeds respective screening level

## - Screening level exceeded

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	Location			SV-16			SV-16			SV-16			SV-17			SV-17			SV-17				
			Sample Name			SV-16-5			SV-16-25			SV-16-45			SV-17-5			SV-17-25			SV-17-40'				
			Sample Date			3/10/2022			3/10/2022			3/10/2022			4/2/2022			4/2/2022			4/2/2022				
<b>Laboratory Report</b>																									
			E-1262			E-1262			E-1262			E-1262			ST-19464			ST-19464			ST-19464			ST-19464	
<b>Volatile Organic Compounds (EPA 8260B)</b>																									
1,1,2-Tetrachloroethane	1.66	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,1,2-Trichloroethane	21900.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,1,2-Tetrachloroethene	0.211	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
1,1,2-Trichloroethene	0.767	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,1-Dichloroethane	<b>7.670</b>	ug/m³	ND	8	1	ND	8	1	ND	<b>9</b>	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,1-Dichloroethene	876.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,1-Dichloropropane	NS	ug/m³	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10
1,2-Dichlorobenzene	876.000	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
1,2,3-Trichlorobenzene	466.667	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
1,2,3-Trichloropropane	0.053	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,2,4-Trichlorobenzene	8.760	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
1,2,4-Trimethylbenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,2-Dibromo-3-chloropropane	0.002	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,2-Dibromoethane (EDB)	0.020	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,2-Dibromoethane	0.472	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,2-Dichloropropane	3.310	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,3,5-Trimethylbenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,3-Dichlorobenzene	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
1,3-Dichloropropane	11666.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
1,4-Dichlorobenzene	1.110	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
2,2-Dichloropropane	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
2-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12
4-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12
4-isopropyltoluene	NS	ug/m³	ND	8	1	33	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Benzene	<b>1.570</b>	ug/m³	ND	8	1	<b>10</b>	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Bromobenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Bromodichloromethane	0.331	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Bromoform	11.100	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Carbon tetrachloride	2.040	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Chlorobenzene	219.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Chloroform	<b>0.533</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
cis-1,2-Dichloroethene	1166.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
cis-1,3-Dichloroethene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Dibromochloromethane	19.333	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Dibromomethane	17.500	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Dichlorofluoromethane	438.000	ug/m³	ND	16	1	21	16	1	66	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
Di-isopropylether	3070.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40
Ethylenecne	<b>4.910</b>	ug/m³	ND	8	1	ND	8	1	<b>14</b>	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Ethyl-tert-butylether	153.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40
Freon 113	21900.000	ug/m³	46	16	1	255	16	1	1720	16	1	ND	16	1	89	16	1	559	16	1	ND	16	1	ND	16
Hexachlorobutadiene	0.557	ug/m³	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24
Isopropylbenzene	1750.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
m,p-Xylene	NS	ug/m³	ND	16	1	42	16	1	29	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16
Styrene	4380.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
tert-Butylmethylether	NS	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40
tert-Butylbenzene	21900.000	ug/m³	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400
tert-Butylbenzene	60000.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12
Tetrachloroethene	<b>47.200</b>	ug/m³	<b>1630</b>	8	1	<b>4360</b>	8	1	<b>22400</b>	8	1	ND	8	1	<b>260</b>	8	1	<b>6840</b>	8	1	<b>8</b>	<b>1</b>	<b>ND</b>	<b>8</b>	
Toluene	21900.000	ug/m³	8	1	14	8	1	9	8	1	22	8	1	39	8	1	42	8	1	42	8	1	ND	8	
trans-1,2-Dichloroethene	175.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
trans-1,3-Dichloropropene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8
Trichloroethene	<b>2.990</b>	ug/m³	<b>53</b>	8	1	<b>96</b>	8	1	<b>1400</b>	8	1	ND	8	1	<b>17</b>	8	1	<b>522</b>	8	1	<b>1</b>	<b>ND</b>	<b>8</b>	<b>1</b>	

**Table 2**  
**Summary of Soil Vapor Results**  
**Project 72103501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	Location			SV-1B			SV-1B			SV-1B			SV-1B			SV-1B			SV-1B					
			Sample Name			SV-1B-5			SV-1B-15			SV-1B-5			SV-1B-15			SV-1B-5			SV-1B-15					
			Sample Date			3/11/2022			3/11/2022			3/11/2022			3/11/2022			3/11/2022			3/11/2022					
Laboratory Report																										
			E-1263			E-1263			E-1263			E-1263			E-1263			E-1263			E-1263			E-1263		
<b>Volatile Organic Compounds (EPA 8260B)</b>																										
1,1,2-Tetrachloroethane	1.66	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,1,2-Trichloroethane	21900.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,1,2-Tetrachloroethene	0.211	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
1,1,2-Trichloroethene	0.767	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,1-Dichloroethane	<b>7.670</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,1-Dichloroethene	876.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,1-Dichloropropane	NS	ug/m³	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	1	ND	10	
1,2-Dichlorobenzene	876.000	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
1,2,3-Trichlorobenzene	466.667	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
1,2,3-Trichloropropane	0.053	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,2,4-Trichlorobenzene	8.760	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
1,2,4-Trimethylbenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,2-Dibromo-3-chloropropane	0.002	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,2-Dibromoethane (EDB)	0.020	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,2-Dibromoethane	0.472	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,2-Dichloropropane	3.310	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,3,5-Trimethylbenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,3-Dichlorobenzene	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
1,3-Dichloropropane	11666.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
1,4-Dichlorobenzene	1.110	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
2,2-Dichloropropane	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
2-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	
4-Chlorotoluene	11666.667	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	
4-isopropyltoluene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Benzene	<b>1.570</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Bromobenzene	263.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Bromodichloromethane	0.331	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Bromoform	11.100	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Carbon tetrachloride	2.040	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Chlorobenzene	219.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Chloroform	<b>0.533</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
cis-1,2-Dichloroethene	1166.667	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
cis-1,3-Dichloroethene	NS	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Dibromochloromethane	19.333	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Dibromomethane	17.500	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Dichlorofluoromethane	438.000	ug/m³	ND	16	1	68	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
Di-isopropylether	3070.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	
Ethylenecne	<b>4.910</b>	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
Ethyl-tert-butylether	153.000	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	
Freon 113	21900.000	ug/m³	ND	16	1	70	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
Hexachlorobutadiene	0.557	ug/m³	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	1	ND	24	
Isopropylbenzene	1750.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	
m,p-Xylene	NS	ug/m³	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	1	ND	16	
o,Xylene	438.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
sec-Butylbenzene	60000.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	
Styrene	438.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
tert-Amyl methyl ether	NS	ug/m³	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	1	ND	40	
tert-Butyl alcohol	21900.000	ug/m³	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	1	ND	400	
tert-Butylbenzene	60000.000	ug/m³	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	1	ND	12	
Tetrachloroethene	<b>47.200</b>	ug/m³	<b>97</b>	8	1	<b>695</b>	8	1	<b>57</b>	8	1	<b>871</b>	8	1	<b>21</b>	8	1	<b>422</b>	8	1	<b>1</b>	<b>422</b>	8	1	<b>1</b>	<b>422</b>
Toluene	21900.000	ug/m³	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	1	ND	8	
trans-1,2-Dichloroethene	175.000	ug/m³	ND	8	1	ND	8	1	ND	8																

### **TABLE 3**

### **Groundwater Sample Results Summary**

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			MW-1			MW-3			MW-5					
Sample Name			MW-1			MW-3			MW-5					
Sample Date			3/10/2022			3/11/2022			3/9/2022					
Laboratory Report			2200342-03			2200355			2200333-04					
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Title 22 Metals (EPA 6010B)</b>														
Antimony	1.00	µg/L	ND	8.8	10	1	ND	8.8	10	1	ND	8.8	10	1
Arsenic	<b>0.00</b>	µg/L	ND	7.8	10	1	ND	7.8	10	1	ND	7.8	10	1
Barium	2000.00	µg/L	390	2.6	3	1	100	2.6	3	1	130	2.6	3	1
Beryllium	<b>1.00</b>	µg/L	<b>4.9</b>	1.6	3	1	ND	1.6	3	1	ND	1.6	3	1
Cadmium	NS	µg/L	ND	2.4	3	1	ND	2.4	3	1	ND	2.4	3	1
Chromium	NS	µg/L	120	2	3	1	17	2	3	1	4.6	2	3	1
Cobalt	<b>6.01</b>	µg/L	<b>15</b>	1.6	3	1	ND	1.6	3	1	ND	1.6	3	1
Copper	300.00	µg/L	110	3.8	9	1	13	3.8	9	1	ND	3.8	9	1
Lead	<b>0.20</b>	µg/L	<b>6.6</b>	4.7	5	1	ND	4.7	5	1	ND	4.7	5	1
Molybdenum	99.83	µg/L	11	3	5	1	7.5	3	5	1	ND	3	5	1
Nickel	<b>12.00</b>	µg/L	<b>58</b>	4.6	5	1	ND	4.6	5	1	ND	4.6	5	1
Selenium	30.00	µg/L	ND	9.3	10	1	ND	9.3	10	1	ND	9.3	10	1
Silver	94.05	µg/L	12	2.4	3	1	4.2	2.4	3	1	4.2	2.4	3	1
Thallium	0.10	µg/L	ND	8.5	15	1	ND	8.5	15	1	ND	8.5	15	1
Vanadium	<b>50.00</b>	µg/L	<b>86</b>	2.2	3	1	37	2.2	3	1	39	2.2	3	1
Zinc	6000.59	µg/L	220	5.7	25	1	110	5.7	25	1	91	5.7	25	1
<b>Mercury (EPA 7470A)</b>														
Mercury	<b>0.06</b>	µg/L	<b>0.4</b>	0.05	0.2	1	<b>0.28</b>	0.05	0.2	1	ND	0.05	0.2	1

Notes

Screening Level is the minimum of the 2019 Rev 2 Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

\*\* Historical records from California Water Boards Groundwater Ambient Monitoring & Assessment Program (GAMA) Groundwater Information System

µg/L - micrograms per liter

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

**##** - Sample exceeds respective screening level

**##** - Screening level exceeded

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			102226**		102227**		102228**		102229**		102230**	
Sample Name			102226		102227		102228		102229		102230	
Sample Date			4/1/2016		4/1/2016		4/1/2016		4/1/2016		4/1/2016	
Laboratory Report			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Analyte												
<b>Title 22 Metals (EPA 6010B)</b>												
Antimony	1.00	µg/L	ND	1	ND	1	ND	1	ND	1	ND	1
Arsenic	<b>0.00</b>	µg/L	ND	1		1	<b>4.5</b>	1	ND	1	<b>4.1</b>	1
Barium	2000.00	µg/L	15	2	70	2	43	2	37	2	54	2
Beryllium	<b>1.00</b>	µg/L	ND	1	ND	1	ND	1	ND	1	ND	1
Cadmium	NS	µg/L	ND	1	ND	1	ND	1	ND	1	ND	1
Chromium	NS	µg/L	ND	1	ND	1	ND	1	ND	1	ND	1
Cobalt	<b>6.01</b>	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	300.00	µg/L	ND	2	ND	2	ND	2	ND	2	ND	2
Lead	<b>0.20</b>	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Molybdenum	99.83	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	<b>12.00</b>	µg/L	ND	5	ND	5	ND	5	ND	5	ND	5
Selenium	30.00	µg/L	ND	5	ND	5	ND	5	5.3	5	ND	5
Silver	94.05	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Thallium	0.10	µg/L	ND	1	ND	1	ND	1	ND	1	ND	1
Vanadium	<b>50.00</b>	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	6000.59	µg/L	ND	20	ND	20	ND	20	ND	20	ND	20
<b>Mercury (EPA 7470A)</b>												
Mercury	<b>0.06</b>	µg/L	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2

Notes

Screening Level is the minimum of the 2019 Rev 2 Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

\*\* Historical records from California Water Boards Groundwater Ambient Monitoring & Assessment Program (GAMA) Groundwater Information System

µg/L - micrograms per liter

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

**##** - Sample exceeds respective screening level

**##** - Screening level exceeded

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92600**

Analyte	Screening Level	M04-1												M04-3												M04-5												M04-S*												M04-S*											
		Sample No.				Sample Date				Laboratory Report				2/10/2023				3/11/2023				3/9/2023				11/19/2021				11/19/2021				11/19/2021				11/19/2021				11/19/2021				11/19/2021				11/19/2021				11/19/2021							
		2200342-03												220033-04												211122-15												211122-16												211122-17											
<b>Volatile Organic Compounds (EPA 8260B)</b>		Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF																
1,1,2-Tetrachloroethane	0.57	µg/L	ND	0.11	0.5	1	ND	0.11	0.5	1	ND	0.11	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1								
1,1,1-Trichloroethane	1000.00	µg/L	ND	0.21	0.5	1	ND	0.21	0.5	1	ND	0.21	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1														
1,1,2,2-Tetrachloroethane	0.08	µg/L	ND	0.36	0.5	1	ND	0.36	0.5	1	ND	0.36	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1														
1,1-Dichloroethane	0.26	µg/L	<b>6.7</b>	0.09	0.5	1	2.3	0.09	0.5	1	<b>11</b>	0.09	0.5	1	<b>8.1</b>	0.05	5	<b>18.6</b>	0.05	5	<b>11.7</b>	0.05	1	<b>11.7</b>	0.05	5	<b>11.7</b>	0.05	1	<b>11.7</b>	0.05	5	<b>11.7</b>	0.05	1	<b>11.7</b>	0.05	5	<b>11.7</b>	0.05	1	<b>11.7</b>	0.05	5	<b>11.7</b>	0.05	1														
1,1-Dichloroethene	10.00	µg/L	<b>86</b>	0.13	0.5	1	<b>14</b>	0.13	0.5	1	<b>64</b>	0.13	0.5	1	<b>50.9</b>	0.05	5	<b>198</b>	0.05	5	<b>131</b>	0.05	1	<b>131</b>	0.05	5	<b>131</b>	0.05	1	<b>131</b>	0.05	5	<b>131</b>	0.05	1	<b>131</b>	0.05	5	<b>131</b>	0.05	1																				
1,1-Dichloropropane	NS	µg/L	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1														
1,2,3-Trichlorobenzene	NS	µg/L	ND	0.18	0.5	1	ND	0.18	0.5	1	ND	0.18	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,2,4-Trichlorobenzene	0.00	µg/L	ND	0.39	0.5	1	ND	0.39	0.5	1	ND	0.39	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,2,4-Trichlorobenzene	1.13	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,2,4-Trichloropropane	0.00	µg/L	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,2,4-Trichloropropane	0.44	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,3,5-Trimethylbenzene	NS	µg/L	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,3-Dichlorobenzene	600.00	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,3-Dichlorobenzene	NS	µg/L	ND	0.21	0.5	1	ND	0.21	0.5	1	ND	0.21	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
1,4-Dichlorobenzene	0.48	µg/L	ND	0.17	0.5	1	ND	0.17	0.5	1	ND	0.17	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
2,2-Dichloropropane	NS	µg/L	ND	0.38	0.5	1	ND	0.38	0.5	1	ND	0.38	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
2-Butanone	5665.42	µg/L	ND	4.5	10	1	ND	4.5	10	1	ND	4.5	10	1	ND	2.0	5	ND	2.0	5	ND	2.0	1	ND	2.0	5	ND	2.0	1	ND	2.0	5	ND	2.0	1	ND	2.0	5	ND	2.0	1																				
2-Chlorotoluene	NS	µg/L	ND	0.11	0.5	1	ND	0.11	0.5	1	ND	0.11	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
4-Chlorotoluene	NS	µg/L	ND	0.12	0.5	1	ND	0.12	0.5	1	ND	0.12	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Carbon disulfide	NS	µg/L	ND	0.07	1	1	ND	0.07	1	1	ND	0.07	1	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Carbon tetrachloride	0.10	µg/L	ND	0.08	0.5	1	ND	0.08	0.5	1	ND	0.08	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Chloroethane	0.04	µg/L	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Chloroform	20857.14	µg/L	ND	0.15	0.5	1	ND	0.15	0.5	1	ND	0.15	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Chloromethane	187.71	µg/L	ND	0.12	0.5	1	ND	0.12	0.5	1	ND	0.12	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
cis-1,2-Dichloroethene	11.41	µg/L	ND	0.14	0.5	1	ND	0.14	0.5	1	ND	0.14	0.5	1	<b>63</b>	0.14	0.5	1	<b>304</b>	0.14	0.5	1	<b>59.2</b>	0.14	0.5	1	<b>59.2</b>	0.14	0.5	1	<b>59.2</b>	0.14	0.5	1	<b>59.2</b>	0.14	0.5	1	<b>59.2</b>	0.14	0.5	1																			
cis-1,3-Dichloropropene	NS	µg/L	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.13	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1																				
Dibromoacetonitrile	0.87	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.5	5	ND	0.5	5	ND	0.5	1	ND	0.5	5	ND	0.5	1	ND																															

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	10226**		10227**		10228**		10229**		10230**			
			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL		
Laboratory Report														
<b>Volatile Organic Compounds (EPA 8260B)</b>														
1,1,1-Tetrachloroethane	0.57	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,1,1-Trichloroethane	1000.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,1,2-Tetrachloroethane	0.08	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,1,2,2-Tetrachloroethane	0.53	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,1-Dichloroethane	<b>2.75</b>	µg/L	ND	0.5	ND	0.5	ND	0.5	0.91	0.5	<b>13</b>	0.5		
1,1-Dichloropropane	<b>10.00</b>	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,2-Dichloropropane	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,2,3-Trichlorobenzene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,2,3-Trichloropropane	0.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,2,4-Trichlorobenzene	1.13	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,2,4-Trimethylbenzene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,2,3,4-Tetrahydro-3-chloropropene	0.00	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,2-Dibromoethane	0.01	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,2-Dichlorobenzene	303.52	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,2-Dichloroethane	<b>0.17</b>	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	<b>2.8</b>	0.5		
1,2-Dichloropropane	0.44	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,3,5-Trimethylbenzene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,3-Dichlorobenzene	600.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
1,3-Dimethylbenzene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
1,4-Dichlorobenzene	0.48	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
2,2-Dichloropropane	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
2-Butanone	5569.42	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
2-Chlorotoluene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
4-Chlorotoluene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
4-Isopropyltoluene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Benzene	0.15	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Bromodifluoromethane	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Bromoform	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Bromomethane	0.12	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Carbon disulfide	2.88	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Carbon tetrachloride	0.10	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Chloroethane	70.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Chloroform	20897.14	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Chloromethane	187.71	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
cis-1,2-Dichloroethene	<b>11.41</b>	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
cis-1,3-Dichloropropene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Dibromochloromethane	0.87	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Dichlorodifluoromethane	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Dichloroethane	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Diisopropyl ether	NS	µg/L	ND	3	ND	3	ND	3	ND	3	ND	3		
Ethyl Acetate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Ethyl Ether	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Ethyl tert-butyl ether	NS	µg/L	ND	3	ND	3	ND	3	ND	3	ND	3		
Ethylbenzene	1.49	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Freon-113	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Heptachloroethene	0.14	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Isocyanobenzene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
m,p-Xylene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Methylene chloride	0.93	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
MTBE	13.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Naphthalene	<b>0.17</b>	µg/L	<b>0.83</b>	0.5	<b>0.69</b>	0.5	ND	0.5	ND	0.5	ND	0.5		
n-Butylbenzene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
o-Xylylene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
sec-Butylbenzene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Styrene	0.50	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
tert-Amyl methyl ether	NS	µg/L	ND	3	ND	3	ND	3	ND	3	ND	3		
tert-Butanol	12.00	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
tert-Butylbenzene	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Tetrachloroethene	<b>0.06</b>	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	<b>4.8</b>	0.5		
Toluene	15.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
trans-1,2-Dichloroethene	50.00	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
trans-1,3-Dichloropropene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Trichloroethene	<b>0.49</b>	µg/L	ND	0.5	<b>0.86</b>	0.5	<b>29</b>	0.5	<b>4.2</b>	0.5	<b>220</b>	2.5		
Trichlorofluoromethane	NS	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		
Vinyl acetate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Vinyl chloride	<b>0.01</b>	µg/L	ND	0.3	ND	0.3	ND	0.3	ND	0.3	<b>0.37</b>	0.3		

Note: Screening Level is the minimum of the 2019 Rev 2 Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

\*Analytical data obtained from the Second Semi-Annual Groundwater Well Monitoring Report 2021 for Continental Heat Treating conducted by Fero Engineering dated February 1, 2022."

\*\* Historical data from California Water Boards Groundwater Ambient Monitoring & Assessment Program (GAMA) Groundwater Information System

ug/L - micrograms per liter

ND - Not Detected

DL - Detection Limit

RL - Reporting Limit

DF - Dilution Factor

NS - No Standard

NA - Not Analyzed

## - Sample exceeds respective screening level

## - Screening level exceeded

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Unit	Result	MW-1			MW-3			MW-5					
				Sample Name			MW-1			MW-3					
				Sample Date			3/10/2022			3/11/2022					
Laboratory Report			2200342-03			2200355			2200333-04						
				Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Semivolatile Organic Compounds (EPA 8270C)</b>															
1,2,4-Trichlorobenzene	1.13	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	
1,2-Dichlorobenzene	303.52	µg/L	ND	0.2	0.5	1	ND	0.2	0.5	1	ND	0.2	0.5	1	
1,3-Dichlorobenzene	600.00	µg/L	ND	0.16	0.5	1	ND	0.16	0.5	1	ND	0.16	0.5	1	
1,4-Dichlorobenzene	0.48	µg/L	ND	0.17	0.5	1	ND	0.17	0.5	1	ND	0.17	0.5	1	
2,4,5-Trichlorophenol	1182.26	µg/L	ND	2	10	1	ND	2	10	1	ND	2	10	1	
2,4,6-Trichlorophenol	0.63	µg/L	ND	1.9	10	1	ND	1.9	10	1	ND	1.9	10	1	
2,4-Dichlorophenol	45.67	µg/L	ND	1.4	10	1	ND	1.4	10	1	ND	1.4	10	1	
2,4-Dimethylphenol	100.00	µg/L	ND	0.83	10	1	ND	0.83	10	1	ND	0.83	10	1	
2,4-Dinitrophenol	38.83	µg/L	ND	3.8	60	1	ND	3.8	50	1	ND	3.8	50	1	
2,4-Dinitrotoluene	0.24	µg/L	ND	2.4	10	1	ND	2.4	10	1	ND	2.4	10	1	
2,6-Dinitrotoluene	NS	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
2-Chloronaphthalene	NS	µg/L	ND	2.2	10	1	ND	2.2	10	1	ND	2.2	10	1	
2-Chlorophenol	91.28	µg/L	ND	1.7	10	1	ND	1.7	10	1	ND	1.7	10	1	
2-Methylnaphthalene	35.89	µg/L	ND	2.8	10	1	ND	2.8	10	1	ND	2.8	10	1	
2-Methylchlorophenol	NS	µg/L	ND	0.92	10	1	ND	0.92	10	1	ND	0.92	10	1	
2-Nitroaniline	NS	µg/L	ND	1.2	50	1	ND	1.2	50	1	ND	1.2	50	1	
2-Nitrophenol	NS	µg/L	ND	1.9	10	1	ND	1.9	10	1	ND	1.9	10	1	
3,3'-Dichlorobenzidine	0.05	µg/L	ND	1.6	20	1	ND	1.6	20	1	ND	1.6	20	1	
3-Nitroaniline	NS	µg/L	ND	1.1	50	1	ND	1.1	50	1	ND	1.1	50	1	
4,6-Dinitro-2-methylphenol	NS	µg/L	ND	2	50	1	ND	2	50	1	ND	2	50	1	
4-Bromophenylphenylether	NS	µg/L	ND	2.6	10	1	ND	2.6	10	1	ND	2.6	10	1	
4-Chloro-3-methylphenol	NS	µg/L	ND	1	50	1	ND	1	50	1	ND	1	50	1	
4-Chloroaniline	0.36	µg/L	ND	0.7	20	1	ND	0.7	20	1	ND	0.7	20	1	
4-Chlorophenylphenylether	NS	µg/L	ND	2.9	10	1	ND	2.9	10	1	ND	2.9	10	1	
4-Methylphenol	NS	µg/L	ND	0.88	10	1	ND	0.88	10	1	ND	0.88	10	1	
4-Nitroaniline	NS	µg/L	ND	1.2	20	1	ND	1.2	20	1	ND	1.2	20	1	
4-Nitrophenol	NS	µg/L	ND	0.51	50	1	ND	0.51	50	1	ND	0.51	50	1	
Aceanthrycene	534.39	µg/L	ND	2.1	10	1	ND	2.1	10	1	ND	2.1	10	1	
Aceanthylene	NS	µg/L	ND	2.1	10	1	ND	2.1	10	1	ND	2.1	10	1	
Anthracene	1762.69	µg/L	ND	2.1	10	1	ND	2.1	10	1	ND	2.1	10	1	
Benzidine (M)	NS	µg/L	ND	3.4	50	1	ND	3.4	50	1	ND	3.4	50	1	
Benzoflanthracene	0.02	µg/L	ND	2.1	10	1	ND	2.1	10	1	ND	2.1	10	1	
Benzoflavene	0.01	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
Benzofluoranthene	0.25	µg/L	ND	2.5	10	1	ND	2.5	10	1	ND	2.5	10	1	
Benzofluoranthene	NS	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
Benzofluoranthene	2.51	µg/L	ND	2.8	10	1	ND	2.8	10	1	ND	2.8	10	1	
Benzoic acid	NS	µg/L	ND	17	50	1	ND	17	50	1	ND	17	50	1	
Benzyl alcohol	NS	µg/L	ND	0.6	20	1	ND	0.6	20	1	ND	0.6	20	1	
bis(2-Chloroethoxy)methane	NS	µg/L	ND	1.4	10	1	ND	1.4	10	1	ND	1.4	10	1	
bis(2-Chloroethyl)ether	0.01	µg/L	ND	1.7	10	1	ND	1.7	10	1	ND	1.7	10	1	
bis(2-Chloropropoxy)ether	0.36	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
bis(2-Ethylhexyl)phthalate	5.56	µg/L	ND	1.7	10	1	ND	1.7	10	1	ND	1.7	10	1	
Butylbenzylphthalate	NS	µg/L	ND	2.6	10	1	ND	2.6	10	1	ND	2.6	10	1	
Chrysene	25.05	µg/L	ND	1.9	10	1	ND	1.9	10	1	ND	1.9	10	1	
Dibenz(a,h)anthracene	0.03	µg/L	ND	2.7	10	1	ND	2.7	10	1	ND	2.7	10	1	
Dibenzofuran	NS	µg/L	ND	2.5	10	1	ND	2.5	10	1	ND	2.5	10	1	
Diethyl phthalate	14638.36	µg/L	ND	1.3	10	1	ND	1.3	10	1	ND	1.3	10	1	
Dimethyl phthalate	NS	µg/L	ND	1.3	10	1	ND	1.3	10	1	ND	1.3	10	1	
Di-n-butylphthalate	NS	µg/L	ND	1.5	10	1	ND	1.5	10	1	ND	1.5	10	1	
Di-n-octylphthalate	NS	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
Fluoranthene	802.20	µg/L	ND	2.2	10	1	ND	2.2	10	1	ND	2.2	10	1	
Fluorene	293.84	µg/L	ND	2.6	10	1	ND	2.6	10	1	ND	2.6	10	1	
Hexachlorobenzene	0.01	µg/L	ND	3.3	10	1	ND	3.3	10	1	ND	3.3	10	1	
Hexachlorobutadiene	0.14	µg/L	ND	0.15	0.5	1	ND	0.15	0.5	1	ND	0.15	0.5	1	
Hexachlorocyclopentadiene	NS	µg/L	ND	3.4	10	1	ND	3.4	10	1	ND	3.4	10	1	
Hexachloroethane	0.33	µg/L	ND	1.8	10	1	ND	1.8	10	1	ND	1.8	10	1	
Indeno[1,2,3- <i>cd</i> ]pyrene	0.25	µg/L	ND	2.2	10	1	ND	2.2	10	1	ND	2.2	10	1	
Isophorone	NS	µg/L	ND	1.1	10	1	ND	1.1	10	1	ND	1.1	10	1	
Naphthalene	##	µg/L	ND	0.41	0.5	1	ND	0.41	0.5	1	ND	0.41	0.5	1	
Nitrobenzene	NS	µg/L	ND	1.5	10	1	ND	1.5	10	1	ND	1.5	10	1	
N-Nitroso-d- <i>n</i> propylamine	NS	µg/L	ND	1.3	10	1	ND	1.3	10	1	ND	1.3	10	1	
N,N-Dimethyl-p-phenylenediamine	NS	µg/L	ND	1.6	10	1	ND	1.6	10	1	ND	1.6	10	1	
Pentachlorophenol	0.04	µg/L	ND	1.5	50	1	ND	1.5	50	1	ND	1.5	50	1	
Phenanthrene	NS	µg/L	ND	2.3	10	1	ND	2.3	10	1	ND	2.3	10	1	
Phenol	4200.00	µg/L	ND	0.35	10	1	ND	0.35	10	1	ND	0.35	10	1	
Pxrene	120.62	µg/L	ND	2.2	10	1	ND	2.2	10	1	ND	2.2	10	1	
Pyridine	NS	µg/L	ND	0.55	50	1	ND	0.55	50	1	ND	0.55	50	1	

Notes:

Screening Level is the minimum of the 2019 Rev 2 Regional Water Quality Control Board

(RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure

Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

\*\* Historical records from California Water Boards Groundwater Ambient Monitoring &

Assessment Program (GAMA) Groundwater Information System

µg/L - micrograms per liter

ND - Not Detected

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RL - Reporting Limit

DF - Dilution Factor

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## - Sample exceeds respective screening level

## - Screening level exceeded

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Analyte	Screening Level	Location		102226**		102227**		102228**		102229**		102230**		
		Sample Name		102226	102227	102228	102229	102230	Sample Date		4/1/2016	4/1/2016	4/1/2016	4/1/2016
		Laboratory Report												
<b>Semivolatile Organic Compounds (EPA 8270C)</b>														
1,2,4-Trichlorobenzene	1.13	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
1,2-Dichlorobenzene	303.52	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
1,3-Dichlorobenzene	600.00	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
1,4-Dichlorobenzene	0.48	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
2,4,5-Trichlorophenol	1182.26	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,4,6-Trichlorophenol	0.63	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,4-Dimethylphenol	45.67	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,4-Dimethoxyphenol	100.00	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,4-Dinitrophenol	38.83	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,4-Dinitrotoluene	0.24	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,6-Dinitrotoluene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Chloronaphthalene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Methylnaphthalene	9.48	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Methylphenol	35.89	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Nitrophenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Nitroaniline	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Nitrophenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3,3-Dichlorobenzidine	0.05	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3-Nitroaniline	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4,6-Dinitro-2-methoxyphenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Bromophenylphenylether	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chloro-3-methylphenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chloroaniline	0.36	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chlorophenylphenylether	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Methylphenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Nitroaniline	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Nitrophenol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthene	534.38	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthylene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Anthracene	1762.69	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzidine (IM)	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzol[a]anthracene	0.02	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzol[a]pyrene	0.01	µg/L	ND	5	ND	5	ND	5	ND	5	ND	5	ND	
Benzol[b]fluoranthene	0.25	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzol[g,h,i]perylene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzol[k]fluoranthene	2.51	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzoic acid	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzyl alcohol	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
bis[2-chloroethyl]methane	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
bis[2-chloroethyl]ether	0.01	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
bis[2-chloroisopropyl]ether	0.36	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
bis[2-ethylhexyl]phthalate	5.56	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Butylbenzylphthalate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chrysene	25.05	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenz[a,h]anthracene	0.03	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenzofuran	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Diethyl phthalate	14838.36	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dimethyl phthalate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Di-n-butylphthalate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Di-n-octylphthalate	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoranthene	802.20	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluorene	293.84	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hexachlorobenzene	0.01	µg/L	ND	5	ND	5	ND	5	ND	5	ND	5	ND	
Hexachlorobutadiene	0.14	µg/L	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
Hexachlorocyclopentadiene	NS	µg/L	ND	10	ND	10	ND	10	ND	10	ND	10	ND	
Hexachloroethane	0.33	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Indeno[1,2,3-cd]pyrene	0.25	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Isophorone	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	0.17	µg/L	0.83	0.5	0.69	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Nitrobenzene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
N,N-ditroso-di-n-propylamine	NS	µg/L	ND	5	ND	5	ND	5	ND	5	ND	5	ND	
N,N-dimethylbenzylamine	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pentachlorophenol	0.04	µg/L	ND	20	ND	20	ND	20	ND	20	ND	20	ND	
Phenanthrene	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phenol	4200.09	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pyrene	120.62	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pyridine	NS	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Notes  
 Screening Level is the minimum of the 2019 Rev 2 Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure

Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

\*\* Historical records from California Water Boards Groundwater Ambient Monitoring & Assessment Program (GAMA) Groundwater Information System

ug/L - micrograms per liter

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## - Sample exceeds respective screening level

### - Screening level exceeded

**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			MW-1			MW-3			MW-5					
Sample Name			MW-1			MW-3			MW-5					
Sample Date			3/10/2022			3/11/2022			3/9/2022					
Laboratory Report			2200342-03			2200355			2200333-04					
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Total Petroleum Hydrocarbons (EPA 8015B)</b>														
Gasoline Range Organics (C4-C12)	758.98	µg/L	ND	40	200	1	ND	40	200	1	ND	40	200	1
Diesel Range Organics (C13-C22)	199.39	µg/L	ND	200	200	1	ND	400	400	1	<b>230</b>	200	200	1
Motor Oil Range Organics (C23-C32)	NS	µg/L	ND	200	200	1	ND	400	400	1	250	200	200	1

Notes

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(RWQCB) Environmental Screening Levels (ESLs) for Groundwater-Direct Exposure

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µg/L - micrograms per liter

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**Table 3**  
**Summary of Ground Water Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

Location			MW-1			MW-3			MW-5					
Sample Name			MW-1			MW-3			MW-5					
Sample Date			3/10/2022			3/11/2022			3/9/2022					
Laboratory Report			2200342-03			2200355			2200333-04					
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Pesticides (EPA 8081A)</b>														
4,4'-DDD	0.03	µg/L	ND	0.003	0.05	1	ND	0.003	0.05	1	ND	0.003	0.05	1
4,4'-DDE	0.05	µg/L	ND	0.004	0.05	1	ND	0.004	0.05	1	ND	0.004	0.05	1
4,4'-DDT	0.23	µg/L	ND	0.004	0.05	1	ND	0.004	0.05	1	ND	0.004	0.05	1
Aldrin	0.00	µg/L	ND	0.003	0.02	1	ND	0.003	0.02	1	ND	0.003	0.02	1
alpha-BHC	NS	µg/L	ND	0.009	0.02	1	ND	0.009	0.02	1	ND	0.009	0.02	1
alpha-Chlordane	NS	µg/L	ND	0.003	0.02	1	ND	0.003	0.02	1	ND	0.003	0.02	1
beta-BHC	NS	µg/L	ND	0.007	0.02	1	ND	0.007	0.02	1	ND	0.007	0.02	1
Chlordane	NS	µg/L	ND	0.03	0.25	1	ND	0.03	0.25	1	ND	0.03	0.25	1
delta-BHC	NS	µg/L	ND	0.005	0.02	1	ND	0.005	0.02	1	ND	0.005	0.02	1
Dieldrin	0.00	µg/L	ND	0.002	0.05	1	ND	0.002	0.05	1	ND	0.002	0.05	1
Endosulfan I	NS	µg/L	ND	0.003	0.02	1	ND	0.003	0.02	1	ND	0.003	0.02	1
Endosulfan II	NS	µg/L	ND	0.004	0.05	1	ND	0.004	0.05	1	ND	0.004	0.05	1
Endosulfan sulfate	NS	µg/L	ND	0.002	0.05	1	ND	0.002	0.05	1	ND	0.002	0.05	1
Endrin	0.30	µg/L	ND	0.004	0.05	1	ND	0.004	0.05	1	ND	0.004	0.05	1
Endrin aldehyde	NS	µg/L	ND	0.002	0.05	1	ND	0.002	0.05	1	ND	0.002	0.05	1
Endrin ketone	NS	µg/L	ND	0.003	0.05	1	ND	0.003	0.05	1	ND	0.003	0.05	1
gamma-BHC	0.03	µg/L	ND	0.005	0.02	1	ND	0.005	0.02	1	ND	0.005	0.02	1
gamma-Chlordane	NS	µg/L	ND	0.001	0.02	1	ND	0.001	0.02	1	ND	0.001	0.02	1
Heptachlor	0.00	µg/L	ND	0.01	0.02	1	ND	0.01	0.02	1	ND	0.01	0.02	1
Heptachlor epoxide	0.00	µg/L	ND	0.003	0.02	1	ND	0.003	0.02	1	ND	0.003	0.02	1
Methoxychlor	0.09	µg/L	ND	0.005	0.25	1	ND	0.005	0.25	1	ND	0.005	0.25	1
Toxaphene	0.03	µg/L	ND	0.34	2.5	1	ND	0.34	2.5	1	ND	0.34	2.5	1

Notes

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**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,**  
**Santa Fe Springs, CA 92660**

Location			MW-1				MW-3				MW-5			
Sample Name			MW-1				MW-3				MW-5			
Sample Date			3/10/2022				3/11/2022				3/9/2022			
Laboratory Report			2200342-03				2200355				2200333-04			
Analyte	Screening Level	Unit	Result	DL	RL	DF	Result	DL	RL	DF	Result	DL	RL	DF
<b>Polychlorinated Biphenyls (EPA 8082)</b>														
Aroclor 1016	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1
Aroclor 1221	NS	µg/L	ND	0.06	1	1	ND	0.06	1	1	ND	0.06	1	1
Aroclor 1232	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1
Aroclor 1242	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1
Aroclor 1248	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1
Aroclor 1254	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1
Aroclor 1260	NS	µg/L	ND	0.06	0.5	1	ND	0.06	0.5	1	ND	0.06	0.5	1

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Human Health Risk Levels-Tapwater Cancer Risk and Noncancer Hazard

µg/L - micrograms per liter

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 - Sample exceeds respective screening level

 - Screening level exceeded

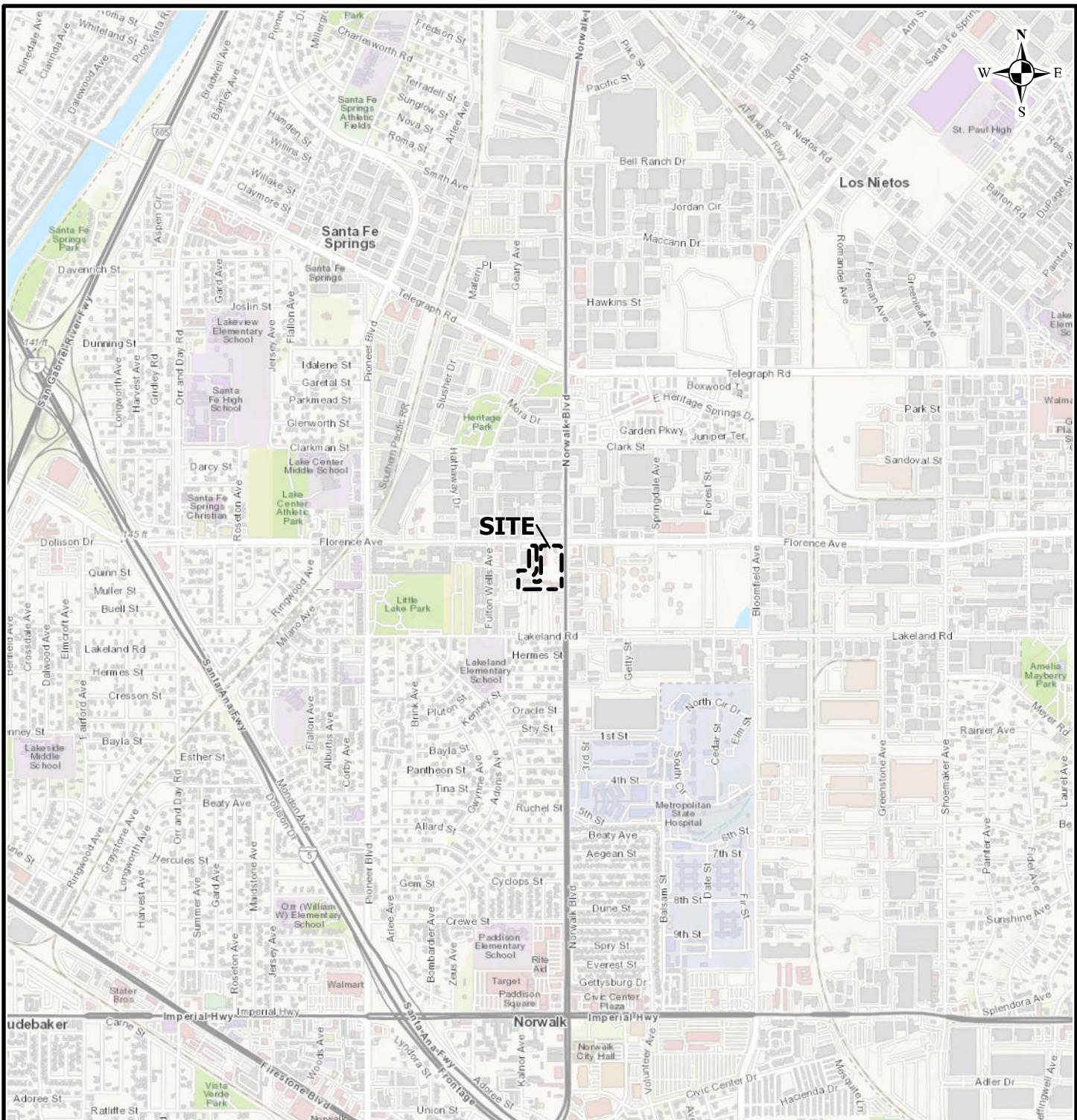
**TABLE 4**

**Well Survey Data**

**Table 4**  
**Summary of Groundwater Well Survey Results**  
**Project 721033501 - 10801-10859 Norwalk Blvd, 10819-10858 Koontz Ave and 12120 Florence Ave,  
Santa Fe Springs, CA 92660**

<b>Well ID</b>	<b>Northing</b>	<b>Easting</b>	<b>Casing Elevation (ft amsl)</b>	<b>Depth to GW (ft)</b>	<b>GW Elevation (ft amsl)</b>
MW-1	1798769.396	6539493.899	136.07	116.5	19.57
MW-3	1798231.106	6539527.033	134.48	121.9	12.58
MW-5	1798245.412	6539071.396	135.565	118.6	16.965

## **FIGURES**



#### Legend

Approximate Site Boundary

**LANGAN**

Langan Engineering and Environmental Services, Inc.

515 South Flower Street, Suite 2860  
Los Angeles, CA 90071

T: 213.314.8100 F: 213.314.8101 www.langan.com

Project

**ORBIS -  
SANTA FE SPRINGS**

SANTA FE SPRINGS  
LOS ANGELES  
COUNTY CALIFORNIA

Figure Title

**SITE  
LOCATION MAP**

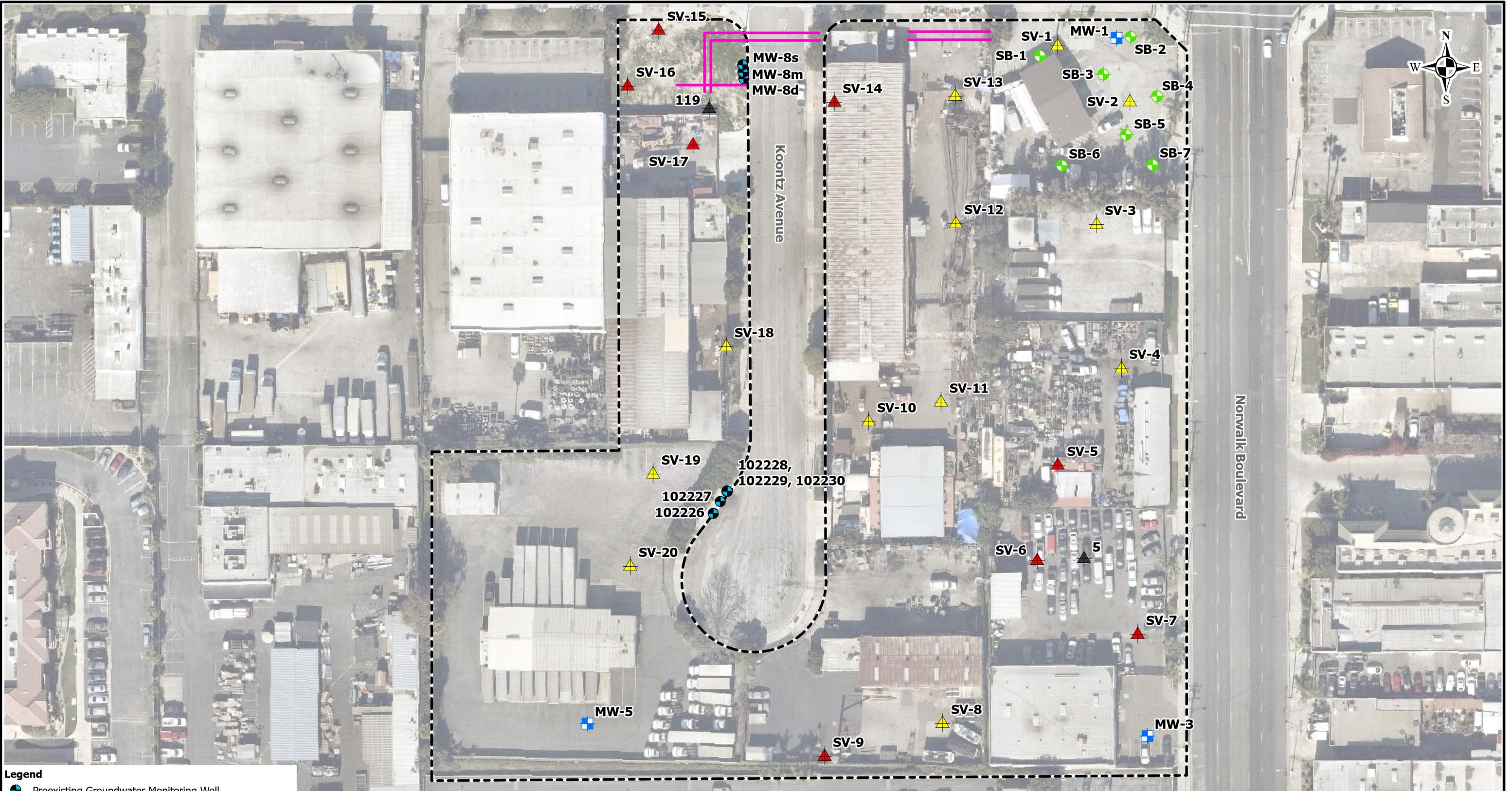
Project No.  
**721033501**

Date  
**3/15/2022**

Scale  
**1"=2,000'**

Drawn By  
**TO**

**1**



# LANGAN

Langan Engineering and  
Environmental Services, Inc.

515 S Flower Street, Suite 2860  
Los Angeles, CA 90071  
T: 213.314.8100 F: 213.314.8101 www.langan.com

Project

**ORBIS -  
SANTA FE SPRINGS**

SANTA FE SPRINGS

LOS ANGELES COUNTY CALIFORNIA

Figure Title

## SAMPLE LOCATION PLAN

Project No.  
721033501

Date  
4/8/2022

Scale  
1"=75'

Drawn By  
TO

Figure  
2



**Legend**

- Soil Boring
- Approximate Site Boundary

**Notes:**  
1. Aerial imagery provided by Nearmap, 01/30/2022.  
2. All features shown are approximate.

75      0      75  
SCALE IN FEET

# LANGAN

Langan Engineering and  
Environmental Services, Inc.

135 Main Street, Suite 1500  
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Project

ORBIS -  
SANTA FE SPRINGS

SANTA FE SPRINGS

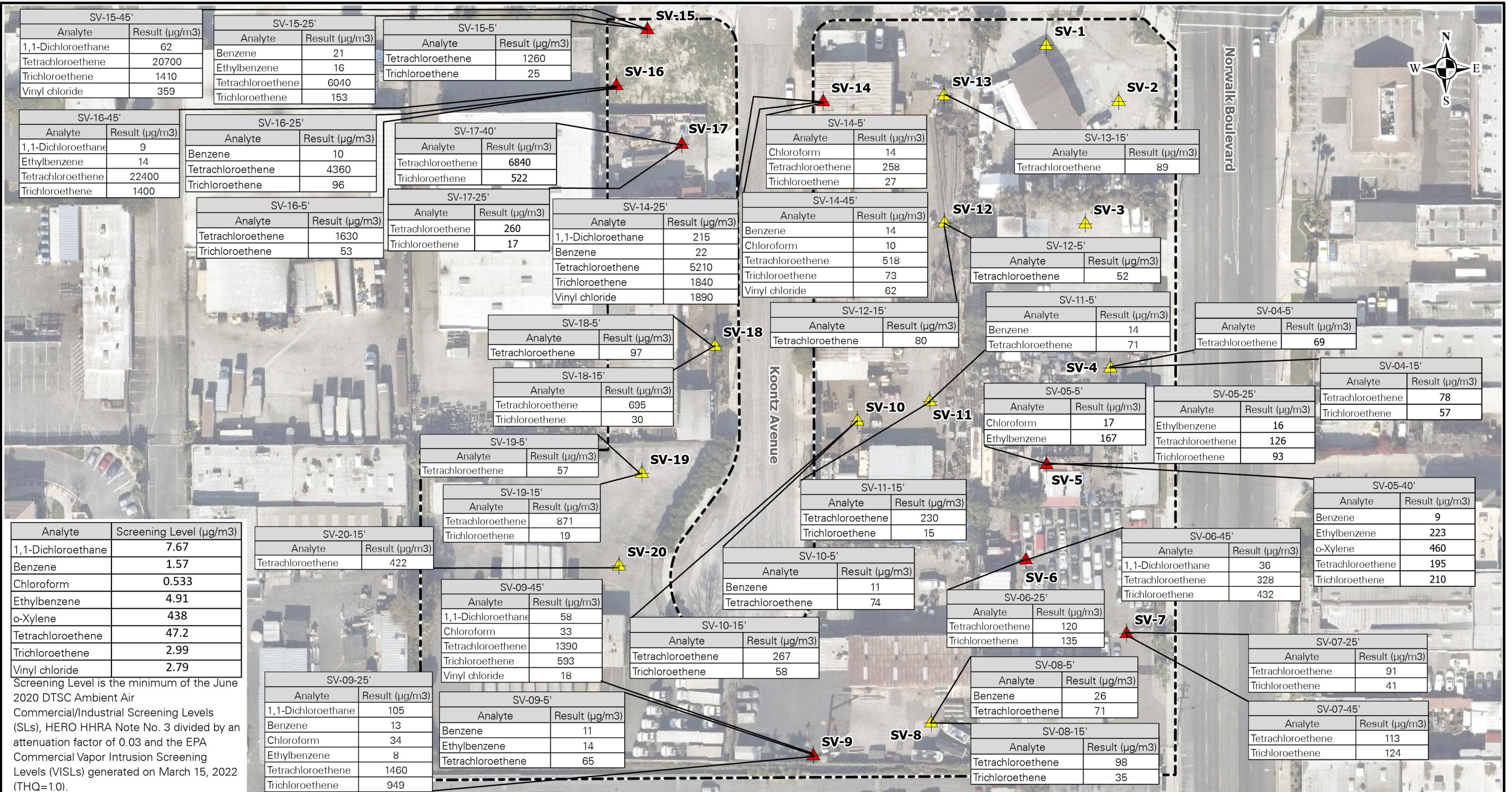
LOS ANGELES COUNTY      CALIFORNIA

Figure Title

SOIL SAMPLE  
RESULTS EXCEEDANCE  
SUMMARY

Project No.  
721033501  
Date  
3/16/2022  
Scale  
1"=75'  
Drawn By  
TO

Figure  
3



**Legend**

- ▲ Soil Vapor Probe (20')
- ▲ Soil Vapor Probe (50')
- Approximate Site Boundary

Notes:  
1. Aerial imagery provided by Nearmap, 01/30/2022.  
2. All features shown are approximate.

75 0 75  
SCALE IN FEET

**LANGAN**

Langan Engineering and Environmental Services, Inc.

135 Main Street, Suite 1500  
San Francisco, CA 94105

T: 415.955.5200 F: 415.955.5201 www.langan.com

Project

**ORBIS -  
SANTA FE SPRINGS**

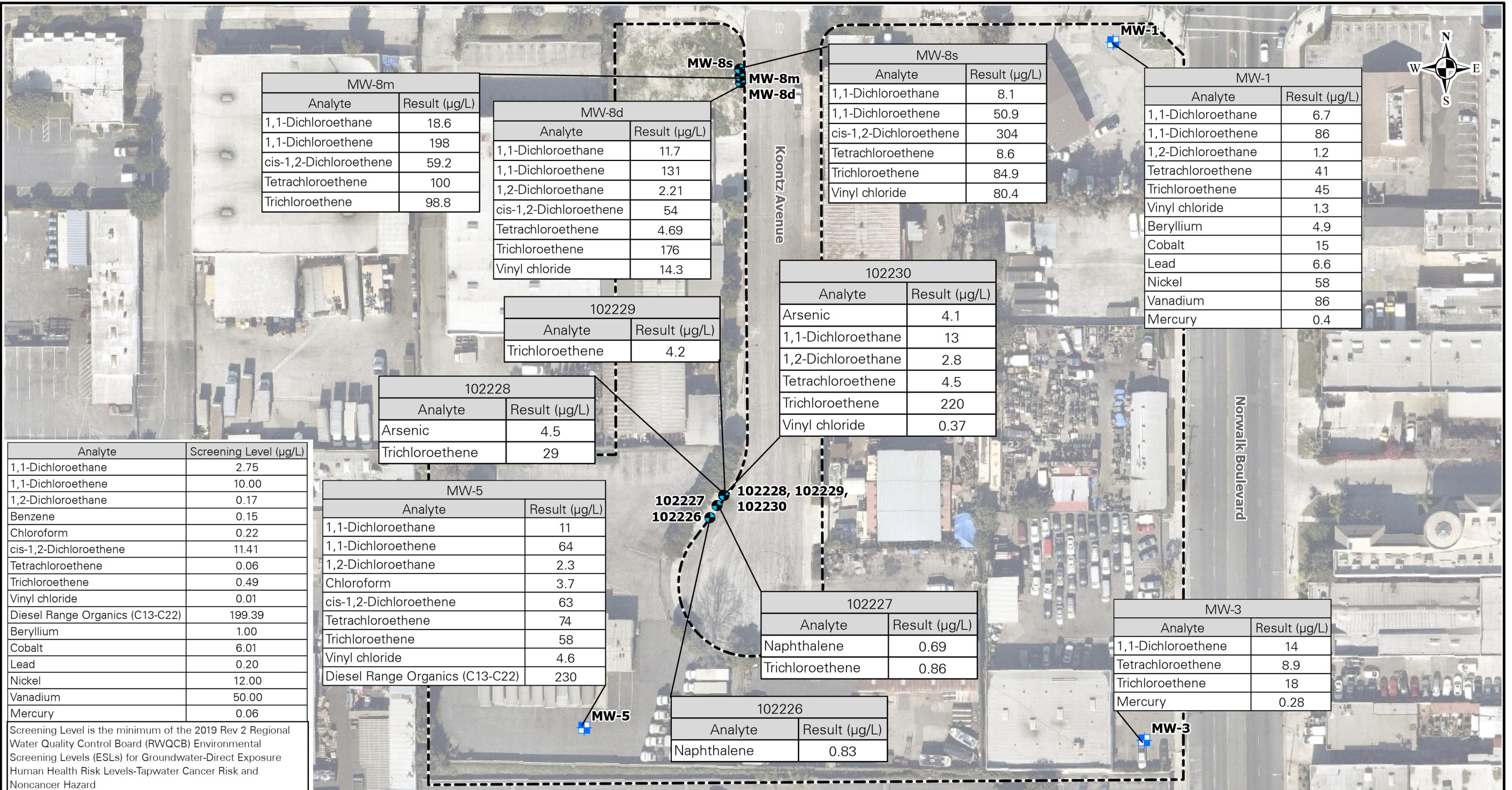
SANTA FE SPRINGS  
LOS ANGELES COUNTY CALIFORNIA

Figure Title

**SOIL VAPOR SAMPLE  
RESULTS EXCEEDANCE  
SUMMARY**

Project No. 721033501  
Date 4/8/2022  
Scale 1"=75'  
Drawn By TO

4



**Notes:**  
1. Aerial imagery provided by Nearmap, 01/30/2022.  
2. All features shown are approximate.

75 0 75  
SCALE IN FEET

**LANGAN**

Langan Engineering and Environmental Services, Inc.

135 Main Street, Suite 1500  
San Francisco, CA 94105

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Project

**ORBIS -  
SANTA FE SPRINGS**

SANTA FE SPRINGS

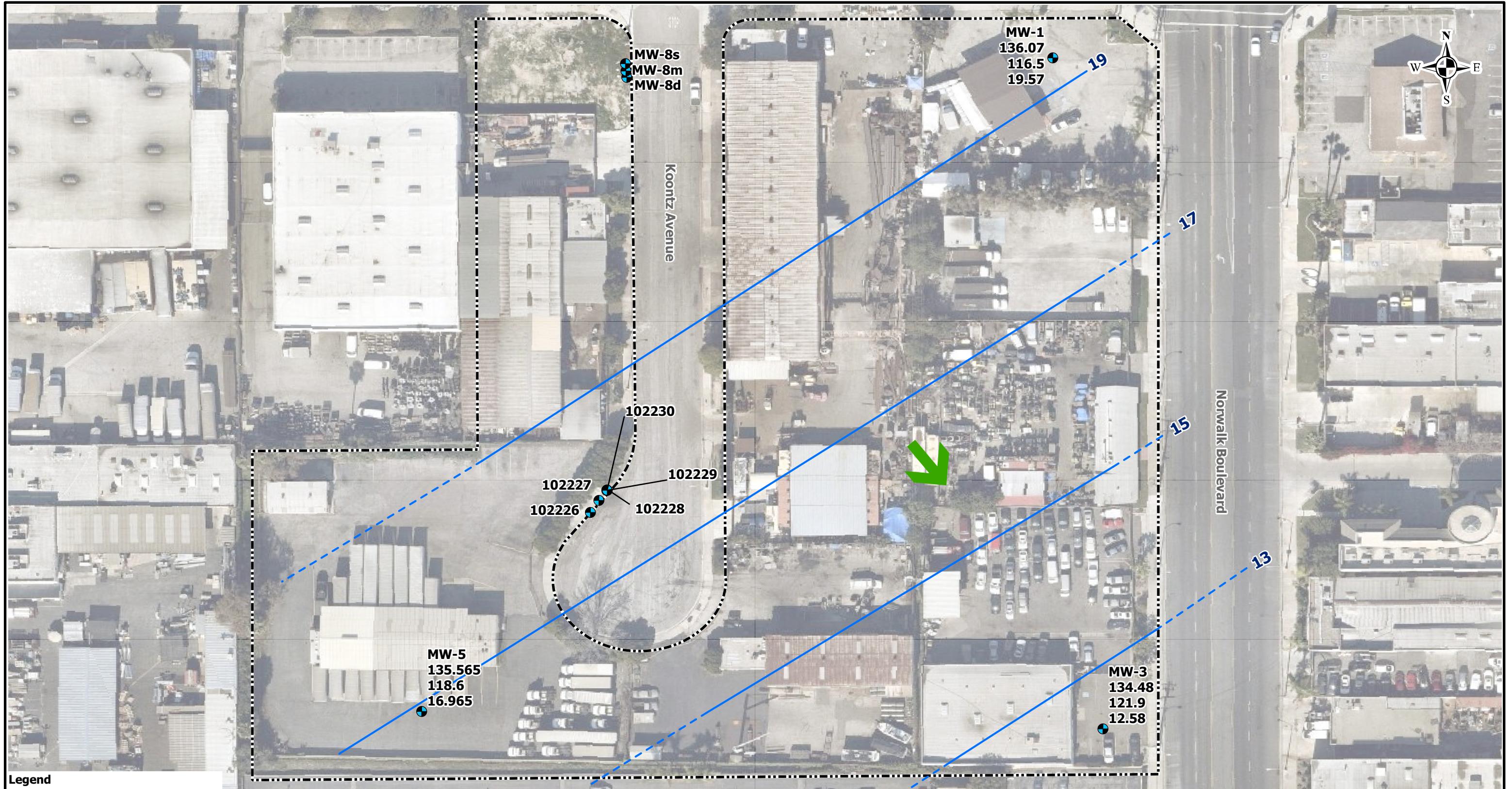
LOS ANGELES COUNTY CALIFORNIA

Figure Title

## GROUNDWATER SAMPLE RESULTS EXCEEDANCE SUMMARY

Project No. 721033501  
Date 4/8/2022  
Scale 1"=75'  
Drawn By TO

Figure 5



#### Legend

- Groundwater Well Location
- Groundwater Elevation Contour
- Approximate Site Boundary
- Groundwater Flow Direction
- MW-5** - Well ID
- 135.565** - Casing Elevation (ft amsl)
- 118.6** - Depth to GW (ft)
- 16.965** - GW Elevation (ft amsl)

Notes:  
 1. Aerial imagery provided by Nearmap, 01/30/2022.  
 2. All features shown are approximate.  
 3. PMW-11 had three well casings in one well box.  
 4. Contour Interval = 2.0 ft  
 5. GW elevation in ft amsl  
 6. Only GW data from Langan installed wells used.

75 0 75  
SCALE IN FEET

# LANGAN

Langan Engineering and  
Environmental Services, Inc.  
515 South Flower Street, Suite 2860  
Los Angeles, CA 90071  
T: 213.314.8100 F: 213.314.8101 www.langan.com

Project

ORBIS -  
SANTA FE SPRINGS  
SANTA FE SPRINGS

LOS ANGELES COUNTY CALIFORNIA

Figure Title

POTENTIOMETRIC  
SURFACE MAP

Project No.	721033501
Date	4/8/2022
Scale	1"=75'
Drawn By	TO

Figure  
6

## **APPENDIX A**

### **Drilling Permits**



# ENVIRONMENTAL HEALTH

## Drinking Water Program



5050 Commerce Drive, Baldwin Park, CA 91706

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

## Work Plan Approval

### TO BE COMPLETED BY APPLICANT:

WORK SITE ADDRESS	CITY	ZIP	EMAIL ADDRESS FOR WELL PERMIT APPROVAL
10845 Norwalk Blvd	Santa Fe Springs	90670	<a href="mailto:cslatten@langan.com">cslatten@langan.com</a> <a href="mailto:jgrocki@langan.com">jgrocki@langan.com</a>

### NOTICE:

- WORK PLAN APPROVALS ARE VALID FOR 180 DAYS. 30 DAY EXTENSIONS OF WORK PLAN APPROVALS ARE CONSIDERED ON AN INDIVIDUAL (CASE-BY-CASE) BASIS AND MAY BE SUBJECT TO ADDITIONAL PLAN REVIEW FEES (HOURLY RATE AS APPLICABLE).
- WORK PLAN MODIFICATIONS MAY BE REQUIRED IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED AT THE SITE INSPECTION ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- WORK PLAN APPROVALS ARE LIMITED TO COMPLIANCE WITH THE CALIFORNIA WELL STANDARDS AND THE LOS ANGELES COUNTY CODE AND DOES NOT GRANT ANY RIGHTS TO CONSTRUCT, RENOVATE, OR DECOMMISSION ANY WELL. THE APPLICANT IS RESPONSIBLE FOR SECURING ALL OTHER NECESSARY PERMITS SUCH AS WATER RIGHTS, PROPERTY RIGHTS, COASTAL COMMISSION APPROVALS, USE COVENANTS, ENCROACHMENT PERMISSIONS, UTILITY LINE SETBACKS, CITY/COUNTY PUBLIC WORKS RIGHTS OF WAY, ETC.
- ALL FIELD WORK MUST BE CONDUCTED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF CALIFORNIA.
- THIS PERMIT IS NOT COMPLETE UNTIL ALL OF THE FOLLOWING REQUIREMENTS ARE SIGNED BY THE DEPUTY HEALTH OFFICER. WORK SHALL NOT BE INITIATED WITHOUT A WORK PLAN APPROVAL STAMPED BY THE DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM.
- **ONCE APPROVED NOTIFY BELINDA LARSEN AT [blarsen@ph.lacounty.gov](mailto:blarsen@ph.lacounty.gov) PREFERABLY 4 BUSINESS DAYS BEFORE WORK IS SCHEDULED TO BEGIN.**

### TO BE COMPLETED BY DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM:

**X** WORK PLAN APPROVED **SR0286723 (5 MW Constructions)**

DATE: 3-3-2022

### ADDITIONAL APPROVAL CONDITIONS:

- Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
- Must comply with all applicable requirements published in the California Well Standards (Bulletins 74-81 and 74-90) and the Los Angeles County Code, Title 11.
- Notify me by e-mail at [blarsen@ph.lacounty.gov](mailto:blarsen@ph.lacounty.gov) prior to start of field work.
- Drillers shall submit their well completion reports to the Department of Water Resources through the Online System of Well Completion Reports (OSWCR) at [https://civicnet.resources.ca.gov/DWR\\_WELLS](https://civicnet.resources.ca.gov/DWR_WELLS).

5838  
  
Belinda Larsen R.E.H.S  
818-593-7308

### ANNULAR SEAL FINAL INSPECTION REQUIRED

DATE ACCEPTED: REHS signature

### WELL COMPLETION LOG REQUIRED

DATE ACCEPTED: REHS signature

### WATER QUALITY—BACTERIOLOGICAL STANDARDS REQUIRED

DATE ACCEPTED: REHS signature

### WATER QUALITY—CHEMICAL STANDARDS REQUIRED

DATE ACCEPTED: REHS signature

### WATER SUPPLY YIELD REQUIRED

DATE ACCEPTED: REHS signature

### OTHER REQUIREMENT

DATE ACCEPTED: REHS signature



# ENVIRONMENTAL HEALTH



COUNTY OF LOS ANGELES  
Public Health

## Drinking Water Program

5050 Commerce Drive, Baldwin Park, CA 91706

Telephone: (626) 430-5420 • [http://publichealth.lacounty.gov/eh/ep/dw/dw\\_main.htm](http://publichealth.lacounty.gov/eh/ep/dw/dw_main.htm)

## Work Plan Approval

WORK SITE ADDRESS	CITY	ZIP	EMAIL ADDRESS
10845 Norwalk Blvd	Santa Fe Springs	90670	cslatten@langan.com jgrocki@langan.com

**NOTICE:**

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

TO BE COMPLETED BY DEPARTMENT OF PUBLIC HEALTH—DRINKING WATER PROGRAM:

<b>X</b>	WORK PLAN APPROVED FOR: 29 Soil Borings/Exp. Holes	PERMIT NUMBER:	SR0286726	DATE:	3-2-2022
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**ADDITIONAL APPROVAL CONDITIONS:**

- Work plan approval is issued for scope of work submitted to the Drinking Water Program. Any modifications to the scope of work will require additional work plan review.
- Ensure the boring/exploration hole is backfilled within 24 hours of boring construction.
- Ensure to backfill using a tremie pipe under pressure or equivalent equipment with approved cement grout, proceeding upward from the bottom of the boring/exploration hole.
- Ensure soil borings are sealed per California Well Standards 74-90
  - Cement grout mix ratio of 5-6 gallons of water per 94-pound bag of Portland cement.
  - Up to 6% of Bentonite may be added to the cement-based mix.
  - No hydrated Bentonite chips
- Borings/Exploration holes must comply with all applicable requirements published in the California Well Standards (Bulletins 74-81 and 74-90) and the Los Angeles County Code, Title 11.



