Environmental Site Investigation
SBD4
Victorville, California

Prepared for:

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Pier 1, Bay 1
San Francisco, California

Prepared by:

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27 April 2021
700089101

LANGAN

Technical Excellence
Practical Experience
Client Responsiveness

April 27, 2021

Ms. Julia Smith
Prologis, L.P.
Pier 1, Bay 1
San Francisco, California 94111

Subject: Environmental Site Investigation
SBD4
Victorville, California
Langan Project: 700089101

Dear Ms. Smith:

Langan Engineering and Environmental Services, Inc. (Langan) is submitting this Environmental Site Investigation (ESI) for the prospect SBD4 site located in the City of Victorville in San Bernardino County (the "Site"). The Site is east of Adelanto Road on parcels 045904124, 045904123, and 045904132. Our scope of services for this project consisted of collecting and analyzing discrete soil, composite soil, and soil vapor samples.

We appreciate the opportunity to assist you with this project. If you have questions or need information clarified, please call Mr. Andrew Kerr at 510-333-9051 or Mr. Rory Johnston at 973-560-4978.

Sincerely yours,

Langan Engineering and Environmental Services, Inc.

Andrew Kerr, PG
Associate

Robert (Rory) S. Johnston, PE, BCEE
Principal / Vice President

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1.0 INTRODUCTION

Langan Engineering and Environmental Services, Inc. (Langan) has performed this Environmental Site Investigation (ESI) for the proposed SBD4 site located east of Adelanto Road in the City of Victorville in San Bernardino