## **APPENDIX B**

### **Soil Borings**

# LANGAN

LOG OF BORING MW-1

SHEET 1 OF 1

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT HSA CME 75		DATE STARTED 3/8/22	DATE FINISHED 3/9/22				
SIZE AND TYPE OF BIT 8"		NUMBER OF SAMPLES	DIST. --				
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 132	WATER LEVEL (ft.)	FIRST ▽				
SAMPLER HSA		UNDIST. --	COMPL. ▼				
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	DRILLING FOREMAN Raul				
		INSPECTING ENGINEER Megan Ritsema					
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Brown, fine to medium grained clayey SAND			5		0.0	
				10		0.1	
				15		0.0	
	Brown, fine to medium grained clayey SAND with gravel			20		0.0	
				25		0.3	
	Brown, fine grained clayey SILT			30		9.8	
				35		6.3	
	Grey-brown, medium grained SILT			40		7.4	
				45		5.1	
	Grey-brown, fine grained clayey SILT			50		0.8	
				55		0.1	
	Brown, fine grained clayey SILT			60		1.8	
				65		0.6	
	Grey-brown, fine to medium grained clayey SAND with gravel			70		0.5	
	Grey-brown, fine grained silty CLAY			75		0.2	
	Brown, fine grained clayey SILT			80		1.7	
				85		1.3	
	Grey-brown, fine to medium grained clayey SILT with gravel			90		1.6	
	Grey-brown, fine to medium grained clayey SILT			95		0.1	
				100		0.3	
	Brown, fine to medium grained clayey SAND with gravel			105		0.4	
	Brown, fine grained clayey SILT			110		0.8	
	Brown, fine to medium grained clayey SAND with gravel			115			
	Brown, fine grained clayey SILT			120			
	Brown, fine grained clayey SILT with gravel			125			
				130			

# LANGAN

LOG OF BORING MW-3

SHEET 1 OF 1

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT HSA CME 75			DATE STARTED 3/9/22		DATE FINISHED 3/10/22		COMPLETION DEPTH 132 ft.	
SIZE AND TYPE OF BIT 8"			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 132		WATER LEVEL (ft.)	FIRST ▽	COMPL. ▼	24 HR. ▽		
SAMPLER HSA			DRILLING FOREMAN Raul					
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Megan Ritsema					
ELEV. (ft)	SAMPLE DESCRIPTION			DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
	Asphalt Brown, fine grained clayey SILT			5			PID Reading (ppm)	
				10			0.1	
				15			0.1	
				20			0.2	
				25			0.1	
				30			0.4	
	Brown, fine grained silty CLAY			35			0.1	
	Brown, fine grained clayey SILT with gravel			40			0.2	
				45			0.6	
				50			0.0	
	Brown, fine to medium grained clayey SAND			55			0.0	
	Brown, fine to medium grained silty SAND with gravel			60			0.1	
				65			0.0	
	Brown, fine to medium grained clayey SAND with gravel			70			0.2	
	Brown, fine grained clayey SILT			75			0.0	
				80			0.0	
				85			0.0	
	Brown, fine to medium grained clayey SAND with gravel			90			0.1	
				95			0.0	
				100			0.2	
				105			0.4	
				110			0.6	
	Brown, fine grained clayey SILT with gravel Wet from 120' to bottom of hole			115			0.0	
				120			0.0	
				125			0.0	
				130			0.0	

# LANGAN

LOG OF BORING MW-5

SHEET 1 OF 1

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT HSA CME 75			DATE STARTED 3/7/22		DATE FINISHED 3/8/22		COMPLETION DEPTH 132 ft.	
SIZE AND TYPE OF BIT 8"			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 132		WATER LEVEL (ft.)	FIRST 	COMPL. 	24 HR. 		
SAMPLER HSA	DRILLING FOREMAN Raul		INSPECTING ENGINEER Megan Ritsema					
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --						
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Brown, fine to medium grained sandy SILT with gravel				5			0.2
	Brown, fine grained clayey SILT				10			0.1
	Brown, fine to medium grained sandy SILT with gravel				15			0.2
	Brown, fine grained silty CLAY				20			0.8
					25			0.0
					30			0.0
					35			0.0
					40			0.0
					45			0.0
					50			0.0
					55			0.0
					60			0.4
					65			0.1
	Brown, fine grained clayey SILT with gravel				70			0.0
	Brown, fine to medium grained sandy SILT with gravel				75			0.0
	Brown, fine grained clayey SILT				80			0.5
					85			0.2
					90			0.8
					95			0.7
					100			0.1
	Brown, fine to medium grained clayey SAND with gravel				105			0.1
	Brown, fine to medium grained silty SAND with gravel wet from 120 to bottom of hole				110			0.0
					115			0.3
					120			0.0
					125			
					130			

# **LANGAN**

LOG OF BORING

SHEET 1 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501							
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.							
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/7/22		DATE FINISHED 3/7/22		COMPLETION DEPTH 35 ft.			
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --		UNDIST. --			
CASING DIAMETER (in) 2"		CASING DEPTH(ft) 35		WATER LEVEL (ft.)		FIRST ▽		CORE --		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN Raul							
SAMPLER HAMMER --			WEIGHT(lbs) --		DROP(in) --		INSPECTING ENGINEER Casey Slatten			
ELEV. (ft)	SAMPLE DESCRIPTION		SYMBOL LOG	DEPTH SCALE	SAMPLE DATA				PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					NUMBER	TYPE	RECOV. (in)	PENETR. BL/6in		
	Asphalt Dark-brown, medium grained SAND with gravel - Moist									
	Red-brown, fine grained sandy SILT - Moist				2				0	0
					4				0	0
					6				0	0
					8				0	0
					10				0	0
					12				0	0
	Tan-brown, fine to medium grained SAND - Moist				14				0	0
					16				0	0
	Brown, fine grained clayey SAND				18				0	0
	Brown, fine grained CLAY - Moist				20				0	0
	Brown, fine grained clayey SAND				22				0	0
	Red-Brown, medium grained clayey SAND - Moist				24				0	0
	Brown, medium grained clayey SAND				26				0	0
					28				0	0
	Red-Brown, medium grained clayey SAND - Moist				30				0	0
	Brown, fine grained clayey SILT - Moist				32				0	0
	Brown, fine to medium grained SAND - Moist				34				0	0
	Brown, fine grained clayey SILT - Moist									

# **LANGAN**

LOG OF BORING SB-01

SB-01

SHEET 2 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA				REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE	RECOV. (in)	PENETR. BL/in	
				36				0
				38				
				40				
				42				
				44				
				46				
				48				
				50				
				52				
				54				
				56				
				58				
				60				
				62				
				64				
				66				
				68				
				70				
				72				
				74				

# **LANGAN**

LOG OF BORING

SB-02

SHEET 1 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501							
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.							
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/7/22		DATE FINISHED 3/7/22		COMPLETION DEPTH 35 ft.			
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --		UNDIST. --			
CASING DIAMETER (in) 2"		CASING DEPTH(ft) 35	WATER LEVEL (ft.)		FIRST 	COMPL. 		24 HR. 		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN Raul							
SAMPLER HAMMER --			WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten					
ELEV. (ft)	SAMPLE DESCRIPTION		SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					NUMBER	TYPE	RECOV. (in)	PENETR. BL/in	N-VALUE BLOWS PER FT	
	Asphalt Red-brown, fine grained clayey SILT - Moist				2					0
					4					0
					6					0
					8					0
					10					0
					12					0
	Brown, fine to medium grained silty SAND - Moist				14					0
	Tan-Brown, fine to medium grained, SAND - Moist				16					0
	Brown, fine to medium grained SAND - Mois				18					0
	Tan-brown, fine to medium grained silty SAND - Moist				20					0
	Brown, fine grained clayey SILT - Mois				22					0
	Tan-brown, fine grained CLAY - Mois				24					0
	Brown, fine grained clayey SILT - Mois				26					0
	Red-brown, fine grained clayey SILT - Mois				28					0
	Brown, fine grained clayey SILT - Mois				30					0
	Tan-brown, medium brown SAND - Mois				32					0
	Brown, fine grained clayey SILT - Mois				34					0
	Tan-brown, medium brown SAND - Mois									0

# LANGAN

 LOG OF BORING SB-02

 SHEET 2 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.		
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE RECOV. (in) PENETR. RESIST. BLK/in N-VALUE BLOWS PER FT
				36	
				38	
				40	
				42	
				44	
				46	
				48	
				50	
				52	
				54	
				56	
				58	
				60	
				62	
				64	
				66	
				68	
				70	
				72	
				74	
					PID Reading (ppm)
					0

# LANGAN

 LOG OF BORING **SB-03**

 SHEET **1** OF **1**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/7/22	DATE FINISHED 3/7/22			
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --			
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 35	WATER LEVEL (ft.)	FIRST ▽			
SAMPLER Continuous Acetate Liner		UNDIST. --	COMPL. ▼			
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten			
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS		
		LOG	NUMBER TYPE RECOV. (in) PENETR. RESIST. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	(DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Dark Grey to Black, fine grained clayey SILT with Staining	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34			252.6 241.7 290.8 604.1 375.4 202.6 314.7  476.6 24.9 25.7 160.7 9.4 6.4 6.9 4.0 4.8 589.5 10.7 4.1 1.7 2.9 2.8 1.5 1.3 2.8 1.2 323.0 3.2 1.0	
	Red-brown, fine to medium grained SAND - Moist					
	Brown, fine grained CLAY - Moist					
	Brown, fine to medium grained silty SAND					
	Tan-brown, fine grained silty CLAY - Moist					
	Red-brown, fine grained silty CLAY - Moist					
	Brown, fine grained silty CLAY - Moist					
	Brown, fine grained CLAY - Moist					

# LANGAN

 LOG OF BORING **SB-04**

 SHEET **1** OF **1**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/7/22	DATE FINISHED 3/7/22	
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 35	WATER LEVEL (ft.)	FIRST ▽	
SAMPLER Continuous Acetate Liner		UNDIST. --	COMPL. ▼	
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine to medium grained clayey SILT - Moist	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34	NUMBER TYPE RECOV. (in) PENETR. RESIST. BL/6in N-VALUE BLOWS PER FT	PID Reading (ppm)
	Tan, fine to medium grained SAND - Moist			0.4 1.6 0.8 0.6 0.4 0.4 0.3 0.4 0.5 0.5 0.6 0.5
	Tan, fine to medium grained clayey SILT - Moist			0.4 0.4 0.3 0.3 0.3
	Tan, fine to medium grained SAND - Moist			0.3 0.3
	Brown, fine to medium grained SAND - Moist			0.2 0.3 0.3
	Tan-brown, fine to medium grained SAND - Moist			0.3 0.2 0.7 0.5 0.5 0.4 0.3

# LANGAN

 LOG OF BORING **SB-05**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/7/22	DATE FINISHED 3/7/22	
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 35	WATER LEVEL (ft.)	FIRST ▽	
SAMPLER Continuous Acetate Liner		UNDIST.	CORE --	
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine to medium grained clayey SILT - Moist	2 4 6 8 10 12	NUMBER TYPE RECOV. (in) PENETR. BL/6in RESIST. BL/6in N-VALUE BLOWS PER FT	0.5 0.3 0.2 0.2 0.2 0.2
	Tan, fine grained silty SAND - Moist	14 16		0.2 0.1 0.3 0.2
	Tan, medium grained silty SAND - Moist	18		0.2
	Tan, medium grained SAND - Moist	20 22		0.2 0.3 0.2
	Tan, fine to medium grained clayey SILT - Moist	24		0.2 0.1
	Brown, fine grained SAND - Moist	26 28 30		0.2 0.1 0.2 0.2 0.1
	Grey-brown, fine to medium grained SAND	32 34		0.1 0.2 0.2 0.2

# LANGAN

LOG OF BORING SB-05

SHEET 2 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.		
ELEV. (ft)	SAMPLE DESCRIPTION	SYMBOL LOG	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
				NUMBER	TYPE RECOV. (in) PENETR. RESIST. BLK/in N-VALUE BLOWS PER FT
				36	
				38	
				40	
				42	
				44	
				46	
				48	
				50	
				52	
				54	
				56	
				58	
				60	
				62	
				64	
				66	
				68	
				70	
				72	
				74	
					PID Reading (ppm)
					0.1

# LANGAN

 LOG OF BORING **SB-06**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/7/22	DATE FINISHED 3/7/22	
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 35	WATER LEVEL (ft.)	FIRST ▼	
SAMPLER Continuous Acetate Liner		UNDIST.	CORE --	
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	DRILLING FOREMAN Raul	
		INSPECTING ENGINEER Casey Slatten		
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine grained sandy SILT - Moist	2 4 6 8 10	NUMBER TYPE RECOV. (in) PENETR. RESIST. BL/6in N-VALUE BLOWS PER FT	0.5 0.3 0.3 0.2 0.2
	No Recovery	12 14		0.1 0.1
	Red-brown, fine grained clayey SILT	16		0.1 0.1
	Tan, fine grained SAND - Moist	18		0.1 0.1
	Light brown, fine grained CLAY - Moist	20		0.1 0.1
	Light brown, fine grained clayey SILT - Moist Tan, fine to medium grained SAND - Moist	22 24 26 28 30 32 34		0.2 0.2 0.1 0.1 0.1 0.1 0.2 0.2 0.1
	Tan, fine grained SAND - Moist			0.1 0.2 0.1 0.1 0.1 0.1 0.2 0.2 0.1

# LANGAN

LOG OF BORING SB-06

SHEET 2 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.		
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
			36	PENETR. RESIST. BLK/in	PID Reading (ppm)
			38	N-VALUE BLOWS PER FT	0.2
			40		
			42		
			44		
			46		
			48		
			50		
			52		
			54		
			56		
			58		
			60		
			62		
			64		
			66		
			68		
			70		
			72		
			74		

# **LANGAN**

LOG OF BORING

SB-07

SHEET 1 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501									
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.									
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/8/22		DATE FINISHED 3/8/22		COMPLETION DEPTH 35 ft.					
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --		UNDIST. --					
CASING DIAMETER (in) 2"		CASING DEPTH(ft) 35		WATER LEVEL (ft.)		FIRST ▼		COMPL. ▼				
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN Raul									
SAMPLER HAMMER --			INSPECTING ENGINEER Casey Slatten									
ELEV. (ft)	SAMPLE DESCRIPTION		SYMBOL LOG	DEPTH SCALE	NUMBER	TYPE	RECOV. (in)	PENETR. BL/in	RESIST. BL/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine to medium grained sandy SILT - Moist				2						0	
					4						0	
					6						0	
					8						0	
	Tan, fine grained sandy SILT - Moist				10						0	
					12						0	
					14						0	
					16						0	
	Tan, fine grained clayey SILT - Moist				18						0	
	Tan, fine grained sandy SILT				20						0	
	Tan, fine grained clayey SILT - Moist				22						0	
	Tan, fine grained SAND				24						0	
	Tan, fine grained clayey SILT - Moist				26						0	
	Tan, fine grained sandy SILT				28						0	
					30						0	
	Tan, fine to medium grained SAND				32						0	
					34						0	

# LANGAN

 LOG OF BORING **SB-07**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
		SYMBOL LOG	NUMBER TYPE RECOV. (in) PENETR. RESIST. BLK/in N-VALUE BLOWS PER FT
	Tan, course grained SAND		36
	Tan, fine grained clayey SILT - Moist		38
			40
			42
			44
			46
			48
			50
			52
			54
			56
			58
			60
			62
			64
			66
			68
			70
			72
			74
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-01**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>						
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.						
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/8/22</b>		DATE FINISHED <b>3/8/22</b>		COMPLETION DEPTH <b>20 ft.</b>		
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --		
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>						
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>					
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)		
	Asphalt Dark brown, fine to medium grained Silty SAND with trace clay				2				
					4				
	Red-brown, fine to medium clayey SAND - Moist				6				0
					8				0
	Tan, medium to coarse SAND - Moist				10				0
					12				0
	Red-brown, fine to medium SAND				14				0
					16				0
	Red-brown, fine to medium clayey SILT				18				0

# LANGAN

LOG OF BORING **SV-01**

SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-02**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>								
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.								
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/8/22</b>		DATE FINISHED <b>3/8/22</b>		COMPLETION DEPTH <b>20 ft.</b>				
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --		UNDIST. --	CORE --			
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽				
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>								
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>							
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA		REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)		
	Asphalt Dark brown, fine to medium grained Silty SAND with trace clay						Type RECov. (in)	Penetr. Resist. BL/6in	N-Value Blows per ft	PID Reading (ppm)	
					2					0	
					4					0	
	Red-brown, fine to medium clayey SAND - Moist				6					0	
					8					0	
					10					0	
	Red-brown, fine to coarse clayey SILT				12					0	
					14					0	
	Tan, fine grained sandy SILT				16					0	
	Tan, fine grained clayey SILT				18					0	
	Tan, fine grained silty SAND										

# LANGAN

 LOG OF BORING **SV-02**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-03**

 SHEET **1** OF **1**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>									
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.									
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/8/22</b>		DATE FINISHED <b>3/8/22</b>		COMPLETION DEPTH <b>20 ft.</b>					
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --					
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽					
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>									
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>								
ELEV. (ft)	SAMPLE DESCRIPTION			SAMPLE LOG SYMBOL	DEPTH SCALE	NUMBER	SAMPLE DATA			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)		
	Asphalt Red-brown, fine to medium grained clayey SAND						Type	RECov. (in)	Penetr. Resist. BL/6in	N-Value Blows per ft	PID Reading (ppm)	
					2						0	
					4						0	
					6						0	
					8						0	
					10						0	
	Red-brown, fine to medium grained silty SAND				12						0	
					14						0	
	Red-brown, fine to medium grained clayey SILT				16						0	
	Red-brown, fine to medium grained sandy SILT				18						0	
	Red-brown, fine to medium grained clayey SAND											

# LANGAN

 LOG OF BORING **SV-04**

 SHEET **1** OF **1**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>								
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.								
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>4/2/22</b>		DATE FINISHED <b>4/2/22</b>		COMPLETION DEPTH <b>20 ft.</b>				
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --				
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽				
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>								
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Marcoluis Garcia</b>							
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
							TYPE	REC'D. (in)	PENETR. BL/6in		N-VALUE BLOWS PER FT
	Asphalt										
	Top Soil										
	Red Brown fine to medium grained sandy SILT with some clay					2					
						4					
						6					
						8					
						10					
						12					
	Grey Brown fine to medium grained silty SAND					14					
						16					
	Grey Brown fine to medium grained silty CLAY					18					

# LANGAN

 LOG OF BORING **SV-05**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. <b>721033501</b>		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED <b>4/2/22</b>	DATE FINISHED <b>4/2/22</b>	
SIZE AND TYPE OF BIT <b>2"</b>		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) <b>2"</b>		WATER LEVEL (ft.)	FIRST ▽	
SAMPLER Continuous Acetate Liner		UNDIST. --	CORE --	
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Marcoluis Garcia</b>	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Top Soil			
	Red Brown fine to medium grained sandy SILT	5		6.0
	Grey Brown fine to medium grained silty SAND	10		
	Grey Brown fine to medium grained silty CLAY	15		
	Grey Brown fine to medium grained sandy SILT	20		
	Grey Brown fine to medium grained silty CLAY	25		1.6
	Grey Brown medium grained clayey SILT	30		
	Grey Brown medium to coarse grained silty SAND with some gravel	35		

# LANGAN

 LOG OF BORING **SV-05**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
		N-VALUE BLOWS PER FT	PID Reading (ppm)
		45	
		50	
		55	
		60	
		65	
		70	
		75	
		80	
		85	

# LANGAN

 LOG OF BORING **SV-06**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/8/22	DATE FINISHED 3/8/22	
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 50	WATER LEVEL (ft.)	FIRST ▽	
SAMPLER Continuous Acetate Liner		UNDIST. --	COMPL. ▼	
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten, Nilma Edward	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS
			NUMBER TYPE RECOV. (in) PENETR. RESIST. BL/6in	(DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine to medium grained silty SAND with some clay - moist	5		0 0
	Red-brown, fine grained sandy SILT	10		0.2 0.3 0.3 0.3
	Tan, fine grained sandy SILT - moist	15		.1 0
	Tan, fine grained clayey SAND	20		0 0
	Tan, fine grained silty SAND	25		0 0
	Tan, fine to medium grained clayey SAND	30		0 0
	Red-brown, fine to medium grained SAND	35		0 0
	Tan, fine to medium grained SAND	40		0 0
	Red-brown, course grained SAND with some gravel - moist	45		0 0
	Brown, fine grained silty CLAY - moist			0 0
	Tan, fine to medium grained SAND			0 0

# LANGAN

LOG OF BORING SV-06

SHEET 2 OF 2

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA			
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					0	
			55			
			60			
			65			
			70			
			75			
			80			
			85			
			90			
			95			
			100			
			105			

# LANGAN

 LOG OF BORING **SV-07**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. <b>721033501</b>					
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED <b>3/8/22</b>	DATE FINISHED <b>3/8/22</b>				
SIZE AND TYPE OF BIT <b>2"</b>		NUMBER OF SAMPLES	DIST. --				
CASING DIAMETER (in) <b>2"</b>	CASING DEPTH(ft) <b>50</b>	WATER LEVEL (ft.)	FIRST ▼				
SAMPLER Continuous Acetate Liner		UNDIST.	COMPL. ▼				
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	DRILLING FOREMAN Raul				
INSPECTING ENGINEER Casey Slatten, Nilma Edward							
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS			
		NUMBER LOG	TYPE RECOV. (in)	PENETR. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	(DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine grained sandy SILT with some clay - moist					0	
	Tan, fine grained sandy SILT - moist	5				0	
	Medium brown, fine grained clayey SAND - moist	10				0	
	Tan, fine grained SAND - moist	15				0	
	Tan, fine to medium grained clayey SAND	20				0	
	Red-brown, fine to medium grained SAND - moist	25				0	
	Tan, fine grained sandy SILT - moist	30				1	
	Tan, fine grained clayey SILT					0	
	Tan, fine to medium grained silty SAND					0	
	Tan, medium to coarse grained SAND	35				0	
	Tan, fine to medium grained SAND					0	
	Tan, fine grained sandy SILT					0	
	Red-brown, fine grained clayey SAND - moist	40				0	
	Tan, medium to coarse grained SAND - moist					0	
	Tan, fine grained SAND					0	
	Tan, course grained SAND					0	
	Tan, fine grained SAND	45				0	

# **LANGAN**

LOG OF BORING SV-07

SHEET 2 OF 2

# LANGAN

 LOG OF BORING **SV-08**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/10/22</b>		DATE FINISHED <b>3/10/22</b>		COMPLETION DEPTH <b>20 ft.</b>	
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --	
CASING DIAMETER (in) <b>2"</b>	CASING DEPTH(ft) <b>20</b>		WATER LEVEL (ft.)	FIRST ▽	COMPL. ▼	24 HR. ▽		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>					
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>					
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Dark grey, fine grained clayey SAND- Moist				2			
	Red-brown, fine grained clayey SAND- Moist				4			0
	Brown, fine grained SAND				6			0
	Brown, fine grained clayey SNAD				8			0
	Red-brown fine grained clayey SAND with dark gray sand lenses				10			0
	Brown, fine grained clayey SAND				12			0
	Red-brown fine grained clayey SAND with dark gray sand lenses				14			0
	Brown, fine grained clayey SAND				16			0
	Brown, fine to medium grained clayey SAND				18			0
	Red-brown, fine grained SAND							0

# LANGAN

 LOG OF BORING **SV-08**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-09**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/10/22	DATE FINISHED 3/10/22	
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 50	WATER LEVEL (ft.)	FIRST ▼	
SAMPLER Continuous Acetate Liner		UNDIST.	COMPL. ▼	
SAMPLER HAMMER --	WEIGHT(lbs) --	DRILLING FOREMAN Raul	24 HR. ▼	
SAMPLER HAMMER --	WEIGHT(lbs) --	INSPECTING ENGINEER Casey Slatten, Nilma Edward		
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Dark brown, fine grained clayey SAND with gravel	5		
	Red-brown, fine grained clayey SAND with gravel	10		
	Grey-brown, fine grained clayey SAND with gravel	15		
	Brown, fine grained clayey SAND with gravel	20		
	Brown, fine grained SAND	25		
	Red-brown, fine grained clayey SAND with gravel	30		
	Grey, fine grained clayey SAND with gravel	35		
	Brown, fine grained clayey SAND with gravel	40		
	Brown, fine to medium grained SAND	45		
	Brown, fine grained clayey SAND			
	Brown, fine to medium grained SAND			
	Grey-brown, fine to medium grained SAND			
	Grey-brown, fine grained clayey SAND with gravel			
	Dark-grey, course grained SAND with gravel			
	Tan-brown, course grained SAND with gravel			
	Tan-brown, fine grained clayey SAND			
	Tan-brown, medium to coarse grained SAND with gravel			
	Tan-brown, medium grained SAND with gravel			
	Tan-brown, medium to coarse grained SAND with gravel			
	Tan-brown, medium grained SAND with gravel			

# LANGAN

 LOG OF BORING **SV-09**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA			
LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					0	
		55				
		60				
		65				
		70				
		75				
		80				
		85				
		90				
		95				
		100				
		105				

# **LANGAN**

LOG OF BORING SV-10

SHEET 1 OF 2

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501								
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.								
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/9/22		DATE FINISHED 3/9/22		COMPLETION DEPTH 20 ft.				
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --		UNDIST. --				
CASING DIAMETER (in) 2"		CASING DEPTH(ft) 20		WATER LEVEL (ft.)		FIRST ▽		COMPL. ▽			
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN Raul								
SAMPLER HAMMER --		WEIGHT(lbs) --		DROP(in) --		INSPECTING ENGINEER Casey Slatten, Nilma Edward					
ELEV. (ft)	SAMPLE DESCRIPTION		SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
					NUMBER	TYPE	RECOV. (in)	PENETR. BL/in	N-VALUE BLOWS PER FT		PID Reading (ppm)
	Concrete with Rebar										
	Red-brown, fine grained clayey SAND - moist				2					0	
					4					0	
					6					0	
					8					0	
					10					0	
					12					0	
					14					0	
	Tan, fine grained silty SAND - moist				16					0	
	Tan, fine grained clayey SAND				18					0	

# LANGAN

 LOG OF BORING **SV-10**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# **LANGAN**

LOG OF BORING SV-11

SHEET 1 OF 1

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501								
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.								
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/9/22		DATE FINISHED 3/9/22		COMPLETION DEPTH 20 ft.				
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --		UNDIST. --				
CASING DIAMETER (in) 2"		CASING DEPTH(ft) 20		WATER LEVEL (ft.)		FIRST ▽		COMPL. ▽			
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN Raul								
SAMPLER HAMMER --		WEIGHT(lbs) --		DROP(in) --		INSPECTING ENGINEER Casey Slatten, Nilma Edward					
ELEV. (ft)	SAMPLE DESCRIPTION		SYMBOL LOG	DEPTH SCALE	SAMPLE DATA					REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)	
					NUMBER	TYPE	RECOV. (in)	PENETR. BL/in	N-VALUE BLOWS PER FT		PID Reading (ppm)
	Concrete with Rebar										
	Red-brown, fine grained clayey SAND - moist				2					0	
					4					0	
					6					0	
					8					0	
					10					0	
					12					0	
					14					0	
	Tan, fine grained silty SAND - moist				16					0	
					18					0	
	Tan, fine grained clayey SAND										
	Tan, fine grained SAND										

# LANGAN

 LOG OF BORING **SV-12**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/10/22</b>		DATE FINISHED <b>3/10/22</b>		COMPLETION DEPTH <b>20 ft.</b>	
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --	
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽	
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>					
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --		INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>			
ELEV. (ft)	SAMPLE DESCRIPTION		SAMPLE LOG SYMBOL	DEPTH SCALE NUMBER	SAMPLE DATA			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Concrete with Rebar				TYPE REC'D. (in)	PENETR. RESIST. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)
	Red-brown fine grained clayey SAND - Moist			2				0
				4				0
				6				0
				8				0
				10				0
				12				0
	Red-brown fine grained SAND			14				0
	Tan-brown fine grained SAND			16				0
	Brown, fine grained clayey SAND			18				0

# LANGAN

 LOG OF BORING **SV-12**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-13**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>						
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.						
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/10/22</b>		DATE FINISHED <b>3/10/22</b>		COMPLETION DEPTH <b>20 ft.</b>		
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --		
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>						
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>					
ELEV. (ft)	SAMPLE DESCRIPTION			SAMPLE LOG SYMBOL	DEPTH SCALE NUMBER	SAMPLE DATA			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Dark-brown, fine grained clayey SAND - Moist				2				
					4				
	Red-brown, fine grained clayey SAND - Moist				6				0.4
					8				0
					10				0
					12				0
	Red-brown, fine grained SAND								0
	Brown, fine grained SAND								0
	Tan-brown, fine grained SAND				14				0
	Tan-brown, fine grained clayey SAND				16				0
					18				0

# LANGAN

 LOG OF BORING **SV-13**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-14**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/9/22	DATE FINISHED 3/9/22				
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --				
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 50	WATER LEVEL (ft.)	FIRST ▽				
SAMPLER Continuous Acetate Liner		UNDIST. --	COMPL. ▼				
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	DRILLING FOREMAN Raul				
INSPECTING ENGINEER Casey Slatten, Nilma Edward							
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS			
		NUMBER	TYPE RECOV. (in)	PENETR. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	(DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Red-brown, fine grained clayey SAND - Moist					0	
		5				0	
		10				0	
	Brown, fine to medium grained SAND - Moist					0	
		15				0	
	Brown, fine grained clayey SAND - Moist					0	
	Brown, fine grained clayey SILT					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained SAND					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained clayey SILT					0	
	Brown, fine to medium grained SAND with gravel					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained SAND					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained clayey SILT					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained clayey SILT					0	
	Brown, fine grained clayey SAND					0	
	Dark grey-brown, fine grained clayey SAND					0.1	
	Grey, fine to medium grained SAND					1.7	
		40				2.2	
		45				0.1	
	Brown, fine to medium grained SAND					0	

# LANGAN

 LOG OF BORING **SV-14**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA			
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					0	
			55			
			60			
			65			
			70			
			75			
			80			
			85			
			90			
			95			
			100			
			105			

# LANGAN

 LOG OF BORING **SV-15**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED 3/9/22	DATE FINISHED 3/9/22				
SIZE AND TYPE OF BIT 2"		NUMBER OF SAMPLES	DIST. --				
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 50	WATER LEVEL (ft.)	FIRST ▼				
SAMPLER Continuous Acetate Liner		UNDIST.	CORE --				
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	DRILLING FOREMAN Raul				
INSPECTING ENGINEER Casey Slatten, Nilma Edward							
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	REMARKS			
		NUMBER	TYPE RECOV. (in)	PENETR. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	(DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Red-brown, fine grained clayey SAND - Moist	5				0	
		10				0	
	Red-brown, fine grained SAND - Moist					0	
	Brown, medium grained SAND - Moist					0	
	Brown, fine fine grained clayey SILT - Moist	15				0	
	Brown, fine grained clayey SAND - Moist					0	
	Brown, fine grained SAND					0	
	Brown, fine grained clayey SAND	20				0	
	Brown, fine grained SAND					0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained SAND	25				0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained SAND with gravel	30				0	
	Brown, fine grained clayey SAND					0	
	Brown, fine to medium grained SAND	35				0	
	Brown, fine grained clayey SAND					0	
	Brown, fine grained SAND	40				0	
	Grey-brown, fine to medium grained SAND - Moist					0	
	Grey-brown, fine grained SAND					0	
	Brown, fine grained clayey SAND with gravel					0	
	Brown, fine grained SAND	45				1.3	
	Brown, fine grained SAND with gravel					1.3	
	Grey-brown, fine grained SAND					0	
						0	
						0	

# LANGAN

 LOG OF BORING **SV-15**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA			
LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					0	
		55				
		60				
		65				
		70				
		75				
		80				
		85				
		90				
		95				
		100				
		105				

# LANGAN

 LOG OF BORING **SV-16**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. <b>721033501</b>					
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT		DATE STARTED <b>3/9/22</b>	DATE FINISHED <b>3/9/22</b>				
SIZE AND TYPE OF BIT <b>2"</b>		NUMBER OF SAMPLES	DIST. --				
CASING DIAMETER (in) <b>2"</b>		WATER LEVEL (ft.)	UNDIST. --				
		FIRST	CORE --				
		COMPL.	24 HR.				
SAMPLER Continuous Acetate Liner		DRILLING FOREMAN <b>Raul</b>					
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA				REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
NUMBER	TYPE	RECOV. (in)	PENETR. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)		
	Red-brown, fine grained clayey SAND	5			0		
	Red-brown, fine to medium grained silty SAND	10			0		
		15			0		
	Brown, fine grained silty CLAY - Moist	20			0		
	Brown, fine grained SAND	25			0		
	Brown, fine grained SILT	30			0		
	Brown, fine grained clayey SILT	35			0		
	Brown, fine grained SAND	40			0		
	Brown, fine grained clayey SAND	45			0		
	Brown, fine grained SAND				0		
	Brown, fine grained clayey SAND				0		

# LANGAN

 LOG OF BORING **SV-16**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501				
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.				
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA			
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT	PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
					0	
			55			
			60			
			65			
			70			
			75			
			80			
			85			
			90			
			95			
			100			
			105			

# **LANGAN**

LOG OF BORING SV-17

SHEET 1 OF 2

# LANGAN

 LOG OF BORING **SV-17**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
		N-VALUE BLOWS PER FT	PID Reading (ppm)
		45	
		50	
		55	
		60	
		65	
		70	
		75	
		80	
		85	

# LANGAN

 LOG OF BORING **SV-18**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>							
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.							
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/10/22</b>		DATE FINISHED <b>3/10/22</b>		COMPLETION DEPTH <b>20 ft.</b>			
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --		UNDIST. --	CORE --		
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>		WATER LEVEL (ft.)		FIRST 	COMPL. 	24 HR. 		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>							
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>						
ELEV. (ft)	SAMPLE DESCRIPTION			SAMPLE LOG DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)			
	Asphalt Dark-brown, fine grained clayey SAND - Moist					TYPE REC'D. (in)	PENETR. RESIST. BL/6in	N-VALUE BLOWS PER FT	PID Reading (ppm)	
					2					
					4					
	Red-brown, fine grained clayey SAND - Moist				6					0
					8					0
					10					0
	Brown, fine to medium grained clayey SAND - Moist				12					0
					14					0
	Grey-brown, fine to medium grained clayey SAND - Moist				16					0
					18					0
	Brown, fine grained SAND									

# LANGAN

 LOG OF BORING **SV-18**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501	
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.	
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in
			N-VALUE BLOWS PER FT
		22	
		24	
		26	
		28	
		30	
		32	
		34	
		36	
		38	
		40	
		42	
			PID Reading (ppm)
			0
			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)

# LANGAN

 LOG OF BORING **SV-19**

 SHEET **1** OF **1**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. 721033501					
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.					
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED 3/10/22		DATE FINISHED 3/10/22		COMPLETION DEPTH 20 ft.	
SIZE AND TYPE OF BIT 2"			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --	
CASING DIAMETER (in) 2"	CASING DEPTH(ft) 20		WATER LEVEL (ft.)		FIRST 	COMPL. 	24 HR. 	
SAMPLER Continuous Acetate Liner	DRILLING FOREMAN Raul							
SAMPLER HAMMER --	WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER Casey Slatten, Nilma Edward					
ELEV. (ft)	SAMPLE DESCRIPTION			SYMBOL LOG	DEPTH SCALE	NUMBER	SAMPLE DATA	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Brown, fine grained clayey SAND - Moist				2			
	Red-brown, fine grained clayey SAND - Moist				4			0
	Brown, fine grained clayey SAND with gravel				6			0
	Brown, fine to medium grained clayey SAND with gravel				8			0
	Brown, fine grained clayey SAND with gravel				10			0
	Brown, fine grained clayey SAND with gravel				12			0
	Brown, fine grained clayey SAND with gravel				14			0
	Brown, fine grained SAND with gravel				16			0
	Brown, fine grained SAND				18			
	Brown, fine grained clayey SAND							

# LANGAN

 LOG OF BORING **SV-20**

 SHEET **1** OF **2**

PROJECT Orbis - Santa Fe Springs			PROJECT NO. <b>721033501</b>						
LOCATION 10845 Koontz Ave, Santa Fe Springs			ELEVATION AND DATUM Approx.						
DRILLING EQUIPMENT Geoprobe 7822 DT			DATE STARTED <b>3/10/22</b>		DATE FINISHED <b>3/10/22</b>		COMPLETION DEPTH <b>20 ft.</b>		
SIZE AND TYPE OF BIT <b>2"</b>			NUMBER OF SAMPLES		DIST. --	UNDIST. --	CORE --		
CASING DIAMETER (in) <b>2"</b>		CASING DEPTH(ft) <b>20</b>	WATER LEVEL (ft.)		FIRST ▽	COMPL. ▼	24 HR. ▽		
SAMPLER Continuous Acetate Liner			DRILLING FOREMAN <b>Raul</b>						
SAMPLER HAMMER --		WEIGHT(lbs) --	DROP(in) --	INSPECTING ENGINEER <b>Casey Slatten, Nilma Edward</b>					
ELEV. (ft)	SAMPLE DESCRIPTION			SAMPLE LOG SYMBOL	DEPTH SCALE NUMBER	SAMPLE DATA			REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
	Asphalt Brown, fine grained clayey SAND - Moist				2				
					4				
	Red-brown, fine grained clayey SAND - Moist				6				0
					8				0
	Grey-brown, fine grained clayey SAND - Moist				10				0
	Grey-brown, fine to medium grained clayey SAND - Moist				12				0
					14				0
	Grey-brown, fine grained clayey SAND				16				0
					18				0
	Brown, fine grained clayey SILT - Moist								0

# LANGAN

 LOG OF BORING **SV-20**

 SHEET **2** OF **2**

PROJECT Orbis - Santa Fe Springs		PROJECT NO. 721033501		
LOCATION 10845 Koontz Ave, Santa Fe Springs		ELEVATION AND DATUM Approx.		
ELEV. (ft)	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLE DATA	
SYMBOL LOG	NUMBER	TYPE RECOV. (in.)	PENETR. RESIST. BLK/in	N-VALUE BLOWS PER FT
		22		
		24		
		26		
		28		
		30		
		32		
		34		
		36		
		38		
		40		
		42		
			PID Reading (ppm)	REMARKS (DRILLING FLUID, DEPTH OF CASING, FLUID LOSS, DRILLING RESISTANCE, ETC.)
			0	

## **APPENDIX C**

### **Laboratory Analytical Reports**



March 15, 2022

Julian Grochocki  
Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles, CA 90071  
Tel: (213) 314-8100  
Fax:

ELAP No.: 1838  
CSDLAC No.: 10196  
ORELAP No.: CA300003

Re: ATL Work Order Number : 2200309  
Client Reference : Orbis - Santa Fe Springs / 721033501

Enclosed are the results for sample(s) received on March 07, 2022 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Michel".

A handwritten signature in black ink, appearing to read "for".

Victoria Michel, Project Assistant

Victoria.Michel@atlglobal.com

Authorized to Release on 03/15/22 11:30 on Behalf of

A handwritten signature in black ink, appearing to read "Amy Leung".

Amy Leung  
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-01-10'	2200309-01	Soil	3/07/22 8:58	3/07/22 16:41
SB-01-35'	2200309-02	Soil	3/07/22 9:37	3/07/22 16:41
SB-02-10'	2200309-03	Soil	3/07/22 10:17	3/07/22 16:41
SB-02-35'	2200309-04	Soil	3/07/22 10:36	3/07/22 16:41
SB-03-7'	2200309-05	Soil	3/07/22 11:15	3/07/22 16:41
SB-03-15'	2200309-06	Soil	3/07/22 11:22	3/07/22 16:41
SB-03-35'	2200309-07	Soil	3/07/22 11:40	3/07/22 16:41
SB-04-10'	2200309-08	Soil	3/07/22 13:10	3/07/22 16:41
SB-04-35'	2200309-09	Soil	3/07/22 13:30	3/07/22 16:41
SB-05-10'	2200309-10	Soil	3/07/22 14:03	3/07/22 16:41
SB-05-35'	2200309-11	Soil	3/07/22 14:29	3/07/22 16:41
SB-06-9'	2200309-12	Soil	3/07/22 14:55	3/07/22 16:41
SB-06-35'	2200309-13	Soil	3/07/22 15:28	3/07/22 16:41
DUP-SS-1A	2200309-14	Soil	3/07/22 0:00	3/07/22 16:41



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
MO	Manufacturer omitted analyte within the stock standard.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
L3	Laboratory control sample outside in-house established limits but within method criteria.
D10	Sample required dilution due to dark sample
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

#### Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-10'**  
**Lab ID: 2200309-01**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 14:00	
C23-C32	ND	10	1	B2C1015	03/08/2022	03/08/22 14:00	
Surrogate: p-Terphenyl	105 %	62 - 141		B2C1015	03/08/2022	03/08/22 14:00	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1,1-Trichloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1,2,2-Tetrachloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1,2-Trichloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1-Dichloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1-Dichloroethene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,1-Dichloropropene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2,3-Trichloropropane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2,3-Trichlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2,4-Trichlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2,4-Trimethylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2-Dibromo-3-chloropropane	ND	8.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2-Dibromoethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2-Dichlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2-Dichloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,2-Dichloropropane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,3,5-Trimethylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,3-Dichlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,3-Dichloropropane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
1,4-Dichlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
2,2-Dichloropropane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
2-Chlorotoluene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
4-Chlorotoluene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
4-Isopropyltoluene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Benzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Bromobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Bromochloromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Bromodichloromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Bromoform	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Bromomethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Carbon disulfide	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Carbon tetrachloride	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Chlorobenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-10'**  
**Lab ID: 2200309-01**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Chloroform	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Chloromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
cis-1,2-Dichloroethene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
cis-1,3-Dichloropropene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Di-isopropyl ether	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Dibromochloromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Dibromomethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Dichlorodifluoromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Ethyl Acetate	ND	40	1	B2C1064	03/10/2022	03/10/22 15:35	
Ethyl Ether	ND	40	1	B2C1064	03/10/2022	03/10/22 15:35	
Ethyl tert-butyl ether	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Ethylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Freon-113	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Hexachlorobutadiene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Isopropylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
m,p-Xylene	ND	8.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Methylene chloride	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
MTBE	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
n-Butylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
n-Propylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Naphthalene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
o-Xylene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
sec-Butylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Styrene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
tert-Amyl methyl ether	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
tert-Butanol	ND	80	1	B2C1064	03/10/2022	03/10/22 15:35	
tert-Butylbenzene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Tetrachloroethene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Toluene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
trans-1,2-Dichloroethene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
trans-1,3-Dichloropropene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Trichloroethene	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Trichlorofluoromethane	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
Vinyl acetate	ND	40	1	B2C1064	03/10/2022	03/10/22 15:35	
Vinyl chloride	ND	4.0	1	B2C1064	03/10/2022	03/10/22 15:35	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	115 %	66 - 200		B2C1064	03/10/2022	03/10/22 15:35	
<i>Surrogate: 4-Bromofluorobenzene</i>	97.3 %	50 - 146		B2C1064	03/10/2022	03/10/22 15:35	
<i>Surrogate: Dibromofluoromethane</i>	112 %	77 - 159		B2C1064	03/10/2022	03/10/22 15:35	
<i>Surrogate: Toluene-d8</i>	97.1 %	81 - 128		B2C1064	03/10/2022	03/10/22 15:35	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-10'**  
**Lab ID: 2200309-01**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.74	1	B2C1074	03/10/2022	03/11/22 05:55	
C4-C12	ND	0.74	1	B2C1074	03/10/2022	03/11/22 05:55	
Surrogate: 4-Bromofluorobenzene	95.5 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 05:55	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-35'**  
**Lab ID: 2200309-02**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 14:18	
<b>C23-C32</b>	<b>11</b>	10	1	B2C1015	03/08/2022	03/08/22 14:18	
<i>Surrogate: p-Terphenyl</i>	90.5 %	62 - 141		B2C1015	03/08/2022	03/08/22 14:18	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1,1-Trichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1,2,2-Tetrachloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1,2-Trichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1-Dichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,1-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2,3-Trichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2,3-Trichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2,4-Trichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2,4-Trimethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2-Dibromo-3-chloropropane	ND	7.3	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2-Dibromoethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2-Dichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,2-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,3,5-Trimethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,3-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,3-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
1,4-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
2,2-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
2-Chlorotoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
4-Chlorotoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
4-Isopropyltoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
<b>Benzene</b>	<b>14</b>	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Bromobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Bromochloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Bromodichloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Bromoform	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Bromomethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Carbon disulfide	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Carbon tetrachloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Chlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-35'**  
**Lab ID: 2200309-02**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Chloroform	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Chloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
cis-1,2-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
cis-1,3-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Di-isopropyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Dibromochloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Dibromomethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Dichlorodifluoromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Ethyl Acetate	ND	37	1	B2C1064	03/10/2022	03/10/22 16:00	
Ethyl Ether	ND	37	1	B2C1064	03/10/2022	03/10/22 16:00	
Ethyl tert-butyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Ethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Freon-113	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Hexachlorobutadiene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Isopropylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
m,p-Xylene	ND	7.3	1	B2C1064	03/10/2022	03/10/22 16:00	
Methylene chloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
MTBE	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
n-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
n-Propylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Naphthalene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
o-Xylene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
sec-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Styrene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
tert-Amyl methyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
tert-Butanol	ND	73	1	B2C1064	03/10/2022	03/10/22 16:00	
tert-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Tetrachloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
<b>Toluene</b>	<b>6.2</b>	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
trans-1,2-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
trans-1,3-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Trichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Trichlorofluoromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
Vinyl acetate	ND	37	1	B2C1064	03/10/2022	03/10/22 16:00	
Vinyl chloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:00	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	123 %	66 - 200		B2C1064	03/10/2022	03/10/22 16:00	
<i>Surrogate: 4-Bromofluorobenzene</i>	99.4 %	50 - 146		B2C1064	03/10/2022	03/10/22 16:00	
<i>Surrogate: Dibromofluoromethane</i>	112 %	77 - 159		B2C1064	03/10/2022	03/10/22 16:00	
<i>Surrogate: Toluene-d8</i>	97.2 %	81 - 128		B2C1064	03/10/2022	03/10/22 16:00	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-01-35'**  
**Lab ID: 2200309-02**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.84	1	B2C1074	03/10/2022	03/11/22 06:19	
C4-C12	ND	0.84	1	B2C1074	03/10/2022	03/11/22 06:19	
Surrogate: 4-Bromofluorobenzene	94.0 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 06:19	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-10'**  
**Lab ID: 2200309-03**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 14:36	
<b>C23-C32</b>	<b>11</b>	<b>10</b>	<b>1</b>	<b>B2C1015</b>	<b>03/08/2022</b>	<b>03/08/22 14:36</b>	
<i>Surrogate: p-Terphenyl</i>	<i>93.0 %</i>	<i>62 - 141</i>		B2C1015	03/08/2022	<i>03/08/22 14:36</i>	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1,1-Trichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1,2,2-Tetrachloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1,2-Trichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1-Dichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,1-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2,3-Trichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2,3-Trichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2,4-Trichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2,4-Trimethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2-Dibromo-3-chloropropane	ND	7.4	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2-Dibromoethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2-Dichloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,2-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,3,5-Trimethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,3-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,3-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
1,4-Dichlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
2,2-Dichloropropane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
2-Chlorotoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
4-Chlorotoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
4-Isopropyltoluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Benzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Bromobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Bromochloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Bromodichloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Bromoform	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Bromomethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Carbon disulfide	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Carbon tetrachloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Chlorobenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-10'**  
**Lab ID: 2200309-03**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Chloroform	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Chloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
cis-1,2-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
cis-1,3-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Di-isopropyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Dibromochloromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Dibromomethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Dichlorodifluoromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Ethyl Acetate	ND	37	1	B2C1064	03/10/2022	03/10/22 16:24	
Ethyl Ether	ND	37	1	B2C1064	03/10/2022	03/10/22 16:24	
Ethyl tert-butyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Ethylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Freon-113	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Hexachlorobutadiene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Isopropylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
m,p-Xylene	ND	7.4	1	B2C1064	03/10/2022	03/10/22 16:24	
Methylene chloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
MTBE	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
n-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
n-Propylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Naphthalene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
o-Xylene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
sec-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Styrene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
tert-Amyl methyl ether	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
tert-Butanol	ND	74	1	B2C1064	03/10/2022	03/10/22 16:24	
tert-Butylbenzene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Tetrachloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Toluene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
trans-1,2-Dichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
trans-1,3-Dichloropropene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Trichloroethene	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Trichlorofluoromethane	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
Vinyl acetate	ND	37	1	B2C1064	03/10/2022	03/10/22 16:24	
Vinyl chloride	ND	3.7	1	B2C1064	03/10/2022	03/10/22 16:24	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	114 %	66 - 200		B2C1064	03/10/2022	03/10/22 16:24	
<i>Surrogate: 4-Bromofluorobenzene</i>	94.9 %	50 - 146		B2C1064	03/10/2022	03/10/22 16:24	
<i>Surrogate: Dibromofluoromethane</i>	113 %	77 - 159		B2C1064	03/10/2022	03/10/22 16:24	
<i>Surrogate: Toluene-d8</i>	96.8 %	81 - 128		B2C1064	03/10/2022	03/10/22 16:24	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-10'**  
**Lab ID: 2200309-03**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.68	1	B2C1074	03/10/2022	03/11/22 06:43	
C4-C12	ND	0.68	1	B2C1074	03/10/2022	03/11/22 06:43	
Surrogate: 4-Bromofluorobenzene	92.8 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 06:43	



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-35'**  
**Lab ID: 2200309-04**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 14:54	
<b>C23-C32</b>	<b>11</b>	<b>10</b>	<b>1</b>	<b>B2C1015</b>	<b>03/08/2022</b>	<b>03/08/22 14:54</b>	
<i>Surrogate: p-Terphenyl</i>	<i>103 %</i>	<i>62 - 141</i>		B2C1015	03/08/2022	<i>03/08/22 14:54</i>	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1,1-Trichloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1,2,2-Tetrachloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1,2-Trichloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1-Dichloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1-Dichloroethene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,1-Dichloropropene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2,3-Trichloropropane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2,3-Trichlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2,4-Trichlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2,4-Trimethylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2-Dibromo-3-chloropropane	ND	9.2	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2-Dibromoethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2-Dichlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2-Dichloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,2-Dichloropropane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,3,5-Trimethylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,3-Dichlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,3-Dichloropropane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
1,4-Dichlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
2,2-Dichloropropane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
2-Chlorotoluene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
4-Chlorotoluene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
4-Isopropyltoluene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Benzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Bromobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Bromochloromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Bromodichloromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Bromoform	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Bromomethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Carbon disulfide	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Carbon tetrachloride	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Chlorobenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-35'**  
**Lab ID: 2200309-04**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Chloroform	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Chloromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
cis-1,2-Dichloroethene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
cis-1,3-Dichloropropene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Di-isopropyl ether	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Dibromochloromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Dibromomethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Dichlorodifluoromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Ethyl Acetate	ND	46	1	B2C1064	03/10/2022	03/10/22 16:49	
Ethyl Ether	ND	46	1	B2C1064	03/10/2022	03/10/22 16:49	
Ethyl tert-butyl ether	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Ethylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Freon-113	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Hexachlorobutadiene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Isopropylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
m,p-Xylene	ND	9.2	1	B2C1064	03/10/2022	03/10/22 16:49	
Methylene chloride	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
MTBE	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
n-Butylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
n-Propylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Naphthalene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
o-Xylene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
sec-Butylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Styrene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
tert-Amyl methyl ether	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
tert-Butanol	ND	92	1	B2C1064	03/10/2022	03/10/22 16:49	
tert-Butylbenzene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Tetrachloroethene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Toluene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
trans-1,2-Dichloroethene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
trans-1,3-Dichloropropene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Trichloroethene	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Trichlorofluoromethane	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
Vinyl acetate	ND	46	1	B2C1064	03/10/2022	03/10/22 16:49	
Vinyl chloride	ND	4.6	1	B2C1064	03/10/2022	03/10/22 16:49	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	109 %	66 - 200		B2C1064	03/10/2022	03/10/22 16:49	
<i>Surrogate: 4-Bromofluorobenzene</i>	94.5 %	50 - 146		B2C1064	03/10/2022	03/10/22 16:49	
<i>Surrogate: Dibromofluoromethane</i>	109 %	77 - 159		B2C1064	03/10/2022	03/10/22 16:49	
<i>Surrogate: Toluene-d8</i>	97.6 %	81 - 128		B2C1064	03/10/2022	03/10/22 16:49	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-02-35'**  
**Lab ID: 2200309-04**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.89	1	B2C1074	03/10/2022	03/11/22 10:40	
C4-C12	ND	0.89	1	B2C1074	03/10/2022	03/11/22 10:40	
Surrogate: 4-Bromofluorobenzene	95.1 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 10:40	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-7'**  
**Lab ID: 2200309-05**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	<b>120</b>	10	1	B2C1015	03/08/2022	03/08/22 15:12	
C23-C32	ND	10	1	B2C1015	03/08/2022	03/08/22 15:12	
Surrogate: p-Terphenyl	114 %	62 - 141		B2C1015	03/08/2022	03/08/22 15:12	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1,1-Trichloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1,2,2-Tetrachloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1,2-Trichloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1-Dichloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1-Dichloroethene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,1-Dichloropropene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2,3-Trichloropropane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2,3-Trichlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2,4-Trichlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>1,2,4-Trimethylbenzene</b>	<b>54000</b>	1800	500	B2C1127	03/10/2022	03/14/22 15:44	
1,2-Dibromo-3-chloropropane	ND	360	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2-Dibromoethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2-Dichlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2-Dichloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,2-Dichloropropane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>1,3,5-Trimethylbenzene</b>	<b>8400</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,3-Dichlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,3-Dichloropropane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
1,4-Dichlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
2,2-Dichloropropane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
2-Chlorotoluene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
4-Chlorotoluene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>4-Isopropyltoluene</b>	<b>840</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Benzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Bromobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Bromochloromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Bromodichloromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Bromoform	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Bromomethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Carbon disulfide	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Carbon tetrachloride	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Chlorobenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-7'**

**Lab ID: 2200309-05**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Chloroform	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Chloromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
cis-1,2-Dichloroethene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
cis-1,3-Dichloropropene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Di-isopropyl ether	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Dibromochloromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Dibromomethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Dichlorodifluoromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Ethyl Acetate	ND	1800	50	B2C1057	03/10/2022	03/10/22 21:23	
Ethyl Ether	ND	1800	50	B2C1057	03/10/2022	03/10/22 21:23	
Ethyl tert-butyl ether	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>Ethylbenzene</b>	<b>3100</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Freon-113	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Hexachlorobutadiene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>Isopropylbenzene</b>	<b>870</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>m,p-Xylene</b>	<b>2700</b>	360	50	B2C1057	03/10/2022	03/10/22 21:23	
Methylene chloride	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
MTBE	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>n-Butylbenzene</b>	<b>9200</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>n-Propylbenzene</b>	<b>5000</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>Naphthalene</b>	<b>13000</b>	1800	500	B2C1127	03/10/2022	03/14/22 15:44	
<b>o-Xylene</b>	<b>460</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<b>sec-Butylbenzene</b>	<b>1300</b>	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Styrene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
tert-Amyl methyl ether	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
tert-Butanol	ND	3600	50	B2C1057	03/10/2022	03/10/22 21:23	
tert-Butylbenzene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Tetrachloroethene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Toluene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
trans-1,2-Dichloroethene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
trans-1,3-Dichloropropene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Trichloroethene	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Trichlorofluoromethane	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
Vinyl acetate	ND	1800	50	B2C1057	03/10/2022	03/10/22 21:23	
Vinyl chloride	ND	180	50	B2C1057	03/10/2022	03/10/22 21:23	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>111 %</i>	<i>66 - 200</i>		B2C1057	03/10/2022	<i>03/10/22 21:23</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>118 %</i>	<i>66 - 200</i>		B2C1127	03/10/2022	<i>03/14/22 15:44</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>138 %</i>	<i>50 - 146</i>		B2C1057	03/10/2022	<i>03/10/22 21:23</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>102 %</i>	<i>50 - 146</i>		B2C1127	03/10/2022	<i>03/14/22 15:44</i>	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-7'**  
**Lab ID: 2200309-05**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time	Notes
Surrogate: Dibromofluoromethane	99.5 %	77 - 159		B2C1057	03/10/2022	03/10/22 21:23	
Surrogate: Dibromofluoromethane	117 %	77 - 159		B2C1127	03/10/2022	03/14/22 15:44	
Surrogate: Toluene-d8	98.8 %	81 - 128		B2C1127	03/10/2022	03/14/22 15:44	
Surrogate: Toluene-d8	104 %	81 - 128		B2C1057	03/10/2022	03/10/22 21:23	

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time	Notes
Gasoline Range Organics	800	36	50	B2C1106	03/12/2022	03/12/22 10:16	D1
C4-C12	810	36	50	B2C1106	03/12/2022	03/12/22 10:16	D1
Surrogate: 4-Bromofluorobenzene	114 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 10:16	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-15'**  
**Lab ID: 2200309-06**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	370	10	1	B2C1015	03/08/2022	03/08/22 15:30	
C23-C32	29	10	1	B2C1015	03/08/2022	03/08/22 15:30	
Surrogate: <i>p</i> -Terphenyl	113 %	62 - 141		B2C1015	03/08/2022	03/08/22 15:30	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1,1-Trichloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1,2,2-Tetrachloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1,2-Trichloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1-Dichloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1-Dichloroethene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,1-Dichloropropene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2,3-Trichloropropane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2,3-Trichlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2,4-Trichlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
<b>1,2,4-Trimethylbenzene</b>	<b>380</b>	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2-Dibromo-3-chloropropane	ND	450	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2-Dibromoethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2-Dichlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2-Dichloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,2-Dichloropropane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,3,5-Trimethylbenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,3-Dichlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,3-Dichloropropane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
1,4-Dichlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
2,2-Dichloropropane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
2-Chlorotoluene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
4-Chlorotoluene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
4-Isopropyltoluene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Benzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Bromobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Bromochloromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Bromodichloromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Bromoform	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Bromomethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Carbon disulfide	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Carbon tetrachloride	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Chlorobenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-15'**  
**Lab ID: 2200309-06**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Chloroform	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Chloromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
cis-1,2-Dichloroethene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
cis-1,3-Dichloropropene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Di-isopropyl ether	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Dibromochloromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Dibromomethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Dichlorodifluoromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Ethyl Acetate	ND	2300	50	B2C1127	03/14/2022	03/14/22 15:18	
Ethyl Ether	ND	2300	50	B2C1127	03/14/2022	03/14/22 15:18	
Ethyl tert-butyl ether	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Ethylbenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Freon-113	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Hexachlorobutadiene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Isopropylbenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
m,p-Xylene	ND	450	50	B2C1127	03/14/2022	03/14/22 15:18	
Methylene chloride	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
MTBE	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
<b>n-Butylbenzene</b>	<b>620</b>	230	50	B2C1127	03/14/2022	03/14/22 15:18	
<b>n-Propylbenzene</b>	<b>280</b>	230	50	B2C1127	03/14/2022	03/14/22 15:18	
<b>Naphthalene</b>	<b>1500</b>	230	50	B2C1127	03/14/2022	03/14/22 15:18	
o-Xylene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
sec-Butylbenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Styrene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
tert-Amyl methyl ether	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
tert-Butanol	ND	4500	50	B2C1127	03/14/2022	03/14/22 15:18	
tert-Butylbenzene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Tetrachloroethene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Toluene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
trans-1,2-Dichloroethene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
trans-1,3-Dichloropropene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Trichloroethene	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Trichlorofluoromethane	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
Vinyl acetate	ND	2300	50	B2C1127	03/14/2022	03/14/22 15:18	
Vinyl chloride	ND	230	50	B2C1127	03/14/2022	03/14/22 15:18	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>110 %</i>	<i>66 - 200</i>		B2C1127	03/14/2022	<i>03/14/22 15:18</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.8 %</i>	<i>50 - 146</i>		B2C1127	03/14/2022	<i>03/14/22 15:18</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>103 %</i>	<i>77 - 159</i>		B2C1127	03/14/2022	<i>03/14/22 15:18</i>	
<i>Surrogate: Toluene-d8</i>	<i>95.6 %</i>	<i>81 - 128</i>		B2C1127	03/14/2022	<i>03/14/22 15:18</i>	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-15'**  
**Lab ID: 2200309-06**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
<b>Gasoline Range Organics</b>	<b>7.9</b>	0.89	1	B2C1074	03/10/2022	03/11/22 11:29	
<b>C4-C12</b>	<b>8.0</b>	0.89	1	B2C1074	03/10/2022	03/11/22 11:29	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>106 %</i>	<i>47.6 - 121.18</i>		B2C1074	03/10/2022	<i>03/11/22 11:29</i>	



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Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-35'**  
**Lab ID: 2200309-07**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 15:49	
<b>C23-C32</b>	<b>10</b>	10	1	B2C1015	03/08/2022	03/08/22 15:49	
<i>Surrogate: p-Terphenyl</i>	<i>91.7 %</i>	<i>62 - 141</i>		B2C1015	03/08/2022	<i>03/08/22 15:49</i>	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1,1-Trichloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1,2,2-Tetrachloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1,2-Trichloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1-Dichloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1-Dichloroethene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,1-Dichloropropene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2,3-Trichloropropane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2,3-Trichlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2,4-Trichlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2,4-Trimethylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2-Dibromo-3-chloropropane	ND	6.9	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2-Dibromoethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2-Dichlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2-Dichloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,2-Dichloropropane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,3,5-Trimethylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,3-Dichlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,3-Dichloropropane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
1,4-Dichlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
2,2-Dichloropropane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
2-Chlorotoluene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
4-Chlorotoluene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
4-Isopropyltoluene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Benzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Bromobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Bromochloromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Bromodichloromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Bromoform	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Bromomethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Carbon disulfide	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Carbon tetrachloride	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Chlorobenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-35'**

**Lab ID: 2200309-07**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Chloroform	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Chloromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
cis-1,2-Dichloroethene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
cis-1,3-Dichloropropene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Di-isopropyl ether	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Dibromochloromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Dibromomethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Dichlorodifluoromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Ethyl Acetate	ND	34	1	B2C1064	03/10/2022	03/10/22 17:13	
Ethyl Ether	ND	34	1	B2C1064	03/10/2022	03/10/22 17:13	
Ethyl tert-butyl ether	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Ethylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Freon-113	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Hexachlorobutadiene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Isopropylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
m,p-Xylene	ND	6.9	1	B2C1064	03/10/2022	03/10/22 17:13	
Methylene chloride	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
MTBE	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
n-Butylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
n-Propylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Naphthalene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
o-Xylene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
sec-Butylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Styrene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
tert-Amyl methyl ether	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
tert-Butanol	ND	69	1	B2C1064	03/10/2022	03/10/22 17:13	
tert-Butylbenzene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Tetrachloroethene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Toluene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
trans-1,2-Dichloroethene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
trans-1,3-Dichloropropene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Trichloroethene	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Trichlorofluoromethane	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
Vinyl acetate	ND	34	1	B2C1064	03/10/2022	03/10/22 17:13	
Vinyl chloride	ND	3.4	1	B2C1064	03/10/2022	03/10/22 17:13	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	117 %	66 - 200		B2C1064	03/10/2022	03/10/22 17:13	
<i>Surrogate: 4-Bromofluorobenzene</i>	102 %	50 - 146		B2C1064	03/10/2022	03/10/22 17:13	
<i>Surrogate: Dibromofluoromethane</i>	106 %	77 - 159		B2C1064	03/10/2022	03/10/22 17:13	
<i>Surrogate: Toluene-d8</i>	104 %	81 - 128		B2C1064	03/10/2022	03/10/22 17:13	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-03-35'**  
**Lab ID: 2200309-07**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.78	1	B2C1074	03/10/2022	03/11/22 11:54	
C4-C12	ND	0.78	1	B2C1074	03/10/2022	03/11/22 11:54	
Surrogate: 4-Bromofluorobenzene	96.1 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 11:54	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-10'**  
**Lab ID: 2200309-08**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	100	10	B2C1015	03/08/2022	03/08/22 16:07	D10
<b>C23-C32</b>	<b>260</b>	100	10	B2C1015	03/08/2022	03/08/22 16:07	D10
Surrogate: <i>p</i> -Terphenyl	100 %	62 - 141		B2C1015	03/08/2022	03/08/22 16:07	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1,1-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1,2,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1,2-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,1-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2,3-Trichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2,3-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2,4-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2,4-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2-Dibromo-3-chloropropane	ND	9.1	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2-Dibromoethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,3,5-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,3-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,3-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
1,4-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
2,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
2-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
4-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
4-Isopropyltoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Benzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Bromobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Bromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Bromodichloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Bromoform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Bromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Carbon disulfide	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Carbon tetrachloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Chlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-10'**  
**Lab ID: 2200309-08**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Chloroform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Chloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
cis-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
cis-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Di-isopropyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Dibromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Dibromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Dichlorodifluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Ethyl Acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 17:38	
Ethyl Ether	ND	45	1	B2C1064	03/10/2022	03/10/22 17:38	
Ethyl tert-butyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Ethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Freon-113	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Hexachlorobutadiene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Isopropylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
m,p-Xylene	ND	9.1	1	B2C1064	03/10/2022	03/10/22 17:38	
Methylene chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
MTBE	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
n-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
n-Propylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Naphthalene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
o-Xylene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
sec-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Styrene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
tert-Amyl methyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
tert-Butanol	ND	91	1	B2C1064	03/10/2022	03/10/22 17:38	
tert-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Tetrachloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Toluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
trans-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
trans-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Trichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Trichlorofluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
Vinyl acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 17:38	
Vinyl chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 17:38	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	118 %	66 - 200		B2C1064	03/10/2022	03/10/22 17:38	
<i>Surrogate: 4-Bromofluorobenzene</i>	99.8 %	50 - 146		B2C1064	03/10/2022	03/10/22 17:38	
<i>Surrogate: Dibromofluoromethane</i>	109 %	77 - 159		B2C1064	03/10/2022	03/10/22 17:38	
<i>Surrogate: Toluene-d8</i>	97.8 %	81 - 128		B2C1064	03/10/2022	03/10/22 17:38	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-10'**  
**Lab ID: 2200309-08**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.98	1	B2C1074	03/10/2022	03/11/22 12:19	
C4-C12	ND	0.98	1	B2C1074	03/10/2022	03/11/22 12:19	
Surrogate: 4-Bromofluorobenzene	95.1 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 12:19	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-35'**  
**Lab ID: 2200309-09**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 16:25	
<b>C23-C32</b>	<b>11</b>	<b>10</b>	<b>1</b>	<b>B2C1015</b>	<b>03/08/2022</b>	<b>03/08/22 16:25</b>	
<i>Surrogate: p-Terphenyl</i>	<i>95.0 %</i>	<i>62 - 141</i>		B2C1015	03/08/2022	<i>03/08/22 16:25</i>	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1,1-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1,2,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1,2-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,1-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2,3-Trichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2,3-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2,4-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2,4-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2-Dibromo-3-chloropropane	ND	8.9	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2-Dibromoethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,3,5-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,3-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,3-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
1,4-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
2,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
2-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
4-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
4-Isopropyltoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Benzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Bromobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Bromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Bromodichloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Bromoform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Bromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Carbon disulfide	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Carbon tetrachloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Chlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-35'**  
**Lab ID: 2200309-09**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Chloroform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Chloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
cis-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
cis-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Di-isopropyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Dibromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Dibromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Dichlorodifluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Ethyl Acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 18:02	
Ethyl Ether	ND	45	1	B2C1064	03/10/2022	03/10/22 18:02	
Ethyl tert-butyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Ethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Freon-113	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Hexachlorobutadiene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Isopropylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
m,p-Xylene	ND	8.9	1	B2C1064	03/10/2022	03/10/22 18:02	
Methylene chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
MTBE	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
n-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
n-Propylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Naphthalene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
o-Xylene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
sec-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Styrene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
tert-Amyl methyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
tert-Butanol	ND	89	1	B2C1064	03/10/2022	03/10/22 18:02	
tert-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Tetrachloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Toluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
trans-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
trans-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Trichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Trichlorofluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
Vinyl acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 18:02	
Vinyl chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:02	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>115 %</i>	<i>66 - 200</i>		<i>B2C1064</i>	<i>03/10/2022</i>	<i>03/10/22 18:02</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>98.4 %</i>	<i>50 - 146</i>		<i>B2C1064</i>	<i>03/10/2022</i>	<i>03/10/22 18:02</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>109 %</i>	<i>77 - 159</i>		<i>B2C1064</i>	<i>03/10/2022</i>	<i>03/10/22 18:02</i>	
<i>Surrogate: Toluene-d8</i>	<i>101 %</i>	<i>81 - 128</i>		<i>B2C1064</i>	<i>03/10/2022</i>	<i>03/10/22 18:02</i>	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-04-35'**  
**Lab ID: 2200309-09**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.98	1	B2C1106	03/12/2022	03/12/22 05:46	
C4-C12	ND	0.98	1	B2C1106	03/12/2022	03/12/22 05:46	
Surrogate: 4-Bromofluorobenzene	94.7 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 05:46	



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Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-10'**  
**Lab ID: 2200309-10**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	100	10	B2C1015	03/08/2022	03/08/22 16:43	D10
<b>C23-C32</b>	<b>200</b>	100	10	B2C1015	03/08/2022	03/08/22 16:43	D10
Surrogate: <i>p</i> -Terphenyl	106 %	62 - 141		B2C1015	03/08/2022	03/08/22 16:43	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1,1-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1,2,2-Tetrachloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1,2-Trichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,1-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2,3-Trichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2,3-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2,4-Trichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2,4-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2-Dibromo-3-chloropropane	ND	9.1	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2-Dibromoethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2-Dichloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,3,5-Trimethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,3-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,3-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
1,4-Dichlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
2,2-Dichloropropane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
2-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
4-Chlorotoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
4-Isopropyltoluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Benzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Bromobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Bromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Bromodichloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Bromoform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Bromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Carbon disulfide	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Carbon tetrachloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Chlorobenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-10'**  
**Lab ID: 2200309-10**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Chloroform	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Chloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
cis-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
cis-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Di-isopropyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Dibromochloromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Dibromomethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Dichlorodifluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Ethyl Acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 18:27	
Ethyl Ether	ND	45	1	B2C1064	03/10/2022	03/10/22 18:27	
Ethyl tert-butyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Ethylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Freon-113	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Hexachlorobutadiene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Isopropylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
m,p-Xylene	ND	9.1	1	B2C1064	03/10/2022	03/10/22 18:27	
Methylene chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
MTBE	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
n-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
n-Propylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Naphthalene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
o-Xylene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
sec-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Styrene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
tert-Amyl methyl ether	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
tert-Butanol	ND	91	1	B2C1064	03/10/2022	03/10/22 18:27	
tert-Butylbenzene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Tetrachloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Toluene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
trans-1,2-Dichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
trans-1,3-Dichloropropene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Trichloroethene	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Trichlorofluoromethane	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
Vinyl acetate	ND	45	1	B2C1064	03/10/2022	03/10/22 18:27	
Vinyl chloride	ND	4.5	1	B2C1064	03/10/2022	03/10/22 18:27	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	114 %	66 - 200		B2C1064	03/10/2022	03/10/22 18:27	
<i>Surrogate: 4-Bromofluorobenzene</i>	98.4 %	50 - 146		B2C1064	03/10/2022	03/10/22 18:27	
<i>Surrogate: Dibromofluoromethane</i>	114 %	77 - 159		B2C1064	03/10/2022	03/10/22 18:27	
<i>Surrogate: Toluene-d8</i>	101 %	81 - 128		B2C1064	03/10/2022	03/10/22 18:27	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-10'**  
**Lab ID: 2200309-10**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.88	1	B2C1106	03/12/2022	03/12/22 06:10	
C4-C12	ND	0.88	1	B2C1106	03/12/2022	03/12/22 06:10	
Surrogate: 4-Bromofluorobenzene	88.9 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 06:10	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-35'**  
**Lab ID: 2200309-11**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 17:02	
<b>C23-C32</b>	<b>12</b>	10	1	B2C1015	03/08/2022	03/08/22 17:02	
<i>Surrogate: p-Terphenyl</i>	<i>106 %</i>	<i>62 - 141</i>		B2C1015	03/08/2022	<i>03/08/22 17:02</i>	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1,1-Trichloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1,2,2-Tetrachloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1,2-Trichloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1-Dichloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1-Dichloroethene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,1-Dichloropropene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2,3-Trichloropropane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2,3-Trichlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2,4-Trichlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2,4-Trimethylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2-Dibromo-3-chloropropane	ND	10	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2-Dibromoethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2-Dichlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2-Dichloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,2-Dichloropropane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,3,5-Trimethylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,3-Dichlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,3-Dichloropropane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
1,4-Dichlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
2,2-Dichloropropane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
2-Chlorotoluene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
4-Chlorotoluene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
4-Isopropyltoluene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Benzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Bromobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Bromochloromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Bromodichloromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Bromoform	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Bromomethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Carbon disulfide	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Carbon tetrachloride	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Chlorobenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-35'**  
**Lab ID: 2200309-11**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Chloroform	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Chloromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
cis-1,2-Dichloroethene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
cis-1,3-Dichloropropene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Di-isopropyl ether	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Dibromochloromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Dibromomethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Dichlorodifluoromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Ethyl Acetate	ND	51	1	B2C1064	03/10/2022	03/10/22 18:52	
Ethyl Ether	ND	51	1	B2C1064	03/10/2022	03/10/22 18:52	
Ethyl tert-butyl ether	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Ethylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Freon-113	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Hexachlorobutadiene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Isopropylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
m,p-Xylene	ND	10	1	B2C1064	03/10/2022	03/10/22 18:52	
Methylene chloride	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
MTBE	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
n-Butylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
n-Propylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Naphthalene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
o-Xylene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
sec-Butylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Styrene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
tert-Amyl methyl ether	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
tert-Butanol	ND	100	1	B2C1064	03/10/2022	03/10/22 18:52	
tert-Butylbenzene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Tetrachloroethene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Toluene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
trans-1,2-Dichloroethene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
trans-1,3-Dichloropropene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Trichloroethene	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Trichlorofluoromethane	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
Vinyl acetate	ND	51	1	B2C1064	03/10/2022	03/10/22 18:52	
Vinyl chloride	ND	5.1	1	B2C1064	03/10/2022	03/10/22 18:52	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	108 %	66 - 200		B2C1064	03/10/2022	03/10/22 18:52	
<i>Surrogate: 4-Bromofluorobenzene</i>	97.3 %	50 - 146		B2C1064	03/10/2022	03/10/22 18:52	
<i>Surrogate: Dibromofluoromethane</i>	108 %	77 - 159		B2C1064	03/10/2022	03/10/22 18:52	
<i>Surrogate: Toluene-d8</i>	101 %	81 - 128		B2C1064	03/10/2022	03/10/22 18:52	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-05-35'**  
**Lab ID: 2200309-11**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.96	1	B2C1106	03/12/2022	03/12/22 06:34	
C4-C12	ND	0.96	1	B2C1106	03/12/2022	03/12/22 06:34	
Surrogate: 4-Bromofluorobenzene	97.0 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 06:34	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-9'**  
**Lab ID: 2200309-12**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1015	03/08/2022	03/08/22 17:20	
<b>C23-C32</b>	<b>12</b>	10	1	B2C1015	03/08/2022	03/08/22 17:20	
Surrogate: <i>p</i> -Terphenyl	102 %	62 - 141		B2C1015	03/08/2022	03/08/22 17:20	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1,1-Trichloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1,2,2-Tetrachloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1,2-Trichloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1-Dichloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1-Dichloroethene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,1-Dichloropropene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2,3-Trichloropropane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2,3-Trichlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2,4-Trichlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2,4-Trimethylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2-Dibromo-3-chloropropane	ND	8.3	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2-Dibromoethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2-Dichlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2-Dichloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,2-Dichloropropane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,3,5-Trimethylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,3-Dichlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,3-Dichloropropane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
1,4-Dichlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
2,2-Dichloropropane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
2-Chlorotoluene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
4-Chlorotoluene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
4-Isopropyltoluene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Benzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Bromobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Bromochloromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Bromodichloromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Bromoform	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Bromomethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Carbon disulfide	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Carbon tetrachloride	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Chlorobenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-9'**

**Lab ID: 2200309-12**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Chloroform	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Chloromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
cis-1,2-Dichloroethene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
cis-1,3-Dichloropropene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Di-isopropyl ether	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Dibromochloromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Dibromomethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Dichlorodifluoromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Ethyl Acetate	ND	42	1	B2C1064	03/10/2022	03/10/22 19:16	
Ethyl Ether	ND	42	1	B2C1064	03/10/2022	03/10/22 19:16	
Ethyl tert-butyl ether	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Ethylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Freon-113	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Hexachlorobutadiene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Isopropylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
m,p-Xylene	ND	8.3	1	B2C1064	03/10/2022	03/10/22 19:16	
Methylene chloride	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
MTBE	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
n-Butylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
n-Propylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Naphthalene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
o-Xylene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
sec-Butylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Styrene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
tert-Amyl methyl ether	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
tert-Butanol	ND	83	1	B2C1064	03/10/2022	03/10/22 19:16	
tert-Butylbenzene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Tetrachloroethene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Toluene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
trans-1,2-Dichloroethene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
trans-1,3-Dichloropropene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Trichloroethene	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Trichlorofluoromethane	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
Vinyl acetate	ND	42	1	B2C1064	03/10/2022	03/10/22 19:16	
Vinyl chloride	ND	4.2	1	B2C1064	03/10/2022	03/10/22 19:16	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	120 %	66 - 200		B2C1064	03/10/2022	03/10/22 19:16	
<i>Surrogate: 4-Bromofluorobenzene</i>	95.8 %	50 - 146		B2C1064	03/10/2022	03/10/22 19:16	
<i>Surrogate: Dibromofluoromethane</i>	110 %	77 - 159		B2C1064	03/10/2022	03/10/22 19:16	
<i>Surrogate: Toluene-d8</i>	101 %	81 - 128		B2C1064	03/10/2022	03/10/22 19:16	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-9'**  
**Lab ID: 2200309-12**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.75	1	B2C1106	03/12/2022	03/12/22 06:59	
C4-C12	ND	0.75	1	B2C1106	03/12/2022	03/12/22 06:59	
Surrogate: 4-Bromofluorobenzene	93.2 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 06:59	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-35'**  
**Lab ID: 2200309-13**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	20	2	B2C1015	03/08/2022	03/08/22 17:38	D10
<b>C23-C32</b>	<b>44</b>	20	2	B2C1015	03/08/2022	03/08/22 17:38	D10
Surrogate: <i>p</i> -Terphenyl	100 %	62 - 141		B2C1015	03/08/2022	03/08/22 17:38	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1,1-Trichloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1,2,2-Tetrachloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1,2-Trichloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1-Dichloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1-Dichloroethene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,1-Dichloropropene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2,3-Trichloropropane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2,3-Trichlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2,4-Trichlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2,4-Trimethylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2-Dibromo-3-chloropropane	ND	10	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2-Dibromoethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2-Dichlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2-Dichloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,2-Dichloropropane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,3,5-Trimethylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,3-Dichlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,3-Dichloropropane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
1,4-Dichlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
2,2-Dichloropropane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
2-Chlorotoluene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
4-Chlorotoluene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
4-Isopropyltoluene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Benzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Bromobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Bromochloromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Bromodichloromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Bromoform	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Bromomethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Carbon disulfide	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Carbon tetrachloride	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Chlorobenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-35'**  
**Lab ID: 2200309-13**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Chloroform	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Chloromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
cis-1,2-Dichloroethene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
cis-1,3-Dichloropropene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Di-isopropyl ether	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Dibromochloromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Dibromomethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Dichlorodifluoromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Ethyl Acetate	ND	50	1	B2C1064	03/10/2022	03/10/22 19:41	
Ethyl Ether	ND	50	1	B2C1064	03/10/2022	03/10/22 19:41	
Ethyl tert-butyl ether	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Ethylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Freon-113	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Hexachlorobutadiene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Isopropylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
m,p-Xylene	ND	10	1	B2C1064	03/10/2022	03/10/22 19:41	
Methylene chloride	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
MTBE	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
n-Butylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
n-Propylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Naphthalene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
o-Xylene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
sec-Butylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Styrene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
tert-Amyl methyl ether	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
tert-Butanol	ND	100	1	B2C1064	03/10/2022	03/10/22 19:41	
tert-Butylbenzene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Tetrachloroethene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Toluene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
trans-1,2-Dichloroethene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
trans-1,3-Dichloropropene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Trichloroethene	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Trichlorofluoromethane	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
Vinyl acetate	ND	50	1	B2C1064	03/10/2022	03/10/22 19:41	
Vinyl chloride	ND	5.0	1	B2C1064	03/10/2022	03/10/22 19:41	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	112 %	66 - 200		B2C1064	03/10/2022	03/10/22 19:41	
<i>Surrogate: 4-Bromofluorobenzene</i>	98.4 %	50 - 146		B2C1064	03/10/2022	03/10/22 19:41	
<i>Surrogate: Dibromofluoromethane</i>	110 %	77 - 159		B2C1064	03/10/2022	03/10/22 19:41	
<i>Surrogate: Toluene-d8</i>	95.3 %	81 - 128		B2C1064	03/10/2022	03/10/22 19:41	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: SB-06-35'**  
**Lab ID: 2200309-13**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.86	1	B2C1106	03/12/2022	03/12/22 07:23	
C4-C12	ND	0.86	1	B2C1106	03/12/2022	03/12/22 07:23	
Surrogate: 4-Bromofluorobenzene	93.7 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 07:23	



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Client Sample ID: DUP-SS-1A Lab ID: 2200309-14

#### **Hydrocarbon Chain Distribution by EPA 8015B (Modified)**

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	20	2	B2C1015	03/08/2022	03/08/22 17:56	D10
<b>C23-C32</b>	<b>60</b>	20	2	B2C1015	03/08/2022	03/08/22 17:56	D10
Surrogate: <i>p</i> -Terphenyl	90.8 %	62 - 141		B2C1015	03/08/2022	03/08/22 17:56	

#### **Volatile Organic Compounds by EPA 5035 / EPA 8260B**

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1,1-Trichloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1,2,2-Tetrachloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1,2-Trichloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1-Dichloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1-Dichloroethene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,1-Dichloropropene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2,3-Trichloropropane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2,3-Trichlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2,4-Trichlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2,4-Trimethylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2-Dibromo-3-chloropropane	ND	8.3	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2-Dibromoethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2-Dichlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2-Dichloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,2-Dichloropropane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,3,5-Trimethylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,3-Dichlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,3-Dichloropropane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
1,4-Dichlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
2,2-Dichloropropane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
2-Chlorotoluene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
4-Chlorotoluene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
4-Isopropyltoluene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Benzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Bromobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Bromochloromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Bromodichloromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Bromoform	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Bromomethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Carbon disulfide	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Carbon tetrachloride	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Chlorobenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Client Sample ID: DUP-SS-1A

**Lab ID: 2200309-14**

#### **Volatile Organic Compounds by EPA 5035 / EPA 8260B**

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Chloroform	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Chloromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
cis-1,2-Dichloroethene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
cis-1,3-Dichloropropene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Di-isopropyl ether	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Dibromochloromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Dibromomethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Dichlorodifluoromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Ethyl Acetate	ND	41	1	B2C1064	03/10/2022	03/10/22 20:05	
Ethyl Ether	ND	41	1	B2C1064	03/10/2022	03/10/22 20:05	
Ethyl tert-butyl ether	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Ethylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Freon-113	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Hexachlorobutadiene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Isopropylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
m,p-Xylene	ND	8.3	1	B2C1064	03/10/2022	03/10/22 20:05	
Methylene chloride	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
MTBE	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
n-Butylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
n-Propylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Naphthalene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
o-Xylene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
sec-Butylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Styrene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
tert-Amyl methyl ether	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
tert-Butanol	ND	83	1	B2C1064	03/10/2022	03/10/22 20:05	
tert-Butylbenzene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Tetrachloroethene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Toluene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
trans-1,2-Dichloroethene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
trans-1,3-Dichloropropene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Trichloroethene	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Trichlorofluoromethane	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
Vinyl acetate	ND	41	1	B2C1064	03/10/2022	03/10/22 20:05	
Vinyl chloride	ND	4.1	1	B2C1064	03/10/2022	03/10/22 20:05	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	128 %	66 - 200		B2C1064	03/10/2022	03/10/22 20:05	
<i>Surrogate: 4-Bromofluorobenzene</i>	95.5 %	50 - 146		B2C1064	03/10/2022	03/10/22 20:05	
<i>Surrogate: Dibromofluoromethane</i>	113 %	77 - 159		B2C1064	03/10/2022	03/10/22 20:05	
<i>Surrogate: Toluene-d8</i>	99.5 %	81 - 128		B2C1064	03/10/2022	03/10/22 20:05	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

**Client Sample ID: DUP-SS-1A**  
**Lab ID: 2200309-14**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.90	1	B2C1106	03/12/2022	03/12/22 07:48	
C4-C12	ND	0.90	1	B2C1106	03/12/2022	03/12/22 07:48	
Surrogate: 4-Bromofluorobenzene	87.7 %	47.6 - 121.18		B2C1106	03/12/2022	03/12/22 07:48	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### QUALITY CONTROL SECTION

#### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1074 - GCVOA\_S

**Blank (B2C1074-BLK1)** Prepared: 3/10/2022 Analyzed: 3/11/2022

Gasoline Range Organics	ND	1.0	0.13
C4-C12	ND	1.0	0.13

*Surrogate: 4-Bromofluorobenzene* 0.6410 0.800000 80.1 47.6 - 121.18

**LCS (B2C1074-BS1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

Gasoline Range Organics	5.70800	1.0	0.13	5.00000	114	58.69 - 124.0 <sup>d</sup>
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*Surrogate: 4-Bromofluorobenzene* 0.7177 0.800000 89.7 47.6 - 121.18

**LCS Dup (B2C1074-BSD1)** Prepared: 3/10/2022 Analyzed: 3/11/2022

Gasoline Range Organics	5.85800	1.0	0.13	5.00000	117	58.69 - 124.0 <sup>d</sup>	2.59	20
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*Surrogate: 4-Bromofluorobenzene* 0.7248 0.800000 90.6 47.6 - 121.18



## Certificate of Analysis

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Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1106 - GCVOA\_S

##### Blank (B2C1106-BLK1)

Prepared: 3/12/2022 Analyzed: 3/12/2022

Gasoline Range Organics	ND	1.0	0.13							
C4-C12	ND	1.0	0.13							

Surrogate: 4-Bromofluorobenzene	0.7376			0.800000		92.2		47.6 - 121.18		
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##### LCS (B2C1106-BS1)

Prepared: 3/12/2022 Analyzed: 3/12/2022

Gasoline Range Organics	5.70300	1.0	0.13	5.00000		114		58.69 - 124.04		
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Surrogate: 4-Bromofluorobenzene	0.7569			0.800000		94.6		47.6 - 121.18		
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##### LCS Dup (B2C1106-BSD1)

Prepared: 3/12/2022 Analyzed: 3/12/2022

Gasoline Range Organics	6.04100	1.0	0.13	5.00000		121		58.69 - 124.04	5.76	20
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Surrogate: 4-Bromofluorobenzene	0.7517			0.800000		94.0		47.6 - 121.18		
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## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1015 - GCSEMI_DRO_S</b>										
<b>Blank (B2C1015-BLK1)</b>										
C13-C22	ND	10	3.6							
C23-C32	ND	10	3.6							
<i>Surrogate: p-Terphenyl</i>	77.92			80.0000		97.4	62 - 141			
<b>LCS (B2C1015-BS1)</b>										
DRO	954.023	10	3.6	1000.00		95.4	56 - 139			
<i>Surrogate: p-Terphenyl</i>	83.58			80.0000		104	62 - 141			
<b>Matrix Spike (B2C1015-MS1)</b>										
DRO	828.869	10	3.6	1000.00	ND	82.9	38 - 161			
<i>Surrogate: p-Terphenyl</i>	84.93			80.0000		106	62 - 141			
<b>Matrix Spike Dup (B2C1015-MSD1)</b>										
DRO	926.058	10	3.6	1000.00	ND	92.6	38 - 161	11.1	20	
<i>Surrogate: p-Terphenyl</i>	84.85			80.0000		106	62 - 141			



## Certificate of Analysis

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Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S**
**Blank (B2C1057-BLK1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52							
1,1,1-Trichloroethane	ND	5.0	0.26							
1,1,2,2-Tetrachloroethane	ND	5.0	0.21							
1,1,2-Trichloroethane	ND	5.0	0.40							
1,1-Dichloroethane	ND	5.0	1.4							
1,1-Dichloroethene	ND	5.0	1.9							
1,1-Dichloropropene	ND	5.0	0.54							
1,2,3-Trichloropropane	ND	5.0	0.40							
1,2,3-Trichlorobenzene	ND	5.0	0.83							
1,2,4-Trichlorobenzene	ND	5.0	0.80							
1,2,4-Trimethylbenzene	ND	5.0	0.91							
1,2-Dibromo-3-chloropropane	ND	10	1.1							
1,2-Dibromoethane	ND	5.0	0.40							
1,2-Dichlorobenzene	ND	5.0	0.21							
1,2-Dichloroethane	ND	5.0	0.50							
1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromochloromethane	ND	5.0	0.30							
Bromodichloromethane	ND	5.0	0.52							
Bromoform	ND	5.0	1.4							
Bromomethane	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S (continued)**
**Blank (B2C1057-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Ethylbenzene	ND	5.0	0.43
Freon-113	ND	5.0	1.3
Hexachlorobutadiene	ND	5.0	0.40
Isopropylbenzene	ND	5.0	0.79
m,p-Xylene	ND	10	0.98
Methylene chloride	ND	5.0	2.2
MTBE	ND	5.0	0.81
n-Butylbenzene	ND	5.0	1.2
n-Propylbenzene	ND	5.0	0.78
Naphthalene	ND	5.0	1.1
o-Xylene	ND	5.0	0.67
sec-Butylbenzene	ND	5.0	0.63
Styrene	ND	5.0	0.45
tert-Amyl methyl ether	ND	5.0	1.1
tert-Butanol	ND	100	11
tert-Butylbenzene	ND	5.0	0.80
Tetrachloroethene	ND	5.0	0.31
Toluene	ND	5.0	0.27
trans-1,2-Dichloroethene	ND	5.0	0.56
trans-1,3-Dichloropropene	ND	5.0	0.59
Trichloroethene	ND	5.0	0.32
Trichlorofluoromethane	ND	5.0	1.0
Vinyl acetate	ND	50	6.0
Vinyl chloride	ND	5.0	0.92

Surrogate: 1,2-Dichloroethane-d4

61.81 50.0000 124 66 - 200

Surrogate: 4-Bromofluorobenzene

46.80 50.0000 93.6 50 - 146

Surrogate: Dibromofluoromethane

56.59 50.0000 113 77 - 159

Surrogate: Toluene-d8

46.40 50.0000 92.8 81 - 128

**Blank (B2C1057-BLK2)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52
1,1,1-Trichloroethane	ND	5.0	0.26
1,1,2,2-Tetrachloroethane	ND	5.0	0.21
1,1,2-Trichloroethane	ND	5.0	0.40
1,1-Dichloroethane	ND	5.0	1.4
1,1-Dichloroethene	ND	5.0	1.9
1,1-Dichloropropene	ND	5.0	0.54
1,2,3-Trichloropropane	ND	5.0	0.40
1,2,3-Trichlorobenzene	ND	5.0	0.83
1,2,4-Trichlorobenzene	ND	5.0	0.80
1,2,4-Trimethylbenzene	ND	5.0	0.91
1,2-Dibromo-3-chloropropane	ND	10	1.1
1,2-Dibromoethane	ND	5.0	0.40
1,2-Dichlorobenzene	ND	5.0	0.21
1,2-Dichloroethane	ND	5.0	0.50



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S (continued)**
**Blank (B2C1057-BLK2) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromoform	ND	5.0	0.30							
Bromochloromethane	ND	5.0	0.52							
Bromodichloromethane	ND	5.0	1.4							
Bromoform	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							
Ethylbenzene	ND	5.0	0.43							
Freon-113	ND	5.0	1.3							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.79							
m,p-Xylene	ND	10	0.98							
Methylene chloride	ND	5.0	2.2							
MTBE	ND	5.0	0.81							
n-Butylbenzene	ND	5.0	1.2							
n-Propylbenzene	ND	5.0	0.78							
Naphthalene	ND	5.0	1.1							
o-Xylene	ND	5.0	0.67							
sec-Butylbenzene	ND	5.0	0.63							
Styrene	ND	5.0	0.45							
tert-Amyl methyl ether	ND	5.0	1.1							
tert-Butanol	ND	100	11							



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Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S (continued)**
**Blank (B2C1057-BLK2) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

tert-Butylbenzene	ND	5.0	0.80							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.27							
trans-1,2-Dichloroethene	ND	5.0	0.56							
trans-1,3-Dichloropropene	ND	5.0	0.59							
Trichloroethene	ND	5.0	0.32							
Trichlorofluoromethane	ND	5.0	1.0							
Vinyl acetate	ND	50	6.0							
Vinyl chloride	ND	5.0	0.92							

Surrogate: 1,2-Dichloroethane-d4	58.67	50.0000	117	66 - 200
Surrogate: 4-Bromofluorobenzene	46.66	50.0000	93.3	50 - 146
Surrogate: Dibromofluoromethane	49.40	50.0000	98.8	77 - 159
Surrogate: Toluene-d8	47.51	50.0000	95.0	81 - 128

**LCS (B2C1057-BS1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	50.1500	5.0	0.52	50.0000	100	84 - 123
1,1,1-Trichloroethane	54.1800	5.0	0.26	50.0000	108	78 - 133
1,1,2,2-Tetrachloroethane	44.8500	5.0	0.21	50.0000	89.7	63 - 127
1,1,2-Trichloroethane	47.2200	5.0	0.40	50.0000	94.4	80 - 125
1,1-Dichloroethane	49.8700	5.0	1.4	50.0000	99.7	77 - 128
1,1-Dichloroethene	57.8500	5.0	1.9	50.0000	116	69 - 138
1,1-Dichloropropene	49.9500	5.0	0.54	50.0000	99.9	80 - 133
1,2,3-Trichloropropane	46.3800	5.0	0.40	50.0000	92.8	74 - 123
1,2,3-Trichlorobenzene	47.8900	5.0	0.83	50.0000	95.8	79 - 133
1,2,4-Trichlorobenzene	45.2100	5.0	0.80	50.0000	90.4	73 - 131
1,2,4-Trimethylbenzene	47.7500	5.0	0.91	50.0000	95.5	86 - 137
1,2-Dibromo-3-chloropropane	51.3200	10	1.1	50.0000	103	62 - 127
1,2-Dibromoethane	49.5800	5.0	0.40	50.0000	99.2	83 - 126
1,2-Dichlorobenzene	45.2400	5.0	0.21	50.0000	90.5	83 - 123
1,2-Dichloroethane	55.6700	5.0	0.50	50.0000	111	76 - 128
1,2-Dichloropropane	45.1700	5.0	0.46	50.0000	90.3	77 - 121
1,3,5-Trimethylbenzene	47.3500	5.0	0.70	50.0000	94.7	84 - 135
1,3-Dichlorobenzene	47.1000	5.0	0.36	50.0000	94.2	81 - 126
1,3-Dichloropropane	46.3400	5.0	0.49	50.0000	92.7	80 - 118
1,4-Dichlorobenzene	47.2600	5.0	0.27	50.0000	94.5	80 - 124
2,2-Dichloropropane	53.5400	5.0	0.28	50.0000	107	72 - 135
2-Chlorotoluene	47.8000	5.0	0.53	50.0000	95.6	81 - 127
4-Chlorotoluene	48.6600	5.0	0.40	50.0000	97.3	83 - 127
4-Isopropyltoluene	47.7700	5.0	0.81	50.0000	95.5	82 - 143
Benzene	49.2700	5.0	0.36	50.0000	98.5	84 - 123
Bromobenzene	50.2000	5.0	0.62	50.0000	100	80 - 122
Bromochloromethane	51.2700	5.0	0.30	50.0000	103	83 - 127
Bromodichloromethane	54.9600	5.0	0.52	50.0000	110	82 - 123
Bromoform	46.2000	5.0	1.4	50.0000	92.4	80 - 132
Bromomethane	82.0700	5.0	2.5	50.0000	164	67 - 176



## Certificate of Analysis

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Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1057 - MSVOA_S (continued)</b>										
<b>LCS (B2C1057-BS1) - Continued</b>										
Prepared: 3/10/2022 Analyzed: 3/10/2022										
Carbon disulfide	53.7000	5.0	0.94	50.0000		107	75 - 138			
Carbon tetrachloride	50.8500	5.0	0.73	50.0000		102	76 - 131			
Chlorobenzene	48.2500	5.0	0.42	50.0000		96.5	84 - 119			
Chloroethane	62.7500	5.0	1.5	50.0000		126	56 - 170			
Chloroform	56.0700	5.0	0.24	50.0000		112	78 - 129			
Chloromethane	44.6600	5.0	1.1	50.0000		89.3	63 - 141			
cis-1,2-Dichloroethene	37.1300	5.0	0.20	50.0000		74.3	83 - 125			L3
cis-1,3-Dichloropropene	42.0900	5.0	0.39	50.0000		84.2	76 - 129			
Di-isopropyl ether	46.0600	5.0	1.9	50.0000		92.1	73 - 132			
Dibromochloromethane	44.1400	5.0	0.81	50.0000		88.3	81 - 120			
Dibromomethane	47.4900	5.0	0.23	50.0000		95.0	79 - 124			
Dichlorodifluoromethane	47.5700	5.0	0.14	50.0000		95.1	18 - 199			
Ethyl Acetate	25.3700	50	7.0	500.000		5.07	76 - 138			MO
Ethyl Ether	608.890	50	17	500.000		122	74 - 128			
Ethyl tert-butyl ether	45.8200	5.0	0.85	50.0000		91.6	50 - 175			
Ethylbenzene	49.6900	5.0	0.43	50.0000		99.4	86 - 130			
Freon-113	66.7800	5.0	1.3	50.0000		134	66 - 132			L4
Hexachlorobutadiene	49.2400	5.0	0.40	50.0000		98.5	64 - 135			
Isopropylbenzene	49.1000	5.0	0.79	50.0000		98.2	80 - 133			
m,p-Xylene	97.1600	10	0.98	100.000		97.2	89 - 133			
Methylene chloride	47.0100	5.0	2.2	50.0000		94.0	72 - 143			
MTBE	45.7000	5.0	0.81	50.0000		91.4	73 - 136			
n-Butylbenzene	49.0800	5.0	1.2	50.0000		98.2	76 - 144			
n-Propylbenzene	47.5200	5.0	0.78	50.0000		95.0	81 - 136			
Naphthalene	42.9200	5.0	1.1	50.0000		85.8	64 - 128			
o-Xylene	49.0500	5.0	0.67	50.0000		98.1	82 - 134			
sec-Butylbenzene	47.3100	5.0	0.63	50.0000		94.6	81 - 138			
Styrene	44.4400	5.0	0.45	50.0000		88.9	79 - 152			
tert-Amyl methyl ether	47.6900	5.0	1.1	50.0000		95.4	48 - 166			
tert-Butanol	169.640	100	11	250.000		67.9	48 - 148			
tert-Butylbenzene	46.7100	5.0	0.80	50.0000		93.4	81 - 135			
Tetrachloroethene	46.8400	5.0	0.31	50.0000		93.7	75 - 127			
Toluene	49.6400	5.0	0.27	50.0000		99.3	88 - 130			
trans-1,2-Dichloroethene	68.9300	5.0	0.56	50.0000		138	79 - 127			L5
trans-1,3-Dichloropropene	46.1200	5.0	0.59	50.0000		92.2	80 - 130			
Trichloroethene	47.7500	5.0	0.32	50.0000		95.5	83 - 126			
Trichlorofluoromethane	66.5600	5.0	1.0	50.0000		133	62 - 143			
Vinyl acetate	30.3200	50	6.0	500.000		6.06	69 - 150			MO
Vinyl chloride	57.1800	5.0	0.92	50.0000		114	69 - 140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	56.99		50.0000			114	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	48.14		50.0000			96.3	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	51.27		50.0000			103	77 - 159			
<i>Surrogate: Toluene-d8</i>	47.62		50.0000			95.2	81 - 128			

**LCS Dup (B2C1057-BSD1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022



## Certificate of Analysis

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Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S (continued)**
**LCS Dup (B2C1057-BSD1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	47.4800	5.0	0.52	50.0000	95.0	84 - 123	5.47	20		
1,1,1-Trichloroethane	52.9900	5.0	0.26	50.0000	106	78 - 133	2.22	20		
1,1,2,2-Tetrachloroethane	46.3100	5.0	0.21	50.0000	92.6	63 - 127	3.20	20		
1,1,2-Trichloroethane	51.0300	5.0	0.40	50.0000	102	80 - 125	7.76	20		
1,1-Dichloroethane	50.4900	5.0	1.4	50.0000	101	77 - 128	1.24	20		
1,1-Dichloroethene	54.4700	5.0	1.9	50.0000	109	69 - 138	6.02	20		
1,1-Dichloropropene	47.4400	5.0	0.54	50.0000	94.9	80 - 133	5.15	20		
1,2,3-Trichloropropane	47.8700	5.0	0.40	50.0000	95.7	74 - 123	3.16	20		
1,2,3-Trichlorobenzene	48.9400	5.0	0.83	50.0000	97.9	79 - 133	2.17	20		
1,2,4-Trichlorobenzene	45.4500	5.0	0.80	50.0000	90.9	73 - 131	0.529	20		
1,2,4-Trimethylbenzene	47.7400	5.0	0.91	50.0000	95.5	86 - 137	0.0209	20		
1,2-Dibromo-3-chloropropane	44.6900	10	1.1	50.0000	89.4	62 - 127	13.8	20		
1,2-Dibromoethane	49.8600	5.0	0.40	50.0000	99.7	83 - 126	0.563	20		
1,2-Dichlorobenzene	45.5800	5.0	0.21	50.0000	91.2	83 - 123	0.749	20		
1,2-Dichloroethane	57.6800	5.0	0.50	50.0000	115	76 - 128	3.55	20		
1,2-Dichloropropene	49.6700	5.0	0.46	50.0000	99.3	77 - 121	9.49	20		
1,3,5-Trimethylbenzene	47.2400	5.0	0.70	50.0000	94.5	84 - 135	0.233	20		
1,3-Dichlorobenzene	45.7600	5.0	0.36	50.0000	91.5	81 - 126	2.89	20		
1,3-Dichloropropane	45.4700	5.0	0.49	50.0000	90.9	80 - 118	1.90	20		
1,4-Dichlorobenzene	46.8000	5.0	0.27	50.0000	93.6	80 - 124	0.978	20		
2,2-Dichloropropane	51.7100	5.0	0.28	50.0000	103	72 - 135	3.48	20		
2-Chlorotoluene	48.5100	5.0	0.53	50.0000	97.0	81 - 127	1.47	20		
4-Chlorotoluene	49.6400	5.0	0.40	50.0000	99.3	83 - 127	1.99	20		
4-Isopropyltoluene	46.1600	5.0	0.81	50.0000	92.3	82 - 143	3.43	20		
Benzene	49.9500	5.0	0.36	50.0000	99.9	84 - 123	1.37	20		
Bromobenzene	48.9400	5.0	0.62	50.0000	97.9	80 - 122	2.54	20		
Bromochloromethane	48.3100	5.0	0.30	50.0000	96.6	83 - 127	5.94	20		
Bromodichloromethane	56.7600	5.0	0.52	50.0000	114	82 - 123	3.22	20		
Bromoform	45.4500	5.0	1.4	50.0000	90.9	80 - 132	1.64	20		
Bromomethane	75.0900	5.0	2.5	50.0000	150	67 - 176	8.88	20		
Carbon disulfide	53.4600	5.0	0.94	50.0000	107	75 - 138	0.448	20		
Carbon tetrachloride	53.3800	5.0	0.73	50.0000	107	76 - 131	4.85	20		
Chlorobenzene	44.9400	5.0	0.42	50.0000	89.9	84 - 119	7.10	20		
Chloroethane	60.1500	5.0	1.5	50.0000	120	56 - 170	4.23	20		
Chloroform	55.1700	5.0	0.24	50.0000	110	78 - 129	1.62	20		
Chloromethane	43.7300	5.0	1.1	50.0000	87.5	63 - 141	2.10	20		
cis-1,2-Dichloroethene	39.2700	5.0	0.20	50.0000	78.5	83 - 125	5.60	20	L3	
cis-1,3-Dichloropropene	42.9100	5.0	0.39	50.0000	85.8	76 - 129	1.93	20		
Di-isopropyl ether	47.3800	5.0	1.9	50.0000	94.8	73 - 132	2.83	20		
Dibromochloromethane	44.7700	5.0	0.81	50.0000	89.5	81 - 120	1.42	20		
Dibromomethane	49.4000	5.0	0.23	50.0000	98.8	79 - 124	3.94	20		
Dichlorodifluoromethane	46.6400	5.0	0.14	50.0000	93.3	18 - 199	1.97	20		
Ethyl Acetate	15.5300	50	7.0	500.000	3.11	76 - 138	48.1	20	MO, R	
Ethyl Ether	609.970	50	17	500.000	122	74 - 128	0.177	20		
Ethyl tert-butyl ether	45.7300	5.0	0.85	50.0000	91.5	50 - 175	0.197	20		



## Certificate of Analysis

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Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1057 - MSVOA\_S (continued)**
**LCS Dup (B2C1057-BSD1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Ethylbenzene	48.5200	5.0	0.43	50.0000	97.0	86 - 130	2.38	20		
Freon-113	61.7000	5.0	1.3	50.0000	123	66 - 132	7.91	20		
Hexachlorobutadiene	49.8100	5.0	0.40	50.0000	99.6	64 - 135	1.15	20		
Isopropylbenzene	48.3300	5.0	0.79	50.0000	96.7	80 - 133	1.58	20		
m,p-Xylene	95.4100	10	0.98	100.000	95.4	89 - 133	1.82	20		
Methylene chloride	48.0600	5.0	2.2	50.0000	96.1	72 - 143	2.21	20		
MTBE	47.0600	5.0	0.81	50.0000	94.1	73 - 136	2.93	20		
n-Butylbenzene	47.0900	5.0	1.2	50.0000	94.2	76 - 144	4.14	20		
n-Propylbenzene	47.8300	5.0	0.78	50.0000	95.7	81 - 136	0.650	20		
Naphthalene	42.8400	5.0	1.1	50.0000	85.7	64 - 128	0.187	20		
o-Xylene	46.6800	5.0	0.67	50.0000	93.4	82 - 134	4.95	20		
sec-Butylbenzene	47.3500	5.0	0.63	50.0000	94.7	81 - 138	0.0845	20		
Styrene	45.0900	5.0	0.45	50.0000	90.2	79 - 152	1.45	20		
tert-Amyl methyl ether	46.3300	5.0	1.1	50.0000	92.7	48 - 166	2.89	20		
tert-Butanol	171.310	100	11	250.000	68.5	48 - 148	0.980	20		
tert-Butylbenzene	45.1800	5.0	0.80	50.0000	90.4	81 - 135	3.33	20		
Tetrachloroethene	45.1500	5.0	0.31	50.0000	90.3	75 - 127	3.67	20		
Toluene	51.1700	5.0	0.27	50.0000	102	88 - 130	3.04	20		
trans-1,2-Dichloroethene	67.4100	5.0	0.56	50.0000	135	79 - 127	2.23	20	L4	
trans-1,3-Dichloropropene	48.4800	5.0	0.59	50.0000	97.0	80 - 130	4.99	20		
Trichloroethene	51.4300	5.0	0.32	50.0000	103	83 - 126	7.42	20		
Trichlorofluoromethane	61.6200	5.0	1.0	50.0000	123	62 - 143	7.71	20		
Vinyl acetate	27.1100	50	6.0	500.000	5.42	69 - 150	11.2	20	MO	
Vinyl chloride	57.4600	5.0	0.92	50.0000	115	69 - 140	0.488	20		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	62.36			50.0000	125	66 - 200				
<i>Surrogate: 4-Bromofluorobenzene</i>	48.96			50.0000	97.9	50 - 146				
<i>Surrogate: Dibromofluoromethane</i>	55.34			50.0000	111	77 - 159				
<i>Surrogate: Toluene-d8</i>	51.36			50.0000	103	81 - 128				



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Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1064 - MSVOA\_S

##### Blank (B2C1064-BLK1)

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52							
1,1,1-Trichloroethane	ND	5.0	0.26							
1,1,2,2-Tetrachloroethane	ND	5.0	0.21							
1,1,2-Trichloroethane	ND	5.0	0.40							
1,1-Dichloroethane	ND	5.0	1.4							
1,1-Dichloroethene	ND	5.0	1.9							
1,1-Dichloropropene	ND	5.0	0.54							
1,2,3-Trichloropropane	ND	5.0	0.40							
1,2,3-Trichlorobenzene	ND	5.0	0.83							
1,2,4-Trichlorobenzene	ND	5.0	0.80							
1,2,4-Trimethylbenzene	ND	5.0	0.91							
1,2-Dibromo-3-chloropropane	ND	10	1.1							
1,2-Dibromoethane	ND	5.0	0.40							
1,2-Dichlorobenzene	ND	5.0	0.21							
1,2-Dichloroethane	ND	5.0	0.50							
1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromochloromethane	ND	5.0	0.30							
Bromodichloromethane	ND	5.0	0.52							
Bromoform	ND	5.0	1.4							
Bromomethane	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**
**Blank (B2C1064-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Ethylbenzene	ND	5.0	0.43							
Freon-113	ND	5.0	1.3							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.79							
m,p-Xylene	ND	10	0.98							
Methylene chloride	ND	5.0	2.2							
MTBE	ND	5.0	0.81							
n-Butylbenzene	ND	5.0	1.2							
n-Propylbenzene	ND	5.0	0.78							
Naphthalene	ND	5.0	1.1							
o-Xylene	ND	5.0	0.67							
sec-Butylbenzene	ND	5.0	0.63							
Styrene	ND	5.0	0.45							
tert-Amyl methyl ether	ND	5.0	1.1							
tert-Butanol	ND	100	11							
tert-Butylbenzene	ND	5.0	0.80							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.27							
trans-1,2-Dichloroethene	ND	5.0	0.56							
trans-1,3-Dichloropropene	ND	5.0	0.59							
Trichloroethene	ND	5.0	0.32							
Trichlorofluoromethane	ND	5.0	1.0							
Vinyl acetate	ND	50	6.0							
Vinyl chloride	ND	5.0	0.92							

Surrogate: 1,2-Dichloroethane-d4	50.85	50.0000	102	66 - 200
Surrogate: 4-Bromofluorobenzene	49.58	50.0000	99.2	50 - 146
Surrogate: Dibromofluoromethane	52.38	50.0000	105	77 - 159
Surrogate: Toluene-d8	48.52	50.0000	97.0	81 - 128

LCS (B2C1064-BS1)							Prepared: 3/10/2022 Analyzed: 3/10/2022
1,1,1,2-Tetrachloroethane	49.4400	5.0	0.52	50.0000	98.9	84 - 123	
1,1,1-Trichloroethane	53.0400	5.0	0.26	50.0000	106	78 - 133	
1,1,2,2-Tetrachloroethane	52.7500	5.0	0.21	50.0000	106	63 - 127	
1,1,2-Trichloroethane	51.7700	5.0	0.40	50.0000	104	80 - 125	
1,1-Dichloroethane	50.6000	5.0	1.4	50.0000	101	77 - 128	
1,1-Dichloroethene	46.4000	5.0	1.9	50.0000	92.8	69 - 138	
1,1-Dichloropropene	52.3000	5.0	0.54	50.0000	105	80 - 133	
1,2,3-Trichloropropane	50.0300	5.0	0.40	50.0000	100	74 - 123	
1,2,3-Trichlorobenzene	52.1700	5.0	0.83	50.0000	104	79 - 133	
1,2,4-Trichlorobenzene	51.3700	5.0	0.80	50.0000	103	73 - 131	
1,2,4-Trimethylbenzene	50.8800	5.0	0.91	50.0000	102	86 - 137	
1,2-Dibromo-3-chloropropane	53.0200	10	1.1	50.0000	106	62 - 127	
1,2-Dibromoethane	52.1300	5.0	0.40	50.0000	104	83 - 126	
1,2-Dichlorobenzene	50.9900	5.0	0.21	50.0000	102	83 - 123	
1,2-Dichloroethane	51.8100	5.0	0.50	50.0000	104	76 - 128	



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**
**LCS (B2C1064-BS1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,2-Dichloropropane	52.4400	5.0	0.46	50.0000		105	77 - 121			
1,3,5-Trimethylbenzene	50.0600	5.0	0.70	50.0000		100	84 - 135			
1,3-Dichlorobenzene	49.9000	5.0	0.36	50.0000		99.8	81 - 126			
1,3-Dichloropropane	50.0800	5.0	0.49	50.0000		100	80 - 118			
1,4-Dichlorobenzene	52.3200	5.0	0.27	50.0000		105	80 - 124			
2,2-Dichloropropane	49.9900	5.0	0.28	50.0000		100	72 - 135			
2-Chlorotoluene	49.5900	5.0	0.53	50.0000		99.2	81 - 127			
4-Chlorotoluene	51.5600	5.0	0.40	50.0000		103	83 - 127			
4-Isopropyltoluene	48.6700	5.0	0.81	50.0000		97.3	82 - 143			
Benzene	51.3100	5.0	0.36	50.0000		103	84 - 123			
Bromobenzene	50.9400	5.0	0.62	50.0000		102	80 - 122			
Bromoform	53.4000	5.0	0.30	50.0000		107	83 - 127			
Bromochloromethane	52.6900	5.0	0.52	50.0000		105	82 - 123			
Bromoform	51.4800	5.0	1.4	50.0000		103	80 - 132			
Bromomethane	48.0600	5.0	2.5	50.0000		96.1	67 - 176			
Carbon disulfide	48.2900	5.0	0.94	50.0000		96.6	75 - 138			
Carbon tetrachloride	48.9100	5.0	0.73	50.0000		97.8	76 - 131			
Chlorobenzene	50.4600	5.0	0.42	50.0000		101	84 - 119			
Chloroethane	57.7600	5.0	1.5	50.0000		116	56 - 170			
Chloroform	53.0900	5.0	0.24	50.0000		106	78 - 129			
Chloromethane	49.2600	5.0	1.1	50.0000		98.5	63 - 141			
cis-1,2-Dichloroethene	40.3000	5.0	0.20	50.0000		80.6	83 - 125			L3
cis-1,3-Dichloropropene	49.8100	5.0	0.39	50.0000		99.6	76 - 129			
Di-isopropyl ether	51.6000	5.0	1.9	50.0000		103	73 - 132			
Dibromochloromethane	52.4800	5.0	0.81	50.0000		105	81 - 120			
Dibromomethane	52.8400	5.0	0.23	50.0000		106	79 - 124			
Dichlorodifluoromethane	42.9300	5.0	0.14	50.0000		85.9	18 - 199			
Ethyl Acetate	31.8400	50	7.0	500.000		6.37	76 - 138			MO
Ethyl Ether	548.680	50	17	500.000		110	74 - 128			
Ethyl tert-butyl ether	50.9300	5.0	0.85	50.0000		102	50 - 175			
Ethylbenzene	51.1400	5.0	0.43	50.0000		102	86 - 130			
Freon-113	54.0300	5.0	1.3	50.0000		108	66 - 132			
Hexachlorobutadiene	49.9100	5.0	0.40	50.0000		99.8	64 - 135			
Isopropylbenzene	50.3300	5.0	0.79	50.0000		101	80 - 133			
m,p-Xylene	95.2200	10	0.98	100.000		95.2	89 - 133			
Methylene chloride	46.3700	5.0	2.2	50.0000		92.7	72 - 143			
MTBE	47.3400	5.0	0.81	50.0000		94.7	73 - 136			
n-Butylbenzene	50.5000	5.0	1.2	50.0000		101	76 - 144			
n-Propylbenzene	49.2800	5.0	0.78	50.0000		98.6	81 - 136			
Naphthalene	52.8700	5.0	1.1	50.0000		106	64 - 128			
o-Xylene	50.9300	5.0	0.67	50.0000		102	82 - 134			
sec-Butylbenzene	50.4900	5.0	0.63	50.0000		101	81 - 138			
Styrene	50.8000	5.0	0.45	50.0000		102	79 - 152			
tert-Amyl methyl ether	51.5800	5.0	1.1	50.0000		103	48 - 166			
tert-Butanol	274.350	100	11	250.000		110	48 - 148			



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**

LCS (B2C1064-BS1) - Continued							Prepared: 3/10/2022 Analyzed: 3/10/2022			
tert-Butylbenzene	49.4800	5.0	0.80	50.0000		99.0	81 - 135			
Tetrachloroethene	50.3200	5.0	0.31	50.0000		101	75 - 127			
Toluene	51.8200	5.0	0.27	50.0000		104	88 - 130			
trans-1,2-Dichloroethene	64.2600	5.0	0.56	50.0000		129	79 - 127			L3
trans-1,3-Dichloropropene	48.4900	5.0	0.59	50.0000		97.0	80 - 130			
Trichloroethene	50.1900	5.0	0.32	50.0000		100	83 - 126			
Trichlorofluoromethane	54.3900	5.0	1.0	50.0000		109	62 - 143			
Vinyl acetate	38.6200	50	6.0	500.000		7.72	69 - 150			MO
Vinyl chloride	50.5600	5.0	0.92	50.0000		101	69 - 140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.99			50.0000		102	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	51.87			50.0000		104	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	52.24			50.0000		104	77 - 159			
<i>Surrogate: Toluene-d8</i>	49.89			50.0000		99.8	81 - 128			

**LCS Dup (B2C1064-BSD1)**

LCS Dup (B2C1064-BSD1)							Prepared: 3/10/2022 Analyzed: 3/10/2022			
1,1,1,2-Tetrachloroethane	47.1300	5.0	0.52	50.0000		94.3	84 - 123	4.78	20	
1,1,1-Trichloroethane	51.0100	5.0	0.26	50.0000		102	78 - 133	3.90	20	
1,1,2,2-Tetrachloroethane	49.9300	5.0	0.21	50.0000		99.9	63 - 127	5.49	20	
1,1,2-Trichloroethane	49.2700	5.0	0.40	50.0000		98.5	80 - 125	4.95	20	
1,1-Dichloroethane	49.5900	5.0	1.4	50.0000		99.2	77 - 128	2.02	20	
1,1-Dichloroethene	45.7300	5.0	1.9	50.0000		91.5	69 - 138	1.45	20	
1,1-Dichloropropene	46.1800	5.0	0.54	50.0000		92.4	80 - 133	12.4	20	
1,2,3-Trichloropropane	46.7400	5.0	0.40	50.0000		93.5	74 - 123	6.80	20	
1,2,3-Trichlorobenzene	51.0700	5.0	0.83	50.0000		102	79 - 133	2.13	20	
1,2,4-Trichlorobenzene	48.7700	5.0	0.80	50.0000		97.5	73 - 131	5.19	20	
1,2,4-Trimethylbenzene	48.1000	5.0	0.91	50.0000		96.2	86 - 137	5.62	20	
1,2-Dibromo-3-chloropropane	53.1100	10	1.1	50.0000		106	62 - 127	0.170	20	
1,2-Dibromoethane	48.5800	5.0	0.40	50.0000		97.2	83 - 126	7.05	20	
1,2-Dichlorobenzene	49.3700	5.0	0.21	50.0000		98.7	83 - 123	3.23	20	
1,2-Dichloroethane	48.6800	5.0	0.50	50.0000		97.4	76 - 128	6.23	20	
1,2-Dichloropropane	49.5300	5.0	0.46	50.0000		99.1	77 - 121	5.71	20	
1,3,5-Trimethylbenzene	46.3400	5.0	0.70	50.0000		92.7	84 - 135	7.72	20	
1,3-Dichlorobenzene	47.0100	5.0	0.36	50.0000		94.0	81 - 126	5.96	20	
1,3-Dichloropropane	49.7300	5.0	0.49	50.0000		99.5	80 - 118	0.701	20	
1,4-Dichlorobenzene	48.9400	5.0	0.27	50.0000		97.9	80 - 124	6.68	20	
2,2-Dichloropropane	48.9100	5.0	0.28	50.0000		97.8	72 - 135	2.18	20	
2-Chlorotoluene	46.2700	5.0	0.53	50.0000		92.5	81 - 127	6.93	20	
4-Chlorotoluene	47.1900	5.0	0.40	50.0000		94.4	83 - 127	8.85	20	
4-Isopropyltoluene	45.4300	5.0	0.81	50.0000		90.9	82 - 143	6.89	20	
Benzene	47.4500	5.0	0.36	50.0000		94.9	84 - 123	7.82	20	
Bromobenzene	49.8400	5.0	0.62	50.0000		99.7	80 - 122	2.18	20	
Bromochloromethane	51.5800	5.0	0.30	50.0000		103	83 - 127	3.47	20	
Bromodichloromethane	49.1500	5.0	0.52	50.0000		98.3	82 - 123	6.95	20	
Bromoform	48.5200	5.0	1.4	50.0000		97.0	80 - 132	5.92	20	
Bromomethane	47.8700	5.0	2.5	50.0000		95.7	67 - 176	0.396	20	



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Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1064 - MSVOA_S (continued)</b>										
<b>LCS Dup (B2C1064-BSD1) - Continued</b>										
Prepared: 3/10/2022 Analyzed: 3/10/2022										
Carbon disulfide	47.9300	5.0	0.94	50.0000		95.9	75 - 138	0.748	20	
Carbon tetrachloride	44.3800	5.0	0.73	50.0000		88.8	76 - 131	9.71	20	
Chlorobenzene	47.5200	5.0	0.42	50.0000		95.0	84 - 119	6.00	20	
Chloroethane	57.6200	5.0	1.5	50.0000		115	56 - 170	0.243	20	
Chloroform	49.8300	5.0	0.24	50.0000		99.7	78 - 129	6.34	20	
Chloromethane	47.5400	5.0	1.1	50.0000		95.1	63 - 141	3.55	20	
cis-1,2-Dichloroethene	39.9900	5.0	0.20	50.0000		80.0	83 - 125	0.772	20	L3
cis-1,3-Dichloropropene	47.9000	5.0	0.39	50.0000		95.8	76 - 129	3.91	20	
Di-isopropyl ether	51.5900	5.0	1.9	50.0000		103	73 - 132	0.0194	20	
Dibromochloromethane	50.1100	5.0	0.81	50.0000		100	81 - 120	4.62	20	
Dibromomethane	48.7200	5.0	0.23	50.0000		97.4	79 - 124	8.11	20	
Dichlorodifluoromethane	40.0600	5.0	0.14	50.0000		80.1	18 - 199	6.92	20	
Ethyl Acetate	22.1400	50	7.0	500.000		4.43	76 - 138	35.9	20	MO, R
Ethyl Ether	539.730	50	17	500.000		108	74 - 128	1.64	20	
Ethyl tert-butyl ether	49.5200	5.0	0.85	50.0000		99.0	50 - 175	2.81	20	
Ethylbenzene	47.6600	5.0	0.43	50.0000		95.3	86 - 130	7.04	20	
Freon-113	51.4100	5.0	1.3	50.0000		103	66 - 132	4.97	20	
Hexachlorobutadiene	47.7600	5.0	0.40	50.0000		95.5	64 - 135	4.40	20	
Isopropylbenzene	47.1800	5.0	0.79	50.0000		94.4	80 - 133	6.46	20	
m,p-Xylene	87.5800	10	0.98	100.000		87.6	89 - 133	8.36	20	L3
Methylene chloride	44.9800	5.0	2.2	50.0000		90.0	72 - 143	3.04	20	
MTBE	45.7900	5.0	0.81	50.0000		91.6	73 - 136	3.33	20	
n-Butylbenzene	46.5000	5.0	1.2	50.0000		93.0	76 - 144	8.25	20	
n-Propylbenzene	46.0900	5.0	0.78	50.0000		92.2	81 - 136	6.69	20	
Naphthalene	49.6800	5.0	1.1	50.0000		99.4	64 - 128	6.22	20	
o-Xylene	47.6700	5.0	0.67	50.0000		95.3	82 - 134	6.61	20	
sec-Butylbenzene	46.9900	5.0	0.63	50.0000		94.0	81 - 138	7.18	20	
Styrene	48.8200	5.0	0.45	50.0000		97.6	79 - 152	3.98	20	
tert-Amyl methyl ether	51.3400	5.0	1.1	50.0000		103	48 - 166	0.466	20	
tert-Butanol	269.870	100	11	250.000		108	48 - 148	1.65	20	
tert-Butylbenzene	46.5300	5.0	0.80	50.0000		93.1	81 - 135	6.15	20	
Tetrachloroethene	47.7700	5.0	0.31	50.0000		95.5	75 - 127	5.20	20	
Toluene	48.4400	5.0	0.27	50.0000		96.9	88 - 130	6.74	20	
trans-1,2-Dichloroethene	62.4100	5.0	0.56	50.0000		125	79 - 127	2.92	20	
trans-1,3-Dichloropropene	45.7900	5.0	0.59	50.0000		91.6	80 - 130	5.73	20	
Trichloroethene	46.7200	5.0	0.32	50.0000		93.4	83 - 126	7.16	20	
Trichlorofluoromethane	52.1800	5.0	1.0	50.0000		104	62 - 143	4.15	20	
Vinyl acetate	32.1200	50	6.0	500.000		6.42	69 - 150	18.4	20	MO
Vinyl chloride	49.8900	5.0	0.92	50.0000		99.8	69 - 140	1.33	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.85		50.0000			106	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	51.10		50.0000			102	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	50.96		50.0000			102	77 - 159			
<i>Surrogate: Toluene-d8</i>	50.27		50.0000			101	81 - 128			



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S**
**Blank (B2C1127-BLK1)**

Prepared: 3/14/2022 Analyzed: 3/14/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52							
1,1,1-Trichloroethane	ND	5.0	0.26							
1,1,2,2-Tetrachloroethane	ND	5.0	0.21							
1,1,2-Trichloroethane	ND	5.0	0.40							
1,1-Dichloroethane	ND	5.0	1.4							
1,1-Dichloroethene	ND	5.0	1.9							
1,1-Dichloropropene	ND	5.0	0.54							
1,2,3-Trichloropropane	ND	5.0	0.40							
1,2,3-Trichlorobenzene	ND	5.0	0.83							
1,2,4-Trichlorobenzene	ND	5.0	0.80							
1,2,4-Trimethylbenzene	ND	5.0	0.91							
1,2-Dibromo-3-chloropropane	ND	10	1.1							
1,2-Dibromoethane	ND	5.0	0.40							
1,2-Dichlorobenzene	ND	5.0	0.21							
1,2-Dichloroethane	ND	5.0	0.50							
1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromochloromethane	ND	5.0	0.30							
Bromodichloromethane	ND	5.0	0.52							
Bromoform	ND	5.0	1.4							
Bromomethane	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**
**Blank (B2C1127-BLK1) - Continued**

Prepared: 3/14/2022 Analyzed: 3/14/2022

Ethylbenzene	ND	5.0	0.43
Freon-113	ND	5.0	1.3
Hexachlorobutadiene	ND	5.0	0.40
Isopropylbenzene	ND	5.0	0.79
m,p-Xylene	ND	10	0.98
Methylene chloride	ND	5.0	2.2
MTBE	ND	5.0	0.81
n-Butylbenzene	ND	5.0	1.2
n-Propylbenzene	ND	5.0	0.78
Naphthalene	ND	5.0	1.1
o-Xylene	ND	5.0	0.67
sec-Butylbenzene	ND	5.0	0.63
Styrene	ND	5.0	0.45
tert-Amyl methyl ether	ND	5.0	1.1
tert-Butanol	ND	100	11
tert-Butylbenzene	ND	5.0	0.80
Tetrachloroethene	ND	5.0	0.31
Toluene	ND	5.0	0.27
trans-1,2-Dichloroethene	ND	5.0	0.56
trans-1,3-Dichloropropene	ND	5.0	0.59
Trichloroethene	ND	5.0	0.32
Trichlorofluoromethane	ND	5.0	1.0
Vinyl acetate	ND	50	6.0
Vinyl chloride	ND	5.0	0.92

Surrogate: 1,2-Dichloroethane-d4	63.05	50.0000	126	66 - 200
Surrogate: 4-Bromofluorobenzene	46.05	50.0000	92.1	50 - 146
Surrogate: Dibromofluoromethane	57.40	50.0000	115	77 - 159
Surrogate: Toluene-d8	46.92	50.0000	93.8	81 - 128

**Blank (B2C1127-BLK2)**

Prepared: 3/14/2022 Analyzed: 3/14/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52
1,1,1-Trichloroethane	ND	5.0	0.26
1,1,2,2-Tetrachloroethane	ND	5.0	0.21
1,1,2-Trichloroethane	ND	5.0	0.40
1,1-Dichloroethane	ND	5.0	1.4
1,1-Dichloroethene	ND	5.0	1.9
1,1-Dichloropropene	ND	5.0	0.54
1,2,3-Trichloropropane	ND	5.0	0.40
1,2,3-Trichlorobenzene	ND	5.0	0.83
1,2,4-Trichlorobenzene	ND	5.0	0.80
1,2,4-Trimethylbenzene	ND	5.0	0.91
1,2-Dibromo-3-chloropropane	ND	10	1.1
1,2-Dibromoethane	ND	5.0	0.40
1,2-Dichlorobenzene	ND	5.0	0.21
1,2-Dichloroethane	ND	5.0	0.50



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**
**Blank (B2C1127-BLK2) - Continued**

Prepared: 3/14/2022 Analyzed: 3/14/2022

1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromoform	ND	5.0	0.30							
Bromochloromethane	ND	5.0	0.52							
Bromodichloromethane	ND	5.0	1.4							
Bromoform	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							
Ethylbenzene	ND	5.0	0.43							
Freon-113	ND	5.0	1.3							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.79							
m,p-Xylene	ND	10	0.98							
Methylene chloride	ND	5.0	2.2							
MTBE	ND	5.0	0.81							
n-Butylbenzene	ND	5.0	1.2							
n-Propylbenzene	ND	5.0	0.78							
Naphthalene	ND	5.0	1.1							
o-Xylene	ND	5.0	0.67							
sec-Butylbenzene	ND	5.0	0.63							
Styrene	ND	5.0	0.45							
tert-Amyl methyl ether	ND	5.0	1.1							
tert-Butanol	ND	100	11							



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**
**Blank (B2C1127-BLK2) - Continued**

Prepared: 3/14/2022 Analyzed: 3/14/2022

tert-Butylbenzene	ND	5.0	0.80							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.27							
trans-1,2-Dichloroethene	ND	5.0	0.56							
trans-1,3-Dichloropropene	ND	5.0	0.59							
Trichloroethene	ND	5.0	0.32							
Trichlorofluoromethane	ND	5.0	1.0							
Vinyl acetate	ND	50	6.0							
Vinyl chloride	ND	5.0	0.92							

Surrogate: 1,2-Dichloroethane-d4	56.99	50.0000	114	66 - 200
Surrogate: 4-Bromofluorobenzene	48.07	50.0000	96.1	50 - 146
Surrogate: Dibromofluoromethane	57.16	50.0000	114	77 - 159
Surrogate: Toluene-d8	47.98	50.0000	96.0	81 - 128

**LCS (B2C1127-BS1)**

Prepared: 3/14/2022 Analyzed: 3/14/2022

1,1,1,2-Tetrachloroethane	45.6700	5.0	0.52	50.0000	91.3	84 - 123
1,1,1-Trichloroethane	54.3100	5.0	0.26	50.0000	109	78 - 133
1,1,2,2-Tetrachloroethane	43.4900	5.0	0.21	50.0000	87.0	63 - 127
1,1,2-Trichloroethane	50.2800	5.0	0.40	50.0000	101	80 - 125
1,1-Dichloroethane	50.9300	5.0	1.4	50.0000	102	77 - 128
1,1-Dichloroethene	49.7800	5.0	1.9	50.0000	99.6	69 - 138
1,1-Dichloropropene	49.2300	5.0	0.54	50.0000	98.5	80 - 133
1,2,3-Trichloropropane	48.4800	5.0	0.40	50.0000	97.0	74 - 123
1,2,3-Trichlorobenzene	45.7700	5.0	0.83	50.0000	91.5	79 - 133
1,2,4-Trichlorobenzene	46.8000	5.0	0.80	50.0000	93.6	73 - 131
1,2,4-Trimethylbenzene	48.1100	5.0	0.91	50.0000	96.2	86 - 137
1,2-Dibromo-3-chloropropane	48.4100	10	1.1	50.0000	96.8	62 - 127
1,2-Dibromoethane	47.7900	5.0	0.40	50.0000	95.6	83 - 126
1,2-Dichlorobenzene	45.2300	5.0	0.21	50.0000	90.5	83 - 123
1,2-Dichloroethane	51.9300	5.0	0.50	50.0000	104	76 - 128
1,2-Dichloropropane	45.3500	5.0	0.46	50.0000	90.7	77 - 121
1,3,5-Trimethylbenzene	45.6300	5.0	0.70	50.0000	91.3	84 - 135
1,3-Dichlorobenzene	46.0600	5.0	0.36	50.0000	92.1	81 - 126
1,3-Dichloropropane	47.2000	5.0	0.49	50.0000	94.4	80 - 118
1,4-Dichlorobenzene	45.4700	5.0	0.27	50.0000	90.9	80 - 124
2,2-Dichloropropane	51.4300	5.0	0.28	50.0000	103	72 - 135
2-Chlorotoluene	48.6800	5.0	0.53	50.0000	97.4	81 - 127
4-Chlorotoluene	47.3100	5.0	0.40	50.0000	94.6	83 - 127
4-Isopropyltoluene	47.0500	5.0	0.81	50.0000	94.1	82 - 143
Benzene	50.1400	5.0	0.36	50.0000	100	84 - 123
Bromobenzene	47.5300	5.0	0.62	50.0000	95.1	80 - 122
Bromochloromethane	48.7800	5.0	0.30	50.0000	97.6	83 - 127
Bromodichloromethane	51.7300	5.0	0.52	50.0000	103	82 - 123
Bromoform	43.1300	5.0	1.4	50.0000	86.3	80 - 132
Bromomethane	71.3200	5.0	2.5	50.0000	143	67 - 176



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Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**

LCS (B2C1127-BS1) - Continued							Prepared: 3/14/2022 Analyzed: 3/14/2022			
Carbon disulfide	51.4500	5.0	0.94	50.0000		103	75 - 138			
Carbon tetrachloride	52.6700	5.0	0.73	50.0000		105	76 - 131			
Chlorobenzene	46.2600	5.0	0.42	50.0000		92.5	84 - 119			
Chloroethane	58.1300	5.0	1.5	50.0000		116	56 - 170			
Chloroform	52.0400	5.0	0.24	50.0000		104	78 - 129			
Chloromethane	46.5600	5.0	1.1	50.0000		93.1	63 - 141			
cis-1,2-Dichloroethene	38.0900	5.0	0.20	50.0000		76.2	83 - 125			L3
cis-1,3-Dichloropropene	41.6800	5.0	0.39	50.0000		83.4	76 - 129			
Di-isopropyl ether	48.5100	5.0	1.9	50.0000		97.0	73 - 132			
Dibromochloromethane	44.5800	5.0	0.81	50.0000		89.2	81 - 120			
Dibromomethane	47.1500	5.0	0.23	50.0000		94.3	79 - 124			
Dichlorodifluoromethane	42.8100	5.0	0.14	50.0000		85.6	18 - 199			
Ethyl Acetate	18.4000	50	7.0	500.000		3.68	76 - 138			MO
Ethyl Ether	583.620	50	17	500.000		117	74 - 128			
Ethyl tert-butyl ether	45.6300	5.0	0.85	50.0000		91.3	50 - 175			
Ethylbenzene	48.2800	5.0	0.43	50.0000		96.6	86 - 130			
Freon-113	58.7900	5.0	1.3	50.0000		118	66 - 132			
Hexachlorobutadiene	48.7800	5.0	0.40	50.0000		97.6	64 - 135			
Isopropylbenzene	49.2100	5.0	0.79	50.0000		98.4	80 - 133			
m,p-Xylene	93.4600	10	0.98	100.000		93.5	89 - 133			
Methylene chloride	50.4100	5.0	2.2	50.0000		101	72 - 143			
MTBE	45.9300	5.0	0.81	50.0000		91.9	73 - 136			
n-Butylbenzene	46.7100	5.0	1.2	50.0000		93.4	76 - 144			
n-Propylbenzene	47.6500	5.0	0.78	50.0000		95.3	81 - 136			
Naphthalene	42.1400	5.0	1.1	50.0000		84.3	64 - 128			
o-Xylene	46.6700	5.0	0.67	50.0000		93.3	82 - 134			
sec-Butylbenzene	47.9500	5.0	0.63	50.0000		95.9	81 - 138			
Styrene	45.3900	5.0	0.45	50.0000		90.8	79 - 152			
tert-Amyl methyl ether	47.4200	5.0	1.1	50.0000		94.8	48 - 166			
tert-Butanol	170.940	100	11	250.000		68.4	48 - 148			
tert-Butylbenzene	45.8700	5.0	0.80	50.0000		91.7	81 - 135			
Tetrachloroethene	48.9100	5.0	0.31	50.0000		97.8	75 - 127			
Toluene	49.2000	5.0	0.27	50.0000		98.4	88 - 130			
trans-1,2-Dichloroethene	68.1300	5.0	0.56	50.0000		136	79 - 127			L5
trans-1,3-Dichloropropene	47.2300	5.0	0.59	50.0000		94.5	80 - 130			
Trichloroethene	53.1000	5.0	0.32	50.0000		106	83 - 126			
Trichlorofluoromethane	58.7800	5.0	1.0	50.0000		118	62 - 143			
Vinyl acetate	22.1400	50	6.0	500.000		4.43	69 - 150			MO
Vinyl chloride	54.6500	5.0	0.92	50.0000		109	69 - 140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	54.67			50.0000		109	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	48.88			50.0000		97.8	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	51.43			50.0000		103	77 - 159			
<i>Surrogate: Toluene-d8</i>	50.19			50.0000		100	81 - 128			

**LCS Dup (B2C1127-BSD1)**

Prepared: 3/14/2022 Analyzed: 3/14/2022



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**
**LCS Dup (B2C1127-BSD1) - Continued**

Prepared: 3/14/2022 Analyzed: 3/14/2022

1,1,1,2-Tetrachloroethane	48.3000	5.0	0.52	50.0000	96.6	84 - 123	5.60	20		
1,1,1-Trichloroethane	52.7400	5.0	0.26	50.0000	105	78 - 133	2.93	20		
1,1,2,2-Tetrachloroethane	40.2600	5.0	0.21	50.0000	80.5	63 - 127	7.71	20		
1,1,2-Trichloroethane	49.4300	5.0	0.40	50.0000	98.9	80 - 125	1.70	20		
1,1-Dichloroethane	49.8400	5.0	1.4	50.0000	99.7	77 - 128	2.16	20		
1,1-Dichloroethene	50.9600	5.0	1.9	50.0000	102	69 - 138	2.34	20		
1,1-Dichloropropene	48.3600	5.0	0.54	50.0000	96.7	80 - 133	1.78	20		
1,2,3-Trichloropropane	44.1100	5.0	0.40	50.0000	88.2	74 - 123	9.44	20		
1,2,3-Trichlorobenzene	45.8600	5.0	0.83	50.0000	91.7	79 - 133	0.196	20		
1,2,4-Trichlorobenzene	43.0700	5.0	0.80	50.0000	86.1	73 - 131	8.30	20		
1,2,4-Trimethylbenzene	46.2100	5.0	0.91	50.0000	92.4	86 - 137	4.03	20		
1,2-Dibromo-3-chloropropane	44.4500	10	1.1	50.0000	88.9	62 - 127	8.53	20		
1,2-Dibromoethane	47.9400	5.0	0.40	50.0000	95.9	83 - 126	0.313	20		
1,2-Dichlorobenzene	43.7800	5.0	0.21	50.0000	87.6	83 - 123	3.26	20		
1,2-Dichloroethane	52.0500	5.0	0.50	50.0000	104	76 - 128	0.231	20		
1,2-Dichloropropane	47.3100	5.0	0.46	50.0000	94.6	77 - 121	4.23	20		
1,3,5-Trimethylbenzene	45.2100	5.0	0.70	50.0000	90.4	84 - 135	0.925	20		
1,3-Dichlorobenzene	44.3800	5.0	0.36	50.0000	88.8	81 - 126	3.72	20		
1,3-Dichloropropane	47.9900	5.0	0.49	50.0000	96.0	80 - 118	1.66	20		
1,4-Dichlorobenzene	43.5300	5.0	0.27	50.0000	87.1	80 - 124	4.36	20		
2,2-Dichloropropane	50.3200	5.0	0.28	50.0000	101	72 - 135	2.18	20		
2-Chlorotoluene	45.4600	5.0	0.53	50.0000	90.9	81 - 127	6.84	20		
4-Chlorotoluene	46.6400	5.0	0.40	50.0000	93.3	83 - 127	1.43	20		
4-Isopropyltoluene	44.5100	5.0	0.81	50.0000	89.0	82 - 143	5.55	20		
Benzene	49.7100	5.0	0.36	50.0000	99.4	84 - 123	0.861	20		
Bromobenzene	46.1100	5.0	0.62	50.0000	92.2	80 - 122	3.03	20		
Bromochloromethane	47.4400	5.0	0.30	50.0000	94.9	83 - 127	2.79	20		
Bromodichloromethane	54.8700	5.0	0.52	50.0000	110	82 - 123	5.89	20		
Bromoform	48.4600	5.0	1.4	50.0000	96.9	80 - 132	11.6	20		
Bromomethane	68.9500	5.0	2.5	50.0000	138	67 - 176	3.38	20		
Carbon disulfide	48.9700	5.0	0.94	50.0000	97.9	75 - 138	4.94	20		
Carbon tetrachloride	50.7600	5.0	0.73	50.0000	102	76 - 131	3.69	20		
Chlorobenzene	48.1700	5.0	0.42	50.0000	96.3	84 - 119	4.05	20		
Chloroethane	58.0700	5.0	1.5	50.0000	116	56 - 170	0.103	20		
Chloroform	52.9400	5.0	0.24	50.0000	106	78 - 129	1.71	20		
Chloromethane	45.9400	5.0	1.1	50.0000	91.9	63 - 141	1.34	20		
cis-1,2-Dichloroethene	37.5100	5.0	0.20	50.0000	75.0	83 - 125	1.53	20	L3	
cis-1,3-Dichloropropene	44.1300	5.0	0.39	50.0000	88.3	76 - 129	5.71	20		
Di-isopropyl ether	47.7100	5.0	1.9	50.0000	95.4	73 - 132	1.66	20		
Dibromochloromethane	45.4700	5.0	0.81	50.0000	90.9	81 - 120	1.98	20		
Dibromomethane	49.1600	5.0	0.23	50.0000	98.3	79 - 124	4.17	20		
Dichlorodifluoromethane	45.4700	5.0	0.14	50.0000	90.9	18 - 199	6.03	20		
Ethyl Acetate	21.5500	50	7.0	500.000	4.31	76 - 138	15.8	20	MO	
Ethyl Ether	575.030	50	17	500.000	115	74 - 128	1.48	20		
Ethyl tert-butyl ether	48.4000	5.0	0.85	50.0000	96.8	50 - 175	5.89	20		



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/15/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1127 - MSVOA\_S (continued)**
**LCS Dup (B2C1127-BSD1) - Continued**

Prepared: 3/14/2022 Analyzed: 3/14/2022

Ethylbenzene	49.3500	5.0	0.43	50.0000	98.7	86 - 130	2.19	20		
Freon-113	56.0600	5.0	1.3	50.0000	112	66 - 132	4.75	20		
Hexachlorobutadiene	50.3600	5.0	0.40	50.0000	101	64 - 135	3.19	20		
Isopropylbenzene	47.0100	5.0	0.79	50.0000	94.0	80 - 133	4.57	20		
m,p-Xylene	95.4600	10	0.98	100.000	95.5	89 - 133	2.12	20		
Methylene chloride	50.0500	5.0	2.2	50.0000	100	72 - 143	0.717	20		
MTBE	46.7700	5.0	0.81	50.0000	93.5	73 - 136	1.81	20		
n-Butylbenzene	46.1100	5.0	1.2	50.0000	92.2	76 - 144	1.29	20		
n-Propylbenzene	45.7900	5.0	0.78	50.0000	91.6	81 - 136	3.98	20		
Naphthalene	41.3600	5.0	1.1	50.0000	82.7	64 - 128	1.87	20		
o-Xylene	47.7600	5.0	0.67	50.0000	95.5	82 - 134	2.31	20		
sec-Butylbenzene	45.0300	5.0	0.63	50.0000	90.1	81 - 138	6.28	20		
Styrene	47.3100	5.0	0.45	50.0000	94.6	79 - 152	4.14	20		
tert-Amyl methyl ether	46.8600	5.0	1.1	50.0000	93.7	48 - 166	1.19	20		
tert-Butanol	174.910	100	11	250.000	70.0	48 - 148	2.30	20		
tert-Butylbenzene	46.1800	5.0	0.80	50.0000	92.4	81 - 135	0.674	20		
Tetrachloroethene	46.1900	5.0	0.31	50.0000	92.4	75 - 127	5.72	20		
Toluene	48.6500	5.0	0.27	50.0000	97.3	88 - 130	1.12	20		
trans-1,2-Dichloroethene	64.2700	5.0	0.56	50.0000	129	79 - 127	5.83	20	L3	
trans-1,3-Dichloropropene	46.7200	5.0	0.59	50.0000	93.4	80 - 130	1.09	20		
Trichloroethene	49.0800	5.0	0.32	50.0000	98.2	83 - 126	7.87	20		
Trichlorofluoromethane	57.0200	5.0	1.0	50.0000	114	62 - 143	3.04	20		
Vinyl acetate	27.4000	50	6.0	500.000	5.48	69 - 150	21.2	20	MO	
Vinyl chloride	56.5300	5.0	0.92	50.0000	113	69 - 140	3.38	20		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	57.00			50.0000	114	66 - 200				
<i>Surrogate: 4-Bromofluorobenzene</i>	48.99			50.0000	98.0	50 - 146				
<i>Surrogate: Dibromofluoromethane</i>	52.21			50.0000	104	77 - 159				
<i>Surrogate: Toluene-d8</i>	48.26			50.0000	96.5	81 - 128				



# CHAIN OF CUSTODY RECORD

Page 1 of 2  
Instruction: Complete all shaded areas.

2200309  
21  
I. A. B. O. R. A. T. O. R. I. S.  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 988-4040

CUSTOMER  
Company: Langan Engineering & Environmental Services

SEND REPORT TO:

Attn: Julian Grochocki

Company: Langan Engineering & Environmental Services  
Address: 515 South Flower Street, Suite 2860  
City: Los Angeles State: CA Zip: 90071

PO #:

Project Name: Orbis - Santa Fe Springs

Quote #: 721033501

Sampler: YC/NE

Sample Description

S/N	Lab ID (For Lab Use Only)	Sample ID	Location	Date	Time	Requested Analysis		Sample Matrix	Container	Remarks
						Quantity	Turnaround Time (TAT)			
1	1	SB-01-101	10801	3/17/12	8:58	X	X			
2	2	SB-01-351			1:37					
3	3	SB-02-101			10:17					
4	4	SB-02-351			10:34					
5	5	SB-63-71			11:15					
6	6	SB-63-151			11:22					
7	7	SB-03-351			11:40					
8	8	SB-04-101			13:10					
9	9	SB-64-351			13:30					
10	10	SB-05-101			14:03					

(Special Instructions, Comments, Notes, etc.)

By relinquishing samples to ATL, I hereby agree that I have read and accept ATL's Terms and Conditions, as stated in [www.atlglobal.com/terms-and-conditions](http://www.atlglobal.com/terms-and-conditions).

Relinquished by: (Signature and Printed Name)	Date:	Received by: (Signature and Printed Name)	Date:
Relinquished by: (Signature and Printed Name)	Date:	Received by: (Signature and Printed Name)	Date:
Relinquished by: (Signature and Printed Name)	Date:	Received by: (Signature and Printed Name)	Date:



# CHAIN OF CUSTODY RECORD

Page 2 of 2

*Instruction: Complete all shaded areas.*

I. A B O R A T O R I T Y  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

2200309

Company: Langan Engineering & Environmental Services

## SEND REPORT TO:

Attn: Julian Grochocki  
Email: Jgrochocki@langan.com

## PO #:

721033501

## Sampler:

VIC

## Project Name:

Orbis - Santa Fe Springs

## Quote #:

## Request Analysis

## Sample Matrix

## Container

## Remarks

PROJECT SAMPLES		Sample ID		Location		Date	Time		
1	1	SB-05-351	6801			7/12	14:29	X	
2	2	SB-06-91				14:55			
3	3	SB-06-351				15:28			
4	4	DUR-SS-1A				7/12			
5									
6									
7									
8									
9									
10									

## Sample Description

## EPAs 8015 HCD/Cut (C13-C22, C23-C28)

## EPAs 8016 PCP/Bs

## EPAs 8017 SOC/S

## EPAs 8019 TX/THE 22 Method

## EPAs 8020 VOCs

## EPAs 8021 PCP/Bs

## Other

## Water

## Wastewater

## Non-aqueous

## Solid

## Other

## Trunaround Time (TAT)

## Quantity

## Meterial Test/Class

## Preservative: 1=HC; 2=Plastic; 3=Metol

## 5=air; 6=Tealite; 7=Gauze

## Type: 1=tube; 2=Vial; 3=Leach; 4=Perm

## 6=Perm

## 7=Filter

## 8=Perm

## 9=Perm

## 10=Perm

## 11=Perm

## 12=Perm

## 13=Perm

## 14=Perm

## 15=Perm

## 16=Perm

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## 196=Perm

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## 198=Perm

## 199=Perm

## 200=Perm

## 201=Perm

## 2

## **Edward Bae**

---

**From:** Julian Grochocki <Jgrochocki@lanigan.com>  
**Sent:** Tuesday, March 8, 2022 5:11 PM  
**To:** Edward Bae  
**Subject:** Re: Regarding Orbis - Sante Fe Springs / 721033501 / ATL WO#2200309

Hi Edward,

Please go ahead and analyze all samples for oxy as well.

Thanks!

Julian Grochocki  
Cell: (224) 234-1689

Get [Outlook for iOS](#)

---

**From:** Edward Bae <edward.bae@atlglobal.com>  
**Sent:** Tuesday, March 8, 2022 3:13:40 PM  
**To:** Julian Grochocki <Jgrochocki@lanigan.com>  
**Subject:** [External] Regarding Orbis - Sante Fe Springs / 721033501 / ATL WO#2200309

Good Afternoon Julian,

I wanted to reach out to you in regards to the 8260 analysis requested; would you need to analyze for Oxy as well?

Please let me know if I can be of further assistance.

**PLEASE NOTE: Our legal name is Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories.**

Best regards,



**Edward Bae | Project Assistant**  
**ADVANCED TECHNOLOGY LABORATORIES**  
3275 Walnut Avenue, Signal Hill CA 90755 | [www.atlglobal.com](http://www.atlglobal.com)  
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348  
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March 14, 2022

Julian Grochocki  
Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles, CA 90071  
Tel: (213) 314-8100  
Fax:

ELAP No.: 1838  
CSDLAC No.: 10196  
ORELAP No.: CA300003

Re: ATL Work Order Number : 2200318  
Client Reference : Orbis - Santa Fe Springs / 721033501

Enclosed are the results for sample(s) received on March 08, 2022 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Michel".

for

Victoria Michel, Project Assistant

Victoria.Michel@atlglobal.com

Authorized to Release on 03/14/22 15:26 on Behalf of

A handwritten signature in black ink, appearing to read "Amy Leung".

Amy Leung  
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-07-10'	2200318-01	Soil	3/08/22 7:26	3/08/22 16:32
SB-07-35'	2200318-02	Soil	3/08/22 7:55	3/08/22 16:32



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
MO	Manufacturer omitted analyte within the stock standard.
L3	Laboratory control sample outside in-house established limits but within method criteria.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

#### Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-10'**  
**Lab ID: 2200318-01**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1039	03/09/2022	03/10/22 12:33	
<b>C23-C32</b>	<b>12</b>	10	1	B2C1039	03/09/2022	03/10/22 12:33	
Surrogate: <i>p</i> -Terphenyl	110 %	62 - 141		B2C1039	03/09/2022	03/10/22 12:33	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1,1-Trichloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1,2,2-Tetrachloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1,2-Trichloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1-Dichloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1-Dichloroethene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,1-Dichloropropene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2,3-Trichloropropane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2,3-Trichlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2,4-Trichlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2,4-Trimethylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2-Dibromo-3-chloropropane	ND	10	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2-Dibromoethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2-Dichlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2-Dichloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,2-Dichloropropane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,3,5-Trimethylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,3-Dichlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,3-Dichloropropane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
1,4-Dichlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
2,2-Dichloropropane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
2-Chlorotoluene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
4-Chlorotoluene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
4-Isopropyltoluene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Benzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Bromobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Bromochloromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Bromodichloromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Bromoform	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Bromomethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Carbon disulfide	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Carbon tetrachloride	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Chlorobenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-10'**  
**Lab ID: 2200318-01**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Chloroform	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Chloromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
cis-1,2-Dichloroethene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
cis-1,3-Dichloropropene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Di-isopropyl ether	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Dibromochloromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Dibromomethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Dichlorodifluoromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Ethyl Acetate	ND	52	1	B2C1064	03/10/2022	03/10/22 14:46	
Ethyl Ether	ND	52	1	B2C1064	03/10/2022	03/10/22 14:46	
Ethyl tert-butyl ether	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Ethylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Freon-113	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Hexachlorobutadiene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Isopropylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
m,p-Xylene	ND	10	1	B2C1064	03/10/2022	03/10/22 14:46	
Methylene chloride	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
MTBE	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
n-Butylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
n-Propylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Naphthalene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
o-Xylene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
sec-Butylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Styrene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
tert-Amyl methyl ether	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
tert-Butanol	ND	100	1	B2C1064	03/10/2022	03/10/22 14:46	
tert-Butylbenzene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Tetrachloroethene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Toluene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
trans-1,2-Dichloroethene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
trans-1,3-Dichloropropene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Trichloroethene	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Trichlorofluoromethane	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
Vinyl acetate	ND	52	1	B2C1064	03/10/2022	03/10/22 14:46	
Vinyl chloride	ND	5.2	1	B2C1064	03/10/2022	03/10/22 14:46	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	115 %	66 - 200		B2C1064	03/10/2022	03/10/22 14:46	
<i>Surrogate: 4-Bromofluorobenzene</i>	99.0 %	50 - 146		B2C1064	03/10/2022	03/10/22 14:46	
<i>Surrogate: Dibromofluoromethane</i>	108 %	77 - 159		B2C1064	03/10/2022	03/10/22 14:46	
<i>Surrogate: Toluene-d8</i>	99.1 %	81 - 128		B2C1064	03/10/2022	03/10/22 14:46	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-10'**  
**Lab ID: 2200318-01**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B2C1074	03/10/2022	03/11/22 03:28	
C4-C12	ND	1.0	1	B2C1074	03/10/2022	03/11/22 03:28	
Surrogate: 4-Bromofluorobenzene	86.3 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 03:28	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-35'**

**Lab ID: 2200318-02**

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	10	1	B2C1039	03/09/2022	03/10/22 12:51	
<b>C23-C32</b>	<b>12</b>	10	1	B2C1039	03/09/2022	03/10/22 12:51	
Surrogate: <i>p</i> -Terphenyl	98.5 %	62 - 141		B2C1039	03/09/2022	03/10/22 12:51	

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1,1-Trichloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1,2,2-Tetrachloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1,2-Trichloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1-Dichloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1-Dichloroethene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,1-Dichloropropene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2,3-Trichloropropane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2,3-Trichlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2,4-Trichlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2,4-Trimethylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2-Dibromo-3-chloropropane	ND	9.3	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2-Dibromoethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2-Dichlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2-Dichloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,2-Dichloropropane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,3,5-Trimethylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,3-Dichlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,3-Dichloropropane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
1,4-Dichlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
2,2-Dichloropropane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
2-Chlorotoluene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
4-Chlorotoluene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
4-Isopropyltoluene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Benzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Bromobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Bromochloromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Bromodichloromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Bromoform	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Bromomethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Carbon disulfide	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Carbon tetrachloride	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Chlorobenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-35'**

**Lab ID: 2200318-02**

### Volatile Organic Compounds by EPA 5035 / EPA 8260B

**Analyst: KL**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Chloroform	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Chloromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
cis-1,2-Dichloroethene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
cis-1,3-Dichloropropene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Di-isopropyl ether	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Dibromochloromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Dibromomethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Dichlorodifluoromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Ethyl Acetate	ND	47	1	B2C1064	03/10/2022	03/10/22 15:11	
Ethyl Ether	ND	47	1	B2C1064	03/10/2022	03/10/22 15:11	
Ethyl tert-butyl ether	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Ethylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Freon-113	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Hexachlorobutadiene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Isopropylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
m,p-Xylene	ND	9.3	1	B2C1064	03/10/2022	03/10/22 15:11	
Methylene chloride	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
MTBE	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
n-Butylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
n-Propylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Naphthalene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
o-Xylene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
sec-Butylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Styrene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
tert-Amyl methyl ether	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
tert-Butanol	ND	93	1	B2C1064	03/10/2022	03/10/22 15:11	
tert-Butylbenzene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Tetrachloroethene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Toluene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
trans-1,2-Dichloroethene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
trans-1,3-Dichloropropene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Trichloroethene	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Trichlorofluoromethane	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
Vinyl acetate	ND	47	1	B2C1064	03/10/2022	03/10/22 15:11	
Vinyl chloride	ND	4.7	1	B2C1064	03/10/2022	03/10/22 15:11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	114 %	66 - 200		B2C1064	03/10/2022	03/10/22 15:11	
<i>Surrogate: 4-Bromofluorobenzene</i>	98.3 %	50 - 146		B2C1064	03/10/2022	03/10/22 15:11	
<i>Surrogate: Dibromofluoromethane</i>	108 %	77 - 159		B2C1064	03/10/2022	03/10/22 15:11	
<i>Surrogate: Toluene-d8</i>	98.2 %	81 - 128		B2C1064	03/10/2022	03/10/22 15:11	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: SB-07-35'**  
**Lab ID: 2200318-02**

### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified)

**Analyst: EB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.96	1	B2C1074	03/10/2022	03/11/22 03:53	
C4-C12	ND	0.96	1	B2C1074	03/10/2022	03/11/22 03:53	
Surrogate: 4-Bromofluorobenzene	87.5 %	47.6 - 121.18		B2C1074	03/10/2022	03/11/22 03:53	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### QUALITY CONTROL SECTION

#### Gasoline Range Hydrocarbons by EPA 5035 / EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1074 - GCVOA\_S

**Blank (B2C1074-BLK1)** Prepared: 3/10/2022 Analyzed: 3/11/2022

Gasoline Range Organics	ND	1.0	0.13
C4-C12	ND	1.0	0.13

*Surrogate: 4-Bromofluorobenzene* 0.6410 0.800000 80.1 47.6 - 121.18

**LCS (B2C1074-BS1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

Gasoline Range Organics	5.70800	1.0	0.13	5.00000	114	58.69 - 124.0 <sup>d</sup>
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*Surrogate: 4-Bromofluorobenzene* 0.7177 0.800000 89.7 47.6 - 121.18

**LCS Dup (B2C1074-BSD1)** Prepared: 3/10/2022 Analyzed: 3/11/2022

Gasoline Range Organics	5.85800	1.0	0.13	5.00000	117	58.69 - 124.0 <sup>d</sup>	2.59	20
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*Surrogate: 4-Bromofluorobenzene* 0.7248 0.800000 90.6 47.6 - 121.18



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### Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1039 - GCSEMI\_DRO\_S

##### Blank (B2C1039-BLK1)

Prepared: 3/9/2022 Analyzed: 3/10/2022

C13-C22	ND	10	3.6
C23-C32	ND	10	3.6

Surrogate: *p-Terphenyl* 75.84 80.0000 94.8 62 - 141

##### LCS (B2C1039-BS1)

Prepared: 3/9/2022 Analyzed: 3/10/2022

DRO	932.763	10	3.6	1000.00	ND	93.3	56 - 139
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Surrogate: *p-Terphenyl* 80.56 80.0000 101 62 - 141

##### Matrix Spike (B2C1039-MS1)

Source: 2200318-02

Prepared: 3/9/2022 Analyzed: 3/10/2022

DRO	932.858	10	3.6	1000.00	ND	93.3	38 - 161
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Surrogate: *p-Terphenyl* 81.55 80.0000 102 62 - 141

##### Matrix Spike Dup (B2C1039-MSD1)

Source: 2200318-02

Prepared: 3/9/2022 Analyzed: 3/10/2022

DRO	937.937	10	3.6	1000.00	ND	93.8	38 - 161	0.543	20
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Surrogate: *p-Terphenyl* 82.82 80.0000 104 62 - 141



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S**
**Blank (B2C1064-BLK1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	ND	5.0	0.52							
1,1,1-Trichloroethane	ND	5.0	0.26							
1,1,2,2-Tetrachloroethane	ND	5.0	0.21							
1,1,2-Trichloroethane	ND	5.0	0.40							
1,1-Dichloroethane	ND	5.0	1.4							
1,1-Dichloroethene	ND	5.0	1.9							
1,1-Dichloropropene	ND	5.0	0.54							
1,2,3-Trichloropropane	ND	5.0	0.40							
1,2,3-Trichlorobenzene	ND	5.0	0.83							
1,2,4-Trichlorobenzene	ND	5.0	0.80							
1,2,4-Trimethylbenzene	ND	5.0	0.91							
1,2-Dibromo-3-chloropropane	ND	10	1.1							
1,2-Dibromoethane	ND	5.0	0.40							
1,2-Dichlorobenzene	ND	5.0	0.21							
1,2-Dichloroethane	ND	5.0	0.50							
1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromochloromethane	ND	5.0	0.30							
Bromodichloromethane	ND	5.0	0.52							
Bromoform	ND	5.0	1.4							
Bromomethane	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**
**Blank (B2C1064-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Ethylbenzene	ND	5.0	0.43							
Freon-113	ND	5.0	1.3							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.79							
m,p-Xylene	ND	10	0.98							
Methylene chloride	ND	5.0	2.2							
MTBE	ND	5.0	0.81							
n-Butylbenzene	ND	5.0	1.2							
n-Propylbenzene	ND	5.0	0.78							
Naphthalene	ND	5.0	1.1							
o-Xylene	ND	5.0	0.67							
sec-Butylbenzene	ND	5.0	0.63							
Styrene	ND	5.0	0.45							
tert-Amyl methyl ether	ND	5.0	1.1							
tert-Butanol	ND	100	11							
tert-Butylbenzene	ND	5.0	0.80							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.27							
trans-1,2-Dichloroethene	ND	5.0	0.56							
trans-1,3-Dichloropropene	ND	5.0	0.59							
Trichloroethene	ND	5.0	0.32							
Trichlorofluoromethane	ND	5.0	1.0							
Vinyl acetate	ND	50	6.0							
Vinyl chloride	ND	5.0	0.92							

Surrogate: 1,2-Dichloroethane-d4	50.85	50.0000	102	66 - 200
Surrogate: 4-Bromofluorobenzene	49.58	50.0000	99.2	50 - 146
Surrogate: Dibromofluoromethane	52.38	50.0000	105	77 - 159
Surrogate: Toluene-d8	48.52	50.0000	97.0	81 - 128

**LCS (B2C1064-BS1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	49.4400	5.0	0.52	50.0000	98.9	84 - 123
1,1,1-Trichloroethane	53.0400	5.0	0.26	50.0000	106	78 - 133
1,1,2,2-Tetrachloroethane	52.7500	5.0	0.21	50.0000	106	63 - 127
1,1,2-Trichloroethane	51.7700	5.0	0.40	50.0000	104	80 - 125
1,1-Dichloroethane	50.6000	5.0	1.4	50.0000	101	77 - 128
1,1-Dichloroethene	46.4000	5.0	1.9	50.0000	92.8	69 - 138
1,1-Dichloropropene	52.3000	5.0	0.54	50.0000	105	80 - 133
1,2,3-Trichloropropane	50.0300	5.0	0.40	50.0000	100	74 - 123
1,2,3-Trichlorobenzene	52.1700	5.0	0.83	50.0000	104	79 - 133
1,2,4-Trichlorobenzene	51.3700	5.0	0.80	50.0000	103	73 - 131
1,2,4-Trimethylbenzene	50.8800	5.0	0.91	50.0000	102	86 - 137
1,2-Dibromo-3-chloropropane	53.0200	10	1.1	50.0000	106	62 - 127
1,2-Dibromoethane	52.1300	5.0	0.40	50.0000	104	83 - 126
1,2-Dichlorobenzene	50.9900	5.0	0.21	50.0000	102	83 - 123
1,2-Dichloroethane	51.8100	5.0	0.50	50.0000	104	76 - 128



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**
**LCS (B2C1064-BS1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,2-Dichloropropane	52.4400	5.0	0.46	50.0000		105	77 - 121			
1,3,5-Trimethylbenzene	50.0600	5.0	0.70	50.0000		100	84 - 135			
1,3-Dichlorobenzene	49.9000	5.0	0.36	50.0000		99.8	81 - 126			
1,3-Dichloropropane	50.0800	5.0	0.49	50.0000		100	80 - 118			
1,4-Dichlorobenzene	52.3200	5.0	0.27	50.0000		105	80 - 124			
2,2-Dichloropropane	49.9900	5.0	0.28	50.0000		100	72 - 135			
2-Chlorotoluene	49.5900	5.0	0.53	50.0000		99.2	81 - 127			
4-Chlorotoluene	51.5600	5.0	0.40	50.0000		103	83 - 127			
4-Isopropyltoluene	48.6700	5.0	0.81	50.0000		97.3	82 - 143			
Benzene	51.3100	5.0	0.36	50.0000		103	84 - 123			
Bromobenzene	50.9400	5.0	0.62	50.0000		102	80 - 122			
Bromoform	53.4000	5.0	0.30	50.0000		107	83 - 127			
Bromochloromethane	52.6900	5.0	0.52	50.0000		105	82 - 123			
Bromoform	51.4800	5.0	1.4	50.0000		103	80 - 132			
Bromomethane	48.0600	5.0	2.5	50.0000		96.1	67 - 176			
Carbon disulfide	48.2900	5.0	0.94	50.0000		96.6	75 - 138			
Carbon tetrachloride	48.9100	5.0	0.73	50.0000		97.8	76 - 131			
Chlorobenzene	50.4600	5.0	0.42	50.0000		101	84 - 119			
Chloroethane	57.7600	5.0	1.5	50.0000		116	56 - 170			
Chloroform	53.0900	5.0	0.24	50.0000		106	78 - 129			
Chloromethane	49.2600	5.0	1.1	50.0000		98.5	63 - 141			
cis-1,2-Dichloroethene	40.3000	5.0	0.20	50.0000		80.6	83 - 125			L3
cis-1,3-Dichloropropene	49.8100	5.0	0.39	50.0000		99.6	76 - 129			
Di-isopropyl ether	51.6000	5.0	1.9	50.0000		103	73 - 132			
Dibromochloromethane	52.4800	5.0	0.81	50.0000		105	81 - 120			
Dibromomethane	52.8400	5.0	0.23	50.0000		106	79 - 124			
Dichlorodifluoromethane	42.9300	5.0	0.14	50.0000		85.9	18 - 199			
Ethyl Acetate	31.8400	50	7.0	500.000		6.37	76 - 138			MO
Ethyl Ether	548.680	50	17	500.000		110	74 - 128			
Ethyl tert-butyl ether	50.9300	5.0	0.85	50.0000		102	50 - 175			
Ethylbenzene	51.1400	5.0	0.43	50.0000		102	86 - 130			
Freon-113	54.0300	5.0	1.3	50.0000		108	66 - 132			
Hexachlorobutadiene	49.9100	5.0	0.40	50.0000		99.8	64 - 135			
Isopropylbenzene	50.3300	5.0	0.79	50.0000		101	80 - 133			
m,p-Xylene	95.2200	10	0.98	100.000		95.2	89 - 133			
Methylene chloride	46.3700	5.0	2.2	50.0000		92.7	72 - 143			
MTBE	47.3400	5.0	0.81	50.0000		94.7	73 - 136			
n-Butylbenzene	50.5000	5.0	1.2	50.0000		101	76 - 144			
n-Propylbenzene	49.2800	5.0	0.78	50.0000		98.6	81 - 136			
Naphthalene	52.8700	5.0	1.1	50.0000		106	64 - 128			
o-Xylene	50.9300	5.0	0.67	50.0000		102	82 - 134			
sec-Butylbenzene	50.4900	5.0	0.63	50.0000		101	81 - 138			
Styrene	50.8000	5.0	0.45	50.0000		102	79 - 152			
tert-Amyl methyl ether	51.5800	5.0	1.1	50.0000		103	48 - 166			
tert-Butanol	274.350	100	11	250.000		110	48 - 148			



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### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1064 - MSVOA\_S (continued)**

LCS (B2C1064-BS1) - Continued							Prepared: 3/10/2022 Analyzed: 3/10/2022			
tert-Butylbenzene	49.4800	5.0	0.80	50.0000		99.0	81 - 135			
Tetrachloroethene	50.3200	5.0	0.31	50.0000		101	75 - 127			
Toluene	51.8200	5.0	0.27	50.0000		104	88 - 130			
trans-1,2-Dichloroethene	64.2600	5.0	0.56	50.0000		129	79 - 127			L3
trans-1,3-Dichloropropene	48.4900	5.0	0.59	50.0000		97.0	80 - 130			
Trichloroethene	50.1900	5.0	0.32	50.0000		100	83 - 126			
Trichlorofluoromethane	54.3900	5.0	1.0	50.0000		109	62 - 143			
Vinyl acetate	38.6200	50	6.0	500.000		7.72	69 - 150			MO
Vinyl chloride	50.5600	5.0	0.92	50.0000		101	69 - 140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.99			50.0000		102	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	51.87			50.0000		104	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	52.24			50.0000		104	77 - 159			
<i>Surrogate: Toluene-d8</i>	49.89			50.0000		99.8	81 - 128			

**LCS Dup (B2C1064-BSD1)**

LCS Dup (B2C1064-BSD1)							Prepared: 3/10/2022 Analyzed: 3/10/2022			
1,1,1,2-Tetrachloroethane	47.1300	5.0	0.52	50.0000		94.3	84 - 123	4.78	20	
1,1,1-Trichloroethane	51.0100	5.0	0.26	50.0000		102	78 - 133	3.90	20	
1,1,2,2-Tetrachloroethane	49.9300	5.0	0.21	50.0000		99.9	63 - 127	5.49	20	
1,1,2-Trichloroethane	49.2700	5.0	0.40	50.0000		98.5	80 - 125	4.95	20	
1,1-Dichloroethane	49.5900	5.0	1.4	50.0000		99.2	77 - 128	2.02	20	
1,1-Dichloroethene	45.7300	5.0	1.9	50.0000		91.5	69 - 138	1.45	20	
1,1-Dichloropropene	46.1800	5.0	0.54	50.0000		92.4	80 - 133	12.4	20	
1,2,3-Trichloropropane	46.7400	5.0	0.40	50.0000		93.5	74 - 123	6.80	20	
1,2,3-Trichlorobenzene	51.0700	5.0	0.83	50.0000		102	79 - 133	2.13	20	
1,2,4-Trichlorobenzene	48.7700	5.0	0.80	50.0000		97.5	73 - 131	5.19	20	
1,2,4-Trimethylbenzene	48.1000	5.0	0.91	50.0000		96.2	86 - 137	5.62	20	
1,2-Dibromo-3-chloropropane	53.1100	10	1.1	50.0000		106	62 - 127	0.170	20	
1,2-Dibromoethane	48.5800	5.0	0.40	50.0000		97.2	83 - 126	7.05	20	
1,2-Dichlorobenzene	49.3700	5.0	0.21	50.0000		98.7	83 - 123	3.23	20	
1,2-Dichloroethane	48.6800	5.0	0.50	50.0000		97.4	76 - 128	6.23	20	
1,2-Dichloropropane	49.5300	5.0	0.46	50.0000		99.1	77 - 121	5.71	20	
1,3,5-Trimethylbenzene	46.3400	5.0	0.70	50.0000		92.7	84 - 135	7.72	20	
1,3-Dichlorobenzene	47.0100	5.0	0.36	50.0000		94.0	81 - 126	5.96	20	
1,3-Dichloropropane	49.7300	5.0	0.49	50.0000		99.5	80 - 118	0.701	20	
1,4-Dichlorobenzene	48.9400	5.0	0.27	50.0000		97.9	80 - 124	6.68	20	
2,2-Dichloropropane	48.9100	5.0	0.28	50.0000		97.8	72 - 135	2.18	20	
2-Chlorotoluene	46.2700	5.0	0.53	50.0000		92.5	81 - 127	6.93	20	
4-Chlorotoluene	47.1900	5.0	0.40	50.0000		94.4	83 - 127	8.85	20	
4-Isopropyltoluene	45.4300	5.0	0.81	50.0000		90.9	82 - 143	6.89	20	
Benzene	47.4500	5.0	0.36	50.0000		94.9	84 - 123	7.82	20	
Bromobenzene	49.8400	5.0	0.62	50.0000		99.7	80 - 122	2.18	20	
Bromochloromethane	51.5800	5.0	0.30	50.0000		103	83 - 127	3.47	20	
Bromodichloromethane	49.1500	5.0	0.52	50.0000		98.3	82 - 123	6.95	20	
Bromoform	48.5200	5.0	1.4	50.0000		97.0	80 - 132	5.92	20	
Bromomethane	47.8700	5.0	2.5	50.0000		95.7	67 - 176	0.396	20	



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Report To : Julian Grochocki  
Reported : 03/14/2022

### Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1064 - MSVOA_S (continued)</b>										
<b>LCS Dup (B2C1064-BSD1) - Continued</b>										
Prepared: 3/10/2022 Analyzed: 3/10/2022										
Carbon disulfide	47.9300	5.0	0.94	50.0000		95.9	75 - 138	0.748	20	
Carbon tetrachloride	44.3800	5.0	0.73	50.0000		88.8	76 - 131	9.71	20	
Chlorobenzene	47.5200	5.0	0.42	50.0000		95.0	84 - 119	6.00	20	
Chloroethane	57.6200	5.0	1.5	50.0000		115	56 - 170	0.243	20	
Chloroform	49.8300	5.0	0.24	50.0000		99.7	78 - 129	6.34	20	
Chloromethane	47.5400	5.0	1.1	50.0000		95.1	63 - 141	3.55	20	
cis-1,2-Dichloroethene	39.9900	5.0	0.20	50.0000		80.0	83 - 125	0.772	20	L3
cis-1,3-Dichloropropene	47.9000	5.0	0.39	50.0000		95.8	76 - 129	3.91	20	
Di-isopropyl ether	51.5900	5.0	1.9	50.0000		103	73 - 132	0.0194	20	
Dibromochloromethane	50.1100	5.0	0.81	50.0000		100	81 - 120	4.62	20	
Dibromomethane	48.7200	5.0	0.23	50.0000		97.4	79 - 124	8.11	20	
Dichlorodifluoromethane	40.0600	5.0	0.14	50.0000		80.1	18 - 199	6.92	20	
Ethyl Acetate	22.1400	50	7.0	500.000		4.43	76 - 138	35.9	20	MO, R
Ethyl Ether	539.730	50	17	500.000		108	74 - 128	1.64	20	
Ethyl tert-butyl ether	49.5200	5.0	0.85	50.0000		99.0	50 - 175	2.81	20	
Ethylbenzene	47.6600	5.0	0.43	50.0000		95.3	86 - 130	7.04	20	
Freon-113	51.4100	5.0	1.3	50.0000		103	66 - 132	4.97	20	
Hexachlorobutadiene	47.7600	5.0	0.40	50.0000		95.5	64 - 135	4.40	20	
Isopropylbenzene	47.1800	5.0	0.79	50.0000		94.4	80 - 133	6.46	20	
m,p-Xylene	87.5800	10	0.98	100.000		87.6	89 - 133	8.36	20	L3
Methylene chloride	44.9800	5.0	2.2	50.0000		90.0	72 - 143	3.04	20	
MTBE	45.7900	5.0	0.81	50.0000		91.6	73 - 136	3.33	20	
n-Butylbenzene	46.5000	5.0	1.2	50.0000		93.0	76 - 144	8.25	20	
n-Propylbenzene	46.0900	5.0	0.78	50.0000		92.2	81 - 136	6.69	20	
Naphthalene	49.6800	5.0	1.1	50.0000		99.4	64 - 128	6.22	20	
o-Xylene	47.6700	5.0	0.67	50.0000		95.3	82 - 134	6.61	20	
sec-Butylbenzene	46.9900	5.0	0.63	50.0000		94.0	81 - 138	7.18	20	
Styrene	48.8200	5.0	0.45	50.0000		97.6	79 - 152	3.98	20	
tert-Amyl methyl ether	51.3400	5.0	1.1	50.0000		103	48 - 166	0.466	20	
tert-Butanol	269.870	100	11	250.000		108	48 - 148	1.65	20	
tert-Butylbenzene	46.5300	5.0	0.80	50.0000		93.1	81 - 135	6.15	20	
Tetrachloroethene	47.7700	5.0	0.31	50.0000		95.5	75 - 127	5.20	20	
Toluene	48.4400	5.0	0.27	50.0000		96.9	88 - 130	6.74	20	
trans-1,2-Dichloroethene	62.4100	5.0	0.56	50.0000		125	79 - 127	2.92	20	
trans-1,3-Dichloropropene	45.7900	5.0	0.59	50.0000		91.6	80 - 130	5.73	20	
Trichloroethene	46.7200	5.0	0.32	50.0000		93.4	83 - 126	7.16	20	
Trichlorofluoromethane	52.1800	5.0	1.0	50.0000		104	62 - 143	4.15	20	
Vinyl acetate	32.1200	50	6.0	500.000		6.42	69 - 150	18.4	20	MO
Vinyl chloride	49.8900	5.0	0.92	50.0000		99.8	69 - 140	1.33	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.85		50.0000			106	66 - 200			
<i>Surrogate: 4-Bromofluorobenzene</i>	51.10		50.0000			102	50 - 146			
<i>Surrogate: Dibromofluoromethane</i>	50.96		50.0000			102	77 - 159			
<i>Surrogate: Toluene-d8</i>	50.27		50.0000			101	81 - 128			



# CHAIN OF CUSTODY RECORD

ADVANCED TECHNOLOGY

I. A. B. O. R. A. T. O. R. I. E. S.  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

Company: Langan Engineering & Environmental Services

2200318

Address: 515 South Flower Street, Suite 2860

**21**

City: Los Angeles

State: CA

Zip: 90071

City: Los Angeles

State: CA

Zip: 90071

Page 1 of 1

ATLCOC Ver: 20201001  
For Laboratory Use Only

Instruction: Complete all shaded areas.

Method of Transport		Sample Conditions Upon Receipt			
<input type="checkbox"/> Client	<input type="checkbox"/> ATL	<input type="checkbox"/> 1. CHILLED	<input type="checkbox"/>	<input type="checkbox"/> Condition	<input type="checkbox"/> Y
<input type="checkbox"/> FedEx	<input type="checkbox"/> OnTrac	<input type="checkbox"/> 2. HEADSPACE (VOA) < 6mm	<input type="checkbox"/>	<input type="checkbox"/> N	<input type="checkbox"/> N
<input type="checkbox"/> GSO	<input type="checkbox"/> Other:	<input type="checkbox"/> 3. CONTAINER INTACT	<input type="checkbox"/>	<input type="checkbox"/> 5. # OF SAMPLES MATCH COC	<input type="checkbox"/>
		<input type="checkbox"/> 4. SEALED	<input type="checkbox"/>	<input type="checkbox"/> 6. PRESERVED	<input type="checkbox"/>
			<input type="checkbox"/> 7. COOLER TEMP, deg C: <u>20</u>	<input type="checkbox"/> 8. THERMOMETER ID:	<input type="checkbox"/>

SEND REPORT TO:		Attn: Julian Grochocki Email: jgrochocki@langan.com		Address: 515 South Flower Street, Suite 2860 City: Los Angeles State: CA Zip: 90071		Address: 515 South Flower Street, Suite 2860 City: Los Angeles State: CA Zip: 90071	
SEND INVOICE TO:		Attn: Accounts Payable		Email: Langan_invoicecapture@concursolutions.com		Email: Langan_invoicecapture@concursolutions.com	
Company: Langan Engineering & Environmental Services		Company: Langan Engineering & Environmental Services		Address: 515 South Flower Street, Suite 2860		Address: 515 South Flower Street, Suite 2860	
City: Los Angeles		State: CA		Zip: 90071		State: CA Zip: 90071	

ITEM	Lab ID (For Lab Use Only)	Sample Description				Requested Analysis	Sample Matrix	Container	Remarks
		Sample ID	Location	Date	Time				
1	SB-07-101	10801	31/02/2019	1:24	X X X				
2	SB-07-351	10801	1	1:55	1 1 1				
3									
4									
5									
6									
7									
8									
9									
10									

Project Name: Orbis - Santa Fe Springs	Quote #: <u>721033501</u>	PO #: <u>VJ</u>	Sample ID: <u>SB-07-101</u>	Location: <u>10801</u>	Date: <u>31/02/2019</u>	Time: <u>1:24</u>	Sample Description: <u>EPA 8015 GRD HCID (Q3-C12)</u>	Requested Analysis: <u>EPA 8015 GRD HCID (Q3-C12)</u>	Sample Matrix: <u>EPA 8081 PCDDs</u>	Container: <u>1</u>	Remarks: <u>2 1 1</u>
Project No.: 721033501											
Sampler: <u>VJ</u>											
Turnaround Time (TAT)											
EPA 8080 PCBs											
EPA 8270 VOCs											
EPA 6010/74X Total 22 Metals											
EPA 8270 SOCs											
EPA 8081 PCDDs											
EPA 8015 GRD HCID (Q3-C12)											
Non-aqueous											
Water											
Wastewater											
Soil											
Other											
Preservative: 1=HCl 2=VQA 3=Liter 4=Pint 5=jar 6=edi 7=Canister 8=Metal											
Type: 1=Tube 2=VOA 3=Liter 4=Print 5=Glass 6=Plastic 3=Metal											
4=A, 5=Zn(Ag), 6=Ni(OH), 7=Na2S2O3, 8=H2SO4, 9=HNO3, 10=HCl 2-HNO3, 11=H2O2											
QA/QC											
<input checked="" type="checkbox"/> Excel											
<input type="checkbox"/> EDF											
<input type="checkbox"/> Equis											
<input type="checkbox"/> Legal											
<input type="checkbox"/> RVQCB											
<input type="checkbox"/> Level IV											
<input type="checkbox"/>											

(Special Instructions, Comments, Notes, etc.)

By relinquishing samples to ATL, I hereby agree that I have read and accept ATL's Terms and Conditions, as stated in [www.atlglobal.com/terms-and-conditions](http://www.atlglobal.com/terms-and-conditions).

Reinquished by: <u>Julie</u> (Signature and Printed Name)	Date: <u>3/8/22</u>	Time: <u>10:32</u>	Received by: <u>Ethan Tran</u> (Signature and Printed Name)	Date: <u>3/8/22</u>	Time: <u>10:32</u>
Reinquished by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>	Received by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>
Reinquished by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>	Received by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>
Reinquished by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>	Received by: <u>(Signature and Printed Name)</u>	Date: <u></u>	Time: <u></u>



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SANTA FE SPRINGS, CA 90670  
WWW.JONESENV.COM

## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval:

Annalise O'Toole  
Mobile Lab Manager



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<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
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<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-16-5'	SV-16-25'	SV-16-45'	SV-15-5'	SV-15-5' REP		
<u>Jones ID:</u>	E-1252-01	E-1252-02	E-1252-03	E-1252-04	E-1252-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	<b>10</b>	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	<b>21</b>	<b>66</b>	ND	ND	16	µg/m3
1,1-Dichloroethane	ND	ND	<b>9</b>	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-16-5'	SV-16-25'	SV-16-45'	SV-15-5'	SV-15-5' REP		
<u>Jones ID:</u>	E-1252-01	E-1252-02	E-1252-03	E-1252-04	E-1252-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND	14	ND	ND	8	µg/m <sup>3</sup>
Freon 113	46	255	1720	67	62	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	33	ND	35	30	8	µg/m <sup>3</sup>
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
Naphthalene	ND	ND	ND	ND	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
Styrene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	1630	4360	22400	1260	851	8	µg/m <sup>3</sup>
Toluene	ND	14	9	22	19	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
Trichloroethene	53	96	1400	25	16	8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	19	99	ND	ND	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m <sup>3</sup>
m,p-Xylene	ND	42	29	ND	ND	16	µg/m <sup>3</sup>
o-Xylene	ND	10	9	ND	ND	8	µg/m <sup>3</sup>
MTBE	ND	ND	ND	ND	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m <sup>3</sup>
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	ND	ND	ND	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	ND	ND	ND	ND	80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	83%	87%	77%	83%	82%	60 - 140	
Toluene-d <sub>8</sub>	108%	136%	103%	102%	102%	60 - 140	
4-Bromofluorobenzene	127%	•	96%	102%	104%	60 - 140	
<b>Batch ID:</b>	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	<b>QC Limits</b>	

ND = Value below reporting limit

• = Hydrocarbon interference prevented adequate surrogate recovery.



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-15-25'	SV-15-45'	SV-14-5'	SV-14-25'	SV-14-45'		
<u>Jones ID:</u>	E-1252-06	E-1252-07	E-1252-08	E-1252-09	E-1252-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	<b>21</b>	ND	ND	<b>22</b>	<b>14</b>	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	<b>14</b>	ND	<b>10</b>	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	<b>69</b>	ND	ND	ND	16	µg/m3
1,1-Dichloroethane	ND	<b>62</b>	ND	<b>215</b>	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	<b>215</b>	ND	<b>316</b>	<b>12</b>	8	µg/m3
cis-1,2-Dichloroethene	<b>8</b>	<b>128</b>	ND	<b>635</b>	<b>28</b>	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	<b>152</b>	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-15-25'	SV-15-45'	SV-14-5'	SV-14-25'	SV-14-45'		
<u>Jones ID:</u>	E-1252-06	E-1252-07	E-1252-08	E-1252-09	E-1252-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
Ethylbenzene	<b>16</b>	ND	ND	ND	ND	8	µg/m³
Freon 113	<b>428</b>	<b>1990</b>	ND	<b>424</b>	<b>77</b>	16	µg/m³
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m³
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m³
4-Isopropyltoluene	<b>116</b>	<b>9</b>	<b>76</b>	<b>9</b>	<b>219</b>	8	µg/m³
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m³
Naphthalene	ND	ND	ND	ND	ND	40	µg/m³
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Styrene	ND	ND	ND	ND	ND	8	µg/m³
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m³
Tetrachloroethene	<b>6040</b>	<b>20700</b>	<b>258</b>	<b>5210</b>	<b>518</b>	8	µg/m³
Toluene	<b>105</b>	ND	<b>25</b>	<b>8</b>	<b>79</b>	8	µg/m³
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
Trichloroethene	<b>153</b>	<b>1410</b>	<b>27</b>	<b>1840</b>	<b>73</b>	8	µg/m³
Trichlorofluoromethane	ND	<b>77</b>	ND	ND	ND	16	µg/m³
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Vinyl chloride	ND	<b>359</b>	ND	<b>1890</b>	<b>62</b>	8	µg/m³
m,p-Xylene	<b>66</b>	ND	ND	ND	ND	16	µg/m³
o-Xylene	<b>22</b>	ND	ND	ND	<b>8</b>	8	µg/m³
MTBE	ND	ND	ND	ND	ND	40	µg/m³
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m³
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m³
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m³
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m³
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m³
n-Hexane	ND	ND	ND	ND	ND	80	µg/m³
n-Heptane	ND	ND	ND	ND	ND	80	µg/m³
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	90%	88%	90%	98%	86%	60 - 140	
Toluene-d <sub>8</sub>	103%	105%	103%	114%	105%	60 - 140	
4-Bromofluorobenzene	115%	100%	98%	•	110%	60 - 140	
<b>Batch ID:</b>	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	<b>QC Limits</b>	

ND = Value below reporting limit

• = Hydrocarbon interference prevented adequate surrogate recovery.



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-11-5'	SV-11-15'	SV-10-5'	SV-10-15'	SV-10-15' REP		
<u>Jones ID:</u>	E-1252-11	E-1252-12	E-1252-13	E-1252-14	E-1252-15	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	14	ND	11	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-11-5'	SV-11-15'	SV-10-5'	SV-10-15'	SV-10-15' REP		
<u>Jones ID:</u>	E-1252-11	E-1252-12	E-1252-13	E-1252-14	E-1252-15	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Freon 113	ND	49	ND	22	23	16	µg/m³
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m³
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m³
4-Isopropyltoluene	165	46	38	12	9	8	µg/m³
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m³
Naphthalene	ND	ND	ND	ND	ND	40	µg/m³
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Styrene	ND	ND	ND	ND	ND	8	µg/m³
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m³
Tetrachloroethene	71	230	74	267	251	8	µg/m³
Toluene	57	10	16	ND	ND	8	µg/m³
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
Trichloroethene	ND	15	ND	58	60	8	µg/m³
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m³
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m³
m,p-Xylene	ND	28	ND	16	ND	16	µg/m³
o-Xylene	11	ND	ND	ND	ND	8	µg/m³
MTBE	ND	ND	ND	ND	ND	40	µg/m³
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m³
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m³
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m³
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m³
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m³
n-Hexane	ND	ND	ND	ND	ND	80	µg/m³
n-Heptane	ND	ND	ND	ND	ND	80	µg/m³
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	92%	82%	91%	91%	91%	60 - 140	
Toluene-d <sub>8</sub>	112%	104%	107%	102%	103%	60 - 140	
4-Bromofluorobenzene	•	104%	•	101%	101%	60 - 140	
<b>Batch ID:</b>	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	E3-031022-01	<b>QC Limits</b>	

ND = Value below reporting limit

• = Hydrocarbon interference prevented adequate surrogate recovery.



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV-12-5'**    **SV-12-15'**

<u>Jones ID:</u>	<b>E-1252-16</b>	<b>E-1252-17</b>	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>				
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-12-5'	SV-12-15'		
<u>Jones ID:</u>	E-1252-16	E-1252-17	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytics:</b>				
cis-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Freon 113	ND	ND	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	10	ND	8	µg/m <sup>3</sup>
Methylene chloride	ND	ND	8	µg/m <sup>3</sup>
Naphthalene	ND	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND	8	µg/m <sup>3</sup>
Styrene	ND	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	52	80	8	µg/m <sup>3</sup>
Toluene	ND	ND	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
Trichloroethene	ND	ND	8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND	8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND	16	µg/m <sup>3</sup>
o-Xylene	ND	ND	8	µg/m <sup>3</sup>
MTBE	ND	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND	400	µg/m <sup>3</sup>
<b>Tracer:</b>				
n-Pentane	ND	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	ND	80	µg/m <sup>3</sup>
<b>Dilution Factor</b>				
	1	1		
<b>Surrogate Recoveries:</b>				
Dibromofluoromethane	85%	82%	60 - 140	
Toluene-d <sub>8</sub>	103%	103%	60 - 140	
4-Bromofluorobenzene	101%	99%	60 - 140	
<u>Batch ID:</u>	E3-031022-01	E3-031022-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	<u>METHOD</u>	<u>SAMPLING</u>		
	BLANK	BLANK		
<u>Jones ID:</u>	031022- E3MB1	031022- E3SB1		<u>Reporting Limit</u>
<b>Analytes:</b>				<u>Units</u>
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	METHOD BLANK	SAMPLING BLANK			
<u>Jones ID:</u>	031022- E3MB1	031022- E3SB1		<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>					
cis-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Freon 113	ND	ND		16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND		24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND		8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND		8	µg/m <sup>3</sup>
Methylene chloride	ND	ND		8	µg/m <sup>3</sup>
Naphthalene	ND	ND		40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND		8	µg/m <sup>3</sup>
Styrene	ND	ND		8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND		16	µg/m <sup>3</sup>
Tetrachloroethene	ND	ND		8	µg/m <sup>3</sup>
Toluene	ND	ND		8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
Trichloroethene	ND	ND		8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND		16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND		8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND		8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND		16	µg/m <sup>3</sup>
o-Xylene	ND	ND		8	µg/m <sup>3</sup>
MTBE	ND	ND		40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND		40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND		40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND		40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND		400	µg/m <sup>3</sup>
<b>Tracer:</b>					
n-Pentane	ND	ND		80	µg/m <sup>3</sup>
n-Hexane	ND	ND		80	µg/m <sup>3</sup>
n-Heptane	ND	ND		80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1			
<b>Surrogate Recoveries:</b>					
Dibromofluoromethane	94%	96%		60 - 140	
Toluene-d <sub>8</sub>	101%	100%		60 - 140	
4-Bromofluorobenzene	95%	97%		60 - 140	
<b>Batch ID:</b>	E3-031022- 01	E3-031022- 01			

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b> 3/10/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b> E-1252
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b> 721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b> 3/10/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b> 3/10/2022
		<b>Date Analyzed:</b> 3/10/2022
		<b>Physical State:</b> Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

**Batch ID:** E3-031022-01

**Jones ID:** 031022-E3LCS1    031022-E3LCSD1    031022-E3CCV1

<u>Parameter</u>	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	89%	97%	9.0%	60 - 140	96%	80 - 120
1,1-Dichloroethene	100%	103%	2.8%	60 - 140	110%	80 - 120
Cis-1,2-Dichloroethene	102%	100%	2.0%	70 - 130	113%	80 - 120
1,1,1-Trichloroethane	88%	93%	5.3%	70 - 130	112%	80 - 120
Benzene	94%	104%	10.5%	70 - 130	111%	80 - 120
Trichloroethene	102%	109%	6.4%	70 - 130	110%	80 - 120
Toluene	101%	104%	2.7%	70 - 130	116%	80 - 120
Tetrachloroethene	98%	114%	15.4%	70 - 130	114%	80 - 120
Chlorobenzene	101%	108%	6.9%	70 - 130	117%	80 - 120
Ethylbenzene	93%	97%	4.6%	70 - 130	112%	80 - 120
1,2,4 Trimethylbenzene	98%	99%	1.2%	70 - 130	120%	80 - 120

#### Surrogate Recovery:

Dibromofluoromethane	99%	95%	60 - 140	100%	60 - 140
Toluene-d <sub>8</sub>	101%	103%	60 - 140	103%	60 - 140
4-Bromofluorobenzene	97%	97%	60 - 140	99%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%



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# Soil-Gas Chain-of-Custody Record

Client  
**Langan Engineering and Environmental Services**

Project Name  
**721033501 Santa Fe Springs**

Project Address  
**10845 Koontz Ave,**

**Santa Fe Springs, CA**

Email

Phone

Report To  
**Luis Navarro**      Sampler  
**Casey Ellis**

Date  
**3/10/2022**

Client Project #  
**721033501**

Purge Number:  
 1P  3P  7P  10P

Report Options  
EDD \_\_\_\_\_  
EDF\* - 10% Surcharge \_\_\_\_\_

Shut-In Test:  Y / N

\*Global ID \_\_\_\_\_

LAB USE ONLY

Jones Project #  
**E-1252**

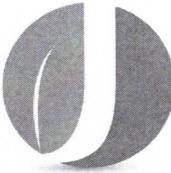
Page  
**1** of **2**

Sample Container:

GASTIGHT GLASS SYRINGE

If different than above, see Notes.

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Analysis Requested		Number of Containers	Notes & Special Instructions	
										Tracer	Sample Matrix: Soil Gas (SG), Air (A), Material (M) EPA 8260B (VOCs)			
SV-16-5'	3	1630	3/10/22	7:44	7:47	E-1252-01	200	SKC.201244	M100.107	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-16-25'	3	1960	3/10/22	7:57	8:03	E-1252-02	200	SKC.201244	M100.110	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-16-45'	3	2290	3/10/22	8:18	8:20	E-1252-03	200	SKC.201244	M100.113	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-15-5'	3	1630	3/10/22	8:38	8:41	E-1252-04	200	SKC.201244	M100.107	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-15-5' REP	3	1630	3/10/22	8:49	8:57	E-1252-05	200	SKC.201244	M100.107	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-15-25'	3	1960	3/10/22	9:12	9:15	E-1252-06	200	SKC.201244	M100.110	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-15-45'	3	2290	3/10/22	9:28	9:32	E-1252-07	200	SKC.201244	M100.113	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-14-5'	3	1630	3/10/22	9:47	9:49	E-1252-08	200	SKC.201244	M100.107	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-14-25'	3	1960	3/10/22	10:02	10:05	E-1252-09	200	SKC.201244	M100.110	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
SV-14-45'	3	2290	3/10/22	10:17	10:22	E-1252-10	200	SKC.201244	M100.113	<input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	X		<2	1
Representative Signature 	Printed Name <b>ERIK VAN DUSEN</b>					Laboratory Signature 	Printed Name <b>Casey Ellis</b>					10	Total Number of Containers	
Company Langan Engineering and Environmental Services	Date 3/10/2022	Time 13:30	Company JONES ENVIRONMENTAL, INC.	Date 3/10/2022	Time 13:30	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.								
Representative Signature	Printed Name					Laboratory Signature	Printed Name							
Company	Date	Time	Company	Date	Time									



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## Soil-Gas Chain-of-Custody Record

Client <b>Langan Engineering and Environmental Services</b>						Date 3/10/2022	Purge Number: <input type="checkbox"/> 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P	Report Options EDD _____ EDF* - 10% Surcharge _____						
Project Name <b>721033501 Santa Fe Springs</b>						Client Project # 721033501	Shut-In Test: <input checked="" type="checkbox"/> Y / N	*Global ID _____						
Project Address <b>10845 Koontz Ave,</b> <b>Santa Fe Springs, CA</b>						Turn Around Requested <input type="checkbox"/> Immediate Attention <input type="checkbox"/> Rush 24 Hours <input type="checkbox"/> Rush 48 Hours <input type="checkbox"/> Rush 72 Hours <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Mobile Lab	Tracer <input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	Analysis Requested						
Email _____ Phone _____						Reporting Limits <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Low Level* <input type="checkbox"/> MDL* <small>*surcharge for these limits</small>	Units <i>mg/m³</i>	Sample Matrix: Soil Gas (SG), Air (A), Material (M) EPA 8260B (VOCs)	Magnetic Vacuum (in/H <sub>2</sub> O)					
Report To <b>Luis Navarro</b> <b>Casey Ellis</b>						Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Number of Containers	Notes & Special Instructions				
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time									
SV-11-5'	3	1630	3/10/22	10:35	10:39	E-1252-11	200	SKC.201244	M100.107	SG X	<2 1			
SV-11-15'	3	1790	3/10/22	10:55	10:59	E-1252-12	200	SKC.201244	M100.110	SG X	<2 1			
SV-10-5'	3	1630	3/10/22	11:12	11:15	E-1252-13	200	SKC.201244	M100.113	SG X	<2 1			
SV-10-15'	3	1790	3/10/22	11:30	11:32	E-1252-14	200	SKC.201244	M100.107	SG X	<2 1			
SV-10-15' REP	3	1790	3/10/22	11:42	11:48	E-1252-15	200	SKC.201244	M100.110	SG X	<2 1			
SV-12-5'	3	1630	3/10/22	12:13	12:15	E-1252-16	200	SKC.201244	M100.113	SG X	<2 1			
SV-12-15'	3	1790	3/10/22	12:18	12:22	E-1252-17	200	SKC.201244	M100.107	SG X	<2 1			
Representative Signature <i>Erik Van Dusen</i>						Printed Name ERIK VAN DUSEN			Laboratory Signature <i>Casey Ellis</i>			Printed Name Casey Ellis		
Company Langan Engineering and Environmental Services			Date 3/10/2022	Time 13:30	Company JONES ENVIRONMENTAL, INC.			Date 3/10/2022	Time 13:30	7 Total Number of Containers				
Representative Signature						Laboratory Signature			Printed Name			Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.		
Company						Company			Date	Time				
Printed Name						Printed Name								
Date						Date								
Time						Time								



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1253
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval:

A handwritten signature in black ink that reads "Annalise O'Toole".

Annalise O'Toole  
Mobile Lab Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1253
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-20-5'	SV-20-15'	SV-19-5'	SV-19-15'	SV-19-15' REP		
<u>Jones ID:</u>	E-1253-01	E-1253-02	E-1253-03	E-1253-04	E-1253-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-20-5'	SV-20-15'	SV-19-5'	SV-19-15'	SV-19-15' REP		
<u>Jones ID:</u>	E-1253-01	E-1253-02	E-1253-03	E-1253-04	E-1253-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	<b>61</b>	ND	<b>69</b>	<b>68</b>	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	ND	ND	ND	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	<b>21</b>	<b>422</b>	<b>57</b>	<b>871</b>	<b>932</b>	8	µg/m3
Toluene	<b>11</b>	<b>9</b>	<b>11</b>	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	<b>19</b>	<b>24</b>	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m3
o-Xylene	ND	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	92%	95%	99%	100%	98%	60 - 140	
Toluene-d <sub>8</sub>	101%	102%	100%	102%	101%	60 - 140	
4-Bromofluorobenzene	101%	105%	100%	102%	102%	60 - 140	
<b>Batch ID:</b>	E3-031122-01	E3-031122-01	E3-031122-01	E3-031122-01	E3-031122-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1253
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-18-5'	SV-18-15'	SV-08-5'	SV-09-5'	SV-09-25'		
<u>Jones ID:</u>	E-1253-06	E-1253-07	E-1253-08	E-1253-09	E-1253-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	<b>26</b>	<b>11</b>	<b>13</b>	8	µg/m³
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m³
Bromoform	ND	ND	ND	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m³
Chloroform	ND	ND	ND	ND	<b>34</b>	8	µg/m³
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m³
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	<b>68</b>	ND	ND	<b>79</b>	16	µg/m³
1,1-Dichloroethane	ND	ND	ND	ND	<b>105</b>	8	µg/m³
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	ND	ND	<b>743</b>	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	ND	ND	<b>358</b>	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	ND	ND	<b>13</b>	8	µg/m³
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-18-5'	SV-18-15'	SV-08-5'	SV-09-5'	SV-09-25'		
<u>Jones ID:</u>	E-1253-06	E-1253-07	E-1253-08	E-1253-09	E-1253-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	<b>14</b>	<b>8</b>	8	µg/m3
Freon 113	ND	<b>70</b>	ND	<b>29</b>	<b>211</b>	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	<b>12</b>	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	ND	ND	ND	<b>34</b>	<b>84</b>	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	<b>97</b>	<b>695</b>	<b>71</b>	<b>65</b>	<b>1460</b>	8	µg/m3
Toluene	ND	ND	<b>21</b>	<b>27</b>	<b>63</b>	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	<b>30</b>	ND	ND	<b>949</b>	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	<b>45</b>	16	µg/m3	
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	<b>20</b>	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	<b>29</b>	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	<b>59</b>	<b>27</b>	16	µg/m3
o-Xylene	ND	ND	ND	<b>21</b>	<b>9</b>	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	98%	99%	98%	99%	99%	60 - 140	
Toluene-d <sub>8</sub>	103%	101%	103%	102%	101%	60 - 140	
4-Bromofluorobenzene	109%	101%	100%	100%	100%	60 - 140	
<b>Batch ID:</b>	E3-031122-01	E3-031122-01	E3-031122-01	E3-031122-01	E3-031122-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1253
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV-09-45'**

<u>Jones ID:</u>	<u>E-1253-11</u>	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytics:</b>			
Benzene	ND	8	µg/m³
Bromobenzene	ND	8	µg/m³
Bromodichloromethane	ND	8	µg/m³
Bromoform	ND	8	µg/m³
n-Butylbenzene	ND	12	µg/m³
sec-Butylbenzene	ND	12	µg/m³
tert-Butylbenzene	ND	12	µg/m³
Carbon tetrachloride	ND	8	µg/m³
Chlorobenzene	ND	8	µg/m³
Chloroform	<b>33</b>	8	µg/m³
2-Chlorotoluene	ND	12	µg/m³
4-Chlorotoluene	ND	12	µg/m³
Dibromochloromethane	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	8	µg/m³
Dibromomethane	ND	8	µg/m³
1,2- Dichlorobenzene	ND	16	µg/m³
1,3-Dichlorobenzene	ND	16	µg/m³
1,4-Dichlorobenzene	ND	16	µg/m³
Dichlorodifluoromethane	<b>181</b>	16	µg/m³
1,1-Dichloroethane	<b>58</b>	8	µg/m³
1,2-Dichloroethane	ND	8	µg/m³
1,1-Dichloroethene	<b>668</b>	8	µg/m³
cis-1,2-Dichloroethene	<b>274</b>	8	µg/m³
trans-1,2-Dichloroethene	<b>11</b>	8	µg/m³
1,2-Dichloropropane	ND	8	µg/m³
1,3-Dichloropropane	ND	8	µg/m³
2,2-Dichloropropane	ND	16	µg/m³
1,1-Dichloropropene	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

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## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV-09-45'**

Jones ID: **E-1253-11**

**Analytes:**

		<u>Reporting Limit</u>	<u>Units</u>
cis-1,3-Dichloropropene	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	8	µg/m <sup>3</sup>
Ethylbenzene	ND	8	µg/m <sup>3</sup>
Freon 113	<b>375</b>	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	<b>11</b>	8	µg/m <sup>3</sup>
Methylene chloride	ND	8	µg/m <sup>3</sup>
Naphthalene	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	8	µg/m <sup>3</sup>
Styrene	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	<b>1390</b>	8	µg/m <sup>3</sup>
Toluene	ND	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	8	µg/m <sup>3</sup>
Trichloroethene	<b>593</b>	8	µg/m <sup>3</sup>
Trichlorofluoromethane	<b>70</b>	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	8	µg/m <sup>3</sup>
Vinyl chloride	<b>18</b>	8	µg/m <sup>3</sup>
m,p-Xylene	ND	16	µg/m <sup>3</sup>
o-Xylene	ND	8	µg/m <sup>3</sup>
MTBE	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	400	µg/m <sup>3</sup>

**Tracer:**

n-Pentane	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	80	µg/m <sup>3</sup>

Dilution Factor      **1**

**Surrogate Recoveries:**

		<u>QC Limits</u>
Dibromofluoromethane	99%	60 - 140
Toluene-d <sub>8</sub>	103%	60 - 140
4-Bromofluorobenzene	100%	60 - 140

Batch ID: **E3-031122-01**

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b>	E-1253
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	<u>METHOD</u>	<u>SAMPLING</u>		
	BLANK	BLANK		
<u>Jones ID:</u>	031122- E3MB1	031122- E3SB1		<u>Reporting Limit</u>
<b>Analytes:</b>				<u>Units</u>
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	METHOD BLANK	SAMPLING BLANK			
<u>Jones ID:</u>	031122- E3MB1	031122- E3SB1		<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>					
cis-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Freon 113	ND	ND		16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND		24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND		8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND		8	µg/m <sup>3</sup>
Methylene chloride	ND	ND		8	µg/m <sup>3</sup>
Naphthalene	ND	ND		40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND		8	µg/m <sup>3</sup>
Styrene	ND	ND		8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND		16	µg/m <sup>3</sup>
Tetrachloroethene	ND	ND		8	µg/m <sup>3</sup>
Toluene	ND	ND		8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
Trichloroethene	ND	ND		8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND		16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND		8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND		8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND		16	µg/m <sup>3</sup>
o-Xylene	ND	ND		8	µg/m <sup>3</sup>
MTBE	ND	ND		40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND		40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND		40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND		40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND		400	µg/m <sup>3</sup>
<b>Tracer:</b>					
n-Pentane	ND	ND		80	µg/m <sup>3</sup>
n-Hexane	ND	ND		80	µg/m <sup>3</sup>
n-Heptane	ND	ND		80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1			
<b>Surrogate Recoveries:</b>					
Dibromofluoromethane	98%	98%		60 - 140	
Toluene-d <sub>8</sub>	102%	102%		60 - 140	
4-Bromofluorobenzene	95%	98%		60 - 140	
<b>Batch ID:</b>	E3-031122- 01	E3-031122- 01		<b>QC Limits</b>	

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b> 3/11/2022
<b>Client Address:</b>	515 South Flower Street, Los Angeles, CA	<b>Jones Ref. No.:</b> E-1253 <b>Client Ref. No.:</b> 721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b> 3/11/2022 <b>Date Received:</b> 3/11/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Analyzed:</b> 3/11/2022
<b>Project Address:</b>	10845 Koontz Ave, Santa Fe Springs, CA	<b>Physical State:</b> Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

**Batch ID:** E3-031122-01

**Jones ID:** 031122-E3LCS1    031122-E3LCSD1    031122-E3CCV1

<u>Parameter</u>	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	92%	98%	6.8%	60 - 140	85%	80 - 120
1,1-Dichloroethene	106%	109%	3.0%	60 - 140	98%	80 - 120
Cis-1,2-Dichloroethene	107%	104%	3.4%	70 - 130	103%	80 - 120
1,1,1-Trichloroethane	93%	98%	5.9%	70 - 130	99%	80 - 120
Benzene	102%	106%	3.8%	70 - 130	100%	80 - 120
Trichloroethene	103%	105%	1.5%	70 - 130	101%	80 - 120
Toluene	107%	102%	4.2%	70 - 130	111%	80 - 120
Tetrachloroethene	103%	105%	2.3%	70 - 130	108%	80 - 120
Chlorobenzene	107%	108%	1.1%	70 - 130	110%	80 - 120
Ethylbenzene	97%	94%	3.8%	70 - 130	109%	80 - 120
1,2,4 Trimethylbenzene	98%	104%	6.7%	70 - 130	115%	80 - 120

#### Surrogate Recovery:

Dibromofluoromethane	98%	98%	60 - 140	98%	60 - 140
Toluene-d <sub>8</sub>	102%	103%	60 - 140	104%	60 - 140
4-Bromofluorobenzene	98%	96%	60 - 140	100%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%



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# Soil-Gas Chain-of-Custody Record

**Client**  
**Langan Engineering and Environmental Services**

Project Name

**721033501 Santa Fe Springs**

Project Address

**10845 Koontz Ave,**

**Santa Fe Springs, CA**

Email

Phone

Report To

**Sampler**  
**Luis Navarro**  
**Tristan Jongert**

Date  
**3/11/2022**

Client Project #  
**721033501**

Purge Number:  
 1P  3P  7P  10P

Report Options  
EDD \_\_\_\_\_  
EDF\* - 10% Surcharge \_\_\_\_\_

Shut-In Test:  Y / N

\*Global ID \_\_\_\_\_

LAB USE ONLY

Jones Project #

**E-1253**

Page

**1** of **2**

Sample Container:

GASTIGHT GLASS SYRINGE

If different than above, see Notes.

Turn Around Requested

- Immediate Attention
- Rush 24 Hours
- Rush 48 Hours
- Rush 72 Hours
- Normal
- Mobile Lab

Tracer

- n-pentane
- n-hexane
- n-heptane
- Isopropyl Alcohol
- 1,1-DFA
- \_\_\_\_\_

Analysis Requested

Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)						Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers

Reporting Limits

Standard     Low Level\*     MDL\*    Units  
\*surcharge for these limits µg/m<sup>3</sup>

Notes & Special Instructions

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)					Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers
SV-20-5'	3	1630	3/11/22	7:08	7:09	E-1253-01	200	CASEY.2	118012	SG	X					<2	1
SV-20-15'	3	1790	3/11/22	7:17	7:24	E-1253-02	200	JACKSON.2	M100.003	SG	X					<2	1
SV-19-5'	3	1630	3/11/22	7:37	7:41	E-1253-03	200	CASEY.2	M100.102	SG	X					<2	1
SV-19-15'	3	1790	3/11/22	7:46	7:59	E-1253-04	200	JACKSON.2	M100.106	SG	X					<2	1
SV-19-15' REP	3	1790	3/11/22	8:01	8:16	E-1253-05	200	JACKSON.2	M100.106	SG	X					<2	1
SV-18-5'	3	1630	3/11/22	8:22	8:35	E-1253-06	200	CASEY.2	118012	SG	X					<2	1
SV-18-15'	3	1790	3/11/22	8:44	8:52	E-1253-07	200	JACKSON.2	M100.003	SG	X					<2	1
SV-08-5'	3	1630	3/11/22	9:02	9:11	E-1253-08	200	CASEY.2	M100.102	SG	X					18	1
SV-09-5'	3	1630	3/11/22	9:16	9:29	E-1253-09	200	JACKSON.2	M100.106	SG	X					<2	1
SV-09-25'	3	1960	3/11/22	9:32	9:47	E-1253-10	200	CASEY.2	118012	SG	X					<2	1

Representative Signature

Printed Name

Erik Van Dusen

Laboratory Signature

Printed Name

Tristan Jongert

10 Total Number of Containers

Company

Langan Engineering and Environmental Services

Date 3/11/2022

Time 10:45

Date 3/11/2022

Time 10:45

Company

Date

Time

Company

Date

Time

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.



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# Soil-Gas Chain-of-Custody Record

Client <b>Langan Engineering and Environmental Services</b>						Date 3/11/2022	Purge Number: <input type="checkbox"/> 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P	Report Options EDD _____ EDF* - 10% Surcharge _____	LAB USE ONLY			
Project Name <b>721033501 Santa Fe Springs</b>						Client Project # 721033501	Shut-In Test: <input checked="" type="checkbox"/> Y / N	*Global ID _____	Jones Project # <b>E-1253</b>			
Project Address <b>10845 Koontz Ave,</b> <b>Santa Fe Springs, CA</b>						Turn Around Requested <input type="checkbox"/> Immediate Attention <input type="checkbox"/> Rush 24 Hours <input type="checkbox"/> Rush 48 Hours <input type="checkbox"/> Rush 72 Hours <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Mobile Lab	Tracer <input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/> _____	Analysis Requested				
						Reporting Limits <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Low Level* <input type="checkbox"/> MDL* *surcharge for these limits	Units <u>ug/m<sup>3</sup></u>	Sample Matrix: Soil Gas (SG), Air (A), Material (M) EPA 8260B (VOCS)	Magnehelic Vacuum (In/H <sub>2</sub> O)	Number of Containers		
						Laboratory Sample ID E-1253-11	Purge Rate (mL/min) 200	Pump Used JACKSON.2	Magnehelic	Notes & Special Instructions		
Report To <b>Luis Navarro</b>						Sampler <b>Tristan Jongert</b>						
Sample ID SV-09-45'	Purge Number 3	Purge Volume (mL)	Date 3/11/22	Sample Collection Time 9:50	Sample Analysis Time 10:05	Laboratory Sample ID E-1253-11	Purge Rate (mL/min) 200	Pump Used JACKSON.2	Magnehelic M100.003	Sample Matrix: Soil Gas (SG), Air (A), Material (M) EPA 8260B (VOCS)	Magnehelic Vacuum (In/H <sub>2</sub> O) <2	Number of Containers 1
Representative Signature 						Printed Name Erik Van Dusen	Laboratory Signature 	Printed Name Tristan Jongert	1	Total Number of Containers		
Company Langan Engineering and Environmental Services	Date 3/11/2022	Time 10:45	Company JONES ENVIRONMENTAL, INC.	Date 3/11/2022	Time 10:45	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.						
Representative Signature	Printed Name	Laboratory Signature	Printed Name									
Company	Date	Time	Company	Date	Time							



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562-646-1611

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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval:



Annalise O'Toole  
Mobile Lab Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-01-5'	SV-01-15'	SV-02-5'	SV-02-15'	SV-03-5'		
<u>Jones ID:</u>	G-0422-01	G-0422-02	G-0422-03	G-0422-04	G-0422-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	ND	ND	ND	8	µg/m³
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m³
Bromoform	ND	ND	ND	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m³
Chloroform	ND	ND	ND	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m³
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	ND	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-01-5'	SV-01-15'	SV-02-5'	SV-02-15'	SV-03-5'		
<u>Jones ID:</u>	G-0422-01	G-0422-02	G-0422-03	G-0422-04	G-0422-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Freon 113	ND	ND	ND	ND	ND	16	µg/m³
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m³
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m³
4-Isopropyltoluene	ND	ND	<b>23</b>	<b>23</b>	<b>11</b>	8	µg/m³
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m³
Naphthalene	ND	ND	ND	ND	ND	40	µg/m³
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Styrene	ND	ND	ND	ND	ND	8	µg/m³
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m³
Tetrachloroethene	<b>10</b>	<b>14</b>	<b>18</b>	<b>21</b>	<b>14</b>	8	µg/m³
Toluene	ND	ND	ND	ND	ND	8	µg/m³
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
Trichloroethene	ND	ND	ND	ND	ND	8	µg/m³
Trichlorofluoromethane	ND	ND	<b>25</b>	ND	ND	16	µg/m³
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m³
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m³
o-Xylene	ND	ND	ND	ND	ND	8	µg/m³
MTBE	ND	ND	ND	ND	ND	40	µg/m³
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m³
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m³
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m³
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m³
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m³
n-Hexane	ND	ND	ND	ND	ND	80	µg/m³
n-Heptane	ND	ND	ND	ND	ND	80	µg/m³
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	93%	100%	96%	98%	98%	60 - 140	
Toluene-d <sub>8</sub>	125%	96%	107%	99%	99%	60 - 140	
4-Bromofluorobenzene	●	104%	●	113%	108%	60 - 140	
<b>Batch ID:</b>	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01		

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-03-15' REP	SV-06-5'	SV-06-25'	SV-06-45'			
<u>Jones ID:</u>	G-0422-06	G-0422-07	G-0422-08	G-0422-09	G-0422-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	ND	ND	ND	8	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m3
Bromoform	ND	ND	ND	ND	ND	8	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m3
Chloroform	ND	ND	ND	ND	ND	8	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
Dichlorodifluoromethane	ND	23	ND	ND	ND	16	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	36	8	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1-Dichloroethene	ND	ND	ND	15	97	8	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	13	51	8	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m3

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-03-15'	SV-03-15' REP	SV-06-5'	SV-06-25'	SV-06-45'		
<u>Jones ID:</u>	G-0422-06	G-0422-07	G-0422-08	G-0422-09	G-0422-10	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Freon 113	ND	ND	ND	ND	<b>99</b>	16	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m3
4-Isopropyltoluene	<b>13</b>	<b>13</b>	<b>87</b>	<b>32</b>	<b>16</b>	8	µg/m3
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m3
Naphthalene	ND	ND	ND	ND	ND	40	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Styrene	ND	ND	ND	ND	ND	8	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m3
Tetrachloroethene	<b>21</b>	<b>20</b>	<b>17</b>	<b>120</b>	<b>328</b>	8	µg/m3
Toluene	ND	ND	<b>44</b>	ND	ND	8	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m3
Trichloroethene	ND	ND	ND	<b>135</b>	<b>432</b>	8	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m3
o-Xylene	ND	ND	ND	ND	ND	8	µg/m3
MTBE	ND	ND	ND	ND	ND	40	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m3
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80	µg/m3
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	99%	100%	97%	99%	99%	60 - 140	
Toluene-d <sub>8</sub>	99%	100%	108%	97%	96%	60 - 140	
4-Bromofluorobenzene	108%	108%	135%	106%	106%	60 - 140	
<b>Batch ID:</b>	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-07-5'	SV-07-25'	SV-07-45'	SV-13-5'	SV-13-15'		
<u>Jones ID:</u>	G-0422-11	G-0422-12	G-0422-13	G-0422-14	G-0422-15	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	ND	ND	ND	8	µg/m³
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m³
Bromoform	ND	ND	ND	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m³
Chloroform	ND	ND	ND	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m³
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	<b>34</b>	ND	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	<b>12</b>	<b>28</b>	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-07-5'	SV-07-25'	SV-07-45'	SV-13-5'	SV-13-15'		
<u>Jones ID:</u>	G-0422-11	G-0422-12	G-0422-13	G-0422-14	G-0422-15	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
Ethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Freon 113	17	116	56	ND	17	16	µg/m³
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m³
Isopropylbenzene	ND	ND	ND	11	ND	8	µg/m³
4-Isopropyltoluene	24	74	28	9	ND	8	µg/m³
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m³
Naphthalene	ND	ND	ND	ND	ND	40	µg/m³
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Styrene	ND	ND	ND	ND	ND	8	µg/m³
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m³
Tetrachloroethene	31	91	113	ND	89	8	µg/m³
Toluene	14	8	12	11	ND	8	µg/m³
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
Trichloroethene	ND	41	124	ND	ND	8	µg/m³
Trichlorofluoromethane	ND	ND	ND	ND	ND	16	µg/m³
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m³
m,p-Xylene	ND	ND	ND	ND	ND	16	µg/m³
o-Xylene	ND	ND	ND	ND	ND	8	µg/m³
MTBE	ND	ND	ND	ND	ND	40	µg/m³
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m³
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m³
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m³
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m³
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m³
n-Hexane	ND	ND	ND	ND	ND	80	µg/m³
n-Heptane	ND	ND	ND	ND	ND	80	µg/m³
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	97%	98%	100%	95%	95%	60 - 140	
Toluene-d <sub>8</sub>	111%	97%	98%	101%	99%	60 - 140	
4-Bromofluorobenzene	136%	110%	104%	105%	103%	60 - 140	
<b>Batch ID:</b>	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01	G1-031022-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-13-15' REP	SV-08-15'	<u>Reporting Limit</u>	<u>Units</u>
<u>Jones ID:</u>	G-0422-16	G-0422-17		
<b>Analytes:</b>				
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-13-15' REP	SV-08-15'		
<u>Jones ID:</u>	G-0422-16	G-0422-17	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>				
cis-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Freon 113	ND	ND	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND	8	µg/m <sup>3</sup>
Methylene chloride	ND	ND	8	µg/m <sup>3</sup>
Naphthalene	ND	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND	8	µg/m <sup>3</sup>
Styrene	ND	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	<b>90</b>	<b>98</b>	8	µg/m <sup>3</sup>
Toluene	ND	ND	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
Trichloroethene	ND	<b>35</b>	8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND	8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND	16	µg/m <sup>3</sup>
o-Xylene	ND	ND	8	µg/m <sup>3</sup>
MTBE	ND	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND	400	µg/m <sup>3</sup>
<b>Tracer:</b>				
n-Pentane	ND	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	ND	80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1		
<b>Surrogate Recoveries:</b>				
Dibromofluoromethane	98%	97%		<b>QC Limits</b>
Toluene-d <sub>8</sub>	100%	99%		60 - 140
4-Bromofluorobenzene	100%	99%		60 - 140
<b>Batch ID:</b>	G1-031022-01	G1-031022-01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	G-0422
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	<u>METHOD</u>	<u>SAMPLING</u>		
	BLANK	BLANK		
<u>Jones ID:</u>	031022- G1MB1	031022- G1SB1		<u>Reporting Limit</u>
<b>Analytes:</b>				<u>Units</u>
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	METHOD BLANK	SAMPLING BLANK	<u>Reporting Limit</u>	<u>Units</u>
<u>Jones ID:</u>	<b>031022- G1MB1</b>	<b>031022- G1SB1</b>		
<b>Analytics:</b>				
cis-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND	8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Freon 113	ND	ND	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND	8	µg/m <sup>3</sup>
Methylene chloride	ND	ND	8	µg/m <sup>3</sup>
Naphthalene	ND	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND	8	µg/m <sup>3</sup>
Styrene	ND	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	ND	ND	8	µg/m <sup>3</sup>
Toluene	ND	ND	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND	8	µg/m <sup>3</sup>
Trichloroethene	ND	ND	8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND	8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND	8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND	16	µg/m <sup>3</sup>
o-Xylene	ND	ND	8	µg/m <sup>3</sup>
MTBE	ND	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND	400	µg/m <sup>3</sup>
<b>Tracer:</b>				
n-Pentane	ND	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	ND	80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1		
<b>Surrogate Recoveries:</b>				
Dibromofluoromethane	101%	103%	60 - 140	
Toluene-d <sub>8</sub>	98%	100%	60 - 140	
4-Bromofluorobenzene	95%	97%	60 - 140	
<b>Batch ID:</b>	G1-031022- 01	G1-031022- 01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b> 3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b> G-0422 <b>Client Ref. No.:</b> 721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b> 3/10/2022 <b>Date Received:</b> 3/10/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Analyzed:</b> 3/10/2022
<b>Project Address:</b>	10845 Koontz Ave. Santa Fe Springs, CA	<b>Physical State:</b> Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

**Batch ID:** G1-031022-01

**Jones ID:** 031022-G1LCS1    031022-G1LCSD1    031022-G1CCV1

<u>Parameter</u>	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	81%	94%	15.5%	60 - 140	116%	80 - 120
1,1-Dichloroethene	87%	87%	0.0%	60 - 140	98%	80 - 120
Cis-1,2-Dichloroethene	96%	109%	12.5%	70 - 130	110%	80 - 120
1,1,1-Trichloroethane	99%	107%	7.8%	70 - 130	106%	80 - 120
Benzene	105%	108%	2.3%	70 - 130	111%	80 - 120
Trichloroethene	112%	118%	5.9%	70 - 130	112%	80 - 120
Toluene	112%	114%	1.4%	70 - 130	113%	80 - 120
Tetrachloroethene	106%	107%	1.5%	70 - 130	107%	80 - 120
Chlorobenzene	124%	130%	4.7%	70 - 130	114%	80 - 120
Ethylbenzene	114%	117%	2.8%	70 - 130	114%	80 - 120
1,2,4 Trimethylbenzene	98%	95%	3.3%	70 - 130	89%	80 - 120

#### Surrogate Recovery:

Dibromofluoromethane	101%	102%	60 - 140	105%	60 - 140
Toluene-d <sub>8</sub>	99%	100%	60 - 140	99%	60 - 140
4-Bromofluorobenzene	97%	98%	60 - 140	100%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%



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# Soil-Gas Chain-of-Custody Record

Client ID: \_\_\_\_\_  
**Langan Engineering and Environmental Services**

Project Name: **721033501 Santa Fe Springs**  
Project Address: **10845 Koontz Ave.**

Attention: **Santa Fe Springs, CA**  
Email: **Russo, Charles**  
Phone: **Mobile Lab**

Tracer: **n-pentane**  
Analysis Requested: **n-hexane**  
Reporting Limits: **n-heptane**  
Report To: **Luis Navarro**

Sampler: **Tristan Jongert**

Analysis Time: **Standard** Units: **ppb VOCs**

Sample Analysis Time: **Low Level\*** MDL\*: **ng/m³**  
\*surcharge for these limits

Date: **3/10/2022**  
Client Project #: **721033501**

Purge Number: **1P**  **3P**  **7P**  **10P**

Report Options: **EDD** \_\_\_\_\_  
**EDF\* - 10% Surcharge** \_\_\_\_\_

LAB USE ONLY

Jones Project #: **G-0422**

Page **1** of **2**

Sample Container:

GASTIGHT GLASS SYRINGE

If different than above, see Notes.

Turn Around Requested:  
 Immediate Attention  
 Rush 24 Hours  
 Rush 48 Hours  
 Rush 72 Hours  
 Normal  
 Mobile Lab  
 Reporting Limits:  
 Standard    Low Level\*    MDL\*   **Units: mg/m³**  
 \*surcharge for these limits

Tracer

- n-pentane
- n-hexane
- n-heptane
- Isopropyl Alcohol
- 1,1-DFA
- GLASS SYRINGE

Analysis Requested

Sample Matrix:	EPA 8260B (VOCs)	Magnethelic Vacuum (in/H <sub>2</sub> O)	Number of Containers
Soil Gas (SG), Air (A), Material (M)			

Notes & Special Instructions

Sample ID	Purge Rate (mL/min)	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnethelic	Sample Matrix:	EPA 8260B (VOCs)	Magnethelic Vacuum (in/H <sub>2</sub> O)	Number of Containers
SV-01-5' G-0422-01	200	3	1630	3/10/22	7:32	7:33	G-0422-01	200	CASEY.1	118012	SG	X	<2	1
SV-01-15' G-0422-02	200	3	1790	3/10/22	7:41	7:48	G-0422-02	200	CASEY.1	M100.003	SG	X	<2	1
SV-02-5' G-0422-03	200	3	1630	3/10/22	7:59	8:05	G-0422-03	200	CASEY.1	M100.102	SG	X	<2	1
SV-02-15' G-0422-04	200	3	1790	3/10/22	8:12	8:23	G-0422-04	200	CASEY.1	M100.106	SG	X	<2	1
SV-03-5' G-0422-05	200	3	1630	3/10/22	8:28	8:40	G-0422-05	200	CASEY.1	118012	SG	X	<2	1
SV-03-15' G-0422-06	200	3	1790	3/10/22	8:44	8:57	G-0422-06	200	CASEY.1	M100.003	SG	X	<2	1
SV-03-15' REP G-0422-07	200	3	1790	3/10/22	8:59	9:15	G-0422-07	200	CASEY.1	M100.003	SG	X	<2	1
SV-06-5' G-0422-08	200	3	1630	3/10/22	9:28	9:36	G-0422-08	200	CASEY.1	M100.102	SG	X	<2	1
SV-06-25' G-0422-09	200	3	1960	3/10/22	9:48	9:51	G-0422-09	200	CASEY.1	M100.106	SG	X	<2	1
SV-06-45' G-0422-10	200	3	2290	3/10/22	10:00	10:08	G-0422-10	200	CASEY.1	118012	SG	X	<2	1

Representative Signature:	Printed Name: <b>Erik Van Dusen</b>	Laboratory Signature:	Printed Name: <b>Tristan Jongert</b>	10 Total Number of Containers
Company: <b>Langan Engineering and Environmental Services</b>	Date: <b>3/10/2022</b>	Time: <b>13:15</b>	Company: <b>JONES ENVIRONMENTAL, INC.</b>	Date: <b>3/10/2022</b>
Representative Signature:	Printed Name: <b>Tristan Jongert</b>	Laboratory Signature:	Printed Name: <b>Tristan Jongert</b>	
Company: <b>Langan Engineering and Environmental Services</b>	Date: <b>3/10/2022</b>	Time: <b>13:15</b>	Company: <b>JONES ENVIRONMENTAL, INC.</b>	Date: <b>3/10/2022</b>

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.



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# Soil-Gas Chain-of-Custody Record

**Client**  
**Langan Engineering and Environmental Services**

Project Name Project #

721033501 Santa Fe Springs

Project Address

10845 Koontz Ave.

Immediate Attention n-pentane

n-hexane

Rush 48 Hours

n-heptane

Rush 72 Hours

Isopropyl Alcohol

Normal

1,1-DFA

Mobile Lab

GASTIGHT GLASS SYRINGE

Reporting Limits

Standard Low Level MDL

Sampler Units

Luis Navarro

Tristan Jongert

\*surcharge for these limits

Date	Purge Number:	Report Options	Analysis Requested				Notes & Special Instructions							
3/10/2022	Jones 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P	EDD _____ EDF* - 10% Surcharge _____	Turn Around Requested	Tracer	Analysis Requested	Sample Matrix:								
Client Project #		Shut-In Test: <input checked="" type="checkbox"/> Y / N				Soil Gas (SG), Air (A), Material (M)	Magnetic Vacuum (In/H <sub>2</sub> O)	Number of Containers						
721033501						EPA 8260B (VOCS)								
SV-07-5' G-0422-11	200	3ASEY 1630	3/10/22	10:18	10:26	G-0422-11	200	CASEY.1	M100.003	SG X		<2	1	SV-15
SV-07-25' G-0422-12	200	3ASEY 1960	3/10/22	10:40	10:43	G-0422-12	200	CASEY.1	M100.102	SG X		<2	1	SV-01-15
SV-07-45' G-0422-13	200	3ASEY 2290	3/10/22	10:56	11:01	G-0422-13	200	CASEY.1	M100.106	SG X		<2	1	SV-02-5
SV-13-5' G-0422-14	200	3ASEY 1630	3/10/22	11:38	11:43	G-0422-14	200	CASEY.1	118012	SG X		<2	1	SV-02-15
SV-13-15' G-0422-15	200	3ASEY 1790	3/10/22	11:54	12:02	G-0422-15	200	CASEY.1	M100.003	SG X		<2	1	SV-03-5
SV-13-15' REP G-0422-16	200	3ASEY 1790	3/10/22	12:05	12:17	G-0422-16	200	CASEY.1	M100.003	SG X		<2	1	SV-03-15
SV-08-15' G-0422-17	200	3ASEY 1790	3/10/22	12:46	12:47	G-0422-17	200	CASEY.1	M100.106	SG X		<2	1	SV-03-15' REP
														SV-06-5
														SV-06-25
														SV-06-45
Representative Signature	Printed Name		Printed Name		Laboratory Signature		Printed Name		Printed Name		7 Total Number of Containers			
Erik Van Dusen					Tristan Jongert									
Company	Date	Time	Company		Date	Time	Company		Date	Time	Company		Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.	
Langan Engineering and Environmental Services	3/10/2022	13:15	JONES ENVIRONMENTAL, INC.		3/10/2022	13:15								
Representative Signature	Printed Name		Laboratory Signature		Printed Name									
Company	Date	Time	Company		Date	Time	Company		Date	Time	Company			



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## JONES ENVIRONMENTAL LABORATORY RESULTS

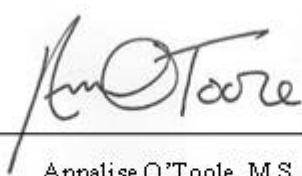
<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19305
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. ASTM D1946 – Fixed Gases

Analytical – Soil Gas samples were analyzed using ASTM D1946 by GC/TCD. All samples were injected into the GC/MS system within 6 hours of sampling.

Approval:



\_\_\_\_\_  
Annalise O'Toole, M.S.  
Mobile Lab Technical Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street	<b>Jones Ref. No.:</b>	ST-19305
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	3/10/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Received:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

<u>Sample ID:</u>	SV-02-5'	SV-03-5'	SV-07-5'	SV-06-5'	SV-01-5'		
<u>Jones ID:</u>	ST-19305-01	ST-19305-02	ST-19305-03	ST-19305-04	ST-19305-05	<u>Reporting Limit</u>	<u>Units</u>
<u>Analytes:</u>							
Methane (CH <sub>4</sub> )	ND	ND	ND	ND	ND	0.030	%
<u>Dilution Factor</u>	1	1	1	1	1		
<u>Batch ID:</u>	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01		

ND = Value less than reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19305
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

**Sample ID:** SV-13-5'    SV-08-15'

**Jones ID:** ST-19305-06    ST-19305-07

**Analytes:**

Methane (CH <sub>4</sub> )	ND	ND	0.030	%
----------------------------	----	----	-------	---

**Dilution Factor**    **1**    **1**

**Batch ID:**    **ASTM-031022-01**    **ASTM-031022-01**

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street	<b>Jones Ref. No.:</b>	ST-19305
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	3/10/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Received:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Fixed Gases**

<u>Sample ID:</u>	METHOD	HELIUM	<u>Reporting Limit</u>	<u>Units</u>
	BLANK	BLANK		
<u>Jones ID:</u>	031022- ASTMMB1	031022- ASTMHB1		
<u>Analytes:</u>				
Methane (CH <sub>4</sub> )	ND	ND	0.030	%
<u>Batch ID:</u>	ASTM- 031022-01	ASTM- 031022-01		

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19305
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Fixed Gases**

GC#: ASTM-031022-01

**Jones ID:** 031022-ASTMCCV1 031022-ASTMCCVD1

<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Carbon Dioxide (CO <sub>2</sub> )	101%	95%	5.9%	80-120
Oxygen (O <sub>2</sub> )	106%	107%	0.7%	80-120
Nitrogen (N <sub>2</sub> )	108%	108%	0.2%	80-120
Methane (CH <sub>4</sub> )	94%	93%	0.5%	80-120
Carbon Monoxide (CO)	94%	93%	0.6%	80-120

CCV = Continuing Calibration Verification

CCV = Continuing Calibration Verification Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



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# Soil-Gas Chain-of-Custody Record

Client  
**Langan Engineering and Environmental Services**

Project Name  
**721033501 Santa Fe Springs**

Project Address

**10845 Koontz Ave.**

Tracer

n-pentane

n-hexane

Analysis Requested

Immediate Attention

Rush 24 Hours

Rush 48 Hours

Rush 72 Hours

Normal

Mobile Lab

Reporting Limits

Standard Law Level

Surcharge for these limits

**Luis Navarro**      **Tristan Jongert**

Date  
**3/10/2022**

Client Project #  
**721033501**

Purge Number:  
 1P  3P  7P  10P

Report Options  
EDD \_\_\_\_\_  
EDF\* - 10% Surcharge \_\_\_\_\_

\*Global ID \_\_\_\_\_

LAB USE ONLY

Jones Project #

**ST-19305**  
**G-0422**

Project Address

**10845 Koontz Ave.**

**1 of 1**  
**Santa Fe Springs, CA**

Sample Container:

GASTIGHT GLASS SYRINGE

If different than above, see Notes.

Report To  
**Luis Navarro**

Turn Around Requested

- Immediate Attention
- Rush 24 Hours
- Rush 48 Hours
- Rush 72 Hours
- Normal
- Mobile Lab

Reporting Limits

Standard  Low Level\*  MDL\*

Units  
\*surcharge for these limits

Tracer

- n-pentane
- n-hexane
- n-heptane
- Isopropyl Alcohol
- 1,1-DFA
- GASTIGHT GLASS SYRINGE

Analysis Requested

Sample Matrix:	ASTM D1946-Methane	Magnetic Vacuum (in/H <sub>2</sub> O)	Number of Containers
Soil Gas (SG), Air (A), Material (M)			

Sample Analysis Time	Sample ID	Purge Rate (mL/min)	Purge Number	Purge Volume (mL)	Sample Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix:	ASTM D1946-Methane	Magnetic Vacuum (in/H <sub>2</sub> O)	Number of Containers	Notes & Special Instructions
SV-02-5'		200	3	1630	3/10/22	8:09	-	ST-19305-01	200	CASEY.1	M100.102	SG	X	<2	1	SV-07-5'
SV-03-5'		200	3	1630	3/10/22	8:43	-	ST-19305-02	200	CASEY.1	118012	SG	X	<2	1	SV-07-25
SV-07-5'		200	3	1630	3/10/22	10:20	-	ST-19305-03	200	CASEY.1	M100.003	SG	X	<2	1	SV-07-45
SV-06-5'		200	3	1630	3/10/22	10:37	-	ST-19305-04	200	CASEY.1	118012	SG	X	<2	1	SV-13-5'
SV-01-5'		200	3	1630	3/10/22	11:07	-	ST-19305-05	200	CASEY.1	118012	SG	X	<2	1	SV-13-15
SV-13-5'		200	3	1630	3/10/22	11:39	-	ST-19305-06	200	CASEY.1	118012	SG	X	<2	1	SV-13-16 REP
SV-08-15'		200	3	1630	3/10/22	12:51	-	ST-19305-07	200	CASEY.1	M100.106	SG	X	<2	1	SV-08-15
															1	
Representative Signature	Printed Name	Printed Name	Laboratory Signature	Printed Name	Printed Name	Total Number of Containers										
	Erik Van Dusen	Tristan Jongert		Tristan Jongert	Tristan Jongert	8	Total Number of Containers									

Company	Date	Time	Company	Date	Time
Langan Engineering and Environmental Services	3/10/2022	13:15		3/10/2022	13:15
Representative Signature	Printed Name	Laboratory Signature	Printed Name		
Company	Date	Time	Company	Date	Time

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19308
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. ASTM D1946 – Fixed Gases

Analytical – Soil Gas samples were analyzed using ASTM D1946 by GC/TCD. All samples were injected into the GC/MS system within 6 hours of sampling.

Approval:

  
\_\_\_\_\_  
Annalise O'Toole, M.S.  
Mobile Lab Technical Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street	<b>Jones Ref. No.:</b>	ST-19308
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	3/10/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Received:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

<u>Sample ID:</u>	SV-16-5'	SV-15-5'	SV-14-5'	SV-11-5'	SV-10-5'		
<u>Jones ID:</u>	ST-19308-01	ST-19308-02	ST-19308-03	ST-19308-04	ST-19308-05	<u>Reporting Limit</u>	<u>Units</u>
<u>Analytes:</u>							
Methane (CH <sub>4</sub> )	ND	ND	ND	ND	ND	0.030	%
<u>Dilution Factor</u>	1	1	1	1	1		
<u>Batch ID:</u>	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01	ASTM-031022-01		

ND = Value less than reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19308
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

**Sample ID:** SV-12-5'    SV-12-15'

**Jones ID:** ST-19308-06    ST-19308-07

**Analytes:**

Methane (CH <sub>4</sub> )	ND	ND	0.030	%
----------------------------	----	----	-------	---

**Dilution Factor**    **1**    **1**

**Batch ID:**    **ASTM-031022-01**    **ASTM-031022-01**

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street	<b>Jones Ref. No.:</b>	ST-19308
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	3/10/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Received:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Fixed Gases**

<u>Sample ID:</u>	METHOD	HELIUM	<u>Reporting Limit</u>	<u>Units</u>
	BLANK	BLANK		
<u>Jones ID:</u>	031022- ASTMMB1	031022- ASTMHB1		
<u>Analytes:</u>				
Methane (CH <sub>4</sub> )	ND	ND	0.030	%
<u>Batch ID:</u>	ASTM- 031022-01	ASTM- 031022-01		

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19308
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/10/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/10/2022
		<b>Date Analyzed:</b>	3/10/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Fixed Gases**

GC#: ASTM-031022-01

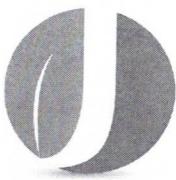
**Jones ID:** 031022-ASTMCCV1 031022-ASTMCCVD1

<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Carbon Dioxide (CO <sub>2</sub> )	101%	95%	5.9%	80-120
Oxygen (O <sub>2</sub> )	106%	107%	0.7%	80-120
Nitrogen (N <sub>2</sub> )	108%	108%	0.2%	80-120
Methane (CH <sub>4</sub> )	94%	93%	0.5%	80-120
Carbon Monoxide (CO)	94%	93%	0.6%	80-120

CCV = Continuing Calibration Verification

CCV = Continuing Calibration Verification Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



# JONES ENVIRONMENTAL, INC.

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## Soil-Gas Chain-of-Custody Record

Client <b>Langan Engineering and Environmental Services</b>						Date 3/10/2022	Purge Number: <input type="checkbox"/> 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P	Report Options EDD _____ EDF* - 10% Surcharge_____		LAB USE ONLY					
Project Name <b>721033501 Santa Fe Springs</b>						Client Project # 721033501	Shut-In Test: <input checked="" type="checkbox"/> Y / N	*Global ID _____		Jones Project # <b>ST-19308</b>					
Project Address <b>10845 Koontz Ave,</b>						Turn Around Requested <input type="checkbox"/> Immediate Attention <input type="checkbox"/> Rush 24 Hours <input type="checkbox"/> Rush 48 Hours <input type="checkbox"/> Rush 72 Hours <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Mobile Lab	Tracer <input type="checkbox"/> n-pentane <input type="checkbox"/> n-hexane <input type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/> _____	Analysis Requested Sample Matrix: Soil Gas (SG), Air (A), Material (M) ASTM D1946- Methane	Magnehelic Vacuum (/inH <sub>2</sub> O)	Number of Containers					
Email _____						Reporting Limits <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Low Level* <input type="checkbox"/> MDL*    Units _____ *surcharge for these limits									
Phone _____															
Report To <b>Luis Navarro</b>															
Sampler <b>Casey Ellis</b>															
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Notes & Special Instructions					
SV-16-5'	3	1630	3/10/22	9:22		ST-19308-01	200	SKC.201244	M100.107	SG X <2 1					
SV-15-5'	3	1630	3/10/22	9:38		ST-19308-02	200	SKC.201244	M100.107	SG X <2 1					
SV-14-5'	3	1630	3/10/22	9:44		ST-19308-03	200	SKC.201244	M100.107	SG X <2 1					
SV-11-5'	3	1630	3/10/22	10:50		ST-19308-04	200	SKC.201244	M100.107	SG X <2 1					
SV-10-5'	3	1630	3/10/22	11:11		ST-19308-05	200	SKC.201244	M100.113	SG X <2 1					
SV-12-5'	3	1630	3/10/22	13:07		ST-19308-06	200	SKC.201244	M100.113	SG X <2 1					
SV-12-15'	3	1790	3/10/22	13:11		ST-19308-07	200	SKC.201244	M100.107	SG X <2 1					
Representative Signature 						Printed Name ERIK VAN DUSEN		Laboratory Signature 		Printed Name Casey Ellis		7 Total Number of Containers			
Company Langan Engineering and Environmental Services		Date 3/10/2022	Time 13:30	Company JONES ENVIRONMENTAL, INC.		Date 3/10/2022	Time 13:30								
Representative Signature 						Printed Name		Laboratory Signature		Printed Name		Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.			
Company Langan Engineering and Environmental Services						Date 3/10/2022	Time 13:30	Company JONES ENVIRONMENTAL, INC.		Date 3/10/2022	Time 13:30				



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19316
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### ANALYSES REQUESTED

1. ASTM D1946 – Fixed Gases

Analytical – Soil Gas samples were analyzed using ASTM D1946 by GC/TCD. All samples were injected into the GC/MS system within 6 hours of sampling.

Approval:



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Annalise O'Toole, M.S.  
Mobile Lab Technical Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19316
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

<u>Sample ID:</u>	SV-20-5'	SV-20-15'	SV-19-5'	SV-19-15'	SV-18-5'		
<u>Jones ID:</u>	ST-19316-01	ST-19316-02	ST-19316-03	ST-19316-04	ST-19316-05	<u>Reporting Limit</u>	<u>Units</u>
<u>Analytes:</u>							
Methane (CH <sub>4</sub> )	ND	ND	ND	ND	ND	0.030	%
<u>Dilution Factor</u>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>		
<u>Batch ID:</u>	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01		

ND = Value less than reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street	<b>Jones Ref. No.:</b>	ST-19316
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	3/11/2022
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Received:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

<u>Sample ID:</u>	SV-18-15	SV-08-5'	SV-09-5'	SV-09-25'	SV-09-45'		
<u>Jones ID:</u>	ST-19316-06	ST-19316-07	ST-19316-08	ST-19316-09	ST-19316-10	<u>Reporting Limit</u>	<u>Units</u>
<u>Analytes:</u>							
Methane (CH <sub>4</sub> )	ND	ND	ND	ND	ND	0.030	%
<u>Dilution Factor</u>	1	1	1	1	1		
<u>Batch ID:</u>	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01	ASTM-031122-01		

ND = Value less than reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19316
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

### ASTM D1946 – Fixed Gases

<u>Sample ID:</u>	METHOD	HELIUM	<u>Reporting Limit</u>	<u>Units</u>
	BLANK	BLANK		
<u>Jones ID:</u>	031122- ASTMMB1	031122- ASTMHB1		
<u>Analytes:</u>				
Methane (CH <sub>4</sub> )	ND	ND	0.030	%
<u>Batch ID:</u>	ASTM- 031122-01	ASTM- 031122-01		

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan Engineering and Environmental Services	<b>Report date:</b>	3/11/2022
<b>Client Address:</b>	515 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19316
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501 Santa Fe Springs	<b>Date Sampled:</b>	3/11/2022
<b>Project Address:</b>	10845 Koontz Ave Santa Fe Springs, CA	<b>Date Received:</b>	3/11/2022
		<b>Date Analyzed:</b>	3/11/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Fixed Gases**

GC#: ASTM-031122-01

**Jones ID:** 031122-ASTMCCV1 031122-ASTMCCVD1

<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Acceptability Range (%)
Carbon Dioxide (CO <sub>2</sub> )	97%	97%	0.6%	80-120
Oxygen (O <sub>2</sub> )	97%	97%	0.6%	80-120
Nitrogen (N <sub>2</sub> )	112%	112%	0.1%	80-120
Methane (CH <sub>4</sub> )	115%	115%	0.1%	80-120
Carbon Monoxide (CO)	99%	98%	0.5%	80-120

CCV = Continuing Calibration Verification

CCV = Continuing Calibration Verification Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



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## Soil-Gas Chain-of-Custody Record

Client <b>Langan Engineering and Environmental Services</b>						Date 3/11/2022	Purge Number: <input type="checkbox"/> 1P <input checked="" type="checkbox"/> 3P <input type="checkbox"/> 7P <input type="checkbox"/> 10P	Report Options EDD _____ EDF* - 10% Surcharge _____			
Project Name <b>721033501 Santa Fe Springs</b>						Client Project # 721033501	Shut-In Test: <input checked="" type="checkbox"/> Y / N	*Global ID _____			
Project Address <b>10845 Koontz Ave,</b>  <b>Santa Fe Springs, CA</b>						Turn Around Requested  <input type="checkbox"/> Immediate Attention <input type="checkbox"/> Rush 24 Hours <input type="checkbox"/> Rush 48 Hours <input type="checkbox"/> Rush 72 Hours <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Mobile Lab	Tracer  <input checked="" type="checkbox"/> n-pentane <input type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Isopropyl Alcohol <input type="checkbox"/> 1,1-DFA <input type="checkbox"/>	Analysis Requested			
Email _____						Reporting Limits  <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Low Level* <input type="checkbox"/> MDL* <small>*surcharge for these limits</small>	Units <i>ug/m<sup>3</sup></i>	Magnetic Vacuum (in/H <sub>2</sub> O)	Number of Containers		
Phone _____						Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Notes & Special Instructions	
Report To <b>Luis Navarro</b>						Sampler <b>Tristan Jongert</b>		Sample Matrix: Soil Gas (SG), Air (A), Material (M) ASTM D1946- Methane			
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	ST-19316-01	200	CASEY.2	118012	SG X	<2 1
SV-20-5'	3	1630	3/11/22	7:11	-	ST-19316-02	200	JACKSON.2	M100.003	SG X	<2 1
SV-20-15'	3	1790	3/11/22	7:29	-	ST-19316-03	200	CASEY.2	M100.102	SG X	<2 1
SV-19-5'	3	1630	3/11/22	7:45	-	ST-19316-04	200	JACKSON.2	M100.106	SG X	<2 1
SV-18-5'	3	1630	3/11/22	8:43	-	ST-19316-05	200	CASEY.2	118012	SG X	<2 1
SV-18-15'	3	1630	3/11/22	8:56	-	ST-19316-06	200	JACKSON.2	M100.003	SG X	<2 1
SV-08-5'	3	1630	3/11/22	9:04	-	ST-19316-07	200	CASEY.2	M100.102	SG X	18 1
SV-09-5'	3	1630	3/11/22	9:18	-	ST-19316-08	200	JACKSON.2	M100.106	SG X	<2 1
SV-09-25'	3	1630	3/11/22	9:33	-	ST-19316-09	200	CASEY.2	118012	SG X	<2 1
SV-09-45'	3	1630	3/11/22	9:52	-	ST-19316-10	200	JACKSON.2	M100.003	SG X	<2 1
Representative Signature <i>Megan Petersen</i>	Printed Name Erik Van Dusen					Laboratory Signature <i>On Jan</i>	Printed Name Tristan Jongert			10 Total Number of Containers	
Company Langan Engineering and Environmental Services	Date 3/11/2022	Time 10:45	Company	Date 3/11/2022	Time 10:45	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.					
Representative Signature	Printed Name										
Company	Date	Time	Company	Date	Time						



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## JONES ENVIRONMENTAL LABORATORY RESULTS

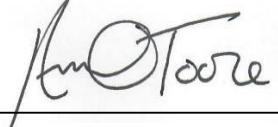
<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street	<b>Jones Ref. No.:</b>	ST-19464
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	4/2/2022
<b>Project:</b>	721033501	<b>Date Received:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

#### ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates
2. ASTM D1946 - Methane

Approval:



\_\_\_\_\_  
Annalise O'Toole, M.S.  
Mobile Lab Technical Manager



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19464
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501	<b>Date Sampled:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Received:</b>	4/2/2022
		<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-17-5'	SV-17-25'	SV-17-40'	SV-5-5'	SV-5-25'		
<u>Jones ID:</u>	ST-19464-01	ST-19464-02	ST-19464-03	ST-19464-04	ST-19464-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
Benzene	ND	ND	<b>16</b>	ND	ND	8	µg/m³
Bromobenzene	ND	ND	ND	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	ND	ND	ND	8	µg/m³
Bromoform	ND	ND	ND	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	ND	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	ND	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	ND	ND	ND	8	µg/m³
Chloroform	ND	ND	ND	<b>17</b>	ND	8	µg/m³
2-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	ND	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	8	µg/m³
Dibromomethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	<b>27</b>	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	ND	ND	<b>8</b>	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	ND	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	ND	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	ND	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-17-5'	SV-17-25'	SV-17-40'	SV-5-5'	SV-5-25'		
<u>Jones ID:</u>	ST-19464-01	ST-19464-02	ST-19464-03	ST-19464-04	ST-19464-05	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	8	µg/m³
Ethylbenzene	ND	ND	ND	<b>167</b>	<b>16</b>	8	µg/m³
Freon 113	ND	<b>89</b>	<b>559</b>	ND	ND	16	µg/m³
Hexachlorobutadiene	ND	ND	ND	ND	ND	24	µg/m³
Isopropylbenzene	ND	ND	ND	ND	ND	8	µg/m³
4-Isopropyltoluene	ND	ND	ND	<b>10</b>	ND	8	µg/m³
Methylene chloride	ND	ND	ND	ND	ND	8	µg/m³
Naphthalene	ND	ND	ND	ND	ND	40	µg/m³
n-Propylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Styrene	ND	ND	ND	ND	ND	8	µg/m³
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	16	µg/m³
Tetrachloroethene	ND	<b>260</b>	<b>6840</b>	<b>19</b>	<b>126</b>	8	µg/m³
Toluene	<b>22</b>	<b>39</b>	<b>42</b>	<b>508</b>	<b>68</b>	8	µg/m³
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	16	µg/m³
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	8	µg/m³
Trichloroethene	ND	<b>17</b>	<b>522</b>	ND	<b>93</b>	8	µg/m³
Trichlorofluoromethane	ND	ND	<b>15</b>	ND	ND	16	µg/m³
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	8	µg/m³
1,2,4-Trimethylbenzene	ND	ND	ND	<b>10</b>	ND	8	µg/m³
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	8	µg/m³
Vinyl chloride	ND	ND	ND	ND	ND	8	µg/m³
m,p-Xylene	ND	ND	ND	<b>853</b>	<b>82</b>	16	µg/m³
o-Xylene	ND	ND	ND	<b>312</b>	<b>27</b>	8	µg/m³
MTBE	ND	ND	ND	ND	ND	40	µg/m³
Ethyl-tert-butylether	ND	ND	ND	ND	ND	40	µg/m³
Di-isopropylether	ND	ND	ND	ND	ND	40	µg/m³
tert-amylmethylether	ND	ND	ND	ND	ND	40	µg/m³
tert-Butylalcohol	ND	ND	ND	ND	ND	400	µg/m³
<b>Tracer:</b>							
n-Pentane	ND	ND	ND	ND	ND	80	µg/m³
n-Hexane	ND	ND	ND	ND	ND	80	µg/m³
n-Heptane	ND	ND	ND	ND	ND	80	µg/m³
<b>Dilution Factor</b>	1	1	1	1	1		
<b>Surrogate Recoveries:</b>							
Dibromofluoromethane	117%	117%	117%	115%	116%	60 - 140	
Toluene-d <sub>8</sub>	98%	97%	97%	97%	96%	60 - 140	
4-Bromofluorobenzene	98%	99%	100%	101%	100%	60 - 140	
<b>Batch ID:</b>	SG1-040222- 01	SG1-040222- 01	SG1-040222- 01	SG1-040222- 01	SG1-040222- 01		

ND = Value below reporting limit



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## JONES ENVIRONMENTAL LABORATORY RESULTS

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19464
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501	<b>Date Sampled:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Received:</b>	4/2/2022
		<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

Sample ID: **SV-5-40'**    **SV-4-5'**    **SV-4-15'**

<u>Jones ID:</u>	<u>ST-19464-06</u>	<u>ST-19464-07</u>	<u>ST-19464-08</u>	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>					
Benzene	<b>9</b>	ND	ND	8	µg/m³
Bromobenzene	ND	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	ND	8	µg/m³
Bromoform	ND	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	ND	8	µg/m³
Chloroform	ND	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	ND	8	µg/m³
Dibromomethane	ND	ND	ND	8	µg/m³
1,2-Dichlorobenzene	ND	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	ND	8	µg/m³
1,1-Dichloroethene	<b>13</b>	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	<b>13</b>	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL LABORATORY RESULTS

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	SV-5-40'	SV-4-5'	SV-4-15'		
<u>Jones ID:</u>	ST-19464-06	ST-19464-07	ST-19464-08	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>					
cis-1,3-Dichloropropene	ND	ND	ND	8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND	ND	8	µg/m <sup>3</sup>
Ethylbenzene	<b>223</b>	ND	ND	8	µg/m <sup>3</sup>
Freon 113	ND	ND	ND	16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND	ND	24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND	ND	8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND	ND	8	µg/m <sup>3</sup>
Methylene chloride	ND	<b>10</b>	<b>16</b>	8	µg/m <sup>3</sup>
Naphthalene	ND	ND	ND	40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND	ND	8	µg/m <sup>3</sup>
Styrene	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND	ND	16	µg/m <sup>3</sup>
Tetrachloroethene	<b>195</b>	<b>69</b>	<b>78</b>	8	µg/m <sup>3</sup>
Toluene	<b>926</b>	<b>27</b>	<b>90</b>	8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND	ND	16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND	ND	16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND	ND	8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND	ND	8	µg/m <sup>3</sup>
Trichloroethene	<b>210</b>	ND	<b>57</b>	8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND	ND	16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND	ND	8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND	ND	8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND	ND	8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND	ND	8	µg/m <sup>3</sup>
m,p-Xylene	<b>1160</b>	<b>31</b>	<b>31</b>	16	µg/m <sup>3</sup>
o-Xylene	<b>460</b>	ND	ND	8	µg/m <sup>3</sup>
MTBE	ND	ND	ND	40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND	ND	40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND	ND	40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND	ND	40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND	ND	400	µg/m <sup>3</sup>
<b>Tracer:</b>					
n-Pentane	ND	ND	ND	80	µg/m <sup>3</sup>
n-Hexane	ND	ND	ND	80	µg/m <sup>3</sup>
n-Heptane	ND	ND	ND	80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1	1		
<b>Surrogate Recoveries:</b>					
Dibromofluoromethane	116%	115%	115%		<b>QC Limits</b>
Toluene-d <sub>8</sub>	97%	97%	97%		60 - 140
4-Bromofluorobenzene	102%	9%	100%		60 - 140

Batch ID: SG1-040222- SG1-040222- SG1-040222-  
01 01 01

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19464
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501	<b>Date Sampled:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Received:</b>	4/2/2022
		<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	<u>METHOD</u>	<u>SAMPLING</u>		
	BLANK	BLANK		
<u>Jones ID:</u>	040222- SG1MB1	040222- SG1SB1	<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>				
Benzene	ND	ND	8	µg/m³
Bromobenzene	ND	ND	8	µg/m³
Bromodichloromethane	ND	ND	8	µg/m³
Bromoform	ND	ND	8	µg/m³
n-Butylbenzene	ND	ND	12	µg/m³
sec-Butylbenzene	ND	ND	12	µg/m³
tert-Butylbenzene	ND	ND	12	µg/m³
Carbon tetrachloride	ND	ND	8	µg/m³
Chlorobenzene	ND	ND	8	µg/m³
Chloroform	ND	ND	8	µg/m³
2-Chlorotoluene	ND	ND	12	µg/m³
4-Chlorotoluene	ND	ND	12	µg/m³
Dibromochloromethane	ND	ND	8	µg/m³
1,2-Dibromo-3-chloropropane	ND	ND	8	µg/m³
1,2-Dibromoethane (EDB)	ND	ND	8	µg/m³
Dibromomethane	ND	ND	8	µg/m³
1,2- Dichlorobenzene	ND	ND	16	µg/m³
1,3-Dichlorobenzene	ND	ND	16	µg/m³
1,4-Dichlorobenzene	ND	ND	16	µg/m³
Dichlorodifluoromethane	ND	ND	16	µg/m³
1,1-Dichloroethane	ND	ND	8	µg/m³
1,2-Dichloroethane	ND	ND	8	µg/m³
1,1-Dichloroethene	ND	ND	8	µg/m³
cis-1,2-Dichloroethene	ND	ND	8	µg/m³
trans-1,2-Dichloroethene	ND	ND	8	µg/m³
1,2-Dichloropropane	ND	ND	8	µg/m³
1,3-Dichloropropane	ND	ND	8	µg/m³
2,2-Dichloropropane	ND	ND	16	µg/m³
1,1-Dichloropropene	ND	ND	10	µg/m³

# JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

## EPA 8260B – Volatile Organics by GC/MS + Oxygenates

<u>Sample ID:</u>	METHOD BLANK	SAMPLING BLANK			
<u>Jones ID:</u>	040222- SG1MB1	040222- SG1SB1		<u>Reporting Limit</u>	<u>Units</u>
<b>Analytes:</b>					
cis-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
trans-1,3-Dichloropropene	ND	ND		8	µg/m <sup>3</sup>
Ethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Freon 113	ND	ND		16	µg/m <sup>3</sup>
Hexachlorobutadiene	ND	ND		24	µg/m <sup>3</sup>
Isopropylbenzene	ND	ND		8	µg/m <sup>3</sup>
4-Isopropyltoluene	ND	ND		8	µg/m <sup>3</sup>
Methylene chloride	ND	ND		8	µg/m <sup>3</sup>
Naphthalene	ND	ND		40	µg/m <sup>3</sup>
n-Propylbenzene	ND	ND		8	µg/m <sup>3</sup>
Styrene	ND	ND		8	µg/m <sup>3</sup>
1,1,1,2-Tetrachloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2,2-Tetrachloroethane	ND	ND		16	µg/m <sup>3</sup>
Tetrachloroethene	ND	ND		8	µg/m <sup>3</sup>
Toluene	ND	ND		8	µg/m <sup>3</sup>
1,2,3-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,2,4-Trichlorobenzene	ND	ND		16	µg/m <sup>3</sup>
1,1,1-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
1,1,2-Trichloroethane	ND	ND		8	µg/m <sup>3</sup>
Trichloroethene	ND	ND		8	µg/m <sup>3</sup>
Trichlorofluoromethane	ND	ND		16	µg/m <sup>3</sup>
1,2,3-Trichloropropane	ND	ND		8	µg/m <sup>3</sup>
1,2,4-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
1,3,5-Trimethylbenzene	ND	ND		8	µg/m <sup>3</sup>
Vinyl chloride	ND	ND		8	µg/m <sup>3</sup>
m,p-Xylene	ND	ND		16	µg/m <sup>3</sup>
o-Xylene	ND	ND		8	µg/m <sup>3</sup>
MTBE	ND	ND		40	µg/m <sup>3</sup>
Ethyl-tert-butylether	ND	ND		40	µg/m <sup>3</sup>
Di-isopropylether	ND	ND		40	µg/m <sup>3</sup>
tert-amylmethylether	ND	ND		40	µg/m <sup>3</sup>
tert-Butylalcohol	ND	ND		400	µg/m <sup>3</sup>
<b>Tracer:</b>					
n-Pentane	ND	ND		80	µg/m <sup>3</sup>
n-Hexane	ND	ND		80	µg/m <sup>3</sup>
n-Heptane	ND	ND		80	µg/m <sup>3</sup>
<b>Dilution Factor</b>	1	1			
<b>Surrogate Recoveries:</b>					
Dibromofluoromethane	115%	117%		60 - 140	
Toluene-d <sub>8</sub>	98%	97%		60 - 140	
4-Bromofluorobenzene	98%	98%		60 - 140	
<b>Batch ID:</b>	SG1-040222- 01	SG1-040222- 01			

ND = Value below reporting limit



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## JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

<b>Client:</b>	Langan	<b>Report date:</b> 4/5/2022
<b>Client Address:</b>	5150 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b> ST-19464 <b>Client Ref. No.:</b> 721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b> 4/2/2022 <b>Date Received:</b> 4/2/2022
<b>Project:</b>	721033501	<b>Date Analyzed:</b> 4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Physical State:</b> Soil Gas

### EPA 8260B – Volatile Organics by GC/MS + Oxygenates

**Batch ID:** SG1-040222-01

**Jones ID:** 040222-SG1LCS1    040222-SG1LCSD1    040222-SG1CCV1

<u>Parameter</u>	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	123%	117%	5.2%	60 - 140	104%	80 - 120
1,1-Dichloroethene	111%	111%	0.5%	60 - 140	88%	80 - 120
Cis-1,2-Dichloroethene	103%	103%	0.1%	70 - 130	91%	80 - 120
1,1,1-Trichloroethane	110%	111%	0.3%	70 - 130	100%	80 - 120
Benzene	100%	99%	0.9%	70 - 130	88%	80 - 120
Trichloroethene	113%	114%	1.5%	70 - 130	105%	80 - 120
Toluene	98%	97%	1.2%	70 - 130	89%	80 - 120
Tetrachloroethene	112%	112%	0.1%	70 - 130	103%	80 - 120
Chlorobenzene	102%	104%	2.0%	70 - 130	102%	80 - 120
Ethylbenzene	98%	99%	0.9%	70 - 130	100%	80 - 120
1,2,4 Trimethylbenzene	96%	96%	0.4%	70 - 130	113%	80 - 120

#### Surrogate Recovery:

Dibromofluoromethane	121%	118%	60 - 140	119%	60 - 140
Toluene-d <sub>8</sub>	95%	94%	60 - 140	95%	60 - 140
4-Bromofluorobenzene	103%	104%	60 - 140	106%	60 - 140

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample Duplicate

CCV = Continuing Calibration Verification

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%



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**JONES ENVIRONMENTAL  
LABORATORY RESULTS**

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street	<b>Jones Ref. No.:</b>	ST-19464
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	4/2/2022
<b>Project:</b>	721033501	<b>Date Received:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Methane**

<b>Sample ID:</b>	SV-17-5'	SV-17-25'	SV-17-40'	SV-5-5'	SV-5-25'
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<b>Jones ID:</b>	ST-19464-01	ST-19464-02	ST-19464-03	ST-19464-04	ST-19464-05	<b>Reporting Limit</b>	<b>Units</b>
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**Analytes:**

Methane (CH <sub>4</sub> )	ND	ND	ND	ND	ND	0.023	%
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<b>Dilution Factor:</b>	1	1	1	1	1
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<b>Batch ID:</b>	ASTM-040222-01	ASTM-040222-01	ASTM-040222-01	ASTM-040222-01	ASTM-040222-01
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**JONES ENVIRONMENTAL  
LABORATORY RESULTS**

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street	<b>Jones Ref. No.:</b>	ST-19464
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	4/2/2022
<b>Project:</b>	721033501	<b>Date Received:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Methane**

**Sample ID:** SV-5-40'    SV-4-5'    SV-4-15'

<b>Jones ID:</b>	ST-19464-06	ST-19464-07	ST-19464-08	<b>Reporting Limit</b>	<b>Units</b>
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**Analytes:**

Methane (CH <sub>4</sub> )	ND	ND	ND	0.023	%
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**Dilution Factor:** 1    1    1

**Batch ID:** ASTM-040222-01    ASTM-040222-01    ASTM-040222-01



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street	<b>Jones Ref. No.:</b>	ST-19464
	Los Angeles, CA	<b>Client Ref. No.:</b>	721033501
<b>Attn:</b>	Luis Navarro	<b>Date Sampled:</b>	4/2/2022
<b>Project:</b>	721033501	<b>Date Received:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Methane**

<u>Sample ID:</u>	METHOD	HELIUM	<u>Reporting Limit</u>	<u>Units</u>
	BLANK	BLANK		
<u>Jones ID:</u>	040222- ASTMMB1	040222- ASTMHB1		
<b>Analytes:</b>				
Methane (CH <sub>4</sub> )	ND	ND	0.023	%
<b>Dilution Factor:</b>	1	1		
<u>Batch ID:</u>	ASTM- 040222-01	ASTM- 040222-01		

ND = Value less than reporting limit



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**JONES ENVIRONMENTAL**  
**QUALITY CONTROL INFORMATION**

<b>Client:</b>	Langan	<b>Report date:</b>	4/5/2022
<b>Client Address:</b>	5150 South Flower Street Los Angeles, CA	<b>Jones Ref. No.:</b>	ST-19464
<b>Attn:</b>	Luis Navarro	<b>Client Ref. No.:</b>	721033501
<b>Project:</b>	721033501	<b>Date Sampled:</b>	4/2/2022
<b>Project Address:</b>	10819 Koontz Ave Santa Fe Springs, CA 90670	<b>Date Received:</b>	4/2/2022
		<b>Date Analyzed:</b>	4/2/2022
		<b>Physical State:</b>	Soil Gas

**ASTM D1946 – Methane**

GC#: ASTM-040222-01

<b>Jones ID:</b>	040222-ASTMCCV1	040222-ASTMCCVD1	Acceptability	
<u>Parameter</u>	CCV Recovery (%)	CCVD Recovery (%)	<u>RPD</u>	Range (%)
Methane (CH <sub>4</sub> )	103%	103%	0.4%	80-120

CCV = Continuing Calibration Verification

CCV = Continuing Calibration Verification Duplicate

RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%



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# Soil-Gas Chain-of-Custody Record

Client <u>Langan</u>		Date <u>4/2/2022</u>	Tedlar Hold-Time Requested: <input checked="" type="checkbox"/> 6 hr (DTSC) <input type="checkbox"/> 72 hr (EPA) <input type="checkbox"/> 5 Day	Report Options EDD _____ EDF* - 10% Surcharge _____	LAB USE ONLY Jones Project # <u>ST-19464</u>								
Client Address <u>5150 South Flower Street, Los Angeles CA</u>		Client Project # <u>72103501</u>	*Global ID _____										
Project Name <u>72103501</u>		Turn Around Requested <input type="checkbox"/> Immediate Attention-200% <input type="checkbox"/> Rush 24 Hours-100% <input type="checkbox"/> Rush 48 Hours-75% <input checked="" type="checkbox"/> Rush 72 Hours-50% <u>KSH 4/15/2022</u> <input type="checkbox"/> Rush 96 Hours-25%	Tracer <input checked="" type="checkbox"/> n-pentane <input checked="" type="checkbox"/> n-hexane <input checked="" type="checkbox"/> n-heptane <input type="checkbox"/> Helium <input type="checkbox"/> 1,1-DFA <input type="checkbox"/> _____	Analysis Requested		Page <u>1 of 1</u>							
Project Address <u>10819 Koontz Ave</u>		Reporting Limits Requested <input checked="" type="checkbox"/> 20 ug/m³ <input type="checkbox"/> 8 ug/m³ <input type="checkbox"/> _____ ug/m³	Units <input checked="" type="checkbox"/> ug/m³ <input type="checkbox"/> ug/L <input type="checkbox"/> ppmV	Sample Matrix: Soil Gas (SG), Air (A), Material (M) <u>8260B</u>	ASTM D1946, Methane/Fixed Gas/H <sub>2</sub> S	Magnethelic Vacuum (ln/H <sub>2</sub> O)							
Report To <u>Luis Navarro</u>						Number of Containers							
Email/Phone		Sampler <u>Kevin Horchler</u>						Notes & Special Instructions					
Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Jones ID (Lab Use Only)	Purge Rate (mL/min)	Pump ID	Magnethelic ID					
SV-17-5'	3	1610	4/2	1123	ST-19464-01	200	Rental.4	M100.500	SG	X	X	c2	1
SV-17-25'	3	1940	4/2	1125	ST-19464-02	200	196117	M100.205	SG	X	X	c2	1
SV-17-40'	3	2190	4/2	1127	ST-19464-03	200	Sampler.2	M100.112	SG	X	X	24	1
SV-5-5'	3	1610	4/2	1510	ST-19464-04	200	Rental.4	M100.500	SG	X	X	c2	1
SV-5-25'	3	1940	4/2	1512	ST-19464-05	200	196117	M100.205	SG	X	X	4	1
SV-5-40'	3	2190	4/2	1514	ST-19464-06	200	Sampler.2	M100.112	SG	X	X	c2	1
SV-4-5'	3	1630	4/2	1525	ST-19464-07	200	Rental.4	M100.500	SG	X	X	c2	1
SV-4-15'	3	1790	4/2	1527	ST-19464-08	200	196117	M100.205	SG	X	X	6	1
Relinquished By (Signature)		Printed Name		Received By (Signature)		Printed Name						Total Number of Containers	
<u>Langan</u>		<u>Marcus Garcia</u>		<u>K.</u>		<u>K. Horchler</u>						8	
Company	Date	Time	Company	Date	Time							Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.	
<u>Langan</u>	<u>4/2/22</u>	<u>1530</u>	<u>Jones Env.</u>	<u>4/2/2022</u>	<u>1530</u>								
Relinquished By (Signature)		Printed Name		Received By Laboratory (Signature)		Printed Name							
Company	Date	Time	Company	Date	Time								



April 08, 2022

Julian Grochocki  
Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles, CA 90071  
Tel: (213) 314-8100  
Fax:

ELAP No.: 1838  
CSDLAC No.: 10196  
ORELAP No.: CA300003

Re: ATL Work Order Number : 2200342  
Client Reference : Orbis- Santa Fe Speings 721033501

Enclosed are the results for sample(s) received on March 10, 2022 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine". Below the signature, the letters "fc" are handwritten.

Christine Caballero, Client Relations Manager  
Christine.Caballero@atlglobal.com  
Authorized to Release on 04/08/22 14:15 on Behalf of

A handwritten signature in black ink, appearing to read "Amy".

Amy Leung  
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	2200342-03	Water	3/10/22 16:35	3/10/22 17:38



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### Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
MO	Manufacturer omitted analyte within the stock standard.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
L3	Laboratory control sample outside in-house established limits but within method criteria.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

#### Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



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### Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury

Analyst: AEG

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Analyzed	Date/Time	Notes
2200342-03	MW-1	<b>0.40</b>	ug/L	0.20	1	B2C1081	03/11/2022	03/11/22 12:45		



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Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

### Title 22 Metals by ICP-AES EPA 6010B

**Analyst: WT**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	1	B2C1082	03/11/2022	03/11/22 15:57	
Arsenic	ND	0.010	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Barium</b>	<b>0.39</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Beryllium</b>	<b>0.0049</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
Cadmium	ND	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Chromium</b>	<b>0.12</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Cobalt</b>	<b>0.015</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Copper</b>	<b>0.11</b>	0.0090	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Lead</b>	<b>0.0066</b>	0.0050	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Molybdenum</b>	<b>0.011</b>	0.0050	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Nickel</b>	<b>0.058</b>	0.0050	1	B2C1082	03/11/2022	03/11/22 15:57	
Selenium	ND	0.010	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Silver</b>	<b>0.012</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
Thallium	ND	0.015	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Vanadium</b>	<b>0.086</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 15:57	
<b>Zinc</b>	<b>0.22</b>	0.025	1	B2C1082	03/11/2022	03/11/22 15:57	

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	0.20	1	B2C1054	03/10/2022	03/11/22 12:28	
C23-C32	ND	0.20	1	B2C1054	03/10/2022	03/11/22 12:28	
<i>Surrogate: p-Terphenyl</i>	103 %	32 - 169		B2C1054	03/10/2022	03/11/22 12:28	

### Organochlorine Pesticides by EPA 8081A

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4'-DDD	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
4,4'-DDE	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
4,4'-DDT	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Aldrin	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
alpha-BHC	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
alpha-Chlordane	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
beta-BHC	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
Chlordane	ND	0.25	1	B2C1091	03/11/2022	03/11/22 15:55	
delta-BHC	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	



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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

### Organochlorine Pesticides by EPA 8081A

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dieldrin	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Endosulfan I	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
Endosulfan II	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Endosulfan sulfate	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Endrin	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Endrin aldehyde	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
Endrin ketone	ND	0.05	1	B2C1091	03/11/2022	03/11/22 15:55	
gamma-BHC	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
gamma-Chlordane	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
Heptachlor	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
Heptachlor epoxide	ND	0.02	1	B2C1091	03/11/2022	03/11/22 15:55	
Methoxychlor	ND	0.25	1	B2C1091	03/11/2022	03/11/22 15:55	
Toxaphene	ND	2.5	1	B2C1091	03/11/2022	03/11/22 15:55	
<i>Surrogate: Decachlorobiphenyl</i>	76.3 %	18 - 108		B2C1091	03/11/2022	03/11/22 15:55	
<i>Surrogate: Tetrachloro-m-xylene</i>	57.9 %	23 - 108		B2C1091	03/11/2022	03/11/22 15:55	

### Polychlorinated Biphenyls by EPA 8082

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1221	ND	1.0	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1232	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1242	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1248	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1254	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
Aroclor 1260	ND	0.50	1	B2C1090	03/11/2022	03/11/22 16:30	
<i>Surrogate: Decachlorobiphenyl</i>	65.5 %	18 - 108		B2C1090	03/11/2022	03/11/22 16:30	
<i>Surrogate: Tetrachloro-m-xylene</i>	58.4 %	23 - 108		B2C1090	03/11/2022	03/11/22 16:30	

### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,1,1-Trichloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,1,2-Trichloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	<b>6.7</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,1-Dichloroethene	<b>86</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,1-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2,3-Trichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2,3-Trichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2,4-Trichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2,4-Trimethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2-Dibromoethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>1,2-Dichloroethane</b>	<b>1.2</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,2-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,3,5-Trimethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,3-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,3-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
1,4-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
2,2-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
2-Butanone	ND	10	1	B2C1080	03/11/2022	03/11/22 13:13	
2-Chlorotoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
4-Chlorotoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
4-Isopropyltoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Benzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Bromobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Bromochloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Bromodichloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Bromoform	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Bromomethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Carbon disulfide	ND	1.0	1	B2C1080	03/11/2022	03/11/22 13:13	
Carbon tetrachloride	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Chlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Chloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Chloroform	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Chloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>cis-1,2-Dichloroethene</b>	<b>11</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
cis-1,3-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Di-isopropyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Dibromochloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Dibromomethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Dichlorodifluoromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Ethyl Acetate	ND	10	1	B2C1080	03/11/2022	03/11/22 13:13	



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Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl Ether	ND	10	1	B2C1080	03/11/2022	03/11/22 13:13	
Ethyl tert-butyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Ethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>Freon-113</b>	<b>2.6</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Hexachlorobutadiene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Isopropylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
m,p-Xylene	ND	1.0	1	B2C1080	03/11/2022	03/11/22 13:13	
Methylene chloride	ND	1.0	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>MTBE</b>	<b>7.1</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
n-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
n-Propylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Naphthalene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
o-Xylene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
sec-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Styrene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
tert-Amyl methyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
tert-Butanol	ND	10	1	B2C1080	03/11/2022	03/11/22 13:13	
tert-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>Tetrachloroethene</b>	<b>41</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>Toluene</b>	<b>0.54</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>trans-1,2-Dichloroethene</b>	<b>0.93</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
trans-1,3-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>Trichloroethene</b>	<b>45</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Trichlorofluoromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Vinyl acetate	ND	10	1	B2C1080	03/11/2022	03/11/22 13:13	
<b>Vinyl chloride</b>	<b>1.3</b>	0.50	1	B2C1080	03/11/2022	03/11/22 13:13	
Surrogate: 1,2-Dichloroethane-d4	101 %	64 - 155		B2C1080	03/11/2022	03/11/22 13:13	
Surrogate: 4-Bromofluorobenzene	103 %	73 - 124		B2C1080	03/11/2022	03/11/22 13:13	
Surrogate: Dibromofluoromethane	102 %	78 - 129		B2C1080	03/11/2022	03/11/22 13:13	
Surrogate: Toluene-d8	100 %	84 - 117		B2C1080	03/11/2022	03/11/22 13:13	

### Semivolatile Organic Compounds by EPA 8270C

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
1,2-Dichlorobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
1,3-Dichlorobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
1,4-Dichlorobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	



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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

**Semivolatile Organic Compounds by EPA 8270C**

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,4,5-Trichlorophenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2,4,6-Trichlorophenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2,4-Dichlorophenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2,4-Dimethylphenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2,4-Dinitrophenol	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
2,4-Dinitrotoluene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2,6-Dinitrotoluene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Chloronaphthalene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Chlorophenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Methylnaphthalene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Methylphenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Nitroaniline	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
2-Nitrophenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
3,3'-Dichlorobenzidine	ND	20	1	B2C1092	03/11/2022	03/11/22 19:49	
3-Nitroaniline	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
4,6-Dinitro-2-methyphenol	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Bromophenyl-phenylether	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Chloro-3-methylphenol	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Chloroaniline	ND	20	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Chlorophenyl-phenylether	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Methylphenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Nitroaniline	ND	20	1	B2C1092	03/11/2022	03/11/22 19:49	
4-Nitrophenol	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
Acenaphthene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Acenaphthylene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Anthracene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzidine (M)	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzo(a)anthracene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzo(a)pyrene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzo(b)fluoranthene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzo(g,h,i)perylene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzo(k)fluoranthene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzoic acid	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
Benzyl alcohol	ND	20	1	B2C1092	03/11/2022	03/11/22 19:49	
bis(2-chloroethoxy)methane	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
bis(2-Chloroethyl)ether	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
bis(2-chloroisopropyl)ether	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
bis(2-ethylhexyl)phthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Butylbenzylphthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Chrysene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

**Client Sample ID: MW-1**  
**Lab ID: 2200342-03**

### Semivolatile Organic Compounds by EPA 8270C

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Di-n-butylphthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Di-n-octylphthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Dibenz(a,h)anthracene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Dibenzofuran	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Diethyl phthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Dimethyl phthalate	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Fluoranthene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Fluorene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Hexachlorobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Hexachlorobutadiene	ND	20	1	B2C1092	03/11/2022	03/11/22 19:49	
Hexachlorocyclopentadiene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Hexachloroethane	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Indeno(1,2,3-cd)pyrene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Isophorone	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
N-Nitroso-di-n propylamine	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
N-Nitrosodiphenylamine	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Naphthalene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Nitrobenzene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Pentachlorophenol	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
Phenanthrene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Phenol	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Pyrene	ND	10	1	B2C1092	03/11/2022	03/11/22 19:49	
Pyridine	ND	50	1	B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	79.8 %	21 - 92		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 2,4,6-Tribromophenol</i>	83.3 %	24 - 113		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 2-Chlorophenol-d4</i>	62.6 %	14 - 86		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 2-Fluorobiphenyl</i>	85.8 %	28 - 105		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 2-Fluorophenol</i>	29.6 %	0 - 59		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: 4-Terphenyl-d14</i>	94.8 %	32 - 116		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: Nitrobenzene-d5</i>	76.7 %	25 - 101		B2C1092	03/11/2022	03/11/22 19:49	
<i>Surrogate: Phenol-d6</i>	18.9 %	0 - 48		B2C1092	03/11/2022	03/11/22 19:49	

### Gasoline Range Hydrocarbons by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C4-C12	ND	0.20	1	B2C1093	03/11/2022	03/11/22 16:57	
<i>Surrogate: 4-Bromofluorobenzene</i>	113 %	63.08 - 129.27		B2C1093	03/11/2022	03/11/22 16:57	



## Certificate of Analysis

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Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### QUALITY CONTROL SECTION

#### Gasoline Range Hydrocarbons by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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#### Batch B2C1093 - GCVOA\_W

**Blank (B2C1093-BLK1)** Prepared: 3/11/2022 Analyzed: 3/11/2022

C4-C12	ND	0.20	0.04
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Surrogate: 4-Bromofluorobenzene	0.4466	0.400000	112	63.08 - 129.27
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**LCS (B2C1093-BS1)** Prepared: 3/11/2022 Analyzed: 3/11/2022

Gasoline Range Organics	0.902000	0.20	0.04	1.00000	90.2	73.27 - 109.13
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Surrogate: 4-Bromofluorobenzene	0.4523	0.400000	113	63.08 - 129.27
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**LCS Dup (B2C1093-BSD1)** Prepared: 3/11/2022 Analyzed: 3/11/2022

Gasoline Range Organics	0.973000	0.20	0.04	1.00000	97.3	73.27 - 109.13	7.57	20
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Surrogate: 4-Bromofluorobenzene	0.4552	0.400000	114	63.08 - 129.27
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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1082 - EPA 3010A\_W**
**Blank (B2C1082-BLK1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	ND	0.010	0.0088
Arsenic	ND	0.010	0.0078
Barium	ND	0.0030	0.0026
Beryllium	ND	0.0030	0.0016
Cadmium	ND	0.0030	0.0024
Chromium	ND	0.0030	0.0020
Cobalt	ND	0.0030	0.0016
Copper	ND	0.0090	0.0038
Lead	ND	0.0050	0.0047
Molybdenum	ND	0.0050	0.0030
Nickel	ND	0.0050	0.0046
Selenium	ND	0.010	0.0093
Silver	ND	0.0030	0.0024
Thallium	ND	0.015	0.0085
Vanadium	ND	0.0030	0.0022
Zinc	ND	0.025	0.0057

**LCS (B2C1082-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.528525	0.010	0.0088	0.500000	106	80 - 120
Arsenic	0.513985	0.010	0.0078	0.500000	103	80 - 120
Barium	0.484582	0.0030	0.0026	0.500000	96.9	80 - 120
Beryllium	0.525599	0.0030	0.0016	0.500200	105	80 - 120
Cadmium	0.512912	0.0030	0.0024	0.500000	103	80 - 120
Chromium	0.507416	0.0030	0.0020	0.500000	101	80 - 120
Cobalt	0.539800	0.0030	0.0016	0.500000	108	80 - 120
Copper	0.511662	0.0090	0.0038	0.500000	102	80 - 120
Lead	0.524631	0.0050	0.0047	0.500000	105	80 - 120
Molybdenum	0.529155	0.0050	0.0030	0.500000	106	80 - 120
Nickel	0.529051	0.0050	0.0046	0.500000	106	80 - 120
Selenium	0.530724	0.010	0.0093	0.500000	106	80 - 120
Silver	0.252025	0.0030	0.0024	0.250000	101	80 - 120
Thallium	0.506036	0.015	0.0085	0.500000	101	80 - 120
Vanadium	0.503172	0.0030	0.0022	0.500000	101	80 - 120
Zinc	0.530736	0.025	0.0057	0.500000	106	80 - 120

**Duplicate (B2C1082-DUP1)**

Source: 2200317-10

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	ND	0.010	0.0088	ND	NR	20
Arsenic	ND	0.010	0.0078	ND	NR	20
Barium	ND	0.0030	0.0026	ND	NR	20
Beryllium	ND	0.0030	0.0016	ND	NR	20
Cadmium	ND	0.0030	0.0024	ND	NR	20
Chromium	ND	0.0030	0.0020	ND	NR	20
Cobalt	ND	0.0030	0.0016	ND	NR	20
Copper	ND	0.0090	0.0038	ND	NR	20
Lead	ND	0.0050	0.0047	ND	NR	20



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Reported : 04/08/2022

### Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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**Batch B2C1082 - EPA 3010A\_W (continued)**

**Duplicate (B2C1082-DUP1) - Continued**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Molybdenum	ND	0.0050	0.0030		ND			NR	20
Nickel	ND	0.0050	0.0046		ND			NR	20
Selenium	ND	0.010	0.0093		ND			NR	20
Silver	ND	0.0030	0.0024		ND			NR	20
Thallium	ND	0.015	0.0085		ND			NR	20
Vanadium	ND	0.0030	0.0022		ND			NR	20
Zinc	0.008032	0.025	0.0057		0.009051			11.9	20

**Matrix Spike (B2C1082-MS1)**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.548111	0.010	0.0088	0.500000	ND	110	58 - 139		
Arsenic	0.519504	0.010	0.0078	0.500000	ND	104	67 - 136		
Barium	0.484935	0.0030	0.0026	0.500000	ND	97.0	68 - 130		
Beryllium	0.513625	0.0030	0.0016	0.500200	ND	103	70 - 133		
Cadmium	0.509894	0.0030	0.0024	0.500000	ND	102	68 - 136		
Chromium	0.502025	0.0030	0.0020	0.500000	ND	100	69 - 135		
Cobalt	0.542554	0.0030	0.0016	0.500000	ND	109	69 - 138		
Copper	0.496760	0.0090	0.0038	0.500000	ND	99.4	60 - 146		
Lead	0.524656	0.0050	0.0047	0.500000	ND	105	58 - 146		
Molybdenum	0.529446	0.0050	0.0030	0.500000	ND	106	68 - 132		
Nickel	0.535565	0.0050	0.0046	0.500000	ND	107	64 - 135		
Selenium	0.546518	0.010	0.0093	0.500000	ND	109	57 - 146		
Silver	0.220035	0.0030	0.0024	0.250000	ND	88.0	47 - 151		
Thallium	0.507730	0.015	0.0085	0.500000	ND	102	59 - 133		
Vanadium	0.496124	0.0030	0.0022	0.500000	ND	99.2	70 - 127		
Zinc	0.551749	0.025	0.0057	0.500000	0.009051	109	53 - 144		

**Matrix Spike Dup (B2C1082-MSD1)**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.544019	0.010	0.0088	0.500000	ND	109	58 - 139	0.749	20
Arsenic	0.516928	0.010	0.0078	0.500000	ND	103	67 - 136	0.497	20
Barium	0.487667	0.0030	0.0026	0.500000	ND	97.5	68 - 130	0.562	20
Beryllium	0.516950	0.0030	0.0016	0.500200	ND	103	70 - 133	0.645	20
Cadmium	0.515952	0.0030	0.0024	0.500000	ND	103	68 - 136	1.18	20
Chromium	0.513799	0.0030	0.0020	0.500000	ND	103	69 - 135	2.32	20
Cobalt	0.538979	0.0030	0.0016	0.500000	ND	108	69 - 138	0.661	20
Copper	0.501873	0.0090	0.0038	0.500000	ND	100	60 - 146	1.02	20
Lead	0.520220	0.0050	0.0047	0.500000	ND	104	58 - 146	0.849	20
Molybdenum	0.529144	0.0050	0.0030	0.500000	ND	106	68 - 132	0.0569	20
Nickel	0.528984	0.0050	0.0046	0.500000	ND	106	64 - 135	1.24	20
Selenium	0.531036	0.010	0.0093	0.500000	ND	106	57 - 146	2.87	20
Silver	0.222336	0.0030	0.0024	0.250000	ND	88.9	47 - 151	1.04	20
Thallium	0.506217	0.015	0.0085	0.500000	ND	101	59 - 133	0.298	20
Vanadium	0.503097	0.0030	0.0022	0.500000	ND	101	70 - 127	1.40	20
Zinc	0.548232	0.025	0.0057	0.500000	0.009051	108	53 - 144	0.639	20



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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**Batch B2C1081 - EPA 245.1/7470\_W**

**Blank (B2C1081-BLK1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Mercury

ND 0.20 0.05

**LCS (B2C1081-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Mercury

5.07300 0.20 0.05 5.00000 101 80 - 120

**Matrix Spike (B2C1081-MS1)**

Source: 2200337-14 Prepared: 3/11/2022 Analyzed: 3/11/2022

Mercury

5.02008 0.20 0.05 5.00000 ND 100 70 - 130

**Matrix Spike Dup (B2C1081-MSD1)**

Source: 2200337-14 Prepared: 3/11/2022 Analyzed: 3/11/2022

Mercury

5.07437 0.20 0.05 5.00000 ND 101 70 - 130 1.08 20

**Post Spike (B2C1081-PS1)**

Source: 2200337-14 Prepared: 3/11/2022 Analyzed: 3/11/2022

Mercury

2.52628 2.50000 0.010354 101 85 - 115



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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
<b>Batch B2C1054 - GCSEMI_DRO_W</b>										
<b>Blank (B2C1054-BLK1)</b>										
C13-C22	ND	0.20	0.20							
C23-C32	ND	0.20	0.20							
<i>Surrogate: p-Terphenyl</i>	0.06656				8.00000E-2		83.2		32 - 169	
<b>Blank (B2C1054-BLK2)</b>										
C13-C22	ND	0.20	0.20							
C23-C32	ND	0.20	0.20							
<i>Surrogate: p-Terphenyl</i>	0.06802				8.00000E-2		85.0		32 - 169	
<b>LCS (B2C1054-BS1)</b>										
DRO	0.640872	0.20	0.20	1.00000			64.1		45 - 161	
<i>Surrogate: p-Terphenyl</i>	0.06623				8.00000E-2		82.8		32 - 169	
<b>LCS (B2C1054-BS2)</b>										
DRO	0.636701	0.20	0.20	1.00000			63.7		45 - 161	
<i>Surrogate: p-Terphenyl</i>	0.06749				8.00000E-2		84.4		32 - 169	
<b>LCS Dup (B2C1054-BSD1)</b>										
DRO	0.823111	0.20	0.20	1.00000			82.3	45 - 161	24.9	20 R
<i>Surrogate: p-Terphenyl</i>	0.08288				8.00000E-2		104		32 - 169	
<b>LCS Dup (B2C1054-BSD2)</b>										
DRO	0.839196	0.20	0.20	1.00000			83.9	45 - 161	27.4	20 R
<i>Surrogate: p-Terphenyl</i>	0.08375				8.00000E-2		105		32 - 169	



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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1091 - GCSEMI\_PCB/PEST\_W**
**Blank (B2C1091-BLK1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

4,4'-DDD	ND	0.05	0.003
4,4'-DDD [2C]	ND	0.05	0.003
4,4'-DDE	ND	0.05	0.004
4,4'-DDE [2C]	ND	0.05	0.004
4,4'-DDT	ND	0.05	0.004
4,4'-DDT [2C]	ND	0.05	0.004
Aldrin	ND	0.02	0.003
Aldrin [2C]	ND	0.02	0.003
alpha-BHC	ND	0.02	0.009
alpha-BHC [2C]	ND	0.02	0.009
alpha-Chlordane	ND	0.02	0.003
alpha-Chlordane [2C]	ND	0.02	0.003
beta-BHC	ND	0.02	0.007
beta-BHC [2C]	ND	0.02	0.007
Chlordane	ND	0.25	0.03
Chlordane [2C]	ND	0.25	0.03
delta-BHC	ND	0.02	0.005
delta-BHC [2C]	ND	0.02	0.005
Dieldrin	ND	0.05	0.002
Dieldrin [2C]	ND	0.05	0.002
Endosulfan I	ND	0.02	0.003
Endosulfan I [2C]	ND	0.02	0.003
Endosulfan II	ND	0.05	0.004
Endosulfan II [2C]	ND	0.05	0.004
Endosulfan sulfate	ND	0.05	0.002
Endosulfan Sulfate [2C]	ND	0.05	0.002
Endrin	ND	0.05	0.004
Endrin [2C]	ND	0.05	0.004
Endrin aldehyde	ND	0.05	0.002
Endrin aldehyde [2C]	ND	0.05	0.002
Endrin ketone	ND	0.05	0.003
Endrin ketone [2C]	ND	0.05	0.003
gamma-BHC	ND	0.02	0.005
gamma-BHC [2C]	ND	0.02	0.005
gamma-Chlordane	ND	0.02	0.001
gamma-Chlordane [2C]	ND	0.02	0.001
Heptachlor	ND	0.02	0.01
Heptachlor [2C]	ND	0.02	0.01
Heptachlor epoxide	ND	0.02	0.003
Heptachlor epoxide [2C]	ND	0.02	0.003
Methoxychlor	ND	0.25	0.005
Methoxychlor [2C]	ND	0.25	0.005
Toxaphene	ND	2.5	0.34
Toxaphene [2C]	ND	2.5	0.34



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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**Batch B2C1091 - GCSEMI\_PCB/PEST\_W (continued)**
**Blank (B2C1091-BLK1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Surrogate: Decachlorobiphenyl	0.3193		0.500000	63.9	18 - 108
Surrogate: Decachlorobiphenyl [2C]	0.2306		0.500000	46.1	25 - 103
Surrogate: Tetrachloro-m-xylene	0.2867		0.500000	57.3	23 - 108
Surrogate: Tetrachloro-m-xylene [2C]	0.2821		0.500000	56.4	21 - 105

**LCS (B2C1091-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

4,4'-DDD	0.368620	0.05	0.003	0.500000	73.7	53 - 116
4,4'-DDD [2C]	0.338045	0.05	0.003	0.500000	67.6	45 - 133
4,4'-DDE	0.283235	0.05	0.004	0.500000	56.6	45 - 122
4,4'-DDE [2C]	0.304990	0.05	0.004	0.500000	61.0	42 - 129
4,4'-DDT	0.227965	0.05	0.004	0.500000	45.6	18 - 134
4,4'-DDT [2C]	0.232285	0.05	0.004	0.500000	46.5	14 - 142
Aldrin	0.287085	0.02	0.003	0.500000	57.4	44 - 118
Aldrin [2C]	0.289430	0.02	0.003	0.500000	57.9	48 - 121
alpha-BHC	0.314195	0.02	0.009	0.500000	62.8	47 - 107
alpha-BHC [2C]	0.309015	0.02	0.009	0.500000	61.8	50 - 111
alpha-Chlordane	0.325305	0.02	0.003	0.500000	65.1	48 - 117
alpha-Chlordane [2C]	0.331800	0.02	0.003	0.500000	66.4	46 - 122
beta-BHC	0.289760	0.02	0.007	0.500000	58.0	52 - 113
beta-BHC [2C]	0.294465	0.02	0.007	0.500000	58.9	49 - 121
delta-BHC	0.330440	0.02	0.005	0.500000	66.1	38 - 105
delta-BHC [2C]	0.318940	0.02	0.005	0.500000	63.8	48 - 97
Dieldrin	0.313465	0.05	0.002	0.500000	62.7	49 - 115
Dieldrin [2C]	0.313430	0.05	0.002	0.500000	62.7	47 - 118
Endosulfan I	0.298845	0.02	0.003	0.500000	59.8	45 - 108
Endosulfan I [2C]	0.287085	0.02	0.003	0.500000	57.4	47 - 108
Endosulfan II	0.319930	0.05	0.004	0.500000	64.0	53 - 118
Endosulfan II [2C]	0.323675	0.05	0.004	0.500000	64.7	48 - 122
Endosulfan sulfate	0.292275	0.05	0.002	0.500000	58.5	51 - 106
Endosulfan Sulfate [2C]	0.254170	0.05	0.002	0.500000	50.8	47 - 110
Endrin	0.311290	0.05	0.004	0.500000	62.3	51 - 127
Endrin [2C]	0.326440	0.05	0.004	0.500000	65.3	61 - 126
Endrin aldehyde	0.327770	0.05	0.002	0.500000	65.6	54 - 112
Endrin aldehyde [2C]	0.331495	0.05	0.002	0.500000	66.3	45 - 121
Endrin ketone	0.261860	0.05	0.003	0.500000	52.4	46 - 111
Endrin ketone [2C]	0.303455	0.05	0.003	0.500000	60.7	37 - 122
gamma-BHC	0.322795	0.02	0.005	0.500000	64.6	49 - 111
gamma-BHC [2C]	0.323415	0.02	0.005	0.500000	64.7	46 - 120
gamma-Chlordane	0.269780	0.02	0.001	0.500000	54.0	48 - 115
gamma-Chlordane [2C]	0.291980	0.02	0.001	0.500000	58.4	38 - 135
Heptachlor	0.289705	0.02	0.01	0.500000	57.9	50 - 113
Heptachlor [2C]	0.296025	0.02	0.01	0.500000	59.2	47 - 123
Heptachlor epoxide	0.298330	0.02	0.003	0.500000	59.7	47 - 110
Heptachlor epoxide [2C]	0.304555	0.02	0.003	0.500000	60.9	45 - 114
Methoxychlor	0.273680	0.25	0.005	0.500000	54.7	47 - 123



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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1091 - GCSEMI\_PCB/PEST\_W (continued)**

**LCS (B2C1091-BS1) - Continued** Prepared: 3/11/2022 Analyzed: 3/11/2022

Methoxychlor [2C]	0.275945	0.25	0.005	0.500000	55.2	4 - 178				
Surrogate: Decachlorobiphenyl	0.2859			0.500000	57.2	18 - 108				
Surrogate: Decachlorobiphenyl [2C]	0.2239			0.500000	44.8	25 - 103				
Surrogate: Tetrachloro-m-xylene	0.2686			0.500000	53.7	23 - 108				
Surrogate: Tetrachloro-m-xylene [2C]	0.2709			0.500000	54.2	21 - 105				

**LCS Dup (B2C1091-BSD1)** Prepared: 3/11/2022 Analyzed: 3/11/2022

4,4'-DDD	0.399425	0.05	0.003	0.500000	79.9	53 - 116	8.02	20		
4,4'-DDD [2C]	0.354630	0.05	0.003	0.500000	70.9	45 - 133	4.79	20		
4,4'-DDE	0.295605	0.05	0.004	0.500000	59.1	45 - 122	4.27	20		
4,4'-DDE [2C]	0.324215	0.05	0.004	0.500000	64.8	42 - 129	6.11	20		
4,4'-DDT	0.252985	0.05	0.004	0.500000	50.6	18 - 134	10.4	20		
4,4'-DDT [2C]	0.250500	0.05	0.004	0.500000	50.1	14 - 142	7.55	20		
Aldrin	0.308860	0.02	0.003	0.500000	61.8	44 - 118	7.31	20		
Aldrin [2C]	0.300325	0.02	0.003	0.500000	60.1	48 - 121	3.69	20		
alpha-BHC	0.330655	0.02	0.009	0.500000	66.1	47 - 107	5.11	20		
alpha-BHC [2C]	0.316900	0.02	0.009	0.500000	63.4	50 - 111	2.52	20		
alpha-Chlordane	0.353235	0.02	0.003	0.500000	70.6	48 - 117	8.23	20		
alpha-Chlordane [2C]	0.353135	0.02	0.003	0.500000	70.6	46 - 122	6.23	20		
beta-BHC	0.309335	0.02	0.007	0.500000	61.9	52 - 113	6.53	20		
beta-BHC [2C]	0.305910	0.02	0.007	0.500000	61.2	49 - 121	3.81	20		
delta-BHC	0.354455	0.02	0.005	0.500000	70.9	38 - 105	7.01	20		
delta-BHC [2C]	0.332440	0.02	0.005	0.500000	66.5	48 - 97	4.15	20		
Dieldrin	0.335000	0.05	0.002	0.500000	67.0	49 - 115	6.64	20		
Dieldrin [2C]	0.327395	0.05	0.002	0.500000	65.5	47 - 118	4.36	20		
Endosulfan I	0.322265	0.02	0.003	0.500000	64.5	45 - 108	7.54	20		
Endosulfan I [2C]	0.299590	0.02	0.003	0.500000	59.9	47 - 108	4.26	20		
Endosulfan II	0.343545	0.05	0.004	0.500000	68.7	53 - 118	7.12	20		
Endosulfan II [2C]	0.336840	0.05	0.004	0.500000	67.4	48 - 122	3.99	20		
Endosulfan sulfate	0.314810	0.05	0.002	0.500000	63.0	51 - 106	7.42	20		
Endosulfan Sulfate [2C]	0.266600	0.05	0.002	0.500000	53.3	47 - 110	4.77	20		
Endrin	0.354090	0.05	0.004	0.500000	70.8	51 - 127	12.9	20		
Endrin [2C]	0.343750	0.05	0.004	0.500000	68.8	61 - 126	5.17	20		
Endrin aldehyde	0.350510	0.05	0.002	0.500000	70.1	54 - 112	6.71	20		
Endrin aldehyde [2C]	0.344335	0.05	0.002	0.500000	68.9	45 - 121	3.80	20		
Endrin ketone	0.282300	0.05	0.003	0.500000	56.5	46 - 111	7.51	20		
Endrin ketone [2C]	0.317665	0.05	0.003	0.500000	63.5	37 - 122	4.58	20		
gamma-BHC	0.340525	0.02	0.005	0.500000	68.1	49 - 111	5.35	20		
gamma-BHC [2C]	0.332175	0.02	0.005	0.500000	66.4	46 - 120	2.67	20		
gamma-Chlordane	0.280795	0.02	0.001	0.500000	56.2	48 - 115	4.00	20		
gamma-Chlordane [2C]	0.293335	0.02	0.001	0.500000	58.7	38 - 135	0.463	20		
Heptachlor	0.311270	0.02	0.01	0.500000	62.3	50 - 113	7.18	20		
Heptachlor [2C]	0.307600	0.02	0.01	0.500000	61.5	47 - 123	3.84	20		
Heptachlor epoxide	0.323085	0.02	0.003	0.500000	64.6	47 - 110	7.97	20		
Heptachlor epoxide [2C]	0.315010	0.02	0.003	0.500000	63.0	45 - 114	3.37	20		



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Reported : 04/08/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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#### Batch B2C1091 - GCSEMI\_PCB/PEST\_W (continued)

##### LCS Dup (B2C1091-BSD1) - Continued

Prepared: 3/11/2022 Analyzed: 3/11/2022

Methoxychlor	0.293470	0.25	0.005	0.500000	58.7	47 - 123	6.98	20
Methoxychlor [2C]	0.296520	0.25	0.005	0.500000	59.3	4 - 178	7.19	20
Surrogate: Decachlorobiphenyl	0.3119			0.500000	62.4	18 - 108		
Surrogate: Decachlorobiphenyl [2C]	0.2325			0.500000	46.5	25 - 103		
Surrogate: Tetrachloro-m-xylene	0.2855			0.500000	57.1	23 - 108		
Surrogate: Tetrachloro-m-xylene [2C]	0.2822			0.500000	56.4	21 - 105		



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### Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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#### Batch B2C1090 - GCSEMI\_PCB/PEST\_W

##### Blank (B2C1090-BLK1)

Prepared: 3/11/2022 Analyzed: 3/11/2022

Aroclor 1016	ND	0.50	0.06
Aroclor 1221	ND	1.0	0.06
Aroclor 1232	ND	0.50	0.06
Aroclor 1242	ND	0.50	0.06
Aroclor 1248	ND	0.50	0.06
Aroclor 1254	ND	0.50	0.06
Aroclor 1260	ND	0.50	0.06

Surrogate: Decachlorobiphenyl	0.2861	0.500000	57.2	18 - 108
Surrogate: Tetrachloro-m-xylene	0.2773	0.500000	55.5	23 - 108

##### LCS (B2C1090-BS1)

Prepared: 3/11/2022 Analyzed: 3/11/2022

Aroclor 1016	2.94164	0.50	0.06	5.00000	58.8	48 - 100
Aroclor 1260	3.14100	0.50	0.06	5.00000	62.8	42 - 112

Surrogate: Decachlorobiphenyl	0.2792	0.500000	55.8	18 - 108
Surrogate: Tetrachloro-m-xylene	0.2828	0.500000	56.6	23 - 108

##### LCS Dup (B2C1090-BSD1)

Prepared: 3/11/2022 Analyzed: 3/11/2022

Aroclor 1016	2.96726	0.50	0.06	5.00000	59.3	48 - 100	0.867	20
Aroclor 1260	3.12433	0.50	0.06	5.00000	62.5	42 - 112	0.532	20

Surrogate: Decachlorobiphenyl	0.2757	0.500000	55.1	18 - 108
Surrogate: Tetrachloro-m-xylene	0.2644	0.500000	52.9	23 - 108



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### Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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#### Batch B2C1080 - MSVOA\_LL\_W

##### Blank (B2C1080-BLK1)

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,1,1,2-Tetrachloroethane	ND	0.50	0.11					
1,1,1-Trichloroethane	ND	0.50	0.21					
1,1,2,2-Tetrachloroethane	ND	0.50	0.36					
1,1,2-Trichloroethane	ND	0.50	0.25					
1,1-Dichloroethane	ND	0.50	0.09					
1,1-Dichloroethene	ND	0.50	0.13					
1,1-Dichloropropene	ND	0.50	0.13					
1,2,3-Trichloropropane	ND	0.50	0.39					
1,2,3-Trichlorobenzene	ND	0.50	0.18					
1,2,4-Trichlorobenzene	ND	0.50	0.16					
1,2,4-Trimethylbenzene	ND	0.50	0.14					
1,2-Dibromo-3-chloropropane	ND	0.50	0.41					
1,2-Dibromoethane	ND	0.50	0.24					
1,2-Dichlorobenzene	ND	0.50	0.20					
1,2-Dichloroethane	ND	0.50	0.20					
1,2-Dichloropropane	ND	0.50	0.15					
1,3,5-Trimethylbenzene	ND	0.50	0.13					
1,3-Dichlorobenzene	ND	0.50	0.16					
1,3-Dichloropropane	ND	0.50	0.21					
1,4-Dichlorobenzene	ND	0.50	0.17					
2,2-Dichloropropane	ND	0.50	0.38					
2-Butanone	ND	10	4.5					
2-Chlorotoluene	ND	0.50	0.11					
4-Chlorotoluene	ND	0.50	0.12					
4-Isopropyltoluene	ND	0.50	0.11					
Benzene	ND	0.50	0.13					
Bromobenzene	ND	0.50	0.21					
Bromochloromethane	ND	0.50	0.16					
Bromodichloromethane	ND	0.50	0.14					
Bromoform	ND	0.50	0.20					
Bromomethane	ND	0.50	0.40					
Carbon disulfide	ND	1.0	0.07					
Carbon tetrachloride	ND	0.50	0.09					
Chlorobenzene	ND	0.50	0.13					
Chloroethane	ND	0.50	0.15					
Chloroform	ND	0.50	0.11					
Chloromethane	ND	0.50	0.12					
cis-1,2-Dichloroethene	ND	0.50	0.14					
cis-1,3-Dichloropropene	ND	0.50	0.13					
Di-isopropyl ether	ND	0.50	0.15					
Dibromochloromethane	ND	0.50	0.16					
Dibromomethane	ND	0.50	0.19					
Dichlorodifluoromethane	ND	0.50	0.18					
Ethyl Acetate	ND	10	8.7					
Ethyl Ether	ND	10	2.0					



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**
**Blank (B2C1080-BLK1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Ethyl tert-butyl ether	ND	0.50	0.21
Ethylbenzene	ND	0.50	0.13
Freon-113	ND	0.50	0.13
Hexachlorobutadiene	ND	0.50	0.15
Isopropylbenzene	ND	0.50	0.10
m,p-Xylene	ND	1.0	0.19
Methylene chloride	ND	1.0	0.71
MTBE	ND	0.50	0.26
n-Butylbenzene	ND	0.50	0.11
n-Propylbenzene	ND	0.50	0.10
Naphthalene	ND	0.50	0.41
o-Xylene	ND	0.50	0.13
sec-Butylbenzene	ND	0.50	0.09
Styrene	ND	0.50	0.13
tert-Amyl methyl ether	ND	0.50	0.41
tert-Butanol	ND	10	2.4
tert-Butylbenzene	ND	0.50	0.09
Tetrachloroethene	ND	0.50	0.10
Toluene	ND	0.50	0.12
trans-1,2-Dichloroethene	ND	0.50	0.09
trans-1,3-Dichloropropene	ND	0.50	0.23
Trichloroethene	ND	0.50	0.10
Trichlorofluoromethane	ND	0.50	0.23
Vinyl acetate	ND	10	1.7
Vinyl chloride	ND	0.50	0.13

Surrogate: 1,2-Dichloroethane-d4	24.14	25.0000	96.6	64 - 155
Surrogate: 4-Bromofluorobenzene	24.71	25.0000	98.8	73 - 124
Surrogate: Dibromofluoromethane	25.19	25.0000	101	78 - 129
Surrogate: Toluene-d8	22.52	25.0000	90.1	84 - 117

**LCS (B2C1080-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,1,1,2-Tetrachloroethane	19.2300	0.50	0.11	20.0000	96.2	79 - 116
1,1,1-Trichloroethane	19.8800	0.50	0.21	20.0000	99.4	73 - 130
1,1,2,2-Tetrachloroethane	19.2500	0.50	0.36	20.0000	96.2	71 - 122
1,1,2-Trichloroethane	17.2800	0.50	0.25	20.0000	86.4	70 - 124
1,1-Dichloroethane	21.8900	0.50	0.09	20.0000	109	69 - 128
1,1-Dichloroethene	21.8900	0.50	0.13	20.0000	109	65 - 137
1,1-Dichloropropene	19.1700	0.50	0.13	20.0000	95.8	74 - 129
1,2,3-Trichloropropane	18.1300	0.50	0.39	20.0000	90.6	74 - 123
1,2,3-Trichlorobenzene	13.9000	0.50	0.18	20.0000	69.5	59 - 130
1,2,4-Trichlorobenzene	16.2200	0.50	0.16	20.0000	81.1	65 - 125
1,2,4-Trimethylbenzene	20.1100	0.50	0.14	20.0000	101	88 - 124
1,2-Dibromo-3-chloropropane	16.1200	0.50	0.41	20.0000	80.6	61 - 127
1,2-Dibromoethane	17.9500	0.50	0.24	20.0000	89.8	72 - 125
1,2-Dichlorobenzene	19.2400	0.50	0.20	20.0000	96.2	84 - 113



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**
**LCS (B2C1080-BS1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,2-Dichloroethane	19.3300	0.50	0.20	20.0000	96.6	68 - 130		
1,2-Dichloropropane	22.0900	0.50	0.15	20.0000	110	77 - 121		
1,3,5-Trimethylbenzene	19.7200	0.50	0.13	20.0000	98.6	83 - 124		
1,3-Dichlorobenzene	18.2800	0.50	0.16	20.0000	91.4	83 - 112		
1,3-Dichloropropane	20.6200	0.50	0.21	20.0000	103	77 - 119		
1,4-Dichlorobenzene	18.9700	0.50	0.17	20.0000	94.8	79 - 115		
2,2-Dichloropropane	20.3200	0.50	0.38	20.0000	102	67 - 149		
2-Butanone	187.300	10	4.5	200.000	93.6	30 - 210		
2-Chlorotoluene	19.1900	0.50	0.11	20.0000	96.0	81 - 119		
4-Chlorotoluene	19.5000	0.50	0.12	20.0000	97.5	86 - 117		
4-Isopropyltoluene	18.8800	0.50	0.11	20.0000	94.4	82 - 131		
Benzene	20.4300	0.50	0.13	20.0000	102	75 - 124		
Bromobenzene	18.8100	0.50	0.21	20.0000	94.0	82 - 108		
Bromochloromethane	19.4700	0.50	0.16	20.0000	97.4	73 - 125		
Bromodichloromethane	19.9800	0.50	0.14	20.0000	99.9	80 - 120		
Bromoform	20.5900	0.50	0.20	20.0000	103	70 - 123		
Bromomethane	13.9400	0.50	0.40	20.0000	69.7	44 - 151		
Carbon disulfide	21.8300	1.0	0.07	20.0000	109	63 - 150		
Carbon tetrachloride	16.9000	0.50	0.09	20.0000	84.5	62 - 140		
Chlorobenzene	19.5600	0.50	0.13	20.0000	97.8	80 - 112		
Chloroethane	22.9200	0.50	0.15	20.0000	115	42 - 167		
Chloroform	18.7900	0.50	0.11	20.0000	94.0	77 - 122		
Chloromethane	26.8200	0.50	0.12	20.0000	134	33 - 153		
cis-1,2-Dichloroethene	16.5800	0.50	0.14	20.0000	82.9	75 - 121		
cis-1,3-Dichloropropene	18.7600	0.50	0.13	20.0000	93.8	73 - 127		
Di-isopropyl ether	23.5100	0.50	0.15	20.0000	118	64 - 144		
Dibromochloromethane	20.6000	0.50	0.16	20.0000	103	77 - 122		
Dibromomethane	20.8200	0.50	0.19	20.0000	104	75 - 121		
Dichlorodifluoromethane	14.8700	0.50	0.18	20.0000	74.4	0 - 171		
Ethyl Acetate	ND	10	8.7	200.000	NR	54 - 153		MO
Ethyl Ether	212.960	10	2.0	200.000	106	65 - 139		
Ethyl tert-butyl ether	19.6300	0.50	0.21	20.0000	98.2	54 - 141		
Ethylbenzene	20.9100	0.50	0.13	20.0000	105	82 - 119		
Freon-113	24.5000	0.50	0.13	20.0000	122	49 - 156		
Hexachlorobutadiene	16.8600	0.50	0.15	20.0000	84.3	71 - 131		
Isopropylbenzene	20.5400	0.50	0.10	20.0000	103	75 - 126		
m,p-Xylene	44.0500	1.0	0.19	40.0000	110	86 - 119		
Methylene chloride	22.6800	1.0	0.71	20.0000	113	76 - 125		
MTBE	20.8000	0.50	0.26	20.0000	104	70 - 121		
n-Butylbenzene	20.0000	0.50	0.11	20.0000	100	81 - 125		
n-Propylbenzene	20.2800	0.50	0.10	20.0000	101	78 - 130		
Naphthalene	14.0200	0.50	0.41	20.0000	70.1	47 - 128		
o-Xylene	23.7900	0.50	0.13	20.0000	119	85 - 119		
sec-Butylbenzene	20.0200	0.50	0.09	20.0000	100	78 - 130		
Styrene	24.5500	0.50	0.13	20.0000	123	62 - 148		



## Certificate of Analysis

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Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**

LCS (B2C1080-BS1) - Continued						Prepared: 3/11/2022 Analyzed: 3/11/2022		
tert-Amyl methyl ether	21.6900	0.50	0.41	20.0000	108	55 - 131		
tert-Butanol	109.250	10	2.4	100.000	109	45 - 153		
tert-Butylbenzene	18.4300	0.50	0.09	20.0000	92.2	77 - 125		
Tetrachloroethene	20.3600	0.50	0.10	20.0000	102	73 - 120		
Toluene	18.2000	0.50	0.12	20.0000	91.0	79 - 119		
trans-1,2-Dichloroethene	28.3400	0.50	0.09	20.0000	142	70 - 129		L5
trans-1,3-Dichloropropene	18.1000	0.50	0.23	20.0000	90.5	67 - 137		
Trichloroethene	19.8400	0.50	0.10	20.0000	99.2	73 - 117		
Trichlorofluoromethane	21.1200	0.50	0.23	20.0000	106	59 - 135		
Vinyl acetate	12.8900	10	1.7	200.000	6.44	67 - 155		MO
Vinyl chloride	22.6700	0.50	0.13	20.0000	113	58 - 132		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.10			25.0000	100	64 - 155		
<i>Surrogate: 4-Bromofluorobenzene</i>	27.53			25.0000	110	73 - 124		
<i>Surrogate: Dibromofluoromethane</i>	24.50			25.0000	98.0	78 - 129		
<i>Surrogate: Toluene-d8</i>	22.34			25.0000	89.4	84 - 117		

LCS Dup (B2C1080-BSD1)						Prepared: 3/11/2022 Analyzed: 3/11/2022		
1,1,1,2-Tetrachloroethane	18.8200	0.50	0.11	20.0000	94.1	79 - 116	2.16	20
1,1,1-Trichloroethane	17.8300	0.50	0.21	20.0000	89.2	73 - 130	10.9	20
1,1,2,2-Tetrachloroethane	19.0700	0.50	0.36	20.0000	95.4	71 - 122	0.939	20
1,1,2-Trichloroethane	18.9700	0.50	0.25	20.0000	94.8	70 - 124	9.32	20
1,1-Dichloroethane	19.4100	0.50	0.09	20.0000	97.0	69 - 128	12.0	20
1,1-Dichloroethene	19.0900	0.50	0.13	20.0000	95.4	65 - 137	13.7	20
1,1-Dichloropropene	17.2900	0.50	0.13	20.0000	86.4	74 - 129	10.3	20
1,2,3-Trichloropropane	19.0400	0.50	0.39	20.0000	95.2	74 - 123	4.90	20
1,2,3-Trichlorobenzene	15.1300	0.50	0.18	20.0000	75.6	59 - 130	8.47	20
1,2,4-Trichlorobenzene	16.4400	0.50	0.16	20.0000	82.2	65 - 125	1.35	20
1,2,4-Trimethylbenzene	19.9200	0.50	0.14	20.0000	99.6	88 - 124	0.949	20
1,2-Dibromo-3-chloropropane	16.9600	0.50	0.41	20.0000	84.8	61 - 127	5.08	20
1,2-Dibromoethane	18.6800	0.50	0.24	20.0000	93.4	72 - 125	3.99	20
1,2-Dichlorobenzene	19.0100	0.50	0.20	20.0000	95.0	84 - 113	1.20	20
1,2-Dichloroethane	17.7900	0.50	0.20	20.0000	89.0	68 - 130	8.30	20
1,2-Dichloropropane	20.3900	0.50	0.15	20.0000	102	77 - 121	8.00	20
1,3,5-Trimethylbenzene	18.9100	0.50	0.13	20.0000	94.6	83 - 124	4.19	20
1,3-Dichlorobenzene	18.9900	0.50	0.16	20.0000	95.0	83 - 112	3.81	20
1,3-Dichloropropane	21.1100	0.50	0.21	20.0000	106	77 - 119	2.35	20
1,4-Dichlorobenzene	18.7900	0.50	0.17	20.0000	94.0	79 - 115	0.953	20
2,2-Dichloropropane	18.4400	0.50	0.38	20.0000	92.2	67 - 149	9.70	20
2-Butanone	179.630	10	4.5	200.000	89.8	30 - 210	4.18	20
2-Chlorotoluene	18.8700	0.50	0.11	20.0000	94.4	81 - 119	1.68	20
4-Chlorotoluene	18.7000	0.50	0.12	20.0000	93.5	86 - 117	4.19	20
4-Isopropyltoluene	19.4300	0.50	0.11	20.0000	97.2	82 - 131	2.87	20
Benzene	19.0200	0.50	0.13	20.0000	95.1	75 - 124	7.15	20
Bromobenzene	19.2700	0.50	0.21	20.0000	96.4	82 - 108	2.42	20
Bromochloromethane	18.6800	0.50	0.16	20.0000	93.4	73 - 125	4.14	20



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**
**LCS Dup (B2C1080-BSD1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Bromodichloromethane	18.4500	0.50	0.14	20.0000	92.2	80 - 120	7.96	20		
Bromoform	17.7800	0.50	0.20	20.0000	88.9	70 - 123	14.6	20		
Bromomethane	13.5200	0.50	0.40	20.0000	67.6	44 - 151	3.06	20		
Carbon disulfide	19.4100	1.0	0.07	20.0000	97.0	63 - 150	11.7	20		
Carbon tetrachloride	15.5800	0.50	0.09	20.0000	77.9	62 - 140	8.13	20		
Chlorobenzene	18.7500	0.50	0.13	20.0000	93.8	80 - 112	4.23	20		
Chloroethane	20.9100	0.50	0.15	20.0000	105	42 - 167	9.17	20		
Chloroform	17.3000	0.50	0.11	20.0000	86.5	77 - 122	8.26	20		
Chloromethane	21.1700	0.50	0.12	20.0000	106	33 - 153	23.5	20	R	
cis-1,2-Dichloroethene	14.8900	0.50	0.14	20.0000	74.4	75 - 121	10.7	20	L3	
cis-1,3-Dichloropropene	18.6500	0.50	0.13	20.0000	93.2	73 - 127	0.588	20		
Di-isopropyl ether	20.9700	0.50	0.15	20.0000	105	64 - 144	11.4	20		
Dibromochloromethane	19.7200	0.50	0.16	20.0000	98.6	77 - 122	4.37	20		
Dibromomethane	18.9700	0.50	0.19	20.0000	94.8	75 - 121	9.30	20		
Dichlorodifluoromethane	13.3900	0.50	0.18	20.0000	67.0	0 - 171	10.5	20		
Ethyl Acetate	ND	10	8.7	200.000	NR	54 - 153	NR	20	MO	
Ethyl Ether	202.160	10	2.0	200.000	101	65 - 139	5.20	20		
Ethyl tert-butyl ether	18.3400	0.50	0.21	20.0000	91.7	54 - 141	6.79	20		
Ethylbenzene	19.4300	0.50	0.13	20.0000	97.2	82 - 119	7.34	20		
Freon-113	20.9200	0.50	0.13	20.0000	105	49 - 156	15.8	20		
Hexachlorobutadiene	17.1600	0.50	0.15	20.0000	85.8	71 - 131	1.76	20		
Isopropylbenzene	21.0700	0.50	0.10	20.0000	105	75 - 126	2.55	20		
m,p-Xylene	38.3700	1.0	0.19	40.0000	95.9	86 - 119	13.8	20		
Methylene chloride	21.0800	1.0	0.71	20.0000	105	76 - 125	7.31	20		
MTBE	19.1800	0.50	0.26	20.0000	95.9	70 - 121	8.10	20		
n-Butylbenzene	19.3200	0.50	0.11	20.0000	96.6	81 - 125	3.46	20		
n-Propylbenzene	19.4500	0.50	0.10	20.0000	97.2	78 - 130	4.18	20		
Naphthalene	15.0300	0.50	0.41	20.0000	75.2	47 - 128	6.95	20		
o-Xylene	19.8400	0.50	0.13	20.0000	99.2	85 - 119	18.1	20		
sec-Butylbenzene	20.6000	0.50	0.09	20.0000	103	78 - 130	2.86	20		
Styrene	19.1700	0.50	0.13	20.0000	95.8	62 - 148	24.6	20	R	
tert-Amyl methyl ether	20.5000	0.50	0.41	20.0000	102	55 - 131	5.64	20		
tert-Butanol	97.5900	10	2.4	100.000	97.6	45 - 153	11.3	20		
tert-Butylbenzene	19.4500	0.50	0.09	20.0000	97.2	77 - 125	5.39	20		
Tetrachloroethene	19.8600	0.50	0.10	20.0000	99.3	73 - 120	2.49	20		
Toluene	18.4200	0.50	0.12	20.0000	92.1	79 - 119	1.20	20		
trans-1,2-Dichloroethene	25.5600	0.50	0.09	20.0000	128	70 - 129	10.3	20		
trans-1,3-Dichloropropene	17.8700	0.50	0.23	20.0000	89.4	67 - 137	1.28	20		
Trichloroethene	18.2000	0.50	0.10	20.0000	91.0	73 - 117	8.62	20		
Trichlorofluoromethane	19.1500	0.50	0.23	20.0000	95.8	59 - 135	9.78	20		
Vinyl acetate	11.6800	10	1.7	200.000	5.84	67 - 155	9.85	20	MO	
Vinyl chloride	18.5300	0.50	0.13	20.0000	92.6	58 - 132	20.1	20	R	

Surrogate: 1,2-Dichloroethane-d4 23.72 25.0000 94.9 64 - 155  
 Surrogate: 4-Bromofluorobenzene 24.76 25.0000 99.0 73 - 124  
 Surrogate: Dibromofluoromethane 24.09 25.0000 96.4 78 - 129



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Reported : 04/08/2022

### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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#### Batch B2C1080 - MSVOA\_LL\_W (continued)

##### LCS Dup (B2C1080-BSD1) - Continued

Surrogate: Toluene-d8

23.73

25.0000

Prepared: 3/11/2022 Analyzed: 3/11/2022

94.9 84 - 117



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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#### Batch B2C1092 - MSSEMI\_W

##### Blank (B2C1092-BLK1)

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	ND	10	2.3					
1,2-Dichlorobenzene	ND	10	2.0					
1,3-Dichlorobenzene	ND	10	2.0					
1,4-Dichlorobenzene	ND	10	1.9					
2,4,5-Trichlorophenol	ND	10	2.0					
2,4,6-Trichlorophenol	ND	10	1.9					
2,4-Dichlorophenol	ND	10	1.4					
2,4-Dimethylphenol	ND	10	0.83					
2,4-Dinitrophenol	ND	50	3.8					
2,4-Dinitrotoluene	ND	10	2.4					
2,6-Dinitrotoluene	ND	10	1.8					
2-Chloronaphthalene	ND	10	2.2					
2-Chlorophenol	ND	10	1.7					
2-Methylnaphthalene	ND	10	2.8					
2-Methylphenol	ND	10	0.92					
2-Nitroaniline	ND	50	1.2					
2-Nitrophenol	ND	10	1.9					
3,3'-Dichlorobenzidine	ND	20	1.6					
3-Nitroaniline	ND	50	1.1					
4,6-Dinitro-2-methyphenol	ND	50	2.0					
4-Bromophenyl-phenylether	ND	10	2.6					
4-Chloro-3-methylphenol	ND	50	1.0					
4-Chloroaniline	ND	20	0.70					
4-Chlorophenyl-phenylether	ND	10	2.9					
4-Methylphenol	ND	10	0.88					
4-Nitroaniline	ND	20	1.2					
4-Nitrophenol	ND	50	0.51					
Acenaphthene	ND	10	2.1					
Acenaphthylene	ND	10	2.1					
Anthracene	ND	10	2.1					
Benzidine (M)	ND	50	3.4					
Benzo(a)anthracene	ND	10	2.1					
Benzo(a)pyrene	ND	10	1.8					
Benzo(b)fluoranthene	ND	10	2.5					
Benzo(g,h,i)perylene	ND	10	1.8					
Benzo(k)fluoranthene	ND	10	2.8					
Benzoic acid	ND	50	17					
Benzyl alcohol	ND	20	0.60					
bis(2-chloroethoxy)methane	ND	10	1.4					
bis(2-Chloroethyl)ether	ND	10	1.7					
bis(2-chloroisopropyl)ether	ND	10	1.8					
bis(2-ethylhexyl)phthalate	ND	10	1.7					
Butylbenzylphthalate	ND	10	2.6					
Chrysene	ND	10	1.9					
Di-n-butylphthalate	ND	10	1.5					



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1092 - MSSEMI\_W (continued)**
**Blank (B2C1092-BLK1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Di-n-octylphthalate	ND	10	1.8
Dibenz(a,h)anthracene	ND	10	2.7
Dibenzofuran	ND	10	2.5
Diethyl phthalate	ND	10	1.3
Dimethyl phthalate	ND	10	1.3
Fluoranthene	ND	10	2.2
Fluorene	ND	10	2.6
Hexachlorobenzene	ND	10	3.3
Hexachlorobutadiene	ND	20	2.7
Hexachlorocyclopentadiene	ND	10	3.4
Hexachloroethane	ND	10	1.8
Indeno(1,2,3-cd)pyrene	ND	10	2.2
Isophorone	ND	10	1.1
N-Nitroso-di-n propylamine	ND	10	1.3
N-Nitrosodiphenylamine	ND	10	1.6
Naphthalene	ND	10	2.3
Nitrobenzene	ND	10	1.5
Pentachlorophenol	ND	50	1.5
Phenanthrene	ND	10	2.3
Phenol	ND	10	0.35
Pyrene	ND	10	2.2
Pyridine	ND	50	0.55

Surrogate: 1,2-Dichlorobenzene-d4	46.17	100.000	46.2	21 - 92
Surrogate: 2,4,6-Tribromophenol	56.95	150.000	38.0	24 - 113
Surrogate: 2-Chlorophenol-d4	35.82	150.000	23.9	14 - 86
Surrogate: 2-Fluorobiphenyl	42.33	100.000	42.3	28 - 105
Surrogate: 2-Fluorophenol	18.21	150.000	12.1	0 - 59
Surrogate: 4-Terphenyl-d14	59.70	100.000	59.7	32 - 116
Surrogate: Nitrobenzene-d5	38.23	100.000	38.2	25 - 101
Surrogate: Phenol-d6	13.43	150.000	8.95	0 - 48

**LCS (B2C1092-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	59.3700	10	2.3	100.000	59.4	37 - 96
1,2-Dichlorobenzene	52.4800	10	2.0	100.000	52.5	36 - 86
1,3-Dichlorobenzene	51.3000	10	2.0	100.000	51.3	35 - 84
1,4-Dichlorobenzene	52.6800	10	1.9	100.000	52.7	36 - 83
2,4,5-Trichlorophenol	74.2000	10	2.0	100.000	74.2	37 - 107
2,4,6-Trichlorophenol	75.3400	10	1.9	100.000	75.3	39 - 116
2,4-Dichlorophenol	58.3600	10	1.4	100.000	58.4	36 - 110
2,4-Dimethylphenol	54.6400	10	0.83	100.000	54.6	31 - 99
2,4-Dinitrophenol	70.9800	50	3.8	100.000	71.0	0 - 169
2,4-Dinitrotoluene	70.8600	10	2.4	100.000	70.9	46 - 123
2,6-Dinitrotoluene	67.4800	10	1.8	100.000	67.5	46 - 120
2-Chloronaphthalene	61.3200	10	2.2	100.000	61.3	41 - 107
2-Chlorophenol	42.3100	10	1.7	100.000	42.3	24 - 89



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1092 - MSSEMI\_W (continued)**
**LCS (B2C1092-BS1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

2-Methylnaphthalene	64.1800	10	2.8	100.000	64.2	40 - 101
2-Methylphenol	37.3600	10	0.92	100.000	37.4	8 - 79
2-Nitroaniline	57.8900	50	1.2	100.000	57.9	38 - 128
2-Nitrophenol	57.4800	10	1.9	100.000	57.5	30 - 103
3,3'-Dichlorobenzidine	44.1400	20	1.6	100.000	44.1	40 - 126
3-Nitroaniline	56.3100	50	1.1	100.000	56.3	33 - 117
4,6-Dinitro-2-methyphenol	73.1000	50	2.0	100.000	73.1	5 - 155
4-Bromophenyl-phenylether	66.5500	10	2.6	100.000	66.6	46 - 110
4-Chloro-3-methylphenol	61.7400	50	1.0	100.000	61.7	29 - 116
4-Chloroaniline	53.8100	20	0.70	100.000	53.8	28 - 104
4-Chlorophenyl-phenylether	67.8400	10	2.9	100.000	67.8	45 - 111
4-Methylphenol	17.5800	10	0.88	50.0000	35.2	13 - 100
4-Nitroaniline	66.0400	20	1.2	100.000	66.0	38 - 112
4-Nitrophenol	30.1900	50	0.51	100.000	30.2	6 - 48
Acenaphthene	63.9600	10	2.1	100.000	64.0	38 - 109
Acenaphthylene	59.6800	10	2.1	100.000	59.7	38 - 109
Anthracene	68.7000	10	2.1	100.000	68.7	41 - 109
Benzidine (M)	18.3300	50	3.4	100.000	18.3	0 - 169
Benzo(a)anthracene	68.6600	10	2.1	100.000	68.7	39 - 110
Benzo(a)pyrene	61.0600	10	1.8	100.000	61.1	39 - 112
Benzo(b)fluoranthene	62.5900	10	2.5	100.000	62.6	37 - 108
Benzo(g,h,i)perylene	57.4100	10	1.8	100.000	57.4	34 - 117
Benzo(k)fluoranthene	59.6900	10	2.8	100.000	59.7	39 - 107
Benzoic acid	49.4200	50	17	100.000	49.4	0 - 149
Benzyl alcohol	38.0700	20	0.60	100.000	38.1	11 - 91
bis(2-chloroethoxy)methane	53.9400	10	1.4	100.000	53.9	42 - 98
bis(2-Chloroethyl)ether	46.2500	10	1.7	100.000	46.2	31 - 93
bis(2-chloroisopropyl)ether	46.7400	10	1.8	100.000	46.7	38 - 89
bis(2-ethylhexyl)phthalate	59.7500	10	1.7	100.000	59.8	44 - 118
Butylbenzylphthalate	59.9300	10	2.6	100.000	59.9	44 - 116
Chrysene	65.1900	10	1.9	100.000	65.2	41 - 108
Di-n-butylphthalate	70.3800	10	1.5	100.000	70.4	51 - 110
Di-n-octylphthalate	62.4600	10	1.8	100.000	62.5	36 - 127
Dibenz(a,h)anthracene	60.8700	10	2.7	100.000	60.9	35 - 116
Dibenzofuran	64.5900	10	2.5	100.000	64.6	45 - 107
Diethyl phthalate	66.1800	10	1.3	100.000	66.2	49 - 111
Dimethyl phthalate	66.2100	10	1.3	100.000	66.2	48 - 107
Fluoranthene	73.5000	10	2.2	100.000	73.5	43 - 109
Fluorene	63.9500	10	2.6	100.000	64.0	37 - 114
Hexachlorobenzene	57.3900	10	3.3	100.000	57.4	43 - 114
Hexachlorobutadiene	65.0700	20	2.7	100.000	65.1	34 - 95
Hexachlorocyclopentadiene	55.9400	10	3.4	100.000	55.9	26 - 120
Hexachloroethane	48.5500	10	1.8	100.000	48.6	33 - 89
Indeno(1,2,3-cd)pyrene	61.6000	10	2.2	100.000	61.6	35 - 116
Isophorone	63.7400	10	1.1	100.000	63.7	40 - 110



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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**Batch B2C1092 - MSSEMI\_W (continued)**
**LCS (B2C1092-BS1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

N-Nitroso-di-n propylamine	54.2300	10	1.3	100.000	54.2	43 - 104
N-Nitrosodiphenylamine	65.9700	10	1.6	100.000	66.0	48 - 106
Naphthalene	60.3000	10	2.3	100.000	60.3	33 - 99
Nitrobenzene	52.9500	10	1.5	100.000	53.0	38 - 107
Pentachlorophenol	68.8100	50	1.5	100.000	68.8	25 - 130
Phenanthrene	67.5600	10	2.3	100.000	67.6	44 - 111
Phenol	16.1400	10	0.35	100.000	16.1	5 - 43
Pyrene	74.6800	10	2.2	100.000	74.7	42 - 108
Pyridine	36.3700	50	0.55	100.000	36.4	0 - 59

Surrogate: 1,2-Dichlorobenzene-d4	52.81		100.000	52.8	21 - 92
Surrogate: 2,4,6-Tribromophenol	94.77		150.000	63.2	24 - 113
Surrogate: 2-Chlorophenol-d4	66.48		150.000	44.3	14 - 86
Surrogate: 2-Fluorobiphenyl	62.19		100.000	62.2	28 - 105
Surrogate: 2-Fluorophenol	35.09		150.000	23.4	0 - 59
Surrogate: 4-Terphenyl-d14	64.67		100.000	64.7	32 - 116
Surrogate: Nitrobenzene-d5	55.03		100.000	55.0	25 - 101
Surrogate: Phenol-d6	23.44		150.000	15.6	0 - 48

**LCS Dup (B2C1092-BSD1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	87.0100	10	2.3	100.000	87.0	37 - 96	37.8	20	R
1,2-Dichlorobenzene	77.9300	10	2.0	100.000	77.9	36 - 86	39.0	20	R
1,3-Dichlorobenzene	81.8300	10	2.0	100.000	81.8	35 - 84	45.9	20	R
1,4-Dichlorobenzene	80.4200	10	1.9	100.000	80.4	36 - 83	41.7	20	R
2,4,5-Trichlorophenol	108.920	10	2.0	100.000	109	37 - 107	37.9	20	L3, R
2,4,6-Trichlorophenol	110.520	10	1.9	100.000	111	39 - 116	37.9	20	R
2,4-Dichlorophenol	83.8100	10	1.4	100.000	83.8	36 - 110	35.8	20	R
2,4-Dimethylphenol	84.2200	10	0.83	100.000	84.2	31 - 99	42.6	20	R
2,4-Dinitrophenol	103.160	50	3.8	100.000	103	0 - 169	37.0	20	R
2,4-Dinitrotoluene	106.740	10	2.4	100.000	107	46 - 123	40.4	20	R
2,6-Dinitrotoluene	103.970	10	1.8	100.000	104	46 - 120	42.6	20	R
2-Chloronaphthalene	92.4800	10	2.2	100.000	92.5	41 - 107	40.5	20	R
2-Chlorophenol	69.8200	10	1.7	100.000	69.8	24 - 89	49.1	20	R
2-Methylnaphthalene	95.0900	10	2.8	100.000	95.1	40 - 101	38.8	20	R
2-Methylphenol	58.5900	10	0.92	100.000	58.6	8 - 79	44.3	20	R
2-Nitroaniline	93.7000	50	1.2	100.000	93.7	38 - 128	47.2	20	R
2-Nitrophenol	88.5200	10	1.9	100.000	88.5	30 - 103	42.5	20	R
3,3'-Dichlorobenzidine	74.0700	20	1.6	100.000	74.1	40 - 126	50.6	20	R
3-Nitroaniline	87.6700	50	1.1	100.000	87.7	33 - 117	43.6	20	R
4,6-Dinitro-2-methyphenol	116.930	50	2.0	100.000	117	5 - 155	46.1	20	R
4-Bromophenyl-phenylether	105.450	10	2.6	100.000	105	46 - 110	45.2	20	R
4-Chloro-3-methylphenol	88.3900	50	1.0	100.000	88.4	29 - 116	35.5	20	R
4-Chloroaniline	80.3800	20	0.70	100.000	80.4	28 - 104	39.6	20	R
4-Chlorophenyl-phenylether	104.590	10	2.9	100.000	105	45 - 111	42.6	20	R
4-Methylphenol	28.1600	10	0.88	50.0000	56.3	13 - 100	46.3	20	R
4-Nitroaniline	101.640	20	1.2	100.000	102	38 - 112	42.5	20	R



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1092 - MSSEMI\_W (continued)**
**LCS Dup (B2C1092-BSD1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

4-Nitrophenol	37.2000	50	0.51	100.000	37.2	6 - 48	20.8	20	R
Acenaphthene	95.4100	10	2.1	100.000	95.4	38 - 109	39.5	20	R
Acenaphthylene	93.3400	10	2.1	100.000	93.3	38 - 109	44.0	20	R
Anthracene	106.330	10	2.1	100.000	106	41 - 109	43.0	20	R
Benzidine (M)	26.8600	50	3.4	100.000	26.9	0 - 169	37.8	20	R
Benzo(a)anthracene	106.430	10	2.1	100.000	106	39 - 110	43.1	20	R
Benzo(a)pyrene	106.380	10	1.8	100.000	106	39 - 112	54.1	20	R
Benzo(b)fluoranthene	106.300	10	2.5	100.000	106	37 - 108	51.8	20	R
Benzo(g,h,i)perylene	95.2300	10	1.8	100.000	95.2	34 - 117	49.6	20	R
Benzo(k)fluoranthene	98.6900	10	2.8	100.000	98.7	39 - 107	49.2	20	R
Benzoic acid	54.3200	50	17	100.000	54.3	0 - 149	9.45	20	
Benzyl alcohol	65.3400	20	0.60	100.000	65.3	11 - 91	52.7	20	R
bis(2-chloroethoxy)methane	83.5500	10	1.4	100.000	83.6	42 - 98	43.1	20	R
bis(2-Chloroethyl)ether	73.4000	10	1.7	100.000	73.4	31 - 93	45.4	20	R
bis(2-chloroisopropyl)ether	73.4000	10	1.8	100.000	73.4	38 - 89	44.4	20	R
bis(2-ethylhexyl)phthalate	95.5500	10	1.7	100.000	95.6	44 - 118	46.1	20	R
Butylbenzylphthalate	95.7200	10	2.6	100.000	95.7	44 - 116	46.0	20	R
Chrysene	111.830	10	1.9	100.000	112	41 - 108	52.7	20	L3, R
Di-n-butylphthalate	107.190	10	1.5	100.000	107	51 - 110	41.5	20	R
Di-n-octylphthalate	105.980	10	1.8	100.000	106	36 - 127	51.7	20	R
Dibenz(a,h)anthracene	100.450	10	2.7	100.000	100	35 - 116	49.1	20	R
Dibenzofuran	94.1600	10	2.5	100.000	94.2	45 - 107	37.3	20	R
Diethyl phthalate	104.520	10	1.3	100.000	105	49 - 111	44.9	20	R
Dimethyl phthalate	102.640	10	1.3	100.000	103	48 - 107	43.2	20	R
Fluoranthene	110.630	10	2.2	100.000	111	43 - 109	40.3	20	L3, R
Fluorene	96.2200	10	2.6	100.000	96.2	37 - 114	40.3	20	R
Hexachlorobenzene	89.1300	10	3.3	100.000	89.1	43 - 114	43.3	20	R
Hexachlorobutadiene	97.8500	20	2.7	100.000	97.8	34 - 95	40.2	20	L3, R
Hexachlorocyclopentadiene	87.9300	10	3.4	100.000	87.9	26 - 120	44.5	20	R
Hexachloroethane	78.4000	10	1.8	100.000	78.4	33 - 89	47.0	20	R
Indeno(1,2,3-cd)pyrene	102.040	10	2.2	100.000	102	35 - 116	49.4	20	R
Isophorone	90.0500	10	1.1	100.000	90.0	40 - 110	34.2	20	R
N-Nitroso-di-n propylamine	87.5800	10	1.3	100.000	87.6	43 - 104	47.0	20	R
N-Nitrosodiphenylamine	108.340	10	1.6	100.000	108	48 - 106	48.6	20	L3, R
Naphthalene	88.5500	10	2.3	100.000	88.6	33 - 99	38.0	20	R
Nitrobenzene	77.0400	10	1.5	100.000	77.0	38 - 107	37.1	20	R
Pentachlorophenol	115.220	50	1.5	100.000	115	25 - 130	50.4	20	R
Phenanthrene	93.3300	10	2.3	100.000	93.3	44 - 111	32.0	20	R
Phenol	25.9600	10	0.35	100.000	26.0	5 - 43	46.7	20	R
Pyrene	117.820	10	2.2	100.000	118	42 - 108	44.8	20	L3, R
Pyridine	41.7600	50	0.55	100.000	41.8	0 - 59	13.8	20	

Surrogate: 1,2-Dichlorobenzene-d4	82.08	100.000	82.1	21 - 92
Surrogate: 2,4,6-Tribromophenol	142.3	150.000	94.9	24 - 113
Surrogate: 2-Chlorophenol-d4	103.0	150.000	68.7	14 - 86
Surrogate: 2-Fluorobiphenyl	90.06	100.000	90.1	28 - 105



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Speings 721033501  
Report To : Julian Grochocki  
Reported : 04/08/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	RPD	RPD Limit	Notes
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#### Batch B2C1092 - MSSEMI\_W (continued)

##### LCS Dup (B2C1092-BSD1) - Continued

Prepared: 3/11/2022 Analyzed: 3/11/2022

Surrogate: 2-Fluorophenol	53.71	150.000	35.8	0 - 59
Surrogate: 4-Terphenyl-d14	104.3	100.000	104	32 - 116
Surrogate: Nitrobenzene-d5	78.95	100.000	79.0	25 - 101
Surrogate: Phenol-d6	36.89	150.000	24.6	0 - 48

21

2200342

# CHAIN OF CUSTODY RECORD

Method of Transport		For Laboratory Use Only		ATLCC Ver.20210101	
		Sample Conditions Upon Receipt			
		Condition	Y	N	Condition
<input checked="" type="checkbox"/> Client		<input type="checkbox"/> ATL	<input type="checkbox"/> OnSite	<input type="checkbox"/> S. # OF SAMPLES MATCH COC	<input type="checkbox"/>
<input type="checkbox"/> FedEx		<input type="checkbox"/> ONSITE	<input type="checkbox"/> Other:	<input type="checkbox"/> 6. PRESERVED	<input type="checkbox"/>
<input type="checkbox"/> UPS		<input type="checkbox"/> AIR	<input type="checkbox"/> Other:	<input type="checkbox"/> 7. COOLER TEMP. Reg. C.	<input type="checkbox"/>
<input type="checkbox"/> Other:		<input type="checkbox"/> AIR	<input type="checkbox"/> Other:	<input type="checkbox"/> 8. THERMOMETER ID:	<input type="checkbox"/>
1. CHILLED		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2. HEADSPACE (VOY) 6mm	<input type="checkbox"/>
2. HEADSPACE (VOY) 6mm		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 3. CONTAINER INTACT	<input type="checkbox"/>
3. CONTAINER INTACT		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4. SEALED	<input type="checkbox"/>
4. SEALED		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 5. THERMOMETER ID:	<input type="checkbox"/>

Company: Langan Engineering & Environmental Services

Address: 515 South Flower Street, Suite 2860

Tel: 224-234-1689

City: Los Angeles

State: CA

Zip: 90071

Fax: 90071

Quote #: 224-234-1689

EDD

QA/QC

Excel

Routine

EDF

Equis

Caltrans

Legal

RWQCB

Level IV

Other

Turnaround Time (TAT)

Quantity

Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7 = Canister

Material: 1=Glass; 2=Plastic; 3=Metal

Preservative: 1=HCl; 2=HNO3; 3=H2SO4;

4=AC; 5=Zn(Ac)2; 6=NaOH; 7=NA2S2O3

Remarks

Attn: Julian Grochoki		SEND REPORT TO:	Attn: Accounts Payable	
Email: jgrochoki@lanigan.com		Email: Langan_Invoicecapture@concursolutions.com	Email: Langan_EngineeringAndEnvironmentalServices@lanigan.com	
Company: Langan Engineering & Environmental Services		Address: 515 South Flower Street, Suite 2860		Address: 515 South Flower Street, Suite 2860
City: Los Angeles		State: CA	Zip: 90071	State: CA
		Zip: 90071	Fax: 90071	Zip: 90071

Project Name: Orbis - Santa Fe Springs

Quote #: 721033501

Sampler:

ITEM	Lab ID (for Lab Use Only)	Sample Description		PO#:	Requested Analysis		Sample Matrix	Container
		Sample ID	Location		Date	Time		
1			3/10/22	X	X	X		
2				X	X	X		
3				X	X	X		
4				X	X	X		
5				X	X	X		
6				X	X	X		
7				X	X	X		
8				X	X	X		
9				X	X	X		
10				X	X	X		

(Special Instructions, Comments, Notes, etc.)

NEED results by end of day Friday 3/11/2022

Relinquished by: (Signature and Printed Name)	Date: 3/10/22	Time: 17:33	Received by: (Signature and Printed Name)	Date: 3/10/22	Time: 17:38
Retinquired by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

By relinquishing samples to ATL, I hereby agree that I have read and accept ATL's Terms and Conditions, as stated in [www.atlglobal.com/terms-and-conditions](http://www.atlglobal.com/terms-and-conditions).

SC Page 44 of 48



March 14, 2022

Julian Grochocki  
Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles, CA 90071  
Tel: (213) 314-8100  
Fax:

ELAP No.: 1838  
CSDLAC No.: 10196  
ORELAP No.: CA300003

Re: ATL Work Order Number : 2200355

Client Reference : Orbis - Santa Fe Springs 721033501

Enclosed are the results for sample(s) received on March 11, 2022 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine". Below the signature, the letters "for" are handwritten.

Christine Caballero, Client Relations Manager  
Christine.Caballero@atlglobal.com  
Authorized to Release on 03/14/22 21:00 on Behalf of

A handwritten signature in black ink, appearing to read "Amy".

Amy Leung  
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3	2200355-01	Water	3/11/22 15:30	3/11/22 16:21



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Notes and Definitions

S12	Surrogate recovery outside in-house established limit but within method default criteria.
S1	Surrogate recovery was above laboratory acceptance limit. No associated target analyte was detected in the sample.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
MO	Manufacturer omitted analyte within the stock standard.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
L3	Laboratory control sample outside in-house established limits but within method criteria.
L2	Laboratory Control Sample and/ or Laboratory Control Sample Duplicate outside of acceptance limits. Reextraction and/or reanalysis is not possible due to limited amount of sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

#### Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

### Mercury by AA (Cold Vapor) EPA 7470A

**Analyte: Mercury**

**Analyst: AEG**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Analyzed	Date/Time	Notes
2200355-01	MW-3	0.28	ug/L	0.20	1	B2C1139	03/14/2022	03/14/22 12:58		



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: MW-3**  
**Lab ID: 2200355-01**

**Title 22 Metals by ICP-AES EPA 6010B**

**Analyst: WT**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	1	B2C1082	03/11/2022	03/11/22 18:35	
Arsenic	ND	0.010	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Barium</b>	<b>0.10</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
Beryllium	ND	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
Cadmium	ND	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Chromium</b>	<b>0.017</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
Cobalt	ND	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Copper</b>	<b>0.013</b>	0.0090	1	B2C1082	03/11/2022	03/11/22 18:35	
Lead	ND	0.0050	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Molybdenum</b>	<b>0.0075</b>	0.0050	1	B2C1082	03/11/2022	03/11/22 18:35	
Nickel	ND	0.0050	1	B2C1082	03/11/2022	03/11/22 18:35	
Selenium	ND	0.010	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Silver</b>	<b>0.0042</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
Thallium	ND	0.015	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Vanadium</b>	<b>0.037</b>	0.0030	1	B2C1082	03/11/2022	03/11/22 18:35	
<b>Zinc</b>	<b>0.11</b>	0.025	1	B2C1082	03/11/2022	03/11/22 18:35	

**Hydrocarbon Chain Distribution by EPA 8015B (Modified)**

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C13-C22	ND	0.40	1	B2C1119	03/13/2022	03/14/22 11:22	
C23-C32	ND	0.40	1	B2C1119	03/13/2022	03/14/22 11:22	
<i>Surrogate: p-Terphenyl</i>	<i>178 %</i>	<i>32 - 169</i>		B2C1119	03/13/2022	<i>03/14/22 11:22</i>	S1

**Organochlorine Pesticides by EPA 8081A**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4'-DDD	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
4,4'-DDE	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
4,4'-DDT	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
Aldrin	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
alpha-BHC	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
alpha-Chlordane	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
beta-BHC	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Chlordane	ND	0.25	1	B2C1120	03/13/2022	03/14/22 20:05	
delta-BHC	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Dieldrin	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
Endosulfan I	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Endosulfan II	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: MW-3**  
**Lab ID: 2200355-01**

**Organochlorine Pesticides by EPA 8081A**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Endosulfan sulfate	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
Endrin	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
Endrin aldehyde	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
Endrin ketone	ND	0.05	1	B2C1120	03/13/2022	03/14/22 20:05	
gamma-BHC	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
gamma-Chlordane	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Heptachlor	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Heptachlor epoxide	ND	0.02	1	B2C1120	03/13/2022	03/14/22 20:05	
Methoxychlor	ND	0.25	1	B2C1120	03/13/2022	03/14/22 20:05	
Toxaphene	ND	2.5	1	B2C1120	03/13/2022	03/14/22 20:05	
<i>Surrogate: Decachlorobiphenyl</i>	48.6 %	<i>18 - 108</i>		B2C1120	03/13/2022	03/14/22 20:05	
<i>Surrogate: Tetrachloro-m-xylene</i>	43.2 %	<i>23 - 108</i>		B2C1120	03/13/2022	03/14/22 20:05	

**Polychlorinated Biphenyls by EPA 8082**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1221	ND	1.0	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1232	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1242	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1248	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1254	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
Aroclor 1260	ND	0.50	1	B2C1121	03/13/2022	03/14/22 17:05	
<i>Surrogate: Decachlorobiphenyl</i>	52.0 %	<i>18 - 108</i>		B2C1121	03/13/2022	03/14/22 17:05	
<i>Surrogate: Tetrachloro-m-xylene</i>	48.5 %	<i>23 - 108</i>		B2C1121	03/13/2022	03/14/22 17:05	

**Volatile Organic Compounds by EPA 8260B**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,1,1-Trichloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,1,2-Trichloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>1,1-Dichloroethane</b>	<b>2.3</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>1,1-Dichloroethene</b>	<b>14</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,1-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2,3-Trichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2,3-Trichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2,4-Trichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Client Sample ID: MW-3 Lab ID: 2200355-01

#### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trimethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2-Dibromoethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2-Dichloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,2-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,3,5-Trimethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,3-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,3-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
1,4-Dichlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
2,2-Dichloropropane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
2-Butanone	ND	10	1	B2C1080	03/11/2022	03/11/22 17:29	
2-Chlorotoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
4-Chlorotoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
4-Isopropyltoluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Benzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Bromobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Bromochloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Bromodichloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Bromoform	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Bromomethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Carbon disulfide	ND	1.0	1	B2C1080	03/11/2022	03/11/22 17:29	
Carbon tetrachloride	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Chlorobenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Chloroethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Chloroform	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Chloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>cis-1,2-Dichloroethene</b>	<b>4.4</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
cis-1,3-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Di-isopropyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Dibromochloromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Dibromomethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Dichlorodifluoromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Ethyl Acetate	ND	10	1	B2C1080	03/11/2022	03/11/22 17:29	
Ethyl Ether	ND	10	1	B2C1080	03/11/2022	03/11/22 17:29	
Ethyl tert-butyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Ethylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Freon-113	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Hexachlorobutadiene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Isopropylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
m,p-Xylene	ND	1.0	1	B2C1080	03/11/2022	03/11/22 17:29	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

**Client Sample ID: MW-3**  
**Lab ID: 2200355-01**

**Volatile Organic Compounds by EPA 8260B**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Methylene chloride	ND	1.0	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>MTBE</b>	<b>5.4</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
n-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
n-Propylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Naphthalene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
o-Xylene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
sec-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Styrene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
tert-Amyl methyl ether	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
tert-Butanol	ND	10	1	B2C1080	03/11/2022	03/11/22 17:29	
tert-Butylbenzene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>Tetrachloroethene</b>	<b>8.9</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Toluene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
trans-1,2-Dichloroethene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
trans-1,3-Dichloropropene	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<b>Trichloroethene</b>	<b>18</b>	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Trichlorofluoromethane	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
Vinyl acetate	ND	10	1	B2C1080	03/11/2022	03/11/22 17:29	
Vinyl chloride	ND	0.50	1	B2C1080	03/11/2022	03/11/22 17:29	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>94.3 %</i>	<i>64 - 155</i>		B2C1080	03/11/2022	<i>03/11/22 17:29</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.4 %</i>	<i>73 - 124</i>		B2C1080	03/11/2022	<i>03/11/22 17:29</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>98.2 %</i>	<i>78 - 129</i>		B2C1080	03/11/2022	<i>03/11/22 17:29</i>	
<i>Surrogate: Toluene-d8</i>	<i>97.7 %</i>	<i>84 - 117</i>		B2C1080	03/11/2022	<i>03/11/22 17:29</i>	

**Semivolatile Organic Compounds by EPA 8270C**

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
1,2-Dichlorobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
1,3-Dichlorobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
1,4-Dichlorobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4,5-Trichlorophenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4,6-Trichlorophenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4-Dichlorophenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4-Dimethylphenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4-Dinitrophenol	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
2,4-Dinitrotoluene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2,6-Dinitrotoluene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2-Chloronaphthalene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2-Chlorophenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Client Sample ID: MW-3 Lab ID: 2200355-01

#### Semivolatile Organic Compounds by EPA 8270C

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Methylnaphthalene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2-Methylphenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
2-Nitroaniline	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
2-Nitrophenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
3,3'-Dichlorobenzidine	ND	20	1	B2C1122	03/13/2022	03/14/22 16:17	
3-Nitroaniline	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
4,6-Dinitro-2-methyphenol	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Bromophenyl-phenylether	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Chloro-3-methylphenol	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Chloroaniline	ND	20	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Chlorophenyl-phenylether	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Methylphenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Nitroaniline	ND	20	1	B2C1122	03/13/2022	03/14/22 16:17	
4-Nitrophenol	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
Acenaphthene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Acenaphthylene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Anthracene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzidine (M)	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzo(a)anthracene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzo(a)pyrene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzo(b)fluoranthene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzo(g,h,i)perylene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzo(k)fluoranthene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzoic acid	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
Benzyl alcohol	ND	20	1	B2C1122	03/13/2022	03/14/22 16:17	
bis(2-chloroethoxy)methane	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
bis(2-Chloroethyl)ether	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
bis(2-chloroisopropyl)ether	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
bis(2-ethylhexyl)phthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Butylbenzylphthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Chrysene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Di-n-butylphthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Di-n-octylphthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Dibenz(a,h)anthracene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Dibenzofuran	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Diethyl phthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Dimethyl phthalate	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Fluoranthene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Fluorene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Hexachlorobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Hexachlorobutadiene	ND	20	1	B2C1122	03/13/2022	03/14/22 16:17	



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Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Client Sample ID: MW-3 Lab ID: 2200355-01

#### Semivolatile Organic Compounds by EPA 8270C

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexachlorocyclopentadiene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Hexachloroethane	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Indeno(1,2,3-cd)pyrene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Isophorone	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
N-Nitroso-di-n propylamine	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
N-Nitrosodiphenylamine	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Naphthalene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Nitrobenzene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Pentachlorophenol	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
Phenanthrene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Phenol	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Pyrene	ND	10	1	B2C1122	03/13/2022	03/14/22 16:17	
Pyridine	ND	50	1	B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	81.0 %	21 - 92		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 2,4,6-Tribromophenol</i>	94.5 %	24 - 113		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 2-Chlorophenol-d4</i>	67.5 %	14 - 86		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 2-Fluorobiphenyl</i>	83.0 %	28 - 105		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 2-Fluorophenol</i>	32.5 %	0 - 59		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: 4-Terphenyl-d14</i>	118 %	32 - 116		B2C1122	03/13/2022	03/14/22 16:17	S12
<i>Surrogate: Nitrobenzene-d5</i>	75.3 %	25 - 101		B2C1122	03/13/2022	03/14/22 16:17	
<i>Surrogate: Phenol-d6</i>	20.2 %	0 - 48		B2C1122	03/13/2022	03/14/22 16:17	

#### Gasoline Range Hydrocarbons by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C4-C12	ND	0.20	1	B2C1142	03/14/2022	03/14/22 12:27	
<i>Surrogate: 4-Bromofluorobenzene</i>	108 %	63.08 - 129.27		B2C1142	03/14/2022	03/14/22 12:27	



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Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### QUALITY CONTROL SECTION

#### Gasoline Range Hydrocarbons by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1142 - GCVOA\_W

Blank (B2C1142-BLK1) Prepared: 3/14/2022 Analyzed: 3/14/2022

C4-C12	ND	0.20	0.04
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Surrogate: 4-Bromofluorobenzene	0.4206	0.400000	105	63.08 - 129.27
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LCS (B2C1142-BS1) Prepared: 3/14/2022 Analyzed: 3/14/2022

Gasoline Range Organics	0.952000	0.20	0.04	1.00000	95.2	73.27 - 109.13
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Surrogate: 4-Bromofluorobenzene	0.4236	0.400000	106	63.08 - 129.27
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LCS Dup (B2C1142-BSD1) Prepared: 3/14/2022 Analyzed: 3/14/2022

Gasoline Range Organics	0.941000	0.20	0.04	1.00000	94.1	73.27 - 109.13	1.16	20
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Surrogate: 4-Bromofluorobenzene	0.4403	0.400000	110	63.08 - 129.27
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### Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1082 - EPA 3010A\_W**
**Blank (B2C1082-BLK1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	ND	0.010	0.0088							
Arsenic	ND	0.010	0.0078							
Barium	ND	0.0030	0.0026							
Beryllium	ND	0.0030	0.0016							
Cadmium	ND	0.0030	0.0024							
Chromium	ND	0.0030	0.0020							
Cobalt	ND	0.0030	0.0016							
Copper	ND	0.0090	0.0038							
Lead	ND	0.0050	0.0047							
Molybdenum	ND	0.0050	0.0030							
Nickel	ND	0.0050	0.0046							
Selenium	ND	0.010	0.0093							
Silver	ND	0.0030	0.0024							
Thallium	ND	0.015	0.0085							
Vanadium	ND	0.0030	0.0022							
Zinc	ND	0.025	0.0057							

**LCS (B2C1082-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.528525	0.010	0.0088	0.500000	106	80 - 120
Arsenic	0.513985	0.010	0.0078	0.500000	103	80 - 120
Barium	0.484582	0.0030	0.0026	0.500000	96.9	80 - 120
Beryllium	0.525599	0.0030	0.0016	0.500200	105	80 - 120
Cadmium	0.512912	0.0030	0.0024	0.500000	103	80 - 120
Chromium	0.507416	0.0030	0.0020	0.500000	101	80 - 120
Cobalt	0.539800	0.0030	0.0016	0.500000	108	80 - 120
Copper	0.511662	0.0090	0.0038	0.500000	102	80 - 120
Lead	0.524631	0.0050	0.0047	0.500000	105	80 - 120
Molybdenum	0.529155	0.0050	0.0030	0.500000	106	80 - 120
Nickel	0.529051	0.0050	0.0046	0.500000	106	80 - 120
Selenium	0.530724	0.010	0.0093	0.500000	106	80 - 120
Silver	0.252025	0.0030	0.0024	0.250000	101	80 - 120
Thallium	0.506036	0.015	0.0085	0.500000	101	80 - 120
Vanadium	0.503172	0.0030	0.0022	0.500000	101	80 - 120
Zinc	0.530736	0.025	0.0057	0.500000	106	80 - 120

**Duplicate (B2C1082-DUP1)**

Source: 2200317-10

Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	ND	0.010	0.0088	ND	NR	20
Arsenic	ND	0.010	0.0078	ND	NR	20
Barium	ND	0.0030	0.0026	ND	NR	20
Beryllium	ND	0.0030	0.0016	ND	NR	20
Cadmium	ND	0.0030	0.0024	ND	NR	20
Chromium	ND	0.0030	0.0020	ND	NR	20
Cobalt	ND	0.0030	0.0016	ND	NR	20
Copper	ND	0.0090	0.0038	ND	NR	20
Lead	ND	0.0050	0.0047	ND	NR	20



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### Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1082 - EPA 3010A\_W (continued)**

**Duplicate (B2C1082-DUP1) - Continued**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Molybdenum	ND	0.0050	0.0030		ND		NR	20
Nickel	ND	0.0050	0.0046		ND		NR	20
Selenium	ND	0.010	0.0093		ND		NR	20
Silver	ND	0.0030	0.0024		ND		NR	20
Thallium	ND	0.015	0.0085		ND		NR	20
Vanadium	ND	0.0030	0.0022		ND		NR	20
Zinc	0.008032	0.025	0.0057		0.009051		11.9	20

**Matrix Spike (B2C1082-MS1)**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.548111	0.010	0.0088	0.500000	ND	110	58 - 139
Arsenic	0.519504	0.010	0.0078	0.500000	ND	104	67 - 136
Barium	0.484935	0.0030	0.0026	0.500000	ND	97.0	68 - 130
Beryllium	0.513625	0.0030	0.0016	0.500200	ND	103	70 - 133
Cadmium	0.509894	0.0030	0.0024	0.500000	ND	102	68 - 136
Chromium	0.502025	0.0030	0.0020	0.500000	ND	100	69 - 135
Cobalt	0.542554	0.0030	0.0016	0.500000	ND	109	69 - 138
Copper	0.496760	0.0090	0.0038	0.500000	ND	99.4	60 - 146
Lead	0.524656	0.0050	0.0047	0.500000	ND	105	58 - 146
Molybdenum	0.529446	0.0050	0.0030	0.500000	ND	106	68 - 132
Nickel	0.535565	0.0050	0.0046	0.500000	ND	107	64 - 135
Selenium	0.546518	0.010	0.0093	0.500000	ND	109	57 - 146
Silver	0.222035	0.0030	0.0024	0.250000	ND	88.0	47 - 151
Thallium	0.507730	0.015	0.0085	0.500000	ND	102	59 - 133
Vanadium	0.496124	0.0030	0.0022	0.500000	ND	99.2	70 - 127
Zinc	0.551749	0.025	0.0057	0.500000	0.009051	109	53 - 144

**Matrix Spike Dup (B2C1082-MSD1)**      **Source: 2200317-10**      Prepared: 3/11/2022 Analyzed: 3/11/2022

Antimony	0.544019	0.010	0.0088	0.500000	ND	109	58 - 139	0.749	20
Arsenic	0.516928	0.010	0.0078	0.500000	ND	103	67 - 136	0.497	20
Barium	0.487667	0.0030	0.0026	0.500000	ND	97.5	68 - 130	0.562	20
Beryllium	0.516950	0.0030	0.0016	0.500200	ND	103	70 - 133	0.645	20
Cadmium	0.515952	0.0030	0.0024	0.500000	ND	103	68 - 136	1.18	20
Chromium	0.513799	0.0030	0.0020	0.500000	ND	103	69 - 135	2.32	20
Cobalt	0.538979	0.0030	0.0016	0.500000	ND	108	69 - 138	0.661	20
Copper	0.501873	0.0090	0.0038	0.500000	ND	100	60 - 146	1.02	20
Lead	0.520220	0.0050	0.0047	0.500000	ND	104	58 - 146	0.849	20
Molybdenum	0.529144	0.0050	0.0030	0.500000	ND	106	68 - 132	0.0569	20
Nickel	0.528984	0.0050	0.0046	0.500000	ND	106	64 - 135	1.24	20
Selenium	0.531036	0.010	0.0093	0.500000	ND	106	57 - 146	2.87	20
Silver	0.222336	0.0030	0.0024	0.250000	ND	88.9	47 - 151	1.04	20
Thallium	0.506217	0.015	0.0085	0.500000	ND	101	59 - 133	0.298	20
Vanadium	0.503097	0.0030	0.0022	0.500000	ND	101	70 - 127	1.40	20
Zinc	0.548232	0.025	0.0057	0.500000	0.009051	108	53 - 144	0.639	20



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Reported : 03/14/2022

### Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD Limit	Notes
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**Batch B2C1139 - EPA 245.1/7470\_W**

Blank (B2C1139-BLK1)							Prepared: 3/14/2022 Analyzed: 3/14/2022		
Mercury	ND	0.20	0.05						
LCS (B2C1139-BS1)							Prepared: 3/14/2022 Analyzed: 3/14/2022		
Mercury	5.14376	0.20	0.05	5.00000		103	80 - 120		
Matrix Spike (B2C1139-MS1)							Prepared: 3/14/2022 Analyzed: 3/14/2022		
Mercury	5.14296	0.20	0.05	5.00000	0.284816	97.2	70 - 130		
Matrix Spike Dup (B2C1139-MSD1)							Prepared: 3/14/2022 Analyzed: 3/14/2022		
Mercury	5.15064	0.20	0.05	5.00000	0.284816	97.3	70 - 130	0.149	20
Post Spike (B2C1139-PS1)							Prepared: 3/14/2022 Analyzed: 3/14/2022		
Mercury	2.56537			2.50000	0.142408	96.9	85 - 115		



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Reported : 03/14/2022

### Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1119 - GCSEMI\_DRO\_W

##### Blank (B2C1119-BLK1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

C13-C22	ND	0.20	0.20
C23-C32	ND	0.20	0.20

Surrogate: <i>p</i> -Terphenyl	0.06666			8.00000E-2		83.3		32 - 169	
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##### LCS (B2C1119-BS1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

DRO	1.00134	0.20	0.20	1.00000		100		45 - 161	
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Surrogate: <i>p</i> -Terphenyl	0.07490			8.00000E-2		93.6		32 - 169	
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##### LCS Dup (B2C1119-BSD1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

DRO	1.08096	0.20	0.20	1.00000		108		45 - 161	7.65	20
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Surrogate: <i>p</i> -Terphenyl	0.07870			8.00000E-2		98.4		32 - 169	
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Report To : Julian Grochocki  
Reported : 03/14/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1120 - GCSEMI\_PCB/PEST\_W**
**Blank (B2C1120-BLK1)**

Prepared: 3/13/2022 Analyzed: 3/14/2022

4,4'-DDD	ND	0.05	0.003							
4,4'-DDD [2C]	ND	0.05	0.003							
4,4'-DDE	ND	0.05	0.004							
4,4'-DDE [2C]	ND	0.05	0.004							
4,4'-DDT	ND	0.05	0.004							
4,4'-DDT [2C]	ND	0.05	0.004							
Aldrin	ND	0.02	0.003							
Aldrin [2C]	ND	0.02	0.003							
alpha-BHC	ND	0.02	0.009							
alpha-BHC [2C]	ND	0.02	0.009							
alpha-Chlordane	ND	0.02	0.003							
alpha-Chlordane [2C]	ND	0.02	0.003							
beta-BHC	ND	0.02	0.007							
beta-BHC [2C]	ND	0.02	0.007							
Chlordane	ND	0.25	0.03							
Chlordane [2C]	ND	0.25	0.03							
delta-BHC	ND	0.02	0.005							
delta-BHC [2C]	ND	0.02	0.005							
Dieldrin	ND	0.05	0.002							
Dieldrin [2C]	ND	0.05	0.002							
Endosulfan I	ND	0.02	0.003							
Endosulfan I [2C]	ND	0.02	0.003							
Endosulfan II	ND	0.05	0.004							
Endosulfan II [2C]	ND	0.05	0.004							
Endosulfan sulfate	ND	0.05	0.002							
Endosulfan Sulfate [2C]	ND	0.05	0.002							
Endrin	ND	0.05	0.004							
Endrin [2C]	ND	0.05	0.004							
Endrin aldehyde	ND	0.05	0.002							
Endrin aldehyde [2C]	ND	0.05	0.002							
Endrin ketone	ND	0.05	0.003							
Endrin ketone [2C]	ND	0.05	0.003							
gamma-BHC	ND	0.02	0.005							
gamma-BHC [2C]	ND	0.02	0.005							
gamma-Chlordane	ND	0.02	0.001							
gamma-Chlordane [2C]	ND	0.02	0.001							
Heptachlor	ND	0.02	0.01							
Heptachlor [2C]	ND	0.02	0.01							
Heptachlor epoxide	ND	0.02	0.003							
Heptachlor epoxide [2C]	ND	0.02	0.003							
Methoxychlor	ND	0.25	0.005							
Methoxychlor [2C]	ND	0.25	0.005							
Toxaphene	ND	2.5	0.34							
Toxaphene [2C]	ND	2.5	0.34							



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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1120 - GCSEMI\_PCB/PEST\_W (continued)

##### Blank (B2C1120-BLK1) - Continued

Prepared: 3/13/2022 Analyzed: 3/14/2022

Surrogate: Decachlorobiphenyl	0.2458		0.500000	49.2	18 - 108
Surrogate: Decachlorobiphenyl [2C]	0.2116		0.500000	42.3	25 - 103
Surrogate: Tetrachloro-m-xylene	0.2340		0.500000	46.8	23 - 108
Surrogate: Tetrachloro-m-xylene [2C]	0.2427		0.500000	48.5	21 - 105

##### LCS (B2C1120-BS1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

4,4'-DDD	0.329685	0.05	0.003	0.500000	65.9	53 - 116			
4,4'-DDD [2C]	0.316745	0.05	0.003	0.500000	63.3	45 - 133			
4,4'-DDE	0.207530	0.05	0.004	0.500000	41.5	45 - 122			L2
4,4'-DDE [2C]	0.248370	0.05	0.004	0.500000	49.7	42 - 129			
4,4'-DDT	0.123150	0.05	0.004	0.500000	24.6	18 - 134			
4,4'-DDT [2C]	0.126870	0.05	0.004	0.500000	25.4	14 - 142			
Aldrin	0.231035	0.02	0.003	0.500000	46.2	44 - 118			
Aldrin [2C]	0.234980	0.02	0.003	0.500000	47.0	48 - 121			L2
alpha-BHC	0.236455	0.02	0.009	0.500000	47.3	47 - 107			
alpha-BHC [2C]	0.236095	0.02	0.009	0.500000	47.2	50 - 111			L2
alpha-Chlordane	0.256705	0.02	0.003	0.500000	51.3	48 - 117			
alpha-Chlordane [2C]	0.270300	0.02	0.003	0.500000	54.1	46 - 122			
beta-BHC	0.218805	0.02	0.007	0.500000	43.8	52 - 113			L2
beta-BHC [2C]	0.228530	0.02	0.007	0.500000	45.7	49 - 121			L2
delta-BHC	0.248060	0.02	0.005	0.500000	49.6	38 - 105			
delta-BHC [2C]	0.247175	0.02	0.005	0.500000	49.4	48 - 97			
Dieldrin	0.246360	0.05	0.002	0.500000	49.3	49 - 115			
Dieldrin [2C]	0.248985	0.05	0.002	0.500000	49.8	47 - 118			
Endosulfan I	0.234390	0.02	0.003	0.500000	46.9	45 - 108			
Endosulfan I [2C]	0.227615	0.02	0.003	0.500000	45.5	47 - 108			L2
Endosulfan II	0.250200	0.05	0.004	0.500000	50.0	53 - 118			L2
Endosulfan II [2C]	0.253520	0.05	0.004	0.500000	50.7	48 - 122			
Endosulfan sulfate	0.232030	0.05	0.002	0.500000	46.4	51 - 106			L2
Endosulfan Sulfate [2C]	0.226680	0.05	0.002	0.500000	45.3	47 - 110			L2
Endrin	0.261110	0.05	0.004	0.500000	52.2	51 - 127			
Endrin [2C]	0.269180	0.05	0.004	0.500000	53.8	61 - 126			L2
Endrin aldehyde	0.256730	0.05	0.002	0.500000	51.3	54 - 112			
Endrin aldehyde [2C]	0.276165	0.05	0.002	0.500000	55.2	45 - 121			
Endrin ketone	0.207085	0.05	0.003	0.500000	41.4	46 - 111			L2
Endrin ketone [2C]	0.219000	0.05	0.003	0.500000	43.8	37 - 122			
gamma-BHC	0.241505	0.02	0.005	0.500000	48.3	49 - 111			L2
gamma-BHC [2C]	0.248165	0.02	0.005	0.500000	49.6	46 - 120			
gamma-Chlordane	0.220770	0.02	0.001	0.500000	44.2	48 - 115			L2
gamma-Chlordane [2C]	0.230155	0.02	0.001	0.500000	46.0	38 - 135			
Heptachlor	0.225910	0.02	0.01	0.500000	45.2	50 - 113			L2
Heptachlor [2C]	0.237510	0.02	0.01	0.500000	47.5	47 - 123			
Heptachlor epoxide	0.233755	0.02	0.003	0.500000	46.8	47 - 110			L2
Heptachlor epoxide [2C]	0.242680	0.02	0.003	0.500000	48.5	45 - 114			
Methoxychlor	0.154005	0.25	0.005	0.500000	30.8	47 - 123			L2



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1120 - GCSEMI\_PCB/PEST\_W (continued)**

**LCS (B2C1120-BS1) - Continued** Prepared: 3/13/2022 Analyzed: 3/14/2022

Methoxychlor [2C]	0.165675	0.25	0.005	0.500000	33.1	4 - 178				
Surrogate: Decachlorobiphenyl	0.2295			0.500000	45.9	18 - 108				
Surrogate: Decachlorobiphenyl [2C]	0.2038			0.500000	40.8	25 - 103				
Surrogate: Tetrachloro-m-xylene	0.2269			0.500000	45.4	23 - 108				
Surrogate: Tetrachloro-m-xylene [2C]	0.2377			0.500000	47.5	21 - 105				

**LCS Dup (B2C1120-BSD1)**

Prepared: 3/13/2022 Analyzed: 3/14/2022

4,4'-DDD	0.292830	0.05	0.003	0.500000	58.6	53 - 116	11.8	20		
4,4'-DDD [2C]	0.280065	0.05	0.003	0.500000	56.0	45 - 133	12.3	20		
4,4'-DDE	0.202315	0.05	0.004	0.500000	40.5	45 - 122	2.54	20	L2	
4,4'-DDE [2C]	0.218365	0.05	0.004	0.500000	43.7	42 - 129	12.9	20		
4,4'-DDT	0.105480	0.05	0.004	0.500000	21.1	18 - 134	15.5	20		
4,4'-DDT [2C]	0.107740	0.05	0.004	0.500000	21.5	14 - 142	16.3	20		
Aldrin	0.203485	0.02	0.003	0.500000	40.7	44 - 118	12.7	20	L2	
Aldrin [2C]	0.206860	0.02	0.003	0.500000	41.4	48 - 121	12.7	20	L2	
alpha-BHC	0.198425	0.02	0.009	0.500000	39.7	47 - 107	17.5	20	L2	
alpha-BHC [2C]	0.197540	0.02	0.009	0.500000	39.5	50 - 111	17.8	20	L2	
alpha-Chlordane	0.224945	0.02	0.003	0.500000	45.0	48 - 117	13.2	20	L2	
alpha-Chlordane [2C]	0.237420	0.02	0.003	0.500000	47.5	46 - 122	13.0	20		
beta-BHC	0.186520	0.02	0.007	0.500000	37.3	52 - 113	15.9	20	L2	
beta-BHC [2C]	0.194690	0.02	0.007	0.500000	38.9	49 - 121	16.0	20	L2	
delta-BHC	0.210005	0.02	0.005	0.500000	42.0	38 - 105	16.6	20		
delta-BHC [2C]	0.207725	0.02	0.005	0.500000	41.5	48 - 97	17.3	20	L2	
Dieldrin	0.216615	0.05	0.002	0.500000	43.3	49 - 115	12.8	20	L2	
Dieldrin [2C]	0.216120	0.05	0.002	0.500000	43.2	47 - 118	14.1	20	L2	
Endosulfan I	0.202635	0.02	0.003	0.500000	40.5	45 - 108	14.5	20	L2	
Endosulfan I [2C]	0.196840	0.02	0.003	0.500000	39.4	47 - 108	14.5	20	L2	
Endosulfan II	0.220370	0.05	0.004	0.500000	44.1	53 - 118	12.7	20	L2	
Endosulfan II [2C]	0.221065	0.05	0.004	0.500000	44.2	48 - 122	13.7	20	L2	
Endosulfan sulfate	0.197370	0.05	0.002	0.500000	39.5	51 - 106	16.1	20	L2	
Endosulfan Sulfate [2C]	0.186360	0.05	0.002	0.500000	37.3	47 - 110	19.5	20	L2	
Endrin	0.226285	0.05	0.004	0.500000	45.3	51 - 127	14.3	20	L2	
Endrin [2C]	0.227580	0.05	0.004	0.500000	45.5	61 - 126	16.7	20	L2	
Endrin aldehyde	0.208690	0.05	0.002	0.500000	41.7	54 - 112	20.6	20	L2, R	
Endrin aldehyde [2C]	0.214210	0.05	0.002	0.500000	42.8	45 - 121	25.3	20	L2, R	
Endrin ketone	0.174520	0.05	0.003	0.500000	34.9	46 - 111	17.1	20	L2	
Endrin ketone [2C]	0.187515	0.05	0.003	0.500000	37.5	37 - 122	15.5	20		
gamma-BHC	0.203085	0.02	0.005	0.500000	40.6	49 - 111	17.3	20	L2	
gamma-BHC [2C]	0.209160	0.02	0.005	0.500000	41.8	46 - 120	17.1	20	L2	
gamma-Chlordane	0.184220	0.02	0.001	0.500000	36.8	48 - 115	18.0	20	L2	
gamma-Chlordane [2C]	0.199510	0.02	0.001	0.500000	39.9	38 - 135	14.3	20		
Heptachlor	0.196205	0.02	0.01	0.500000	39.2	50 - 113	14.1	20	L2	
Heptachlor [2C]	0.204560	0.02	0.01	0.500000	40.9	47 - 123	14.9	20	L2	
Heptachlor epoxide	0.203335	0.02	0.003	0.500000	40.7	47 - 110	13.9	20	L2	
Heptachlor epoxide [2C]	0.208340	0.02	0.003	0.500000	41.7	45 - 114	15.2	20	L2	



## Certificate of Analysis

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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1120 - GCSEMI\_PCB/PEST\_W (continued)

##### LCS Dup (B2C1120-BSD1) - Continued

Prepared: 3/13/2022 Analyzed: 3/14/2022

Methoxychlor	0.136315	0.25	0.005	0.500000		27.3	47 - 123	12.2	20	L2
Methoxychlor [2C]	0.140090	0.25	0.005	0.500000		28.0	4 - 178	16.7	20	
Surrogate: Decachlorobiphenyl	0.2040			0.500000		40.8	18 - 108			
Surrogate: Decachlorobiphenyl [2C]	0.1816			0.500000		36.3	25 - 103			
Surrogate: Tetrachloro-m-xylene	0.1936			0.500000		38.7	23 - 108			
Surrogate: Tetrachloro-m-xylene [2C]	0.2052			0.500000		41.0	21 - 105			



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### Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1121 - GCSEMI\_PCB/PEST\_W

##### Blank (B2C1121-BLK1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

Aroclor 1016	ND	0.50	0.06							
Aroclor 1221	ND	1.0	0.06							
Aroclor 1232	ND	0.50	0.06							
Aroclor 1242	ND	0.50	0.06							
Aroclor 1248	ND	0.50	0.06							
Aroclor 1254	ND	0.50	0.06							
Aroclor 1260	ND	0.50	0.06							

Surrogate: Decachlorobiphenyl	0.2661	0.500000	53.2	18 - 108
Surrogate: Tetrachloro-m-xylene	0.2834	0.500000	56.7	23 - 108

##### LCS (B2C1121-BS1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

Aroclor 1016	3.29348	0.50	0.06	5.00000	65.9	48 - 100
Aroclor 1260	3.26170	0.50	0.06	5.00000	65.2	42 - 112
Surrogate: Decachlorobiphenyl	0.2842	0.500000	56.8	18 - 108		
Surrogate: Tetrachloro-m-xylene	0.3098	0.500000	62.0	23 - 108		

##### LCS Dup (B2C1121-BSD1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

Aroclor 1016	3.16685	0.50	0.06	5.00000	63.3	48 - 100	3.92	20
Aroclor 1260	3.42032	0.50	0.06	5.00000	68.4	42 - 112	4.75	20
Surrogate: Decachlorobiphenyl	0.2973	0.500000	59.5	18 - 108				
Surrogate: Tetrachloro-m-xylene	0.3080	0.500000	61.6	23 - 108				



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### Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1080 - MSVOA\_LL\_W**
**Blank (B2C1080-BLK1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,1,1,2-Tetrachloroethane	ND	0.50	0.11
1,1,1-Trichloroethane	ND	0.50	0.21
1,1,2,2-Tetrachloroethane	ND	0.50	0.36
1,1,2-Trichloroethane	ND	0.50	0.25
1,1-Dichloroethane	ND	0.50	0.09
1,1-Dichloroethene	ND	0.50	0.13
1,1-Dichloropropene	ND	0.50	0.13
1,2,3-Trichloropropane	ND	0.50	0.39
1,2,3-Trichlorobenzene	ND	0.50	0.18
1,2,4-Trichlorobenzene	ND	0.50	0.16
1,2,4-Trimethylbenzene	ND	0.50	0.14
1,2-Dibromo-3-chloropropane	ND	0.50	0.41
1,2-Dibromoethane	ND	0.50	0.24
1,2-Dichlorobenzene	ND	0.50	0.20
1,2-Dichloroethane	ND	0.50	0.20
1,2-Dichloropropane	ND	0.50	0.15
1,3,5-Trimethylbenzene	ND	0.50	0.13
1,3-Dichlorobenzene	ND	0.50	0.16
1,3-Dichloropropane	ND	0.50	0.21
1,4-Dichlorobenzene	ND	0.50	0.17
2,2-Dichloropropane	ND	0.50	0.38
2-Butanone	ND	10	4.5
2-Chlorotoluene	ND	0.50	0.11
4-Chlorotoluene	ND	0.50	0.12
4-Isopropyltoluene	ND	0.50	0.11
Benzene	ND	0.50	0.13
Bromobenzene	ND	0.50	0.21
Bromochloromethane	ND	0.50	0.16
Bromodichloromethane	ND	0.50	0.14
Bromoform	ND	0.50	0.20
Bromomethane	ND	0.50	0.40
Carbon disulfide	ND	1.0	0.07
Carbon tetrachloride	ND	0.50	0.09
Chlorobenzene	ND	0.50	0.13
Chloroethane	ND	0.50	0.15
Chloroform	ND	0.50	0.11
Chloromethane	ND	0.50	0.12
cis-1,2-Dichloroethene	ND	0.50	0.14
cis-1,3-Dichloropropene	ND	0.50	0.13
Di-isopropyl ether	ND	0.50	0.15
Dibromochloromethane	ND	0.50	0.16
Dibromomethane	ND	0.50	0.19
Dichlorodifluoromethane	ND	0.50	0.18
Ethyl Acetate	ND	10	8.7
Ethyl Ether	ND	10	2.0



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**
**Blank (B2C1080-BLK1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Ethyl tert-butyl ether	ND	0.50	0.21
Ethylbenzene	ND	0.50	0.13
Freon-113	ND	0.50	0.13
Hexachlorobutadiene	ND	0.50	0.15
Isopropylbenzene	ND	0.50	0.10
m,p-Xylene	ND	1.0	0.19
Methylene chloride	ND	1.0	0.71
MTBE	ND	0.50	0.26
n-Butylbenzene	ND	0.50	0.11
n-Propylbenzene	ND	0.50	0.10
Naphthalene	ND	0.50	0.41
o-Xylene	ND	0.50	0.13
sec-Butylbenzene	ND	0.50	0.09
Styrene	ND	0.50	0.13
tert-Amyl methyl ether	ND	0.50	0.41
tert-Butanol	ND	10	2.4
tert-Butylbenzene	ND	0.50	0.09
Tetrachloroethene	ND	0.50	0.10
Toluene	ND	0.50	0.12
trans-1,2-Dichloroethene	ND	0.50	0.09
trans-1,3-Dichloropropene	ND	0.50	0.23
Trichloroethene	ND	0.50	0.10
Trichlorofluoromethane	ND	0.50	0.23
Vinyl acetate	ND	10	1.7
Vinyl chloride	ND	0.50	0.13

Surrogate: 1,2-Dichloroethane-d4	24.14	25.0000	96.6	64 - 155
Surrogate: 4-Bromofluorobenzene	24.71	25.0000	98.8	73 - 124
Surrogate: Dibromofluoromethane	25.19	25.0000	101	78 - 129
Surrogate: Toluene-d8	22.52	25.0000	90.1	84 - 117

**LCS (B2C1080-BS1)**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,1,1,2-Tetrachloroethane	19.2300	0.50	0.11	20.0000	96.2	79 - 116
1,1,1-Trichloroethane	19.8800	0.50	0.21	20.0000	99.4	73 - 130
1,1,2,2-Tetrachloroethane	19.2500	0.50	0.36	20.0000	96.2	71 - 122
1,1,2-Trichloroethane	17.2800	0.50	0.25	20.0000	86.4	70 - 124
1,1-Dichloroethane	21.8900	0.50	0.09	20.0000	109	69 - 128
1,1-Dichloroethene	21.8900	0.50	0.13	20.0000	109	65 - 137
1,1-Dichloropropene	19.1700	0.50	0.13	20.0000	95.8	74 - 129
1,2,3-Trichloropropane	18.1300	0.50	0.39	20.0000	90.6	74 - 123
1,2,3-Trichlorobenzene	13.9000	0.50	0.18	20.0000	69.5	59 - 130
1,2,4-Trichlorobenzene	16.2200	0.50	0.16	20.0000	81.1	65 - 125
1,2,4-Trimethylbenzene	20.1100	0.50	0.14	20.0000	101	88 - 124
1,2-Dibromo-3-chloropropane	16.1200	0.50	0.41	20.0000	80.6	61 - 127
1,2-Dibromoethane	17.9500	0.50	0.24	20.0000	89.8	72 - 125
1,2-Dichlorobenzene	19.2400	0.50	0.20	20.0000	96.2	84 - 113



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### **Batch B2C1080 - MSVOA\_LL\_W (continued)**

##### **LCS (B2C1080-BS1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

1,2-Dichloroethane	19.3300	0.50	0.20	20.0000		96.6	68 - 130			
1,2-Dichloropropane	22.0900	0.50	0.15	20.0000		110	77 - 121			
1,3,5-Trimethylbenzene	19.7200	0.50	0.13	20.0000		98.6	83 - 124			
1,3-Dichlorobenzene	18.2800	0.50	0.16	20.0000		91.4	83 - 112			
1,3-Dichloropropane	20.6200	0.50	0.21	20.0000		103	77 - 119			
1,4-Dichlorobenzene	18.9700	0.50	0.17	20.0000		94.8	79 - 115			
2,2-Dichloropropane	20.3200	0.50	0.38	20.0000		102	67 - 149			
2-Butanone	187.300	10	4.5	200.000		93.6	30 - 210			
2-Chlorotoluene	19.1900	0.50	0.11	20.0000		96.0	81 - 119			
4-Chlorotoluene	19.5000	0.50	0.12	20.0000		97.5	86 - 117			
4-Isopropyltoluene	18.8800	0.50	0.11	20.0000		94.4	82 - 131			
Benzene	20.4300	0.50	0.13	20.0000		102	75 - 124			
Bromobenzene	18.8100	0.50	0.21	20.0000		94.0	82 - 108			
Bromo(chloromethane	19.4700	0.50	0.16	20.0000		97.4	73 - 125			
Bromodichloromethane	19.9800	0.50	0.14	20.0000		99.9	80 - 120			
Bromoform	20.5900	0.50	0.20	20.0000		103	70 - 123			
Bromomethane	13.9400	0.50	0.40	20.0000		69.7	44 - 151			
Carbon disulfide	21.8300	1.0	0.07	20.0000		109	63 - 150			
Carbon tetrachloride	16.9000	0.50	0.09	20.0000		84.5	62 - 140			
Chlorobenzene	19.5600	0.50	0.13	20.0000		97.8	80 - 112			
Chloroethane	22.9200	0.50	0.15	20.0000		115	42 - 167			
Chloroform	18.7900	0.50	0.11	20.0000		94.0	77 - 122			
Chloromethane	26.8200	0.50	0.12	20.0000		134	33 - 153			
cis-1,2-Dichloroethene	16.5800	0.50	0.14	20.0000		82.9	75 - 121			
cis-1,3-Dichloropropene	18.7600	0.50	0.13	20.0000		93.8	73 - 127			
Di-isopropyl ether	23.5100	0.50	0.15	20.0000		118	64 - 144			
Dibromochloromethane	20.6000	0.50	0.16	20.0000		103	77 - 122			
Dibromomethane	20.8200	0.50	0.19	20.0000		104	75 - 121			
Dichlorodifluoromethane	14.8700	0.50	0.18	20.0000		74.4	0 - 171			
Ethyl Acetate	ND	10	8.7	200.000		NR	54 - 153			MO
Ethyl Ether	212.960	10	2.0	200.000		106	65 - 139			
Ethyl tert-butyl ether	19.6300	0.50	0.21	20.0000		98.2	54 - 141			
Ethylbenzene	20.9100	0.50	0.13	20.0000		105	82 - 119			
Freon-113	24.5000	0.50	0.13	20.0000		122	49 - 156			
Hexachlorobutadiene	16.8600	0.50	0.15	20.0000		84.3	71 - 131			
Isopropylbenzene	20.5400	0.50	0.10	20.0000		103	75 - 126			
m,p-Xylene	44.0500	1.0	0.19	40.0000		110	86 - 119			
Methylene chloride	22.6800	1.0	0.71	20.0000		113	76 - 125			
MTBE	20.8000	0.50	0.26	20.0000		104	70 - 121			
n-Butylbenzene	20.0000	0.50	0.11	20.0000		100	81 - 125			
n-Propylbenzene	20.2800	0.50	0.10	20.0000		101	78 - 130			
Naphthalene	14.0200	0.50	0.41	20.0000		70.1	47 - 128			
o-Xylene	23.7900	0.50	0.13	20.0000		119	85 - 119			
sec-Butylbenzene	20.0200	0.50	0.09	20.0000		100	78 - 130			
Styrene	24.5500	0.50	0.13	20.0000		123	62 - 148			



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**

LCS (B2C1080-BS1) - Continued							Prepared: 3/11/2022 Analyzed: 3/11/2022			
tert-Amyl methyl ether	21.6900	0.50	0.41	20.0000		108	55 - 131			
tert-Butanol	109.250	10	2.4	100.000		109	45 - 153			
tert-Butylbenzene	18.4300	0.50	0.09	20.0000		92.2	77 - 125			
Tetrachloroethene	20.3600	0.50	0.10	20.0000		102	73 - 120			
Toluene	18.2000	0.50	0.12	20.0000		91.0	79 - 119			
trans-1,2-Dichloroethene	28.3400	0.50	0.09	20.0000		142	70 - 129			L5
trans-1,3-Dichloropropene	18.1000	0.50	0.23	20.0000		90.5	67 - 137			
Trichloroethene	19.8400	0.50	0.10	20.0000		99.2	73 - 117			
Trichlorofluoromethane	21.1200	0.50	0.23	20.0000		106	59 - 135			
Vinyl acetate	12.8900	10	1.7	200.000		6.44	67 - 155			MO
Vinyl chloride	22.6700	0.50	0.13	20.0000		113	58 - 132			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.10			25.0000		100	64 - 155			
<i>Surrogate: 4-Bromofluorobenzene</i>	27.53			25.0000		110	73 - 124			
<i>Surrogate: Dibromofluoromethane</i>	24.50			25.0000		98.0	78 - 129			
<i>Surrogate: Toluene-d8</i>	22.34			25.0000		89.4	84 - 117			

LCS Dup (B2C1080-BSD1)							Prepared: 3/11/2022 Analyzed: 3/11/2022			
1,1,1,2-Tetrachloroethane	18.8200	0.50	0.11	20.0000		94.1	79 - 116	2.16	20	
1,1,1-Trichloroethane	17.8300	0.50	0.21	20.0000		89.2	73 - 130	10.9	20	
1,1,2,2-Tetrachloroethane	19.0700	0.50	0.36	20.0000		95.4	71 - 122	0.939	20	
1,1,2-Trichloroethane	18.9700	0.50	0.25	20.0000		94.8	70 - 124	9.32	20	
1,1-Dichloroethane	19.4100	0.50	0.09	20.0000		97.0	69 - 128	12.0	20	
1,1-Dichloroethene	19.0900	0.50	0.13	20.0000		95.4	65 - 137	13.7	20	
1,1-Dichloropropene	17.2900	0.50	0.13	20.0000		86.4	74 - 129	10.3	20	
1,2,3-Trichloropropane	19.0400	0.50	0.39	20.0000		95.2	74 - 123	4.90	20	
1,2,3-Trichlorobenzene	15.1300	0.50	0.18	20.0000		75.6	59 - 130	8.47	20	
1,2,4-Trichlorobenzene	16.4400	0.50	0.16	20.0000		82.2	65 - 125	1.35	20	
1,2,4-Trimethylbenzene	19.9200	0.50	0.14	20.0000		99.6	88 - 124	0.949	20	
1,2-Dibromo-3-chloropropane	16.9600	0.50	0.41	20.0000		84.8	61 - 127	5.08	20	
1,2-Dibromoethane	18.6800	0.50	0.24	20.0000		93.4	72 - 125	3.99	20	
1,2-Dichlorobenzene	19.0100	0.50	0.20	20.0000		95.0	84 - 113	1.20	20	
1,2-Dichloroethane	17.7900	0.50	0.20	20.0000		89.0	68 - 130	8.30	20	
1,2-Dichloropropane	20.3900	0.50	0.15	20.0000		102	77 - 121	8.00	20	
1,3,5-Trimethylbenzene	18.9100	0.50	0.13	20.0000		94.6	83 - 124	4.19	20	
1,3-Dichlorobenzene	18.9900	0.50	0.16	20.0000		95.0	83 - 112	3.81	20	
1,3-Dichloropropane	21.1100	0.50	0.21	20.0000		106	77 - 119	2.35	20	
1,4-Dichlorobenzene	18.7900	0.50	0.17	20.0000		94.0	79 - 115	0.953	20	
2,2-Dichloropropane	18.4400	0.50	0.38	20.0000		92.2	67 - 149	9.70	20	
2-Butanone	179.630	10	4.5	200.000		89.8	30 - 210	4.18	20	
2-Chlorotoluene	18.8700	0.50	0.11	20.0000		94.4	81 - 119	1.68	20	
4-Chlorotoluene	18.7000	0.50	0.12	20.0000		93.5	86 - 117	4.19	20	
4-Isopropyltoluene	19.4300	0.50	0.11	20.0000		97.2	82 - 131	2.87	20	
Benzene	19.0200	0.50	0.13	20.0000		95.1	75 - 124	7.15	20	
Bromobenzene	19.2700	0.50	0.21	20.0000		96.4	82 - 108	2.42	20	
Bromochloromethane	18.6800	0.50	0.16	20.0000		93.4	73 - 125	4.14	20	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
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Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1080 - MSVOA\_LL\_W (continued)**
**LCS Dup (B2C1080-BSD1) - Continued**

Prepared: 3/11/2022 Analyzed: 3/11/2022

Bromodichloromethane	18.4500	0.50	0.14	20.0000	92.2	80 - 120	7.96	20		
Bromoform	17.7800	0.50	0.20	20.0000	88.9	70 - 123	14.6	20		
Bromomethane	13.5200	0.50	0.40	20.0000	67.6	44 - 151	3.06	20		
Carbon disulfide	19.4100	1.0	0.07	20.0000	97.0	63 - 150	11.7	20		
Carbon tetrachloride	15.5800	0.50	0.09	20.0000	77.9	62 - 140	8.13	20		
Chlorobenzene	18.7500	0.50	0.13	20.0000	93.8	80 - 112	4.23	20		
Chloroethane	20.9100	0.50	0.15	20.0000	105	42 - 167	9.17	20		
Chloroform	17.3000	0.50	0.11	20.0000	86.5	77 - 122	8.26	20		
Chloromethane	21.1700	0.50	0.12	20.0000	106	33 - 153	23.5	20	R	
cis-1,2-Dichloroethene	14.8900	0.50	0.14	20.0000	74.4	75 - 121	10.7	20	L3	
cis-1,3-Dichloropropene	18.6500	0.50	0.13	20.0000	93.2	73 - 127	0.588	20		
Di-isopropyl ether	20.9700	0.50	0.15	20.0000	105	64 - 144	11.4	20		
Dibromochloromethane	19.7200	0.50	0.16	20.0000	98.6	77 - 122	4.37	20		
Dibromomethane	18.9700	0.50	0.19	20.0000	94.8	75 - 121	9.30	20		
Dichlorodifluoromethane	13.3900	0.50	0.18	20.0000	67.0	0 - 171	10.5	20		
Ethyl Acetate	ND	10	8.7	200.000	NR	54 - 153	NR	20	MO	
Ethyl Ether	202.160	10	2.0	200.000	101	65 - 139	5.20	20		
Ethyl tert-butyl ether	18.3400	0.50	0.21	20.0000	91.7	54 - 141	6.79	20		
Ethylbenzene	19.4300	0.50	0.13	20.0000	97.2	82 - 119	7.34	20		
Freon-113	20.9200	0.50	0.13	20.0000	105	49 - 156	15.8	20		
Hexachlorobutadiene	17.1600	0.50	0.15	20.0000	85.8	71 - 131	1.76	20		
Isopropylbenzene	21.0700	0.50	0.10	20.0000	105	75 - 126	2.55	20		
m,p-Xylene	38.3700	1.0	0.19	40.0000	95.9	86 - 119	13.8	20		
Methylene chloride	21.0800	1.0	0.71	20.0000	105	76 - 125	7.31	20		
MTBE	19.1800	0.50	0.26	20.0000	95.9	70 - 121	8.10	20		
n-Butylbenzene	19.3200	0.50	0.11	20.0000	96.6	81 - 125	3.46	20		
n-Propylbenzene	19.4500	0.50	0.10	20.0000	97.2	78 - 130	4.18	20		
Naphthalene	15.0300	0.50	0.41	20.0000	75.2	47 - 128	6.95	20		
o-Xylene	19.8400	0.50	0.13	20.0000	99.2	85 - 119	18.1	20		
sec-Butylbenzene	20.6000	0.50	0.09	20.0000	103	78 - 130	2.86	20		
Styrene	19.1700	0.50	0.13	20.0000	95.8	62 - 148	24.6	20	R	
tert-Amyl methyl ether	20.5000	0.50	0.41	20.0000	102	55 - 131	5.64	20		
tert-Butanol	97.5900	10	2.4	100.000	97.6	45 - 153	11.3	20		
tert-Butylbenzene	19.4500	0.50	0.09	20.0000	97.2	77 - 125	5.39	20		
Tetrachloroethene	19.8600	0.50	0.10	20.0000	99.3	73 - 120	2.49	20		
Toluene	18.4200	0.50	0.12	20.0000	92.1	79 - 119	1.20	20		
trans-1,2-Dichloroethene	25.5600	0.50	0.09	20.0000	128	70 - 129	10.3	20		
trans-1,3-Dichloropropene	17.8700	0.50	0.23	20.0000	89.4	67 - 137	1.28	20		
Trichloroethene	18.2000	0.50	0.10	20.0000	91.0	73 - 117	8.62	20		
Trichlorofluoromethane	19.1500	0.50	0.23	20.0000	95.8	59 - 135	9.78	20		
Vinyl acetate	11.6800	10	1.7	200.000	5.84	67 - 155	9.85	20	MO	
Vinyl chloride	18.5300	0.50	0.13	20.0000	92.6	58 - 132	20.1	20	R	

Surrogate: 1,2-Dichloroethane-d4 23.72 25.0000 94.9 64 - 155  
 Surrogate: 4-Bromofluorobenzene 24.76 25.0000 99.0 73 - 124  
 Surrogate: Dibromofluoromethane 24.09 25.0000 96.4 78 - 129



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1080 - MSVOA\_LL\_W (continued)

##### LCS Dup (B2C1080-BSD1) - Continued

Surrogate: Toluene-d8

23.73

25.0000

Prepared: 3/11/2022 Analyzed: 3/11/2022

94.9 84 - 117



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1122 - MSSEMI\_W

##### Blank (B2C1122-BLK1)

Prepared: 3/13/2022 Analyzed: 3/14/2022

1,2,4-Trichlorobenzene	ND	10	2.3							
1,2-Dichlorobenzene	ND	10	2.0							
1,3-Dichlorobenzene	ND	10	2.0							
1,4-Dichlorobenzene	ND	10	1.9							
2,4,5-Trichlorophenol	ND	10	2.0							
2,4,6-Trichlorophenol	ND	10	1.9							
2,4-Dichlorophenol	ND	10	1.4							
2,4-Dimethylphenol	ND	10	0.83							
2,4-Dinitrophenol	ND	50	3.8							
2,4-Dinitrotoluene	ND	10	2.4							
2,6-Dinitrotoluene	ND	10	1.8							
2-Chloronaphthalene	ND	10	2.2							
2-Chlorophenol	ND	10	1.7							
2-Methylnaphthalene	ND	10	2.8							
2-Methylphenol	ND	10	0.92							
2-Nitroaniline	ND	50	1.2							
2-Nitrophenol	ND	10	1.9							
3,3'-Dichlorobenzidine	ND	20	1.6							
3-Nitroaniline	ND	50	1.1							
4,6-Dinitro-2-methyphenol	ND	50	2.0							
4-Bromophenyl-phenylether	ND	10	2.6							
4-Chloro-3-methylphenol	ND	50	1.0							
4-Chloroaniline	ND	20	0.70							
4-Chlorophenyl-phenylether	ND	10	2.9							
4-Methylphenol	ND	10	0.88							
4-Nitroaniline	ND	20	1.2							
4-Nitrophenol	ND	50	0.51							
Acenaphthene	ND	10	2.1							
Acenaphthylene	ND	10	2.1							
Anthracene	ND	10	2.1							
Benzidine (M)	ND	50	3.4							
Benzo(a)anthracene	ND	10	2.1							
Benzo(a)pyrene	ND	10	1.8							
Benzo(b)fluoranthene	ND	10	2.5							
Benzo(g,h,i)perylene	ND	10	1.8							
Benzo(k)fluoranthene	ND	10	2.8							
Benzoic acid	ND	50	17							
Benzyl alcohol	ND	20	0.60							
bis(2-chloroethoxy)methane	ND	10	1.4							
bis(2-Chloroethyl)ether	ND	10	1.7							
bis(2-chloroisopropyl)ether	ND	10	1.8							
bis(2-ethylhexyl)phthalate	ND	10	1.7							
Butylbenzylphthalate	ND	10	2.6							
Chrysene	ND	10	1.9							
Di-n-butylphthalate	ND	10	1.5							



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1122 - MSSEMI\_W (continued)**
**Blank (B2C1122-BLK1) - Continued**

Prepared: 3/13/2022 Analyzed: 3/14/2022

Di-n-octylphthalate	ND	10	1.8							
Dibenz(a,h)anthracene	ND	10	2.7							
Dibenzofuran	ND	10	2.5							
Diethyl phthalate	ND	10	1.3							
Dimethyl phthalate	ND	10	1.3							
Fluoranthene	ND	10	2.2							
Fluorene	ND	10	2.6							
Hexachlorobenzene	ND	10	3.3							
Hexachlorobutadiene	ND	20	2.7							
Hexachlorocyclopentadiene	ND	10	3.4							
Hexachloroethane	ND	10	1.8							
Indeno(1,2,3-cd)pyrene	ND	10	2.2							
Isophorone	ND	10	1.1							
N-Nitroso-di-n propylamine	ND	10	1.3							
N-Nitrosodiphenylamine	ND	10	1.6							
Naphthalene	ND	10	2.3							
Nitrobenzene	ND	10	1.5							
Pentachlorophenol	ND	50	1.5							
Phenanthrene	ND	10	2.3							
Phenol	ND	10	0.35							
Pyrene	ND	10	2.2							
Pyridine	ND	50	0.55							

Surrogate: 1,2-Dichlorobenzene-d4	85.53		100.000		85.5	21 - 92
Surrogate: 2,4,6-Tribromophenol	108.7		150.000		72.4	24 - 113
Surrogate: 2-Chlorophenol-d4	95.28		150.000		63.5	14 - 86
Surrogate: 2-Fluorobiphenyl	75.68		100.000		75.7	28 - 105
Surrogate: 2-Fluorophenol	51.38		150.000		34.3	0 - 59
Surrogate: 4-Terphenyl-d14	92.99		100.000		93.0	32 - 116
Surrogate: Nitrobenzene-d5	75.57		100.000		75.6	25 - 101
Surrogate: Phenol-d6	33.16		150.000		22.1	0 - 48

**LCS (B2C1122-BS1)**

Prepared: 3/13/2022 Analyzed: 3/14/2022

1,2,4-Trichlorobenzene	75.8600	10	2.3	100.000	75.9	37 - 96
1,2-Dichlorobenzene	68.0900	10	2.0	100.000	68.1	36 - 86
1,3-Dichlorobenzene	65.7300	10	2.0	100.000	65.7	35 - 84
1,4-Dichlorobenzene	66.4300	10	1.9	100.000	66.4	36 - 83
2,4,5-Trichlorophenol	103.820	10	2.0	100.000	104	37 - 107
2,4,6-Trichlorophenol	103.280	10	1.9	100.000	103	39 - 116
2,4-Dichlorophenol	75.0500	10	1.4	100.000	75.0	36 - 110
2,4-Dimethylphenol	73.4500	10	0.83	100.000	73.4	31 - 99
2,4-Dinitrophenol	90.0300	50	3.8	100.000	90.0	0 - 169
2,4-Dinitrotoluene	102.280	10	2.4	100.000	102	46 - 123
2,6-Dinitrotoluene	99.0700	10	1.8	100.000	99.1	46 - 120
2-Chloronaphthalene	83.7600	10	2.2	100.000	83.8	41 - 107
2-Chlorophenol	58.5000	10	1.7	100.000	58.5	24 - 89



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1122 - MSSEMI\_W (continued)**
**LCS (B2C1122-BS1) - Continued**

Prepared: 3/13/2022 Analyzed: 3/14/2022

2-Methylnaphthalene	85.0800	10	2.8	100.000		85.1	40 - 101			
2-Methylphenol	49.5000	10	0.92	100.000		49.5	8 - 79			
2-Nitroaniline	88.6600	50	1.2	100.000		88.7	38 - 128			
2-Nitrophenol	76.5300	10	1.9	100.000		76.5	30 - 103			
3,3'-Dichlorobenzidine	77.6600	20	1.6	100.000		77.7	40 - 126			
3-Nitroaniline	90.6800	50	1.1	100.000		90.7	33 - 117			
4,6-Dinitro-2-methyphenol	111.110	50	2.0	100.000		111	5 - 155			
4-Bromophenyl-phenylether	99.9700	10	2.6	100.000		100	46 - 110			
4-Chloro-3-methylphenol	77.9900	50	1.0	100.000		78.0	29 - 116			
4-Chloroaniline	81.4100	20	0.70	100.000		81.4	28 - 104			
4-Chlorophenyl-phenylether	97.9300	10	2.9	100.000		97.9	45 - 111			
4-Methylphenol	22.8900	10	0.88	50.0000		45.8	13 - 100			
4-Nitroaniline	94.5200	20	1.2	100.000		94.5	38 - 112			
4-Nitrophenol	32.0200	50	0.51	100.000		32.0	6 - 48			
Acenaphthene	88.4300	10	2.1	100.000		88.4	38 - 109			
Acenaphthylene	85.9300	10	2.1	100.000		85.9	38 - 109			
Anthracene	102.240	10	2.1	100.000		102	41 - 109			
Benzidine (M)	34.3700	50	3.4	100.000		34.4	0 - 169			
Benzo(a)anthracene	106.340	10	2.1	100.000		106	39 - 110			
Benzo(a)pyrene	103.670	10	1.8	100.000		104	39 - 112			
Benzo(b)fluoranthene	102.520	10	2.5	100.000		103	37 - 108			
Benzo(g,h,i)perylene	95.3400	10	1.8	100.000		95.3	34 - 117			
Benzo(k)fluoranthene	100.210	10	2.8	100.000		100	39 - 107			
Benzoic acid	47.2200	50	17	100.000		47.2	0 - 149			
Benzyl alcohol	55.4900	20	0.60	100.000		55.5	11 - 91			
bis(2-chloroethoxy)methane	72.4600	10	1.4	100.000		72.5	42 - 98			
bis(2-Chloroethyl)ether	60.7400	10	1.7	100.000		60.7	31 - 93			
bis(2-chloroisopropyl)ether	63.6400	10	1.8	100.000		63.6	38 - 89			
bis(2-ethylhexyl)phthalate	92.1200	10	1.7	100.000		92.1	44 - 118			
Butylbenzylphthalate	91.2000	10	2.6	100.000		91.2	44 - 116			
Chrysene	105.550	10	1.9	100.000		106	41 - 108			
Di-n-butylphthalate	107.400	10	1.5	100.000		107	51 - 110			
Di-n-octylphthalate	98.9700	10	1.8	100.000		99.0	36 - 127			
Dibenz(a,h)anthracene	98.4000	10	2.7	100.000		98.4	35 - 116			
Dibenzofuran	90.3800	10	2.5	100.000		90.4	45 - 107			
Diethyl phthalate	98.5000	10	1.3	100.000		98.5	49 - 111			
Dimethyl phthalate	98.2900	10	1.3	100.000		98.3	48 - 107			
Fluoranthene	108.120	10	2.2	100.000		108	43 - 109			
Fluorene	90.9700	10	2.6	100.000		91.0	37 - 114			
Hexachlorobenzene	87.4800	10	3.3	100.000		87.5	43 - 114			
Hexachlorobutadiene	87.4500	20	2.7	100.000		87.4	34 - 95			
Hexachlorocyclopentadiene	82.1900	10	3.4	100.000		82.2	26 - 120			
Hexachloroethane	69.0400	10	1.8	100.000		69.0	33 - 89			
Indeno(1,2,3-cd)pyrene	99.0300	10	2.2	100.000		99.0	35 - 116			
Isophorone	83.0300	10	1.1	100.000		83.0	40 - 110			



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1122 - MSSEMI\_W (continued)**

LCS (B2C1122-BS1) - Continued							Prepared: 3/13/2022 Analyzed: 3/14/2022			
N-Nitroso-di-n propylamine	78.3600	10	1.3	100.000		78.4	43 - 104			
N-Nitrosodiphenylamine	102.450	10	1.6	100.000		102	48 - 106			
Naphthalene	77.7200	10	2.3	100.000		77.7	33 - 99			
Nitrobenzene	65.3000	10	1.5	100.000		65.3	38 - 107			
Pentachlorophenol	105.070	50	1.5	100.000		105	25 - 130			
Phenanthrene	100.250	10	2.3	100.000		100	44 - 111			
Phenol	19.9000	10	0.35	100.000		19.9	5 - 43			
Pyrene	111.460	10	2.2	100.000		111	42 - 108			L3
Pyridine	41.3900	50	0.55	100.000		41.4	0 - 59			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	70.48			100.000		70.5	21 - 92			
<i>Surrogate: 2,4,6-Tribromophenol</i>	136.1			150.000		90.7	24 - 113			
<i>Surrogate: 2-Chlorophenol-d4</i>	86.59			150.000		57.7	14 - 86			
<i>Surrogate: 2-Fluorobiphenyl</i>	82.43			100.000		82.4	28 - 105			
<i>Surrogate: 2-Fluorophenol</i>	39.24			150.000		26.2	0 - 59			
<i>Surrogate: 4-Terphenyl-d14</i>	105.5			100.000		105	32 - 116			
<i>Surrogate: Nitrobenzene-d5</i>	70.05			100.000		70.0	25 - 101			
<i>Surrogate: Phenol-d6</i>	27.15			150.000		18.1	0 - 48			

**LCS Dup (B2C1122-BSD1)**

LCS Dup (B2C1122-BSD1)							Prepared: 3/13/2022 Analyzed: 3/14/2022			
1,2,4-Trichlorobenzene	79.5400	10	2.3	100.000		79.5	37 - 96	4.74	20	
1,2-Dichlorobenzene	71.0500	10	2.0	100.000		71.0	36 - 86	4.25	20	
1,3-Dichlorobenzene	69.0900	10	2.0	100.000		69.1	35 - 84	4.98	20	
1,4-Dichlorobenzene	69.4900	10	1.9	100.000		69.5	36 - 83	4.50	20	
2,4,5-Trichlorophenol	115.660	10	2.0	100.000		116	37 - 107	10.8	20	L3
2,4,6-Trichlorophenol	108.660	10	1.9	100.000		109	39 - 116	5.08	20	
2,4-Dichlorophenol	82.0500	10	1.4	100.000		82.0	36 - 110	8.91	20	
2,4-Dimethylphenol	75.0100	10	0.83	100.000		75.0	31 - 99	2.10	20	
2,4-Dinitrophenol	105.370	50	3.8	100.000		105	0 - 169	15.7	20	
2,4-Dinitrotoluene	110.730	10	2.4	100.000		111	46 - 123	7.93	20	
2,6-Dinitrotoluene	112.170	10	1.8	100.000		112	46 - 120	12.4	20	
2-Chloronaphthalene	89.7800	10	2.2	100.000		89.8	41 - 107	6.94	20	
2-Chlorophenol	61.2100	10	1.7	100.000		61.2	24 - 89	4.53	20	
2-Methylnaphthalene	89.4300	10	2.8	100.000		89.4	40 - 101	4.99	20	
2-Methylphenol	55.3000	10	0.92	100.000		55.3	8 - 79	11.1	20	
2-Nitroaniline	98.0300	50	1.2	100.000		98.0	38 - 128	10.0	20	
2-Nitrophenol	80.2400	10	1.9	100.000		80.2	30 - 103	4.73	20	
3,3'-Dichlorobenzidine	88.2300	20	1.6	100.000		88.2	40 - 126	12.7	20	
3-Nitroaniline	99.2800	50	1.1	100.000		99.3	33 - 117	9.05	20	
4,6-Dinitro-2-methyphenol	131.170	50	2.0	100.000		131	5 - 155	16.6	20	
4-Bromophenyl-phenylether	114.380	10	2.6	100.000		114	46 - 110	13.4	20	L3
4-Chloro-3-methylphenol	92.3000	50	1.0	100.000		92.3	29 - 116	16.8	20	
4-Chloroaniline	85.1000	20	0.70	100.000		85.1	28 - 104	4.43	20	
4-Chlorophenyl-phenylether	103.540	10	2.9	100.000		104	45 - 111	5.57	20	
4-Methylphenol	25.9900	10	0.88	50.0000		52.0	13 - 100	12.7	20	
4-Nitroaniline	109.180	20	1.2	100.000		109	38 - 112	14.4	20	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1122 - MSSEMI\_W (continued)**
**LCS Dup (B2C1122-BSD1) - Continued**

Prepared: 3/13/2022 Analyzed: 3/14/2022

4-Nitrophenol	37.2600	50	0.51	100.000		37.3	6 - 48	15.1	20	
Acenaphthene	97.6000	10	2.1	100.000		97.6	38 - 109	9.86	20	
Acenaphthylene	94.6200	10	2.1	100.000		94.6	38 - 109	9.63	20	
Anthracene	115.180	10	2.1	100.000		115	41 - 109	11.9	20	L3
Benzidine (M)	46.0400	50	3.4	100.000		46.0	0 - 169	29.0	20	R
Benzo(a)anthracene	118.910	10	2.1	100.000		119	39 - 110	11.2	20	L3
Benzo(a)pyrene	119.040	10	1.8	100.000		119	39 - 112	13.8	20	L3
Benzo(b)fluoranthene	117.180	10	2.5	100.000		117	37 - 108	13.3	20	L3
Benzo(g,h,i)perylene	111.820	10	1.8	100.000		112	34 - 117	15.9	20	
Benzo(k)fluoranthene	116.800	10	2.8	100.000		117	39 - 107	15.3	20	L3
Benzoic acid	51.3500	50	17	100.000		51.4	0 - 149	8.38	20	
Benzyl alcohol	60.7200	20	0.60	100.000		60.7	11 - 91	9.00	20	
bis(2-chloroethoxy)methane	75.9400	10	1.4	100.000		75.9	42 - 98	4.69	20	
bis(2-Chloroethyl)ether	63.3700	10	1.7	100.000		63.4	31 - 93	4.24	20	
bis(2-chloroisopropyl)ether	66.2000	10	1.8	100.000		66.2	38 - 89	3.94	20	
bis(2-ethylhexyl)phthalate	99.3100	10	1.7	100.000		99.3	44 - 118	7.51	20	
Butylbenzylphthalate	103.770	10	2.6	100.000		104	44 - 116	12.9	20	
Chrysene	121.020	10	1.9	100.000		121	41 - 108	13.7	20	L3
Di-n-butylphthalate	113.260	10	1.5	100.000		113	51 - 110	5.31	20	L3
Di-n-octylphthalate	112.810	10	1.8	100.000		113	36 - 127	13.1	20	
Dibenz(a,h)anthracene	112.930	10	2.7	100.000		113	35 - 116	13.8	20	
Dibenzofuran	96.1000	10	2.5	100.000		96.1	45 - 107	6.13	20	
Diethyl phthalate	106.850	10	1.3	100.000		107	49 - 111	8.13	20	
Dimethyl phthalate	107.400	10	1.3	100.000		107	48 - 107	8.86	20	L3
Fluoranthene	121.680	10	2.2	100.000		122	43 - 109	11.8	20	L3
Fluorene	97.2200	10	2.6	100.000		97.2	37 - 114	6.64	20	
Hexachlorobenzene	99.7400	10	3.3	100.000		99.7	43 - 114	13.1	20	
Hexachlorobutadiene	91.1000	20	2.7	100.000		91.1	34 - 95	4.09	20	
Hexachlorocyclopentadiene	87.8800	10	3.4	100.000		87.9	26 - 120	6.69	20	
Hexachloroethane	72.6100	10	1.8	100.000		72.6	33 - 89	5.04	20	
Indeno(1,2,3-cd)pyrene	113.120	10	2.2	100.000		113	35 - 116	13.3	20	
Isophorone	85.7200	10	1.1	100.000		85.7	40 - 110	3.19	20	
N-Nitroso-di-n propylamine	80.1700	10	1.3	100.000		80.2	43 - 104	2.28	20	
N-Nitrosodiphenylamine	117.540	10	1.6	100.000		118	48 - 106	13.7	20	L3
Naphthalene	80.5400	10	2.3	100.000		80.5	33 - 99	3.56	20	
Nitrobenzene	76.3600	10	1.5	100.000		76.4	38 - 107	15.6	20	
Pentachlorophenol	117.510	50	1.5	100.000		118	25 - 130	11.2	20	
Phenanthrene	111.820	10	2.3	100.000		112	44 - 111	10.9	20	L3
Phenol	21.4900	10	0.35	100.000		21.5	5 - 43	7.68	20	
Pyrene	126.480	10	2.2	100.000		126	42 - 108	12.6	20	L3
Pyridine	42.4600	50	0.55	100.000		42.5	0 - 59	2.55	20	

Surrogate: 1,2-Dichlorobenzene-d4	72.00	100.000	72.0	21 - 92
Surrogate: 2,4,6-Tribromophenol	143.7	150.000	95.8	24 - 113
Surrogate: 2-Chlorophenol-d4	87.19	150.000	58.1	14 - 86
Surrogate: 2-Fluorobiphenyl	89.80	100.000	89.8	28 - 105



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis - Santa Fe Springs 721033501  
Report To : Julian Grochocki  
Reported : 03/14/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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#### Batch B2C1122 - MSSEMI\_W (continued)

##### LCS Dup (B2C1122-BSD1) - Continued

Prepared: 3/13/2022 Analyzed: 3/14/2022

Surrogate: 2-Fluorophenol	42.31	150.000	28.2	0 - 59
Surrogate: 4-Terphenyl-d14	112.3	100.000	112	32 - 116
Surrogate: Nitrobenzene-d5	76.91	100.000	76.9	25 - 101
Surrogate: Phenol-d6	29.57	150.000	19.7	0 - 48



**ADVANCED TECHNOLOGY**

**CHAIN OF CUSTODY RECORD**

Page 1 of 1

2200355

Company: Langan Engineering & Environmental Services



April 07, 2022

Julian Grochocki  
Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles, CA 90071  
Tel: (213) 314-8100  
Fax:

ELAP No.: 1838  
CSDLAC No.: 10196  
ORELAP No.: CA300003

Re: ATL Work Order Number : 2200333

Client Reference : Orbis- Santa Fe Springs / 721033501

Enclosed are the results for sample(s) received on March 09, 2022 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine". Below the signature, the letters "for" are handwritten.

Christine Caballero, Client Relations Manager  
Christine.Caballero@atlglobal.com  
Authorized to Release on 04/07/22 10:19 on Behalf of

A handwritten signature in black ink, appearing to read "Amy".

Amy Leung  
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	2200333-04	Water	3/09/22 16:35	3/09/22 17:45



## Certificate of Analysis

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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Notes and Definitions

S12	Surrogate recovery outside in-house established limit but within method default criteria.
S1	Surrogate recovery was above laboratory acceptance limit. No associated target analyte was detected in the sample.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
MO	Manufacturer omitted analyte within the stock standard.
L5	Laboratory Control Sample high biased. Sample result/s was non-detect (ND) for the target analyte; therefore reanalysis was not necessary.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
L3	Laboratory control sample outside in-house established limits but within method criteria.
L2	Laboratory Control Sample and/ or Laboratory Control Sample Duplicate outside of acceptance limits. Reextraction and/or reanalysis is not possible due to limited amount of sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

#### Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury

Analyst: AEG

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Analyzed	Date/Time	Notes
2200333-04	MW-5	ND	ug/L	0.20	1	B2C1071	03/11/2022	03/11/22 11:45		



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

**Client Sample ID: MW-5**  
**Lab ID: 2200333-04**

### Title 22 Metals by ICP-AES EPA 6010B

**Analyst: WT**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	1	B2C1066	03/10/2022	03/11/22 15:14	
Arsenic	ND	0.010	1	B2C1066	03/10/2022	03/11/22 15:14	
<b>Barium</b>	<b>0.13</b>	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
Beryllium	ND	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
Cadmium	ND	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
<b>Chromium</b>	<b>0.0046</b>	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
Cobalt	ND	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
Copper	ND	0.0090	1	B2C1066	03/10/2022	03/11/22 15:14	
Lead	ND	0.0050	1	B2C1066	03/10/2022	03/11/22 15:14	
Molybdenum	ND	0.0050	1	B2C1066	03/10/2022	03/11/22 15:14	
Nickel	ND	0.0050	1	B2C1066	03/10/2022	03/11/22 15:14	
Selenium	ND	0.010	1	B2C1066	03/10/2022	03/11/22 15:14	
<b>Silver</b>	<b>0.0042</b>	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
Thallium	ND	0.015	1	B2C1066	03/10/2022	03/11/22 15:14	
<b>Vanadium</b>	<b>0.039</b>	0.0030	1	B2C1066	03/10/2022	03/11/22 15:14	
<b>Zinc</b>	<b>0.091</b>	0.025	1	B2C1066	03/10/2022	03/11/22 15:14	

### Hydrocarbon Chain Distribution by EPA 8015B (Modified)

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
<b>C13-C22</b>	<b>0.23</b>	0.20	1	B2C1054	03/10/2022	03/11/22 04:07	
<b>C23-C32</b>	<b>0.25</b>	0.20	1	B2C1054	03/10/2022	03/11/22 04:07	
<i>Surrogate: p-Terphenyl</i>	128 %	32 - 169		B2C1054	03/10/2022	03/11/22 04:07	

### Organochlorine Pesticides by EPA 8081A

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4,4'-DDD	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
4,4'-DDE	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
4,4'-DDT	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Aldrin	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
alpha-BHC	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
alpha-Chlordane	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
beta-BHC	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
Chlordane	ND	0.25	1	B2C1055	03/10/2022	03/10/22 20:40	
delta-BHC	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

**Client Sample ID: MW-5**  
**Lab ID: 2200333-04**

**Organochlorine Pesticides by EPA 8081A**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dieldrin	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Endosulfan I	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
Endosulfan II	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Endosulfan sulfate	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Endrin	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Endrin aldehyde	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
Endrin ketone	ND	0.05	1	B2C1055	03/10/2022	03/10/22 20:40	
gamma-BHC	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
gamma-Chlordane	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
Heptachlor	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
Heptachlor epoxide	ND	0.02	1	B2C1055	03/10/2022	03/10/22 20:40	
Methoxychlor	ND	0.25	1	B2C1055	03/10/2022	03/10/22 20:40	
Toxaphene	ND	2.5	1	B2C1055	03/10/2022	03/10/22 20:40	
<i>Surrogate: Decachlorobiphenyl</i>	62.7 %	18 - 108		B2C1055	03/10/2022	03/10/22 20:40	
<i>Surrogate: Tetrachloro-m-xylene</i>	57.8 %	23 - 108		B2C1055	03/10/2022	03/10/22 20:40	

**Polychlorinated Biphenyls by EPA 8082**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1221	ND	1.0	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1232	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1242	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1248	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1254	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
Aroclor 1260	ND	0.50	1	B2C1075	03/10/2022	03/10/22 21:26	
<i>Surrogate: Decachlorobiphenyl</i>	60.7 %	18 - 108		B2C1075	03/10/2022	03/10/22 21:26	
<i>Surrogate: Tetrachloro-m-xylene</i>	58.0 %	23 - 108		B2C1075	03/10/2022	03/10/22 21:26	

**Volatile Organic Compounds by EPA 8260B**

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,1,1-Trichloroethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,1,2-Trichloroethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	



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515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

**Client Sample ID: MW-5**  
**Lab ID: 2200333-04**

### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	11	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,1-Dichloroethene	64	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,1-Dichloropropene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2,3-Trichloropropane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2,3-Trichlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2,4-Trichlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2,4-Trimethylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2-Dibromoethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2-Dichlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>1,2-Dichloroethane</b>	<b>2.3</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,2-Dichloropropane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,3,5-Trimethylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,3-Dichlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,3-Dichloropropane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
1,4-Dichlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
2,2-Dichloropropane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
2-Butanone	ND	10	1	B2C1056	03/10/2022	03/10/22 15:22	
2-Chlorotoluene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
4-Chlorotoluene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
4-Isopropyltoluene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Benzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Bromobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Bromochloromethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Bromodichloromethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Bromoform	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Bromomethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Carbon disulfide	ND	1.0	1	B2C1056	03/10/2022	03/10/22 15:22	
Carbon tetrachloride	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Chlorobenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Chloroethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>Chloroform</b>	<b>3.7</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Chloromethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>cis-1,2-Dichloroethene</b>	<b>63</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
cis-1,3-Dichloropropene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Di-isopropyl ether	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Dibromochloromethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Dibromomethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Dichlorodifluoromethane	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Ethyl Acetate	ND	10	1	B2C1056	03/10/2022	03/10/22 15:22	



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**Client Sample ID: MW-5**  
**Lab ID: 2200333-04**

### Volatile Organic Compounds by EPA 8260B

**Analyst: KL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl Ether	ND	10	1	B2C1056	03/10/2022	03/10/22 15:22	
Ethyl tert-butyl ether	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Ethylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Freon-113	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Hexachlorobutadiene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Isopropylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
m,p-Xylene	ND	1.0	1	B2C1056	03/10/2022	03/10/22 15:22	
Methylene chloride	ND	1.0	1	B2C1056	03/10/2022	03/10/22 15:22	
MTBE	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
n-Butylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
n-Propylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Naphthalene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
o-Xylene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
sec-Butylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Styrene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
tert-Amyl methyl ether	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
tert-Butanol	ND	10	1	B2C1056	03/10/2022	03/10/22 15:22	
tert-Butylbenzene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>Tetrachloroethene</b>	<b>74</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Toluene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>trans-1,2-Dichloroethene</b>	<b>2.5</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
trans-1,3-Dichloropropene	ND	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>Trichloroethene</b>	<b>58</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>Trichlorofluoromethane</b>	<b>1.6</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
Vinyl acetate	ND	10	1	B2C1056	03/10/2022	03/10/22 15:22	
<b>Vinyl chloride</b>	<b>4.6</b>	0.50	1	B2C1056	03/10/2022	03/10/22 15:22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>111 %</i>	<i>64 - 155</i>		B2C1056	03/10/2022	03/10/22 15:22	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.4 %</i>	<i>73 - 124</i>		B2C1056	03/10/2022	03/10/22 15:22	
<i>Surrogate: Dibromofluoromethane</i>	<i>100 %</i>	<i>78 - 129</i>		B2C1056	03/10/2022	03/10/22 15:22	
<i>Surrogate: Toluene-d8</i>	<i>103 %</i>	<i>84 - 117</i>		B2C1056	03/10/2022	03/10/22 15:22	

### Semivolatile Organic Compounds by EPA 8270C

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
1,2-Dichlorobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
1,3-Dichlorobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
1,4-Dichlorobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	



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Reported : 04/07/2022

**Client Sample ID: MW-5**  
**Lab ID: 2200333-04**

**Semivolatile Organic Compounds by EPA 8270C**

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2,4,5-Trichlorophenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2,4,6-Trichlorophenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2,4-Dichlorophenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2,4-Dimethylphenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2,4-Dinitrophenol	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
2,4-Dinitrotoluene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2,6-Dinitrotoluene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Chloronaphthalene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Chlorophenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Methylnaphthalene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Methylphenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Nitroaniline	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
2-Nitrophenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
3,3'-Dichlorobenzidine	ND	20	1	B2C1072	03/10/2022	03/11/22 17:12	
3-Nitroaniline	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
4,6-Dinitro-2-methyphenol	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Bromophenyl-phenylether	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Chloro-3-methylphenol	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Chloroaniline	ND	20	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Chlorophenyl-phenylether	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Methylphenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Nitroaniline	ND	20	1	B2C1072	03/10/2022	03/11/22 17:12	
4-Nitrophenol	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
Acenaphthene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Acenaphthylene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Anthracene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzidine (M)	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzo(a)anthracene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzo(a)pyrene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzo(b)fluoranthene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzo(g,h,i)perylene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzo(k)fluoranthene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzoic acid	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
Benzyl alcohol	ND	20	1	B2C1072	03/10/2022	03/11/22 17:12	
bis(2-chloroethoxy)methane	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
bis(2-Chloroethyl)ether	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
bis(2-chloroisopropyl)ether	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
bis(2-ethylhexyl)phthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Butylbenzylphthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Chrysene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	



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**Lab ID: 2200333-04**

**Semivolatile Organic Compounds by EPA 8270C**

**Analyst: EB**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Di-n-butylphthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Di-n-octylphthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Dibenz(a,h)anthracene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Dibenzofuran	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Diethyl phthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Dimethyl phthalate	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Fluoranthene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Fluorene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Hexachlorobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Hexachlorobutadiene	ND	20	1	B2C1072	03/10/2022	03/11/22 17:12	
Hexachlorocyclopentadiene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Hexachloroethane	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Indeno(1,2,3-cd)pyrene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Isophorone	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
N-Nitroso-di-n propylamine	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
N-Nitrosodiphenylamine	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Naphthalene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Nitrobenzene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Pentachlorophenol	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
Phenanthrene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Phenol	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Pyrene	ND	10	1	B2C1072	03/10/2022	03/11/22 17:12	
Pyridine	ND	50	1	B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	87.4 %	21 - 92		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: 2,4,6-Tribromophenol</i>	115 %	24 - 113		B2C1072	03/10/2022	03/11/22 17:12	S12
<i>Surrogate: 2-Chlorophenol-d4</i>	77.7 %	14 - 86		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: 2-Fluorobiphenyl</i>	102 %	28 - 105		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: 2-Fluorophenol</i>	42.2 %	0 - 59		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: 4-Terphenyl-d14</i>	134 %	32 - 116		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: Nitrobenzene-d5</i>	81.8 %	25 - 101		B2C1072	03/10/2022	03/11/22 17:12	
<i>Surrogate: Phenol-d6</i>	29.4 %	0 - 48		B2C1072	03/10/2022	03/11/22 17:12	

**Gasoline Range Hydrocarbons by EPA 8015B (Modified)**

**Analyst: JV**

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C4-C12	ND	0.20	1	B2C1052	03/10/2022	03/10/22 15:59	
<i>Surrogate: 4-Bromofluorobenzene</i>	111 %	63.08 - 129.27		B2C1052	03/10/2022	03/10/22 15:59	



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### QUALITY CONTROL SECTION

#### Gasoline Range Hydrocarbons by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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#### Batch B2C1052 - GCVOA\_W

**Blank (B2C1052-BLK1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

C4-C12	ND	0.20	0.04
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Surrogate: 4-Bromofluorobenzene	0.4375	0.400000	109	63.08 - 129.27
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**LCS (B2C1052-BS1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

Gasoline Range Organics	0.841000	0.20	0.04	1.00000	84.1	73.27 - 109.13
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Surrogate: 4-Bromofluorobenzene	0.4447	0.400000	111	63.08 - 129.27
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**LCS Dup (B2C1052-BSD1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

Gasoline Range Organics	0.761000	0.20	0.04	1.00000	76.1	73.27 - 109.13	9.99	20
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Surrogate: 4-Bromofluorobenzene	0.4441	0.400000	111	63.08 - 129.27
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### Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1066 - EPA 3010A\_W**
**Blank (B2C1066-BLK1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Antimony	ND	0.010	0.0088
Arsenic	ND	0.010	0.0078
Barium	ND	0.0030	0.0026
Beryllium	ND	0.0030	0.0016
Cadmium	ND	0.0030	0.0024
Chromium	ND	0.0030	0.0020
Cobalt	ND	0.0030	0.0016
Copper	ND	0.0090	0.0038
Lead	ND	0.0050	0.0047
Molybdenum	ND	0.0050	0.0030
Nickel	ND	0.0050	0.0046
Selenium	ND	0.010	0.0093
Silver	ND	0.0030	0.0024
Thallium	ND	0.015	0.0085
Vanadium	ND	0.0030	0.0022
Zinc	ND	0.025	0.0057

**LCS (B2C1066-BS1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Antimony	0.469386	0.010	0.0088	0.500000	93.9	80 - 120
Arsenic	0.470537	0.010	0.0078	0.500000	94.1	80 - 120
Barium	0.483898	0.0030	0.0026	0.500000	96.8	80 - 120
Beryllium	0.520763	0.0030	0.0016	0.500200	104	80 - 120
Cadmium	0.495292	0.0030	0.0024	0.500000	99.1	80 - 120
Chromium	0.507012	0.0030	0.0020	0.500000	101	80 - 120
Cobalt	0.499830	0.0030	0.0016	0.500000	100	80 - 120
Copper	0.537332	0.0090	0.0038	0.500000	107	80 - 120
Lead	0.499706	0.0050	0.0047	0.500000	99.9	80 - 120
Molybdenum	0.513346	0.0050	0.0030	0.500000	103	80 - 120
Nickel	0.524186	0.0050	0.0046	0.500000	105	80 - 120
Selenium	0.489705	0.010	0.0093	0.500000	97.9	80 - 120
Silver	0.254715	0.0030	0.0024	0.250000	102	80 - 120
Thallium	0.480895	0.015	0.0085	0.500000	96.2	80 - 120
Vanadium	0.499726	0.0030	0.0022	0.500000	99.9	80 - 120
Zinc	0.527684	0.025	0.0057	0.500000	106	80 - 120

**Matrix Spike (B2C1066-MS1)**
**Source: 2200333-01**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Antimony	0.547891	0.010	0.0088	0.500000	ND	110	58 - 139
Arsenic	0.517166	0.010	0.0078	0.500000	ND	103	67 - 136
Barium	0.595225	0.0030	0.0026	0.500000	0.058937	107	68 - 130
Beryllium	0.565958	0.0030	0.0016	0.500200	ND	113	70 - 133
Cadmium	0.534825	0.0030	0.0024	0.500000	ND	107	68 - 136
Chromium	0.548584	0.0030	0.0020	0.500000	ND	110	69 - 135
Cobalt	0.527915	0.0030	0.0016	0.500000	ND	106	69 - 138
Copper	0.599992	0.0090	0.0038	0.500000	ND	120	60 - 146
Lead	0.534882	0.0050	0.0047	0.500000	ND	107	58 - 146



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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**Batch B2C1066 - EPA 3010A\_W (continued)**

**Matrix Spike (B2C1066-MS1) - Continued**      **Source: 2200333-01**      Prepared: 3/10/2022 Analyzed: 3/10/2022

Molybdenum	0.576133	0.0050	0.0030	0.500000	ND	115	68 - 132			
Nickel	0.539983	0.0050	0.0046	0.500000	ND	108	64 - 135			
Selenium	0.490769	0.010	0.0093	0.500000	ND	98.2	57 - 146			
Silver	0.258122	0.0030	0.0024	0.250000	ND	103	47 - 151			
Thallium	0.514333	0.015	0.0085	0.500000	ND	103	59 - 133			
Vanadium	0.587815	0.0030	0.0022	0.500000	0.026686	112	70 - 127			
Zinc	0.571152	0.025	0.0057	0.500000	0.007851	113	53 - 144			

**Matrix Spike Dup (B2C1066-MSD1)**      **Source: 2200333-01**      Prepared: 3/10/2022 Analyzed: 3/11/2022

Antimony	0.558162	0.010	0.0088	0.500000	ND	112	58 - 139	1.86	20	
Arsenic	0.552920	0.010	0.0078	0.500000	ND	111	67 - 136	6.68	20	
Barium	0.555463	0.0030	0.0026	0.500000	0.058937	99.3	68 - 130	6.91	20	
Beryllium	0.544117	0.0030	0.0016	0.500200	ND	109	70 - 133	3.94	20	
Cadmium	0.519370	0.0030	0.0024	0.500000	ND	104	68 - 136	2.93	20	
Chromium	0.511638	0.0030	0.0020	0.500000	ND	102	69 - 135	6.97	20	
Cobalt	0.523373	0.0030	0.0016	0.500000	ND	105	69 - 138	0.864	20	
Copper	0.528459	0.0090	0.0038	0.500000	ND	106	60 - 146	12.7	20	
Lead	0.514450	0.0050	0.0047	0.500000	ND	103	58 - 146	3.89	20	
Molybdenum	0.539089	0.0050	0.0030	0.500000	ND	108	68 - 132	6.64	20	
Nickel	0.524310	0.0050	0.0046	0.500000	ND	105	64 - 135	2.95	20	
Selenium	0.542559	0.010	0.0093	0.500000	ND	109	57 - 146	10.0	20	
Silver	0.260514	0.0030	0.0024	0.250000	ND	104	47 - 151	0.922	20	
Thallium	0.480408	0.015	0.0085	0.500000	ND	96.1	59 - 133	6.82	20	
Vanadium	0.557918	0.0030	0.0022	0.500000	0.026686	106	70 - 127	5.22	20	
Zinc	0.534908	0.025	0.0057	0.500000	0.007851	105	53 - 144	6.55	20	



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### Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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#### Batch B2C1071 - EPA 245.1/7470\_W

##### Blank (B2C1071-BLK1)

Prepared: 3/10/2022 Analyzed: 3/11/2022

Mercury	ND	0.20	0.05							
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##### LCS (B2C1071-BS1)

Prepared: 3/10/2022 Analyzed: 3/11/2022

Mercury	5.01138	0.20	0.05	5.00000		100	80 - 120			
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##### Matrix Spike (B2C1071-MS1)

Source: 2200333-01 Prepared: 3/10/2022 Analyzed: 3/11/2022

Mercury	4.93561	0.20	0.05	5.00000	0.075321	97.2	70 - 130			
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##### Matrix Spike Dup (B2C1071-MSD1)

Source: 2200333-01 Prepared: 3/10/2022 Analyzed: 3/11/2022

Mercury	4.93072	0.20	0.05	5.00000	0.075321	97.1	70 - 130	0.0992	20	
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##### Post Spike (B2C1071-PS1)

Source: 2200333-01 Prepared: 3/10/2022 Analyzed: 3/11/2022

Mercury	2.24413			2.50000	0.037660	88.3	85 - 115			
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### Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
<b>Batch B2C1054 - GCSEMI_DRO_W</b>										
<b>Blank (B2C1054-BLK1)</b>										
C13-C22	ND	0.20	0.20							
C23-C32	ND	0.20	0.20							
<i>Surrogate: p-Terphenyl</i>	0.06656				8.00000E-2		83.2		32 - 169	
<b>Blank (B2C1054-BLK2)</b>										
C13-C22	ND	0.20	0.20							
C23-C32	ND	0.20	0.20							
<i>Surrogate: p-Terphenyl</i>	0.06802				8.00000E-2		85.0		32 - 169	
<b>LCS (B2C1054-BS1)</b>										
DRO	0.640872	0.20	0.20	1.00000			64.1		45 - 161	
<i>Surrogate: p-Terphenyl</i>	0.06623				8.00000E-2		82.8		32 - 169	
<b>LCS (B2C1054-BS2)</b>										
DRO	0.636701	0.20	0.20	1.00000			63.7		45 - 161	
<i>Surrogate: p-Terphenyl</i>	0.06749				8.00000E-2		84.4		32 - 169	
<b>LCS Dup (B2C1054-BSD1)</b>										
DRO	0.823111	0.20	0.20	1.00000			82.3	45 - 161	24.9	20 R
<i>Surrogate: p-Terphenyl</i>	0.08288				8.00000E-2		104		32 - 169	
<b>LCS Dup (B2C1054-BSD2)</b>										
DRO	0.839196	0.20	0.20	1.00000			83.9	45 - 161	27.4	20 R
<i>Surrogate: p-Terphenyl</i>	0.08375				8.00000E-2		105		32 - 169	



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Reported : 04/07/2022

### Organochlorine Pesticides by EPA 8081A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1055 - GCSEMI\_PCB/PEST\_W**
**Blank (B2C1055-BLK1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

4,4'-DDD	ND	0.05	0.003
4,4'-DDD [2C]	ND	0.05	0.003
4,4'-DDE	ND	0.05	0.004
4,4'-DDE [2C]	ND	0.05	0.004
4,4'-DDT	ND	0.05	0.004
4,4'-DDT [2C]	ND	0.05	0.004
Aldrin	ND	0.02	0.003
Aldrin [2C]	ND	0.02	0.003
alpha-BHC	ND	0.02	0.009
alpha-BHC [2C]	ND	0.02	0.009
alpha-Chlordane	ND	0.02	0.003
alpha-Chlordane [2C]	ND	0.02	0.003
beta-BHC	ND	0.02	0.007
beta-BHC [2C]	ND	0.02	0.007
Chlordane	ND	0.25	0.03
Chlordane [2C]	ND	0.25	0.03
delta-BHC	ND	0.02	0.005
delta-BHC [2C]	ND	0.02	0.005
Dieldrin	ND	0.05	0.002
Dieldrin [2C]	ND	0.05	0.002
Endosulfan I	ND	0.02	0.003
Endosulfan I [2C]	ND	0.02	0.003
Endosulfan II	ND	0.05	0.004
Endosulfan II [2C]	ND	0.05	0.004
Endosulfan sulfate	ND	0.05	0.002
Endosulfan Sulfate [2C]	ND	0.05	0.002
Endrin	ND	0.05	0.004
Endrin [2C]	ND	0.05	0.004
Endrin aldehyde	ND	0.05	0.002
Endrin aldehyde [2C]	ND	0.05	0.002
Endrin ketone	ND	0.05	0.003
Endrin ketone [2C]	ND	0.05	0.003
gamma-BHC	ND	0.02	0.005
gamma-BHC [2C]	ND	0.02	0.005
gamma-Chlordane	ND	0.02	0.001
gamma-Chlordane [2C]	ND	0.02	0.001
Heptachlor	ND	0.02	0.01
Heptachlor [2C]	ND	0.02	0.01
Heptachlor epoxide	ND	0.02	0.003
Heptachlor epoxide [2C]	ND	0.02	0.003
Methoxychlor	ND	0.25	0.005
Methoxychlor [2C]	ND	0.25	0.005
Toxaphene	ND	2.5	0.34
Toxaphene [2C]	ND	2.5	0.34



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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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**Batch B2C1055 - GCSEMI\_PCB/PEST\_W (continued)**
**Blank (B2C1055-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Surrogate: Decachlorobiphenyl	0.2917		0.500000	58.3	18 - 108
Surrogate: Decachlorobiphenyl [2C]	0.3000		0.500000	60.0	25 - 103
Surrogate: Tetrachloro-m-xylene	0.2650		0.500000	53.0	23 - 108
Surrogate: Tetrachloro-m-xylene [2C]	0.2837		0.500000	56.7	21 - 105

**LCS (B2C1055-BS1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

4,4'-DDD	0.323005	0.05	0.003	0.500000	64.6	53 - 116		
4,4'-DDD [2C]	0.325970	0.05	0.003	0.500000	65.2	45 - 133		
4,4'-DDE	0.253285	0.05	0.004	0.500000	50.7	45 - 122		
4,4'-DDE [2C]	0.261195	0.05	0.004	0.500000	52.2	42 - 129		
4,4'-DDT	0.172265	0.05	0.004	0.500000	34.5	18 - 134		
4,4'-DDT [2C]	0.179100	0.05	0.004	0.500000	35.8	14 - 142		
Aldrin	0.244700	0.02	0.003	0.500000	48.9	44 - 118		
Aldrin [2C]	0.253835	0.02	0.003	0.500000	50.8	48 - 121		
alpha-BHC	0.236265	0.02	0.009	0.500000	47.3	47 - 107		
alpha-BHC [2C]	0.238880	0.02	0.009	0.500000	47.8	50 - 111	L2	
alpha-Chlordane	0.274000	0.02	0.003	0.500000	54.8	48 - 117		
alpha-Chlordane [2C]	0.291260	0.02	0.003	0.500000	58.3	46 - 122		
beta-BHC	0.234095	0.02	0.007	0.500000	46.8	52 - 113	L2	
beta-BHC [2C]	0.250695	0.02	0.007	0.500000	50.1	49 - 121		
delta-BHC	0.267110	0.02	0.005	0.500000	53.4	38 - 105		
delta-BHC [2C]	0.266155	0.02	0.005	0.500000	53.2	48 - 97		
Dieldrin	0.254615	0.05	0.002	0.500000	50.9	49 - 115		
Dieldrin [2C]	0.264085	0.05	0.002	0.500000	52.8	47 - 118		
Endosulfan I	0.243340	0.02	0.003	0.500000	48.7	45 - 108		
Endosulfan I [2C]	0.241360	0.02	0.003	0.500000	48.3	47 - 108		
Endosulfan II	0.263345	0.05	0.004	0.500000	52.7	53 - 118	L2	
Endosulfan II [2C]	0.271415	0.05	0.004	0.500000	54.3	48 - 122		
Endosulfan sulfate	0.238310	0.05	0.002	0.500000	47.7	51 - 106	L2	
Endosulfan Sulfate [2C]	0.241145	0.05	0.002	0.500000	48.2	47 - 110		
Endrin	0.264320	0.05	0.004	0.500000	52.9	51 - 127		
Endrin [2C]	0.273115	0.05	0.004	0.500000	54.6	61 - 126	L2	
Endrin aldehyde	0.276965	0.05	0.002	0.500000	55.4	54 - 112		
Endrin aldehyde [2C]	0.283675	0.05	0.002	0.500000	56.7	45 - 121		
Endrin ketone	0.234595	0.05	0.003	0.500000	46.9	46 - 111		
Endrin ketone [2C]	0.242805	0.05	0.003	0.500000	48.6	37 - 122		
gamma-BHC	0.244455	0.02	0.005	0.500000	48.9	49 - 111	L2	
gamma-BHC [2C]	0.256985	0.02	0.005	0.500000	51.4	46 - 120		
gamma-Chlordane	0.217640	0.02	0.001	0.500000	43.5	48 - 115	L2	
gamma-Chlordane [2C]	0.240165	0.02	0.001	0.500000	48.0	38 - 135		
Heptachlor	0.236960	0.02	0.01	0.500000	47.4	50 - 113	L2	
Heptachlor [2C]	0.253830	0.02	0.01	0.500000	50.8	47 - 123		
Heptachlor epoxide	0.243865	0.02	0.003	0.500000	48.8	47 - 110		
Heptachlor epoxide [2C]	0.255640	0.02	0.003	0.500000	51.1	45 - 114		
Methoxychlor	0.203545	0.25	0.005	0.500000	40.7	47 - 123	L2	



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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1055 - GCSEMI\_PCB/PEST\_W (continued)**

**LCS (B2C1055-BS1) - Continued** Prepared: 3/10/2022 Analyzed: 3/10/2022

Methoxychlor [2C]	0.211710	0.25	0.005	0.500000	42.3	4 - 178				
Surrogate: Decachlorobiphenyl	0.2009			0.500000	40.2	18 - 108				
Surrogate: Decachlorobiphenyl [2C]	0.2081			0.500000	41.6	25 - 103				
Surrogate: Tetrachloro-m-xylene	0.2258			0.500000	45.2	23 - 108				
Surrogate: Tetrachloro-m-xylene [2C]	0.2399			0.500000	48.0	21 - 105				

**LCS Dup (B2C1055-BSD1)** Prepared: 3/10/2022 Analyzed: 3/10/2022

4,4'-DDD	0.380665	0.05	0.003	0.500000	76.1	53 - 116	16.4	20		
4,4'-DDD [2C]	0.391030	0.05	0.003	0.500000	78.2	45 - 133	18.1	20		
4,4'-DDE	0.305470	0.05	0.004	0.500000	61.1	45 - 122	18.7	20		
4,4'-DDE [2C]	0.314270	0.05	0.004	0.500000	62.9	42 - 129	18.4	20		
4,4'-DDT	0.209190	0.05	0.004	0.500000	41.8	18 - 134	19.4	20		
4,4'-DDT [2C]	0.219570	0.05	0.004	0.500000	43.9	14 - 142	20.3	20	R	
Aldrin	0.282425	0.02	0.003	0.500000	56.5	44 - 118	14.3	20		
Aldrin [2C]	0.289950	0.02	0.003	0.500000	58.0	48 - 121	13.3	20		
alpha-BHC	0.290830	0.02	0.009	0.500000	58.2	47 - 107	20.7	20	R	
alpha-BHC [2C]	0.294005	0.02	0.009	0.500000	58.8	50 - 111	20.7	20	R	
alpha-Chlordane	0.321005	0.02	0.003	0.500000	64.2	48 - 117	15.8	20		
alpha-Chlordane [2C]	0.340880	0.02	0.003	0.500000	68.2	46 - 122	15.7	20		
beta-BHC	0.286580	0.02	0.007	0.500000	57.3	52 - 113	20.2	20	R	
beta-BHC [2C]	0.305095	0.02	0.007	0.500000	61.0	49 - 121	19.6	20		
delta-BHC	0.327435	0.02	0.005	0.500000	65.5	38 - 105	20.3	20	R	
delta-BHC [2C]	0.323465	0.02	0.005	0.500000	64.7	48 - 97	19.4	20		
Dieldrin	0.302695	0.05	0.002	0.500000	60.5	49 - 115	17.3	20		
Dieldrin [2C]	0.312250	0.05	0.002	0.500000	62.4	47 - 118	16.7	20		
Endosulfan I	0.290795	0.02	0.003	0.500000	58.2	45 - 108	17.8	20		
Endosulfan I [2C]	0.287490	0.02	0.003	0.500000	57.5	47 - 108	17.4	20		
Endosulfan II	0.314820	0.05	0.004	0.500000	63.0	53 - 118	17.8	20		
Endosulfan II [2C]	0.327705	0.05	0.004	0.500000	65.5	48 - 122	18.8	20		
Endosulfan sulfate	0.285155	0.05	0.002	0.500000	57.0	51 - 106	17.9	20		
Endosulfan Sulfate [2C]	0.291725	0.05	0.002	0.500000	58.3	47 - 110	19.0	20		
Endrin	0.314955	0.05	0.004	0.500000	63.0	51 - 127	17.5	20		
Endrin [2C]	0.326515	0.05	0.004	0.500000	65.3	61 - 126	17.8	20		
Endrin aldehyde	0.334850	0.05	0.002	0.500000	67.0	54 - 112	18.9	20		
Endrin aldehyde [2C]	0.346210	0.05	0.002	0.500000	69.2	45 - 121	19.9	20		
Endrin ketone	0.290040	0.05	0.003	0.500000	58.0	46 - 111	21.1	20	R	
Endrin ketone [2C]	0.297435	0.05	0.003	0.500000	59.5	37 - 122	20.2	20	R	
gamma-BHC	0.301755	0.02	0.005	0.500000	60.4	49 - 111	21.0	20	R	
gamma-BHC [2C]	0.315115	0.02	0.005	0.500000	63.0	46 - 120	20.3	20	R	
gamma-Chlordane	0.259365	0.02	0.001	0.500000	51.9	48 - 115	17.5	20		
gamma-Chlordane [2C]	0.281930	0.02	0.001	0.500000	56.4	38 - 135	16.0	20		
Heptachlor	0.271215	0.02	0.01	0.500000	54.2	50 - 113	13.5	20		
Heptachlor [2C]	0.289315	0.02	0.01	0.500000	57.9	47 - 123	13.1	20		
Heptachlor epoxide	0.288900	0.02	0.003	0.500000	57.8	47 - 110	16.9	20		
Heptachlor epoxide [2C]	0.303935	0.02	0.003	0.500000	60.8	45 - 114	17.3	20		



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### Organochlorine Pesticides by EPA 8081A - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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#### Batch B2C1055 - GCSEMI\_PCB/PEST\_W (continued)

##### LCS Dup (B2C1055-BSD1) - Continued

Prepared: 3/10/2022 Analyzed: 3/10/2022

Methoxychlor	0.245390	0.25	0.005	0.500000	49.1	47 - 123	18.6	20
Methoxychlor [2C]	0.257570	0.25	0.005	0.500000	51.5	4 - 178	19.5	20
Surrogate: Decachlorobiphenyl	0.2845			0.500000	56.9	18 - 108		
Surrogate: Decachlorobiphenyl [2C]	0.2937			0.500000	58.7	25 - 103		
Surrogate: Tetrachloro-m-xylene	0.2455			0.500000	49.1	23 - 108		
Surrogate: Tetrachloro-m-xylene [2C]	0.2646			0.500000	52.9	21 - 105		



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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#### Batch B2C1075 - GCSEMI\_PCB/PEST\_W

##### Blank (B2C1075-BLK1)

Prepared: 3/10/2022 Analyzed: 3/10/2022

Aroclor 1016	ND	0.50	0.06							
Aroclor 1221	ND	1.0	0.06							
Aroclor 1232	ND	0.50	0.06							
Aroclor 1242	ND	0.50	0.06							
Aroclor 1248	ND	0.50	0.06							
Aroclor 1254	ND	0.50	0.06							
Aroclor 1260	ND	0.50	0.06							

Surrogate: Decachlorobiphenyl	0.2873	0.500000	57.5	18 - 108
Surrogate: Tetrachloro-m-xylene	0.2800	0.500000	56.0	23 - 108

##### LCS (B2C1075-BS1)

Prepared: 3/10/2022 Analyzed: 3/10/2022

Aroclor 1016	3.20184	0.50	0.06	5.00000	64.0	48 - 100
Aroclor 1260	3.14988	0.50	0.06	5.00000	63.0	42 - 112
Surrogate: Decachlorobiphenyl	0.2774	0.500000	55.5	18 - 108		
Surrogate: Tetrachloro-m-xylene	0.3202	0.500000	64.0	23 - 108		

##### LCS Dup (B2C1075-BSD1)

Prepared: 3/10/2022 Analyzed: 3/10/2022

Aroclor 1016	3.29817	0.50	0.06	5.00000	66.0	48 - 100	2.96	20
Aroclor 1260	3.44600	0.50	0.06	5.00000	68.9	42 - 112	8.98	20
Surrogate: Decachlorobiphenyl	0.3129	0.500000	62.6	18 - 108				
Surrogate: Tetrachloro-m-xylene	0.3234	0.500000	64.7	23 - 108				



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Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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#### Batch B2C1056 - MSVOA\_LL\_W

##### Blank (B2C1056-BLK1)

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	ND	0.50	0.11					
1,1,1-Trichloroethane	ND	0.50	0.21					
1,1,2,2-Tetrachloroethane	ND	0.50	0.36					
1,1,2-Trichloroethane	ND	0.50	0.25					
1,1-Dichloroethane	ND	0.50	0.09					
1,1-Dichloroethene	ND	0.50	0.13					
1,1-Dichloropropene	ND	0.50	0.13					
1,2,3-Trichloropropane	ND	0.50	0.39					
1,2,3-Trichlorobenzene	ND	0.50	0.18					
1,2,4-Trichlorobenzene	ND	0.50	0.16					
1,2,4-Trimethylbenzene	ND	0.50	0.14					
1,2-Dibromo-3-chloropropane	ND	0.50	0.41					
1,2-Dibromoethane	ND	0.50	0.24					
1,2-Dichlorobenzene	ND	0.50	0.20					
1,2-Dichloroethane	ND	0.50	0.20					
1,2-Dichloropropane	ND	0.50	0.15					
1,3,5-Trimethylbenzene	ND	0.50	0.13					
1,3-Dichlorobenzene	ND	0.50	0.16					
1,3-Dichloropropane	ND	0.50	0.21					
1,4-Dichlorobenzene	ND	0.50	0.17					
2,2-Dichloropropane	ND	0.50	0.38					
2-Butanone	ND	10	4.5					
2-Chlorotoluene	ND	0.50	0.11					
4-Chlorotoluene	ND	0.50	0.12					
4-Isopropyltoluene	ND	0.50	0.11					
Benzene	ND	0.50	0.13					
Bromobenzene	ND	0.50	0.21					
Bromochloromethane	ND	0.50	0.16					
Bromodichloromethane	ND	0.50	0.14					
Bromoform	ND	0.50	0.20					
Bromomethane	ND	0.50	0.40					
Carbon disulfide	ND	1.0	0.07					
Carbon tetrachloride	ND	0.50	0.09					
Chlorobenzene	ND	0.50	0.13					
Chloroethane	ND	0.50	0.15					
Chloroform	ND	0.50	0.11					
Chloromethane	ND	0.50	0.12					
cis-1,2-Dichloroethene	ND	0.50	0.14					
cis-1,3-Dichloropropene	ND	0.50	0.13					
Di-isopropyl ether	ND	0.50	0.15					
Dibromochloromethane	ND	0.50	0.16					
Dibromomethane	ND	0.50	0.19					
Dichlorodifluoromethane	ND	0.50	0.18					
Ethyl Acetate	ND	10	8.7					
Ethyl Ether	ND	10	2.0					



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1056 - MSVOA\_LL\_W (continued)**
**Blank (B2C1056-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

Ethyl tert-butyl ether	ND	0.50	0.21
Ethylbenzene	ND	0.50	0.13
Freon-113	ND	0.50	0.13
Hexachlorobutadiene	ND	0.50	0.15
Isopropylbenzene	ND	0.50	0.10
m,p-Xylene	ND	1.0	0.19
Methylene chloride	ND	1.0	0.71
MTBE	ND	0.50	0.26
n-Butylbenzene	ND	0.50	0.11
n-Propylbenzene	ND	0.50	0.10
Naphthalene	ND	0.50	0.41
o-Xylene	ND	0.50	0.13
sec-Butylbenzene	ND	0.50	0.09
Styrene	ND	0.50	0.13
tert-Amyl methyl ether	ND	0.50	0.41
tert-Butanol	ND	10	2.4
tert-Butylbenzene	ND	0.50	0.09
Tetrachloroethene	ND	0.50	0.10
Toluene	ND	0.50	0.12
trans-1,2-Dichloroethene	ND	0.50	0.09
trans-1,3-Dichloropropene	ND	0.50	0.23
Trichloroethene	ND	0.50	0.10
Trichlorofluoromethane	ND	0.50	0.23
Vinyl acetate	ND	10	1.7
Vinyl chloride	ND	0.50	0.13

Surrogate: 1,2-Dichloroethane-d4	25.38	25.0000	102	64 - 155
Surrogate: 4-Bromofluorobenzene	22.48	25.0000	89.9	73 - 124
Surrogate: Dibromofluoromethane	26.40	25.0000	106	78 - 129
Surrogate: Toluene-d8	23.74	25.0000	95.0	84 - 117

**LCS (B2C1056-BS1)**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,1,1,2-Tetrachloroethane	17.9400	0.50	0.11	20.0000	89.7	79 - 116
1,1,1-Trichloroethane	19.4600	0.50	0.21	20.0000	97.3	73 - 130
1,1,2,2-Tetrachloroethane	19.6800	0.50	0.36	20.0000	98.4	71 - 122
1,1,2-Trichloroethane	22.2900	0.50	0.25	20.0000	111	70 - 124
1,1-Dichloroethane	19.8700	0.50	0.09	20.0000	99.4	69 - 128
1,1-Dichloroethene	19.8900	0.50	0.13	20.0000	99.4	65 - 137
1,1-Dichloropropene	20.0200	0.50	0.13	20.0000	100	74 - 129
1,2,3-Trichloropropane	18.1700	0.50	0.39	20.0000	90.8	74 - 123
1,2,3-Trichlorobenzene	18.9000	0.50	0.18	20.0000	94.5	59 - 130
1,2,4-Trichlorobenzene	19.5200	0.50	0.16	20.0000	97.6	65 - 125
1,2,4-Trimethylbenzene	19.4900	0.50	0.14	20.0000	97.4	88 - 124
1,2-Dibromo-3-chloropropane	19.0800	0.50	0.41	20.0000	95.4	61 - 127
1,2-Dibromoethane	22.6300	0.50	0.24	20.0000	113	72 - 125
1,2-Dichlorobenzene	19.3900	0.50	0.20	20.0000	97.0	84 - 113



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1056 - MSVOA\_LL\_W (continued)**
**LCS (B2C1056-BS1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/10/2022

1,2-Dichloroethane	21.0200	0.50	0.20	20.0000	105	68 - 130		
1,2-Dichloropropane	21.3600	0.50	0.15	20.0000	107	77 - 121		
1,3,5-Trimethylbenzene	18.6300	0.50	0.13	20.0000	93.2	83 - 124		
1,3-Dichlorobenzene	18.9800	0.50	0.16	20.0000	94.9	83 - 112		
1,3-Dichloropropane	19.3800	0.50	0.21	20.0000	96.9	77 - 119		
1,4-Dichlorobenzene	18.5200	0.50	0.17	20.0000	92.6	79 - 115		
2,2-Dichloropropane	19.8000	0.50	0.38	20.0000	99.0	67 - 149		
2-Butanone	189.660	10	4.5	200.000	94.8	30 - 210		
2-Chlorotoluene	18.6600	0.50	0.11	20.0000	93.3	81 - 119		
4-Chlorotoluene	18.9600	0.50	0.12	20.0000	94.8	86 - 117		
4-Isopropyltoluene	19.2400	0.50	0.11	20.0000	96.2	82 - 131		
Benzene	21.2000	0.50	0.13	20.0000	106	75 - 124		
Bromobenzene	18.3800	0.50	0.21	20.0000	91.9	82 - 108		
Bromochloromethane	20.0100	0.50	0.16	20.0000	100	73 - 125		
Bromodichloromethane	20.3100	0.50	0.14	20.0000	102	80 - 120		
Bromoform	17.0200	0.50	0.20	20.0000	85.1	70 - 123		
Bromomethane	17.2900	0.50	0.40	20.0000	86.4	44 - 151		
Carbon disulfide	20.7600	1.0	0.07	20.0000	104	63 - 150		
Carbon tetrachloride	19.3600	0.50	0.09	20.0000	96.8	62 - 140		
Chlorobenzene	19.3200	0.50	0.13	20.0000	96.6	80 - 112		
Chloroethane	23.0900	0.50	0.15	20.0000	115	42 - 167		
Chloroform	19.1000	0.50	0.11	20.0000	95.5	77 - 122		
Chloromethane	20.5100	0.50	0.12	20.0000	103	33 - 153		
cis-1,2-Dichloroethene	15.5600	0.50	0.14	20.0000	77.8	75 - 121		
cis-1,3-Dichloropropene	19.8400	0.50	0.13	20.0000	99.2	73 - 127		
Di-isopropyl ether	21.0900	0.50	0.15	20.0000	105	64 - 144		
Dibromochloromethane	18.7900	0.50	0.16	20.0000	94.0	77 - 122		
Dibromomethane	20.5200	0.50	0.19	20.0000	103	75 - 121		
Dichlorodifluoromethane	16.9000	0.50	0.18	20.0000	84.5	0 - 171		
Ethyl Acetate	ND	10	8.7	200.000	NR	54 - 153		MO
Ethyl Ether	205.450	10	2.0	200.000	103	65 - 139		
Ethyl tert-butyl ether	19.3000	0.50	0.21	20.0000	96.5	54 - 141		
Ethylbenzene	20.5200	0.50	0.13	20.0000	103	82 - 119		
Freon-113	23.5200	0.50	0.13	20.0000	118	49 - 156		
Hexachlorobutadiene	19.5200	0.50	0.15	20.0000	97.6	71 - 131		
Isopropylbenzene	19.1200	0.50	0.10	20.0000	95.6	75 - 126		
m,p-Xylene	39.4400	1.0	0.19	40.0000	98.6	86 - 119		
Methylene chloride	19.4000	1.0	0.71	20.0000	97.0	76 - 125		
MTBE	17.5800	0.50	0.26	20.0000	87.9	70 - 121		
n-Butylbenzene	19.0400	0.50	0.11	20.0000	95.2	81 - 125		
n-Propylbenzene	18.8200	0.50	0.10	20.0000	94.1	78 - 130		
Naphthalene	17.2500	0.50	0.41	20.0000	86.2	47 - 128		
o-Xylene	19.5400	0.50	0.13	20.0000	97.7	85 - 119		
sec-Butylbenzene	20.1300	0.50	0.09	20.0000	101	78 - 130		
Styrene	19.3300	0.50	0.13	20.0000	96.6	62 - 148		



## Certificate of Analysis

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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
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**Batch B2C1056 - MSVOA\_LL\_W (continued)**

LCS (B2C1056-BS1) - Continued						Prepared: 3/10/2022 Analyzed: 3/10/2022			
tert-Amyl methyl ether	20.8000	0.50	0.41	20.0000		104	55 - 131		
tert-Butanol	59.1200	10	2.4	100.000		59.1	45 - 153		
tert-Butylbenzene	18.6300	0.50	0.09	20.0000		93.2	77 - 125		
Tetrachloroethene	17.6300	0.50	0.10	20.0000		88.2	73 - 120		
Toluene	21.8000	0.50	0.12	20.0000		109	79 - 119		
trans-1,2-Dichloroethene	26.7100	0.50	0.09	20.0000		134	70 - 129		L4
trans-1,3-Dichloropropene	20.4200	0.50	0.23	20.0000		102	67 - 137		
Trichloroethene	20.1500	0.50	0.10	20.0000		101	73 - 117		
Trichlorofluoromethane	21.8800	0.50	0.23	20.0000		109	59 - 135		
Vinyl acetate	12.0700	10	1.7	200.000		6.04	67 - 155		MO
Vinyl chloride	23.9900	0.50	0.13	20.0000		120	58 - 132		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	25.37			25.0000		101	64 - 155		
<i>Surrogate: 4-Bromofluorobenzene</i>	23.90			25.0000		95.6	73 - 124		
<i>Surrogate: Dibromofluoromethane</i>	24.91			25.0000		99.6	78 - 129		
<i>Surrogate: Toluene-d8</i>	26.45			25.0000		106	84 - 117		

LCS Dup (B2C1056-BSD1)						Prepared: 3/10/2022 Analyzed: 3/10/2022			
1,1,1,2-Tetrachloroethane	20.6900	0.50	0.11	20.0000		103	79 - 116	14.2	20
1,1,1-Trichloroethane	20.8200	0.50	0.21	20.0000		104	73 - 130	6.75	20
1,1,2,2-Tetrachloroethane	20.5500	0.50	0.36	20.0000		103	71 - 122	4.33	20
1,1,2-Trichloroethane	18.8900	0.50	0.25	20.0000		94.4	70 - 124	16.5	20
1,1-Dichloroethane	22.1400	0.50	0.09	20.0000		111	69 - 128	10.8	20
1,1-Dichloroethene	20.4600	0.50	0.13	20.0000		102	65 - 137	2.83	20
1,1-Dichloropropene	19.0200	0.50	0.13	20.0000		95.1	74 - 129	5.12	20
1,2,3-Trichloropropane	20.4300	0.50	0.39	20.0000		102	74 - 123	11.7	20
1,2,3-Trichlorobenzene	18.1400	0.50	0.18	20.0000		90.7	59 - 130	4.10	20
1,2,4-Trichlorobenzene	18.0200	0.50	0.16	20.0000		90.1	65 - 125	7.99	20
1,2,4-Trimethylbenzene	21.2900	0.50	0.14	20.0000		106	88 - 124	8.83	20
1,2-Dibromo-3-chloropropane	19.1200	0.50	0.41	20.0000		95.6	61 - 127	0.209	20
1,2-Dibromoethane	19.3100	0.50	0.24	20.0000		96.6	72 - 125	15.8	20
1,2-Dichlorobenzene	20.4700	0.50	0.20	20.0000		102	84 - 113	5.42	20
1,2-Dichloroethane	20.0800	0.50	0.20	20.0000		100	68 - 130	4.57	20
1,2-Dichloropropane	20.2500	0.50	0.15	20.0000		101	77 - 121	5.34	20
1,3,5-Trimethylbenzene	20.6700	0.50	0.13	20.0000		103	83 - 124	10.4	20
1,3-Dichlorobenzene	20.2600	0.50	0.16	20.0000		101	83 - 112	6.52	20
1,3-Dichloropropane	22.3600	0.50	0.21	20.0000		112	77 - 119	14.3	20
1,4-Dichlorobenzene	19.6700	0.50	0.17	20.0000		98.4	79 - 115	6.02	20
2,2-Dichloropropane	20.4200	0.50	0.38	20.0000		102	67 - 149	3.08	20
2-Butanone	209.120	10	4.5	200.000		105	30 - 210	9.76	20
2-Chlorotoluene	19.5300	0.50	0.11	20.0000		97.6	81 - 119	4.56	20
4-Chlorotoluene	20.0900	0.50	0.12	20.0000		100	86 - 117	5.79	20
4-Isopropyltoluene	20.3000	0.50	0.11	20.0000		102	82 - 131	5.36	20
Benzene	19.5400	0.50	0.13	20.0000		97.7	75 - 124	8.15	20
Bromobenzene	19.3900	0.50	0.21	20.0000		97.0	82 - 108	5.35	20
Bromochloromethane	21.8600	0.50	0.16	20.0000		109	73 - 125	8.84	20



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### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1056 - MSVOA_LL_W (continued)</b>										
<b>LCS Dup (B2C1056-BSD1) - Continued</b>										
							Prepared: 3/10/2022 Analyzed: 3/10/2022			
Bromodichloromethane	20.1300	0.50	0.14	20.0000		101	80 - 120	0.890	20	
Bromoform	20.7700	0.50	0.20	20.0000		104	70 - 123	19.8	20	
Bromomethane	21.0800	0.50	0.40	20.0000		105	44 - 151	19.8	20	
Carbon disulfide	20.0200	1.0	0.07	20.0000		100	63 - 150	3.63	20	
Carbon tetrachloride	18.4300	0.50	0.09	20.0000		92.2	62 - 140	4.92	20	
Chlorobenzene	20.3700	0.50	0.13	20.0000		102	80 - 112	5.29	20	
Chloroethane	23.5500	0.50	0.15	20.0000		118	42 - 167	1.97	20	
Chloroform	19.8500	0.50	0.11	20.0000		99.2	77 - 122	3.85	20	
Chloromethane	23.1800	0.50	0.12	20.0000		116	33 - 153	12.2	20	
cis-1,2-Dichloroethene	16.5200	0.50	0.14	20.0000		82.6	75 - 121	5.99	20	
cis-1,3-Dichloropropene	18.1900	0.50	0.13	20.0000		91.0	73 - 127	8.68	20	
Di-isopropyl ether	23.4100	0.50	0.15	20.0000		117	64 - 144	10.4	20	
Dibromochloromethane	22.8300	0.50	0.16	20.0000		114	77 - 122	19.4	20	
Dibromomethane	20.1200	0.50	0.19	20.0000		101	75 - 121	1.97	20	
Dichlorodifluoromethane	18.1900	0.50	0.18	20.0000		91.0	0 - 171	7.35	20	
Ethyl Acetate	ND	10	8.7	200.000		NR	54 - 153	NR	20	MO
Ethyl Ether	227.100	10	2.0	200.000		114	65 - 139	10.0	20	
Ethyl tert-butyl ether	20.8700	0.50	0.21	20.0000		104	54 - 141	7.82	20	
Ethylbenzene	20.7200	0.50	0.13	20.0000		104	82 - 119	0.970	20	
Freon-113	24.2200	0.50	0.13	20.0000		121	49 - 156	2.93	20	
Hexachlorobutadiene	18.5200	0.50	0.15	20.0000		92.6	71 - 131	5.26	20	
Isopropylbenzene	20.0800	0.50	0.10	20.0000		100	75 - 126	4.90	20	
m,p-Xylene	41.9900	1.0	0.19	40.0000		105	86 - 119	6.26	20	
Methylene chloride	20.2500	1.0	0.71	20.0000		101	76 - 125	4.29	20	
MTBE	20.9100	0.50	0.26	20.0000		105	70 - 121	17.3	20	
n-Butylbenzene	20.1000	0.50	0.11	20.0000		100	81 - 125	5.42	20	
n-Propylbenzene	20.5900	0.50	0.10	20.0000		103	78 - 130	8.98	20	
Naphthalene	17.1500	0.50	0.41	20.0000		85.8	47 - 128	0.581	20	
o-Xylene	23.0100	0.50	0.13	20.0000		115	85 - 119	16.3	20	
sec-Butylbenzene	21.0700	0.50	0.09	20.0000		105	78 - 130	4.56	20	
Styrene	21.0100	0.50	0.13	20.0000		105	62 - 148	8.33	20	
tert-Amyl methyl ether	22.2500	0.50	0.41	20.0000		111	55 - 131	6.74	20	
tert-Butanol	76.6200	10	2.4	100.000		76.6	45 - 153	25.8	20	R
tert-Butylbenzene	20.0900	0.50	0.09	20.0000		100	77 - 125	7.54	20	
Tetrachloroethene	19.5000	0.50	0.10	20.0000		97.5	73 - 120	10.1	20	
Toluene	18.2400	0.50	0.12	20.0000		91.2	79 - 119	17.8	20	
trans-1,2-Dichloroethene	26.1200	0.50	0.09	20.0000		131	70 - 129	2.23	20	L4
trans-1,3-Dichloropropene	18.7300	0.50	0.23	20.0000		93.6	67 - 137	8.63	20	
Trichloroethene	19.1600	0.50	0.10	20.0000		95.8	73 - 117	5.04	20	
Trichlorofluoromethane	23.3000	0.50	0.23	20.0000		116	59 - 135	6.29	20	
Vinyl acetate	12.5000	10	1.7	200.000		6.25	67 - 155	3.50	20	MO
Vinyl chloride	23.6500	0.50	0.13	20.0000		118	58 - 132	1.43	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	26.92		25.0000		108	64 - 155				
<i>Surrogate: 4-Bromofluorobenzene</i>	29.63		25.0000		119	73 - 124				
<i>Surrogate: Dibromofluoromethane</i>	25.90		25.0000		104	78 - 129				



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	RPD Limits	RPD Limit	Notes
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#### Batch B2C1056 - MSVOA\_LL\_W (continued)

##### LCS Dup (B2C1056-BSD1) - Continued

Surrogate: Toluene-d8

22.59

25.0000

Prepared: 3/10/2022 Analyzed: 3/10/2022

90.4 84 - 117



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Reported : 04/07/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1072 - MSSEMI\_W**
**Blank (B2C1072-BLK1)**

Prepared: 3/10/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	ND	10	2.3
1,2-Dichlorobenzene	ND	10	2.0
1,3-Dichlorobenzene	ND	10	2.0
1,4-Dichlorobenzene	ND	10	1.9
2,4,5-Trichlorophenol	ND	10	2.0
2,4,6-Trichlorophenol	ND	10	1.9
2,4-Dichlorophenol	ND	10	1.4
2,4-Dimethylphenol	ND	10	0.83
2,4-Dinitrophenol	ND	50	3.8
2,4-Dinitrotoluene	ND	10	2.4
2,6-Dinitrotoluene	ND	10	1.8
2-Chloronaphthalene	ND	10	2.2
2-Chlorophenol	ND	10	1.7
2-Methylnaphthalene	ND	10	2.8
2-Methylphenol	ND	10	0.92
2-Nitroaniline	ND	50	1.2
2-Nitrophenol	ND	10	1.9
3,3'-Dichlorobenzidine	ND	20	1.6
3-Nitroaniline	ND	50	1.1
4,6-Dinitro-2-methyphenol	ND	50	2.0
4-Bromophenyl-phenylether	ND	10	2.6
4-Chloro-3-methylphenol	ND	50	1.0
4-Chloroaniline	ND	20	0.70
4-Chlorophenyl-phenylether	ND	10	2.9
4-Methylphenol	ND	10	0.88
4-Nitroaniline	ND	20	1.2
4-Nitrophenol	ND	50	0.51
Acenaphthene	ND	10	2.1
Acenaphthylene	ND	10	2.1
Anthracene	ND	10	2.1
Benzidine (M)	ND	50	3.4
Benzo(a)anthracene	ND	10	2.1
Benzo(a)pyrene	ND	10	1.8
Benzo(b)fluoranthene	ND	10	2.5
Benzo(g,h,i)perylene	ND	10	1.8
Benzo(k)fluoranthene	ND	10	2.8
Benzoic acid	ND	50	17
Benzyl alcohol	ND	20	0.60
bis(2-chloroethoxy)methane	ND	10	1.4
bis(2-Chloroethyl)ether	ND	10	1.7
bis(2-chloroisopropyl)ether	ND	10	1.8
bis(2-ethylhexyl)phthalate	ND	10	1.7
Butylbenzylphthalate	ND	10	2.6
Chrysene	ND	10	1.9
Di-n-butylphthalate	ND	10	1.5



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**Blank (B2C1072-BLK1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

Di-n-octylphthalate	ND	10	1.8
Dibenz(a,h)anthracene	ND	10	2.7
Dibenzofuran	ND	10	2.5
Diethyl phthalate	ND	10	1.3
Dimethyl phthalate	ND	10	1.3
Fluoranthene	ND	10	2.2
Fluorene	ND	10	2.6
Hexachlorobenzene	ND	10	3.3
Hexachlorobutadiene	ND	20	2.7
Hexachlorocyclopentadiene	ND	10	3.4
Hexachloroethane	ND	10	1.8
Indeno(1,2,3-cd)pyrene	ND	10	2.2
Isophorone	ND	10	1.1
N-Nitroso-di-n propylamine	ND	10	1.3
N-Nitrosodiphenylamine	ND	10	1.6
Naphthalene	ND	10	2.3
Nitrobenzene	ND	10	1.5
Pentachlorophenol	ND	50	1.5
Phenanthrene	ND	10	2.3
Phenol	ND	10	0.35
Pyrene	ND	10	2.2
Pyridine	ND	50	0.55

Surrogate: 1,2-Dichlorobenzene-d4	55.43	100.000	55.4	21 - 92
Surrogate: 2,4,6-Tribromophenol	70.25	150.000	46.8	24 - 113
Surrogate: 2-Chlorophenol-d4	76.91	150.000	51.3	14 - 86
Surrogate: 2-Fluorobiphenyl	55.73	100.000	55.7	28 - 105
Surrogate: 2-Fluorophenol	45.15	150.000	30.1	0 - 59
Surrogate: 4-Terphenyl-d14	75.52	100.000	75.5	32 - 116
Surrogate: Nitrobenzene-d5	53.58	100.000	53.6	25 - 101
Surrogate: Phenol-d6	30.45	150.000	20.3	0 - 48

**Blank (B2C1072-BLK2)**

Prepared: 3/10/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	ND	10	2.3
1,2-Dichlorobenzene	ND	10	2.0
1,3-Dichlorobenzene	ND	10	2.0
1,4-Dichlorobenzene	ND	10	1.9
2,4,5-Trichlorophenol	ND	10	2.0
2,4,6-Trichlorophenol	ND	10	1.9
2,4-Dichlorophenol	ND	10	1.4
2,4-Dimethylphenol	ND	10	0.83
2,4-Dinitrophenol	ND	50	3.8
2,4-Dinitrotoluene	ND	10	2.4
2,6-Dinitrotoluene	ND	10	1.8
2-Chloronaphthalene	ND	10	2.2
2-Chlorophenol	ND	10	1.7



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD Limit	RPD Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**Blank (B2C1072-BLK2) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

2-Methylnaphthalene	ND	10	2.8
2-Methylphenol	ND	10	0.92
2-Nitroaniline	ND	50	1.2
2-Nitrophenol	ND	10	1.9
3,3'-Dichlorobenzidine	ND	20	1.6
3-Nitroaniline	ND	50	1.1
4,6-Dinitro-2-methyphenol	ND	50	2.0
4-Bromophenyl-phenylether	ND	10	2.6
4-Chloro-3-methylphenol	ND	50	1.0
4-Chloroaniline	ND	20	0.70
4-Chlorophenyl-phenylether	ND	10	2.9
4-Methylphenol	ND	10	0.88
4-Nitroaniline	ND	20	1.2
4-Nitrophenol	ND	50	0.51
Acenaphthene	ND	10	2.1
Acenaphthylene	ND	10	2.1
Anthracene	ND	10	2.1
Benzidine (M)	ND	50	3.4
Benzo(a)anthracene	ND	10	2.1
Benzo(a)pyrene	ND	10	1.8
Benzo(b)fluoranthene	ND	10	2.5
Benzo(g,h,i)perylene	ND	10	1.8
Benzo(k)fluoranthene	ND	10	2.8
Benzoic acid	ND	50	17
Benzyl alcohol	ND	20	0.60
bis(2-chloroethoxy)methane	ND	10	1.4
bis(2-Chloroethyl)ether	ND	10	1.7
bis(2-chloroisopropyl)ether	ND	10	1.8
bis(2-ethylhexyl)phthalate	ND	10	1.7
Butylbenzylphthalate	ND	10	2.6
Chrysene	ND	10	1.9
Di-n-butylphthalate	ND	10	1.5
Di-n-octylphthalate	ND	10	1.8
Dibenz(a,h)anthracene	ND	10	2.7
Dibenzofuran	ND	10	2.5
Diethyl phthalate	ND	10	1.3
Dimethyl phthalate	ND	10	1.3
Fluoranthene	ND	10	2.2
Fluorene	ND	10	2.6
Hexachlorobenzene	ND	10	3.3
Hexachlorobutadiene	ND	20	2.7
Hexachlorocyclopentadiene	ND	10	3.4
Hexachloroethane	ND	10	1.8
Indeno(1,2,3-cd)pyrene	ND	10	2.2
Isophorone	ND	10	1.1



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**Blank (B2C1072-BLK2) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

N-Nitroso-di-n propylamine	ND	10	1.3							
N-Nitrosodiphenylamine	ND	10	1.6							
Naphthalene	ND	10	2.3							
Nitrobenzene	ND	10	1.5							
Pentachlorophenol	ND	50	1.5							
Phenanthrene	ND	10	2.3							
Phenol	ND	10	0.35							
Pyrene	ND	10	2.2							
Pyridine	ND	50	0.55							

Surrogate: 1,2-Dichlorobenzene-d4	87.01	100.000	87.0	21 - 92						
Surrogate: 2,4,6-Tribromophenol	136.3	150.000	90.8	24 - 113						
Surrogate: 2-Chlorophenol-d4	127.8	150.000	85.2	14 - 86						
Surrogate: 2-Fluorobiphenyl	94.73	100.000	94.7	28 - 105						
Surrogate: 2-Fluorophenol	77.09	150.000	51.4	0 - 59						
Surrogate: 4-Terphenyl-d14	121.2	100.000	121	32 - 116						S12
Surrogate: Nitrobenzene-d5	82.88	100.000	82.9	25 - 101						
Surrogate: Phenol-d6	48.46	150.000	32.3	0 - 48						

**LCS (B2C1072-BS1)**

Prepared: 3/10/2022 Analyzed: 3/11/2022

1,2,4-Trichlorobenzene	77.3700	10	2.3	100.000	77.4	37 - 96				
1,2-Dichlorobenzene	67.2700	10	2.0	100.000	67.3	36 - 86				
1,3-Dichlorobenzene	64.9100	10	2.0	100.000	64.9	35 - 84				
1,4-Dichlorobenzene	67.3400	10	1.9	100.000	67.3	36 - 83				
2,4,5-Trichlorophenol	109.730	10	2.0	100.000	110	37 - 107				L3
2,4,6-Trichlorophenol	108.270	10	1.9	100.000	108	39 - 116				
2,4-Dichlorophenol	85.1000	10	1.4	100.000	85.1	36 - 110				
2,4-Dimethylphenol	84.5100	10	0.83	100.000	84.5	31 - 99				
2,4-Dinitrophenol	93.9200	50	3.8	100.000	93.9	0 - 169				
2,4-Dinitrotoluene	99.5900	10	2.4	100.000	99.6	46 - 123				
2,6-Dinitrotoluene	95.3600	10	1.8	100.000	95.4	46 - 120				
2-Chloronaphthalene	86.4600	10	2.2	100.000	86.5	41 - 107				
2-Chlorophenol	68.0700	10	1.7	100.000	68.1	24 - 89				
2-Methylnaphthalene	84.6500	10	2.8	100.000	84.6	40 - 101				
2-Methylphenol	63.7900	10	0.92	100.000	63.8	8 - 79				
2-Nitroaniline	90.7900	50	1.2	100.000	90.8	38 - 128				
2-Nitrophenol	82.5200	10	1.9	100.000	82.5	30 - 103				
3,3'-Dichlorobenzidine	81.1400	20	1.6	100.000	81.1	40 - 126				
3-Nitroaniline	97.6100	50	1.1	100.000	97.6	33 - 117				
4,6-Dinitro-2-methyphenol	108.510	50	2.0	100.000	109	5 - 155				
4-Bromophenyl-phenylether	98.9100	10	2.6	100.000	98.9	46 - 110				
4-Chloro-3-methylphenol	94.2200	50	1.0	100.000	94.2	29 - 116				
4-Chloroaniline	99.0400	20	0.70	100.000	99.0	28 - 104				
4-Chlorophenyl-phenylether	98.7800	10	2.9	100.000	98.8	45 - 111				
4-Methylphenol	30.9100	10	0.88	50.0000	61.8	13 - 100				
4-Nitroaniline	93.3100	20	1.2	100.000	93.3	38 - 112				



## Certificate of Analysis

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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	RPD Limits	RPD Limit	Notes
<b>Batch B2C1072 - MSSEMI_W (continued)</b>									
<b>LCS (B2C1072-BS1) - Continued</b>									
Prepared: 3/10/2022 Analyzed: 3/11/2022									
4-Nitrophenol	44.1700	50	0.51	100.000		44.2	6 - 48		
Acenaphthene	91.5000	10	2.1	100.000		91.5	38 - 109		
Acenaphthylene	90.0500	10	2.1	100.000		90.0	38 - 109		
Anthracene	108.570	10	2.1	100.000		109	41 - 109		
Benzidine (M)	38.7600	50	3.4	100.000		38.8	0 - 169		
Benzo(a)anthracene	114.740	10	2.1	100.000		115	39 - 110		L3
Benzo(a)pyrene	118.190	10	1.8	100.000		118	39 - 112		L3
Benzo(b)fluoranthene	118.470	10	2.5	100.000		118	37 - 108		L3
Benzo(g,h,i)perylene	105.730	10	1.8	100.000		106	34 - 117		
Benzo(k)fluoranthene	109.150	10	2.8	100.000		109	39 - 107		L3
Benzoic acid	52.9000	50	17	100.000		52.9	0 - 149		
Benzyl alcohol	72.9400	20	0.60	100.000		72.9	11 - 91		
bis(2-chloroethoxy)methane	79.4900	10	1.4	100.000		79.5	42 - 98		
bis(2-Chloroethyl)ether	66.1400	10	1.7	100.000		66.1	31 - 93		
bis(2-chloroisopropyl)ether	63.6900	10	1.8	100.000		63.7	38 - 89		
bis(2-ethylhexyl)phthalate	96.0800	10	1.7	100.000		96.1	44 - 118		
Butylbenzylphthalate	96.0500	10	2.6	100.000		96.0	44 - 116		
Chrysene	116.700	10	1.9	100.000		117	41 - 108		L3
Di-n-butylphthalate	112.480	10	1.5	100.000		112	51 - 110		L3
Di-n-octylphthalate	110.810	10	1.8	100.000		111	36 - 127		
Dibenz(a,h)anthracene	111.440	10	2.7	100.000		111	35 - 116		
Dibenzofuran	90.0900	10	2.5	100.000		90.1	45 - 107		
Diethyl phthalate	96.6700	10	1.3	100.000		96.7	49 - 111		
Dimethyl phthalate	99.4400	10	1.3	100.000		99.4	48 - 107		
Fluoranthene	114.170	10	2.2	100.000		114	43 - 109		L3
Fluorene	90.0600	10	2.6	100.000		90.1	37 - 114		
Hexachlorobenzene	87.3200	10	3.3	100.000		87.3	43 - 114		
Hexachlorobutadiene	79.8600	20	2.7	100.000		79.9	34 - 95		
Hexachlorocyclopentadiene	79.9300	10	3.4	100.000		79.9	26 - 120		
Hexachloroethane	65.5700	10	1.8	100.000		65.6	33 - 89		
Indeno(1,2,3-cd)pyrene	113.020	10	2.2	100.000		113	35 - 116		
Isophorone	86.5900	10	1.1	100.000		86.6	40 - 110		
N-Nitroso-di-n propylamine	78.2500	10	1.3	100.000		78.2	43 - 104		
N-Nitrosodiphenylamine	106.590	10	1.6	100.000		107	48 - 106		L3
Naphthalene	78.1900	10	2.3	100.000		78.2	33 - 99		
Nitrobenzene	68.6500	10	1.5	100.000		68.6	38 - 107		
Pentachlorophenol	102.320	50	1.5	100.000		102	25 - 130		
Phenanthrene	101.910	10	2.3	100.000		102	44 - 111		
Phenol	30.0500	10	0.35	100.000		30.0	5 - 43		
Pyrene	115.090	10	2.2	100.000		115	42 - 108		L3
Pyridine	51.3200	50	0.55	100.000		51.3	0 - 59		
Surrogate: 1,2-Dichlorobenzene-d4	68.77			100.000		68.8	21 - 92		
Surrogate: 2,4,6-Tribromophenol	124.4			150.000		82.9	24 - 113		
Surrogate: 2-Chlorophenol-d4	103.0			150.000		68.7	14 - 86		
Surrogate: 2-Fluorobiphenyl	82.56			100.000		82.6	28 - 105		



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**LCS (B2C1072-BS1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

Surrogate: 2-Fluorophenol	56.89		150.000	37.9	0 - 59				
Surrogate: 4-Terphenyl-d14	105.8		100.000	106	32 - 116				
Surrogate: Nitrobenzene-d5	70.92		100.000	70.9	25 - 101				
Surrogate: Phenol-d6	41.73		150.000	27.8	0 - 48				

**LCS (B2C1072-BS2)**

Prepared: 3/10/2022 Analyzed: 3/12/2022

1,2,4-Trichlorobenzene	88.3100	10	2.3	100.000	88.3	37 - 96			
1,2-Dichlorobenzene	73.0500	10	2.0	100.000	73.0	36 - 86			
1,3-Dichlorobenzene	74.1600	10	2.0	100.000	74.2	35 - 84			
1,4-Dichlorobenzene	72.4900	10	1.9	100.000	72.5	36 - 83			
2,4,5-Trichlorophenol	128.180	10	2.0	100.000	128	37 - 107			L3
2,4,6-Trichlorophenol	124.960	10	1.9	100.000	125	39 - 116			L3
2,4-Dichlorophenol	97.5700	10	1.4	100.000	97.6	36 - 110			
2,4-Dimethylphenol	95.7900	10	0.83	100.000	95.8	31 - 99			
2,4-Dinitrophenol	116.290	50	3.8	100.000	116	0 - 169			
2,4-Dinitrotoluene	120.690	10	2.4	100.000	121	46 - 123			
2,6-Dinitrotoluene	114.590	10	1.8	100.000	115	46 - 120			
2-Chloronaphthalene	103.740	10	2.2	100.000	104	41 - 107			
2-Chlorophenol	75.0300	10	1.7	100.000	75.0	24 - 89			
2-Methylnaphthalene	95.5500	10	2.8	100.000	95.6	40 - 101			
2-Methylphenol	72.2200	10	0.92	100.000	72.2	8 - 79			
2-Nitroaniline	104.980	50	1.2	100.000	105	38 - 128			
2-Nitrophenol	93.8100	10	1.9	100.000	93.8	30 - 103			
3,3'-Dichlorobenzidine	89.7000	20	1.6	100.000	89.7	40 - 126			
3-Nitroaniline	119.260	50	1.1	100.000	119	33 - 117			L3
4,6-Dinitro-2-methyphenol	129.060	50	2.0	100.000	129	5 - 155			
4-Bromophenyl-phenylether	117.750	10	2.6	100.000	118	46 - 110			L3
4-Chloro-3-methylphenol	105.770	50	1.0	100.000	106	29 - 116			
4-Chloroaniline	109.080	20	0.70	100.000	109	28 - 104			L3
4-Chlorophenyl-phenylether	119.970	10	2.9	100.000	120	45 - 111			L3
4-Methylphenol	35.6800	10	0.88	50.0000	71.4	13 - 100			
4-Nitroaniline	127.260	20	1.2	100.000	127	38 - 112			L3
4-Nitrophenol	48.1400	50	0.51	100.000	48.1	6 - 48			L2
Acenaphthene	105.350	10	2.1	100.000	105	38 - 109			
Acenaphthylene	102.400	10	2.1	100.000	102	38 - 109			
Anthracene	121.710	10	2.1	100.000	122	41 - 109			L3
Benzidine (M)	36.5600	50	3.4	100.000	36.6	0 - 169			
Benzo(a)anthracene	129.950	10	2.1	100.000	130	39 - 110			L3
Benzo(a)pyrene	128.510	10	1.8	100.000	129	39 - 112			L3
Benzo(b)fluoranthene	123.770	10	2.5	100.000	124	37 - 108			L3
Benzo(g,h,i)perylene	115.660	10	1.8	100.000	116	34 - 117			
Benzo(k)fluoranthene	129.170	10	2.8	100.000	129	39 - 107			L3
Benzoic acid	56.5000	50	17	100.000	56.5	0 - 149			
Benzyl alcohol	82.0100	20	0.60	100.000	82.0	11 - 91			
bis(2-chloroethoxy)methane	88.5200	10	1.4	100.000	88.5	42 - 98			



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
<b>Batch B2C1072 - MSSEMI_W (continued)</b>										
<b>LCS (B2C1072-BS2) - Continued</b>										
Prepared: 3/10/2022 Analyzed: 3/12/2022										
bis(2-Chloroethyl)ether	71.1700	10	1.7	100.000		71.2	31 - 93			
bis(2-chloroisopropyl)ether	73.1700	10	1.8	100.000		73.2	38 - 89			
bis(2-ethylhexyl)phthalate	108.920	10	1.7	100.000		109	44 - 118			
Butylbenzylphthalate	104.550	10	2.6	100.000		105	44 - 116			
Chrysene	130.050	10	1.9	100.000		130	41 - 108			L3
Di-n-butylphthalate	128.410	10	1.5	100.000		128	51 - 110			L3
Di-n-octylphthalate	122.140	10	1.8	100.000		122	36 - 127			
Dibenz(a,h)anthracene	125.870	10	2.7	100.000		126	35 - 116			L3
Dibenzofuran	106.550	10	2.5	100.000		107	45 - 107			
Diethyl phthalate	118.180	10	1.3	100.000		118	49 - 111			L3
Dimethyl phthalate	119.240	10	1.3	100.000		119	48 - 107			L3
Fluoranthene	129.490	10	2.2	100.000		129	43 - 109			L3
Fluorene	107.170	10	2.6	100.000		107	37 - 114			
Hexachlorobenzene	99.5700	10	3.3	100.000		99.6	43 - 114			
Hexachlorobutadiene	93.5300	20	2.7	100.000		93.5	34 - 95			
Hexachlorocyclopentadiene	91.2100	10	3.4	100.000		91.2	26 - 120			
Hexachloroethane	74.6000	10	1.8	100.000		74.6	33 - 89			
Indeno(1,2,3-cd)pyrene	122.140	10	2.2	100.000		122	35 - 116			L3
Isophorone	100.620	10	1.1	100.000		101	40 - 110			
N-Nitroso-di-n propylamine	92.2200	10	1.3	100.000		92.2	43 - 104			
N-Nitrosodiphenylamine	120.220	10	1.6	100.000		120	48 - 106			L3
Naphthalene	89.3800	10	2.3	100.000		89.4	33 - 99			
Nitrobenzene	81.5200	10	1.5	100.000		81.5	38 - 107			
Pentachlorophenol	120.230	50	1.5	100.000		120	25 - 130			
Phenanthrene	115.100	10	2.3	100.000		115	44 - 111			L3
Phenol	32.4100	10	0.35	100.000		32.4	5 - 43			
Pyrene	134.720	10	2.2	100.000		135	42 - 108			L5
Pyridine	52.1100	50	0.55	100.000		52.1	0 - 59			
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	77.16			100.000		77.2	21 - 92			
<i>Surrogate: 2,4,6-Tribromophenol</i>	158.2			150.000		105	24 - 113			
<i>Surrogate: 2-Chlorophenol-d4</i>	112.0			150.000		74.6	14 - 86			
<i>Surrogate: 2-Fluorobiphenyl</i>	101.6			100.000		102	28 - 105			
<i>Surrogate: 2-Fluorophenol</i>	64.85			150.000		43.2	0 - 59			
<i>Surrogate: 4-Terphenyl-d14</i>	119.7			100.000		120	32 - 116			S12
<i>Surrogate: Nitrobenzene-d5</i>	81.36			100.000		81.4	25 - 101			
<i>Surrogate: Phenol-d6</i>	45.84			150.000		30.6	0 - 48			
<b>LCS Dup (B2C1072-BSD1)</b>										
Prepared: 3/10/2022 Analyzed: 3/11/2022										
1,2,4-Trichlorobenzene	68.2200	10	2.3	100.000		68.2	37 - 96	12.6	20	
1,2-Dichlorobenzene	64.4900	10	2.0	100.000		64.5	36 - 86	4.22	20	
1,3-Dichlorobenzene	64.9500	10	2.0	100.000		65.0	35 - 84	0.0616	20	
1,4-Dichlorobenzene	61.3000	10	1.9	100.000		61.3	36 - 83	9.39	20	
2,4,5-Trichlorophenol	94.3300	10	2.0	100.000		94.3	37 - 107	15.1	20	
2,4,6-Trichlorophenol	94.8500	10	1.9	100.000		94.8	39 - 116	13.2	20	
2,4-Dichlorophenol	69.3400	10	1.4	100.000		69.3	36 - 110	20.4	20	R



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**LCS Dup (B2C1072-BSD1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

2,4-Dimethylphenol	69.4300	10	0.83	100.000	69.4	31 - 99	19.6	20		
2,4-Dinitrophenol	86.0900	50	3.8	100.000	86.1	0 - 169	8.70	20		
2,4-Dinitrotoluene	86.9000	10	2.4	100.000	86.9	46 - 123	13.6	20		
2,6-Dinitrotoluene	87.7500	10	1.8	100.000	87.8	46 - 120	8.31	20		
2-Chloronaphthalene	75.2200	10	2.2	100.000	75.2	41 - 107	13.9	20		
2-Chlorophenol	56.8500	10	1.7	100.000	56.8	24 - 89	18.0	20		
2-Methylnaphthalene	72.4800	10	2.8	100.000	72.5	40 - 101	15.5	20		
2-Methylphenol	48.5100	10	0.92	100.000	48.5	8 - 79	27.2	20	R	
2-Nitroaniline	78.7300	50	1.2	100.000	78.7	38 - 128	14.2	20		
2-Nitrophenol	70.8100	10	1.9	100.000	70.8	30 - 103	15.3	20		
3,3'-Dichlorobenzidine	69.4500	20	1.6	100.000	69.4	40 - 126	15.5	20		
3-Nitroaniline	81.3400	50	1.1	100.000	81.3	33 - 117	18.2	20		
4,6-Dinitro-2-methyphenol	94.5700	50	2.0	100.000	94.6	5 - 155	13.7	20		
4-Bromophenyl-phenylether	86.4900	10	2.6	100.000	86.5	46 - 110	13.4	20		
4-Chloro-3-methylphenol	72.8900	50	1.0	100.000	72.9	29 - 116	25.5	20	R	
4-Chloroaniline	75.3500	20	0.70	100.000	75.4	28 - 104	27.2	20	R	
4-Chlorophenyl-phenylether	83.2100	10	2.9	100.000	83.2	45 - 111	17.1	20		
4-Methylphenol	22.3400	10	0.88	50.0000	44.7	13 - 100	32.2	20	R	
4-Nitroaniline	84.1800	20	1.2	100.000	84.2	38 - 112	10.3	20		
4-Nitrophenol	36.5200	50	0.51	100.000	36.5	6 - 48	19.0	20		
Acenaphthene	74.8600	10	2.1	100.000	74.9	38 - 109	20.0	20	R	
Acenaphthylene	76.6800	10	2.1	100.000	76.7	38 - 109	16.0	20		
Anthracene	90.6400	10	2.1	100.000	90.6	41 - 109	18.0	20		
Benzidine (M)	33.9600	50	3.4	100.000	34.0	0 - 169	13.2	20		
Benzo(a)anthracene	99.2800	10	2.1	100.000	99.3	39 - 110	14.4	20		
Benzo(a)pyrene	94.7000	10	1.8	100.000	94.7	39 - 112	22.1	20	R	
Benzo(b)fluoranthene	99.3900	10	2.5	100.000	99.4	37 - 108	17.5	20		
Benzo(g,h,i)perylene	89.7500	10	1.8	100.000	89.8	34 - 117	16.3	20		
Benzo(k)fluoranthene	87.9100	10	2.8	100.000	87.9	39 - 107	21.6	20	R	
Benzoic acid	49.4100	50	17	100.000	49.4	0 - 149	6.82	20		
Benzyl alcohol	53.8800	20	0.60	100.000	53.9	11 - 91	30.1	20	R	
bis(2-chloroethoxy)methane	68.4200	10	1.4	100.000	68.4	42 - 98	15.0	20		
bis(2-Chloroethyl)ether	61.0300	10	1.7	100.000	61.0	31 - 93	8.04	20		
bis(2-chloroisopropyl)ether	58.7300	10	1.8	100.000	58.7	38 - 89	8.10	20		
bis(2-ethylhexyl)phthalate	84.5600	10	1.7	100.000	84.6	44 - 118	12.8	20		
Butylbenzylphthalate	80.3100	10	2.6	100.000	80.3	44 - 116	17.8	20		
Chrysene	98.2500	10	1.9	100.000	98.2	41 - 108	17.2	20		
Di-n-butylphthalate	93.8400	10	1.5	100.000	93.8	51 - 110	18.1	20		
Di-n-octylphthalate	92.8900	10	1.8	100.000	92.9	36 - 127	17.6	20		
Dibenz(a,h)anthracene	92.3700	10	2.7	100.000	92.4	35 - 116	18.7	20		
Dibenzofuran	79.3200	10	2.5	100.000	79.3	45 - 107	12.7	20		
Diethyl phthalate	83.2800	10	1.3	100.000	83.3	49 - 111	14.9	20		
Dimethyl phthalate	89.8000	10	1.3	100.000	89.8	48 - 107	10.2	20		
Fluoranthene	97.1100	10	2.2	100.000	97.1	43 - 109	16.1	20		
Fluorene	77.2300	10	2.6	100.000	77.2	37 - 114	15.3	20		



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**LCS Dup (B2C1072-BSD1) - Continued**

Prepared: 3/10/2022 Analyzed: 3/11/2022

Hexachlorobenzene	74.8500	10	3.3	100.000	74.8	43 - 114	15.4	20		
Hexachlorobutadiene	77.4200	20	2.7	100.000	77.4	34 - 95	3.10	20		
Hexachlorocyclopentadiene	72.8400	10	3.4	100.000	72.8	26 - 120	9.28	20		
Hexachloroethane	63.3700	10	1.8	100.000	63.4	33 - 89	3.41	20		
Indeno(1,2,3-cd)pyrene	93.5700	10	2.2	100.000	93.6	35 - 116	18.8	20		
Isophorone	75.9500	10	1.1	100.000	76.0	40 - 110	13.1	20		
N-Nitroso-di-n propylamine	66.8000	10	1.3	100.000	66.8	43 - 104	15.8	20		
N-Nitrosodiphenylamine	83.4100	10	1.6	100.000	83.4	48 - 106	24.4	20	R	
Naphthalene	67.4700	10	2.3	100.000	67.5	33 - 99	14.7	20		
Nitrobenzene	64.2800	10	1.5	100.000	64.3	38 - 107	6.57	20		
Pentachlorophenol	90.1600	50	1.5	100.000	90.2	25 - 130	12.6	20		
Phenanthrene	89.1300	10	2.3	100.000	89.1	44 - 111	13.4	20		
Phenol	22.1500	10	0.35	100.000	22.2	5 - 43	30.3	20	R	
Pyrene	99.5800	10	2.2	100.000	99.6	42 - 108	14.5	20		
Pyridine	42.4100	50	0.55	100.000	42.4	0 - 59	19.0	20		
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	66.59			100.000	66.6	21 - 92				
<i>Surrogate: 2,4,6-Tribromophenol</i>	110.0			150.000	73.3	24 - 113				
<i>Surrogate: 2-Chlorophenol-d4</i>	85.63			150.000	57.1	14 - 86				
<i>Surrogate: 2-Fluorobiphenyl</i>	75.35			100.000	75.4	28 - 105				
<i>Surrogate: 2-Fluorophenol</i>	47.99			150.000	32.0	0 - 59				
<i>Surrogate: 4-Terphenyl-d14</i>	94.59			100.000	94.6	32 - 116				
<i>Surrogate: Nitrobenzene-d5</i>	63.38			100.000	63.4	25 - 101				
<i>Surrogate: Phenol-d6</i>	31.67			150.000	21.1	0 - 48				

**LCS Dup (B2C1072-BSD2)**

Prepared: 3/10/2022 Analyzed: 3/12/2022

1,2,4-Trichlorobenzene	88.8300	10	2.3	100.000	88.8	37 - 96	0.587	20		
1,2-Dichlorobenzene	81.7100	10	2.0	100.000	81.7	36 - 86	11.2	20		
1,3-Dichlorobenzene	79.5800	10	2.0	100.000	79.6	35 - 84	7.05	20		
1,4-Dichlorobenzene	82.3200	10	1.9	100.000	82.3	36 - 83	12.7	20		
2,4,5-Trichlorophenol	131.020	10	2.0	100.000	131	37 - 107	2.19	20	L5	
2,4,6-Trichlorophenol	125.150	10	1.9	100.000	125	39 - 116	0.152	20	L3	
2,4-Dichlorophenol	89.4700	10	1.4	100.000	89.5	36 - 110	8.66	20		
2,4-Dimethylphenol	89.0500	10	0.83	100.000	89.0	31 - 99	7.29	20		
2,4-Dinitrophenol	116.230	50	3.8	100.000	116	0 - 169	0.0516	20		
2,4-Dinitrotoluene	121.120	10	2.4	100.000	121	46 - 123	0.356	20		
2,6-Dinitrotoluene	117.740	10	1.8	100.000	118	46 - 120	2.71	20		
2-Chloronaphthalene	103.000	10	2.2	100.000	103	41 - 107	0.716	20		
2-Chlorophenol	73.9200	10	1.7	100.000	73.9	24 - 89	1.49	20		
2-Methylnaphthalene	95.8600	10	2.8	100.000	95.9	40 - 101	0.324	20		
2-Methylphenol	60.6600	10	0.92	100.000	60.7	8 - 79	17.4	20		
2-Nitroaniline	108.880	50	1.2	100.000	109	38 - 128	3.65	20		
2-Nitrophenol	94.9900	10	1.9	100.000	95.0	30 - 103	1.25	20		
3,3'-Dichlorobenzidine	93.0000	20	1.6	100.000	93.0	40 - 126	3.61	20		
3-Nitroaniline	114.390	50	1.1	100.000	114	33 - 117	4.17	20		
4,6-Dinitro-2-methyphenol	123.610	50	2.0	100.000	124	5 - 155	4.31	20		



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### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
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**Batch B2C1072 - MSSEMI\_W (continued)**
**LCS Dup (B2C1072-BSD2) - Continued**

Prepared: 3/10/2022 Analyzed: 3/12/2022

4-Bromophenyl-phenylether	114.360	10	2.6	100.000	114	46 - 110	2.92	20	L3
4-Chloro-3-methylphenol	98.9400	50	1.0	100.000	98.9	29 - 116	6.67	20	
4-Chloroaniline	101.510	20	0.70	100.000	102	28 - 104	7.19	20	
4-Chlorophenyl-phenylether	115.300	10	2.9	100.000	115	45 - 111	3.97	20	L3
4-Methylphenol	30.8400	10	0.88	50.0000	61.7	13 - 100	14.6	20	
4-Nitroaniline	119.750	20	1.2	100.000	120	38 - 112	6.08	20	L3
4-Nitrophenol	47.7800	50	0.51	100.000	47.8	6 - 48	0.751	20	
Acenaphthene	106.220	10	2.1	100.000	106	38 - 109	0.822	20	
Acenaphthylene	102.060	10	2.1	100.000	102	38 - 109	0.333	20	
Anthracene	118.250	10	2.1	100.000	118	41 - 109	2.88	20	L3
Benzidine (M)	34.5900	50	3.4	100.000	34.6	0 - 169	5.54	20	
Benzo(a)anthracene	130.640	10	2.1	100.000	131	39 - 110	0.530	20	L5
Benzo(a)pyrene	135.660	10	1.8	100.000	136	39 - 112	5.41	20	L5
Benzo(b)fluoranthene	133.880	10	2.5	100.000	134	37 - 108	7.85	20	L5
Benzo(g,h,i)perylene	121.850	10	1.8	100.000	122	34 - 117	5.21	20	L3
Benzo(k)fluoranthene	119.130	10	2.8	100.000	119	39 - 107	8.09	20	L3
Benzoic acid	53.4100	50	17	100.000	53.4	0 - 149	5.62	20	
Benzyl alcohol	72.9700	20	0.60	100.000	73.0	11 - 91	11.7	20	
bis(2-chloroethoxy)methane	85.8500	10	1.4	100.000	85.8	42 - 98	3.06	20	
bis(2-Chloroethyl)ether	78.2400	10	1.7	100.000	78.2	31 - 93	9.46	20	
bis(2-chloroisopropyl)ether	75.6400	10	1.8	100.000	75.6	38 - 89	3.32	20	
bis(2-ethylhexyl)phthalate	109.080	10	1.7	100.000	109	44 - 118	0.147	20	
Butylbenzylphthalate	106.260	10	2.6	100.000	106	44 - 116	1.62	20	
Chrysene	128.150	10	1.9	100.000	128	41 - 108	1.47	20	L3
Di-n-butylphthalate	122.320	10	1.5	100.000	122	51 - 110	4.86	20	L3
Di-n-octylphthalate	125.930	10	1.8	100.000	126	36 - 127	3.06	20	
Dibenz(a,h)anthracene	129.110	10	2.7	100.000	129	35 - 116	2.54	20	L3
Dibenzofuran	105.530	10	2.5	100.000	106	45 - 107	0.962	20	
Diethyl phthalate	114.150	10	1.3	100.000	114	49 - 111	3.47	20	L3
Dimethyl phthalate	119.410	10	1.3	100.000	119	48 - 107	0.142	20	L3
Fluoranthene	124.330	10	2.2	100.000	124	43 - 109	4.07	20	L3
Fluorene	105.410	10	2.6	100.000	105	37 - 114	1.66	20	
Hexachlorobenzene	98.4900	10	3.3	100.000	98.5	43 - 114	1.09	20	
Hexachlorobutadiene	98.1700	20	2.7	100.000	98.2	34 - 95	4.84	20	L3
Hexachlorocyclopentadiene	91.3400	10	3.4	100.000	91.3	26 - 120	0.142	20	
Hexachloroethane	78.2600	10	1.8	100.000	78.3	33 - 89	4.79	20	
Indeno(1,2,3-cd)pyrene	129.410	10	2.2	100.000	129	35 - 116	5.78	20	L3
Isophorone	97.1800	10	1.1	100.000	97.2	40 - 110	3.48	20	
N-Nitroso-di-n propylamine	88.9900	10	1.3	100.000	89.0	43 - 104	3.56	20	
N-Nitrosodiphenylamine	117.690	10	1.6	100.000	118	48 - 106	2.13	20	L3
Naphthalene	89.9500	10	2.3	100.000	90.0	33 - 99	0.636	20	
Nitrobenzene	84.8700	10	1.5	100.000	84.9	38 - 107	4.03	20	
Pentachlorophenol	117.760	50	1.5	100.000	118	25 - 130	2.08	20	
Phenanthrene	115.130	10	2.3	100.000	115	44 - 111	0.0261	20	L3
Phenol	31.0900	10	0.35	100.000	31.1	5 - 43	4.16	20	



## Certificate of Analysis

Langan Engineering & Environmental Services  
515 South Flower Street Suite 2860  
Los Angeles , CA 90071

Project Number : Orbis- Santa Fe Springs / 721033501  
Report To : Julian Grochocki  
Reported : 04/07/2022

### Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
---------	------------------	---------------	---------------	----------------	------------------	-------	-----------------	-----	--------------	-------

#### Batch B2C1072 - MSSEMI\_W (continued)

##### LCS Dup (B2C1072-BSD2) - Continued

Prepared: 3/10/2022 Analyzed: 3/12/2022

Pyrene	129.300	10	2.2	100.000	129	42 - 108	4.11	20	L3
Pyridine	47.6900	50	0.55	100.000	47.7	0 - 59	8.86	20	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	85.45			100.000	85.4	21 - 92			
<i>Surrogate: 2,4,6-Tribromophenol</i>	155.4			150.000	104	24 - 113			
<i>Surrogate: 2-Chlorophenol-d4</i>	113.7			150.000	75.8	14 - 86			
<i>Surrogate: 2-Fluorobiphenyl</i>	101.6			100.000	102	28 - 105			
<i>Surrogate: 2-Fluorophenol</i>	62.02			150.000	41.3	0 - 59			
<i>Surrogate: 4-Terphenyl-d14</i>	119.4			100.000	119	32 - 116			S12
<i>Surrogate: Nitrobenzene-d5</i>	84.64			100.000	84.6	25 - 101			
<i>Surrogate: Phenol-d6</i>	42.87			150.000	28.6	0 - 48			



# CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

2200333  
21

Company: Langan Engineering & Environmental Services

SEND REPORT TO:

Attn: Julian Girochocki

Email: jgirochock@langan.com

Company: Langan Engineering & Environmental Services

Address: 515 South Flower Street, Suite 2860

City: Los Angeles

State: CA

Zip: 90071

Address: 515 South Flower Street, Suite 2860

Project Name: Orbis - Santa Fe Springs

Quote #: N91CS

PO #:

Project No.: 721033501

Sampler: N91CS

ITEM Lab ID (For Lab Use Only)

Sample ID

Sample Description

Location

Date

Time

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## **APPENDIX D**

### **Groundwater Sampling Logs**



130.5-

ABC Liovin Drilling, Inc

**ABC Clovin Drilling, Inc.**  
1180 E. Burnett Street, Signal Hill, CA 90755 (562) 981-8575 Fax (562) 981-9594  
[www.abcdrilling.com](http://www.abcdrilling.com)  
C-57 License No. 422904

### Development / Purge Record

Date: 3-11-22 ABC Job # 892553 Site: 10895 Keweenaw Ave  
Well I.D. # MW-3 Water Level T.O.C. 117.59 Total Depth 130.50  
Well Dia. 2 Water Column Height 12.91 Casing Volume 2.19

Comments: Surveyed 30 min Br'l 5<sup>+</sup> gallons

Slow Recharge 18 min for 5 Foot Recovery

\*T.O.C. = Top Of Casing

Date Collected by: John

Volume: Gal. per linear foot

$$2'' = 0.17 \quad 6'' = 1.5$$

$$3'' = 0.38 \quad 8'' = 2.51$$

$$A^* = 0.66$$

**Instrument Type**

Serial Number:

#### Instrument Calibration

#### **Operation's Initial**

#### **Client's initial**



## ABC Liovin Drilling, Inc.

1180 E. Burnett Street, Signal Hill, CA 90755 (562) 981-8575 Fax (562) 981-9594  
www.abcdrilling.com  
C-57 License No. 422904

## Development / Purge Record

Date: 3-9-22 ABC Job # 892553 Site: 10845 Kontz Ave  
Well I.D. # Mw-5 Water Level T.O.C. 118.77 Total Depth 130.44  
Well Dia. 2 Water Column Height 12.1 Casing Volume 2.05

OTP

Time	Flow Rate	Gallons Purged	Temperature	Conductivity	pH	Turbidity	DO	Salinity	Other
1:40	.25		28.21	1.52	6.81	1000f	4.34	117	
1:50			28.89	1.59	6.81	1000f	4.78	109	
2:00			28.89	1.55	6.88	158	4.80	104	
2:10			29.79	1.57	6.88	61.3	4.81	102	
2:20			29.78	1.55	6.87	96.3	4.82	106	
2:30			29.79	1.55	6.86	21.5	4.83	107	
2:35			29.81	1.56	6.87	22.1	4.82	108	
2:40			29.80	1.55	6.88	89.8	4.19	107	
2:50			29.81	1.55	6.90	52.3	4.17	106	
2:55			29.82	1.55	6.89	9.1	4.18	106	
3:00			29.80	1.55	6.87	7.8	4.17	105	
3:05	55		29.80	1.55	6.88	5.1	4.18	106	

Comments: 55 gallons

\*T.O.C. = Top Of Casing

Volume: Gal. per linear foot

2" = 0.17      6" = 1.5

3" = 0.38      8" = 2.51

4" = 0.66

Date Collected by: \_\_\_\_\_

Instrument Type: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Instrument Calibration

Operator's Initial: \_\_\_\_\_

Client's Initial: \_\_\_\_\_





## ABC Liovin Drilling, Inc.

1180 E. Burnett Street, Signal Hill, CA 90756 (562) 981-8575 Fax (562) 981-9694  
www.abcdrilling.com  
C-57 License No. 422904

## Development / Purge Record

Date: 7-9-22 ABC Job # 892553 Site: 108'15 Kcont+z true  
Well I.D. # MW-5 Water Level T.O.C. 118.34 Total Depth 130.44  
Well Dia. 2 Water Column Height 12.1 Casing Volume 2.05

ORP

Time	Flow Rate	Gallons Purged	Temperature	Conductivity	pH	Turbidity	DO	Salinity	Other
11:10	.25	0	27.51	1.55	6.75	1000	11.26	169	
11:20	.25		28.11	1.56	6.76	1000	8.77	132	
11:30	.25		28.39	1.55	6.77	1000	7.87	119	
11:40	.25		28.99	1.56	6.76	918	7.05	112	
11:50	.25		29.48	1.55	6.67	719	5.28	97	
12:00	.25		29.08	1.52	6.69	681	5.11	165	
12:10	.25		28.58	1.52	6.67	601	5.73	113	
12:20	.25		28.59	1.52	6.68	540	5.71	112	
12:30	.25		26.35	1.60	6.80	559	6.50	120	
12:40	.25		25.99	1.61	7.02	600	6.22	155	
12:50	.25		26.00	1.69	7.21	591	5.62	217	
1:00	.25		27.20	1.71	6.89	619	5.51	189	
1:10	.25		28.10	1.63	6.80	222	5.80	147	
1:20	.25		28.45	1.55	6.83	198	5.50	124	
1:30	.25	37.5	28.74	1.50	6.85	274	4.64	120	

Comments: Surged 20 min Bailed 10 gallons

Date Collected by: \_\_\_\_\_

\*T.O.C. = Top Of Casing

Volume: Gal. per linear foot

2" = 0.17      6" = 1.5

3" = 0.38      8" = 2.51

4" = 0.66

Instrument Type: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Instrument Calibration

Operator's Initial: \_\_\_\_\_

Client's Initial: \_\_\_\_\_



# Low-Flow Purging and Sampling Field Data Sheet

Langan Engineering and Environmental Services

Site Name:	Santa Fe Springs	Water Quality Meter Make/Model:	
Location:	MW-1	Water Quality Meter Serial #:	
Project No.:		Field Personnel:	M. Ritsema & E. Van Dseen
Weather:		Signature:	
Date:	3/10/2022		

Well ID: MW-1      Well Depth: ~132 ft      Screened/Open Interval: 122 to ~132 ft below TOC  
 Well Permit #: \_\_\_\_\_      Well Diameter: 2 inches

PID/FID Readings (ppm)  
 Background: \_\_\_\_\_  
 Beneath Inner Cap: \_\_\_\_\_

Pump Intake Depth: ~127 ft below TOC  
 Depth to Water Before Pump Installation: 116.5 ft below TOC

TIME	PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUTCTIVITY ( $\mu\text{Scm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
16:10	7.36	6.501	182	-732	0.0	28.9			
16:24	7.24	6.487	183	-6.38	0.0	29.2			
16:28	7.27	6.489	169	-7.36	0.0	29.4			
16:32	7.36	6.490	160	-6.91	0.0	29.4			

✓ meter does not appear to

be reading  
turbidity  
(water is  
cloudy)

flow is  
slowing,  
collecting  
sample  
(have to get  
to lab)

COMMENTS:
-----------

**Low-Flow Purging and Sampling Field Data Sheet**  
 Langan Engineering and Environmental Services

Site Name: Santa Fe Springs Water Quality Meter Make/Model: \_\_\_\_\_  
 Location: MW-3 Water Quality Meter Serial #: \_\_\_\_\_  
 Project No.: \_\_\_\_\_ Field Personnel: M. Rittema & E. Van Dusen  
 Weather: \_\_\_\_\_ Signature: \_\_\_\_\_  
 Date: 3/11/2022

Well ID: M.WJ-3 Well Depth: ~131 ft Screened/Open Interval: ~121 to ~131 ft below TOC  
 Well Permit #: \_\_\_\_\_ Well Diameter: 72 inches

PID/FID Readings (ppm)  
 Background: \_\_\_\_\_  
 Beneath Inner Cap: \_\_\_\_\_

Pump Intake Depth: ~126 ft below TOC  
 Depth to Water Before Pump Installation: 121.9 ft below TOC

TIME	PURGING	pH (standard units)	SPECIFIC CONDUCTIVITY ( $\mu\text{s}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
16:08	SAMPLING	7.64	1.37	228	7.95	0.0	34.21		
16:12		7.76	1.40	225	8.49	6.6	32.54		
16:15		7.75	1.45	218	8.07	6.6	33.16		
16:20		7.66	1.52	236	8.06	620	32.62		
16:23		7.59	1.63	235	8.11	371	32.23		
16:26		7.62	1.68	234	8.08	707	32.08		
16:29		7.66	1.71	232	8.10	170	32.01		

reading turbidity

recalibrated meter reading but not  
turbidity

← started reading turbidity



Worried  
 about  
 draw down,  
 collecting  
 sample  
 (have to  
 get to lab)

COMMENTS:

**Low-Flow Purgging and Sampling Field Data Sheet**  
 Langan Engineering and Environmental Services

Site Name:	Santa Fe Spring	Water Quality Meter Make/Model:																																													
Location:	MW-5	Water Quality Meter Serial #:																																													
Project No.:		Field Personnel:	M. Ritsema + C. Slatter																																												
Weather:		Signature:																																													
Date:	3/19/2022																																														
Well ID:	MW-5	Well Depth:	~132 ft																																												
Well Permit #:		Well Diameter:	2 inches																																												
PID/FID Readings (ppm)		Screened/Open Interval:	~122 to ~132 ft below TOC																																												
Background:		Pump Intake Depth:	~127 ft below TOC																																												
Beneath Inner Cap:		Depth to Water Before Pump Installation:	118.6 ft below TOC																																												
<table border="1"> <thead> <tr> <th>TIME</th> <th>PURGING SAMPLING</th> <th>pH (standard units)</th> <th>SPECIFIC CONDUCTIVITY (<math>\mu\text{s}/\text{cm}</math>)</th> <th>REDOX POTENTIAL (mV)</th> <th>DISSOLVED OXYGEN (mg/L)</th> <th>TURBIDITY (NTU)</th> <th>TEMPERATURE (°C)</th> </tr> <tr> <th>READING</th> <th>CHANGE*</th> <th>READING</th> <th>CHANGE*</th> <th>READING</th> <th>CHANGE*</th> <th>READING</th> <th>CHANGE*</th> </tr> </thead> <tbody> <tr> <td>16:20</td> <td>6.74</td> <td>0.0</td> <td>188</td> <td>16.05</td> <td>30.1</td> <td>21.90</td> <td></td> </tr> <tr> <td>16:25</td> <td>6.31</td> <td>0.6</td> <td>177</td> <td>13.77</td> <td>21.7</td> <td>21.75</td> <td></td> </tr> <tr> <td>16:30</td> <td>6.65</td> <td>0.0</td> <td>187</td> <td>13.60</td> <td>21.5</td> <td>21.75</td> <td></td> </tr> </tbody> </table>								TIME	PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUCTIVITY ( $\mu\text{s}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	16:20	6.74	0.0	188	16.05	30.1	21.90		16:25	6.31	0.6	177	13.77	21.7	21.75		16:30	6.65	0.0	187	13.60	21.5	21.75	
TIME	PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUCTIVITY ( $\mu\text{s}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)																																								
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16:25	6.31	0.6	177	13.77	21.7	21.75																																									
16:30	6.65	0.0	187	13.60	21.5	21.75																																									
Flow slowing Collecting Sample (have to get to lab)																																															
COMMENTS:																																															

**Low-Flow Purging and Sampling Field Data Sheet**  
**Langan Engineering and Environmental Services**

Site Name:	Santa Fe Springs	Water Quality Meter Make/Model:	
Location:	PMW-6	Water Quality Meter Serial #:	
Project No.:		Field Personnel:	M. Riksem & C. Slatter
Weather:		Signature:	
Date:	3/9/2022		

Well ID:	PMW-6	Well Depth:	~80 ft	Screened/Open Interval:		to		ft below TOC
Well Permit #:		Well Diameter:	4 inches					

PID/FID Readings (ppm)		Pump Intake Depth:	~120 ft below TOC
Background:		Depth to Water Before Pump Installation:	113.7 ft below TOC
Beneath Inner Cap:			

TIME PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUCTIVITY ( $\mu\text{S}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0925	6.70	0.671	-173	5.13	0.1	21.79		
0929	6.94	0.633	-167	2.21	0.1	22.82		
0933	6.93	0.628	-161	1.34	0.0	23.73		
0937	7.46	6.633	-182	1.07	6.3	23.45		
0945	7.44	6.631	-170	0.72	0.0	23.6		

↑  
flow is  
slowing,  
collecting  
sample

COMMENTS:

**Low-Flow Purgging and Sampling Field Data Sheet**  
**Langan Engineering and Environmental Services**

Site Name:	Santa Fe Springs	Water Quality Meter Make/Model:	
Location:	PMW-7	Water Quality Meter Serial #:	
Project No.:		Field Personnel:	M. Ritscher & C. Slatter
Weather:		Signature:	
Date:	3/1/2022		

Well ID: PMW-7      Well Depth: ~145 ft      Screened/Open Interval: \_\_\_\_\_ to \_\_\_\_\_ ft below TOC  
 Well Permit #: \_\_\_\_\_ Well Diameter: 4 inches

PID/FID Readings (ppm)  
 Background: \_\_\_\_\_  
 Beneath Inner Cap: \_\_\_\_\_  
 Pump Intake Depth: ~110 ft below TOC  
 Depth to Water Before Pump Installation: 113 ft below TOC

TIME	PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUTIVITY ( $\mu\text{S}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (mL/min)	DEPTH TO WATER (ft below TOC)
		READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*
10:23	6.59	6465	-63	5.67	2.0	23.27			
10:27	7.46	6477	-129	1.33	1.7	23.73			
10:31	7.38	0.471	-130	0.97	1.9	23.93			
10:35	7.34	0.471	-128	0.60	1.2	23.94			

Collecting  
Sample

COMMENTS:

# Low-Flow Purgging and Sampling Field Data Sheet

Langan Engineering and Environmental Services

**Site Name:** Santa Fe Springs  
**Location:** PMW - 8  
**Project No.:**  
**Weather:**  
**Date:** 3/9/2022

**Water Quality Meter Make/Model:**  
**Water Quality Meter Serial #:**  
**Field Personnel:** M. Rikema & C. Slattery  
**Signature:**

**Well ID:** PMW - 8      **Well Depth:** ~130 ft      **Screened/Open Interval:** \_\_\_\_\_ to \_\_\_\_\_ ft below TOC  
**Well Permit #:** \_\_\_\_\_      **Well Diameter:** 4 inches

**PID/FID Readings (ppm)**  
**Background:** \_\_\_\_\_  
**Beneath Inner Cap:** \_\_\_\_\_

**Pump Intake Depth:** ~120 ft below TOC  
**Depth to Water Before Pump Installation:** 112.2 ft below TOC

TIME	PURGING	SAMPLING	pH (standard units)	SPECIFIC CONDUCTIVITY ( $\mu\text{S}/\text{cm}$ )	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
11:10	7.03	0.937	1.56	1.75	1.3	1385				
11:19	6.96	6.939	1.55	1.92	1.8	23.80				
11:23	6.87	6.964	1.54	0.59	1.0	23.67				
11:27	6.85	6.986	1.57	0.31	0.6	23.67				

Collecting Sample

COMMENTS:

**Low-Flow Purging and Sampling Field Data Sheet**  
**Langan Engineering and Environmental Services**

Site Name: Santa Fe Springs Water Quality Meter Make/Model: \_\_\_\_\_  
 Location: PMW-11 Water Quality Meter Serial #: \_\_\_\_\_  
 Project No.: \_\_\_\_\_ Field Personnel: M. Ritsema & E. Van Dseen  
 Weather: \_\_\_\_\_ Signature: \_\_\_\_\_  
 Date: 3/10/1072

Well ID: PMW-11-C-4 Well Depth: ~200 ft Screened/Open Interval: \_\_\_\_\_ to \_\_\_\_\_ ft below TOC  
 Well Permit #: \_\_\_\_\_ Well Diameter: \_\_\_\_\_ inches

PID/FID Readings (ppm)  
 Background: \_\_\_\_\_ Pump Intake Depth: \_\_\_\_\_ ft below TOC  
 Beneath Inner Cap: \_\_\_\_\_ Depth to Water Before Pump Installation: 18.8 ft below TOC

TIME	PURGING SAMPLING	pH (standard units)	SPECIFIC CONDUTIVITY ( $\mu$ Scm)	REDOX POTENTIAL (mV)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
		READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*
12:15	7.59	0.344	-175	10.40	6.0	24.01			
12:20	7.96	6.336	-170	0.69	0.0	23.3			
12:25	8.05	0.345	-180	6.42	0.6	23.37			
12:30	7.91	0.348	-180	0.21	6.0	23.34			

Collecting  
Sample

COMMENTS:

**Low-Flow Purging and Sampling Field Data Sheet**  
 Langan Engineering and Environmental Services

Site Name: Santa Fe Springs  
 Location: PMW1-11  
 Project No.: \_\_\_\_\_  
 Weather: \_\_\_\_\_  
 Date: 3/16/2022  
 Water Quality Meter Make/Model: \_\_\_\_\_  
 Water Quality Meter Serial #: \_\_\_\_\_  
 Field Personnel: M. Rissena & E. Van Dusen  
 Signature: \_\_\_\_\_

Well ID: PMW1-11-1C-5

Well Depth: 155 ft

Screened/Open Interval: \_\_\_\_\_ to \_\_\_\_\_ ft below TOC

Well Permit #:

Well Diameter: \_\_\_\_\_ inches

PID/FID Readings (ppm)

Background: \_\_\_\_\_

Beneath Inner Cap: \_\_\_\_\_

Pump Intake Depth: \_\_\_\_\_ ft below TOC  
 Depth to Water Before Pump Installation: 115.1 ft below TOC

TIME	PURGING		SPECIFIC CONDUCTIVITY		REDOX POTENTIAL		DISSOLVED OXYGEN		TURBIDITY (NTU)		TEMPERATURE (°C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
	PURGING	SAMPLING	(standard units)	( $\mu$ Scm)	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
13:45	7.35	6.82	-39	14.45	5.5	24								
13:50	7.31	6.636	-30	12.07	11.3	23								
13:55	7.37	6.621	-21	8.31	13.3	23								
14:00	7.36	6.623	-23	6.11	16.1	23								
14:05	7.38	6.626	-26	4.51	17.4	23								
14:18	7.33	6.625	-18	4.13	17.2	23								
14:23	7.30	6.628	-9	3.84	18.3	23								

Collecting  
Samples

COMMENTS: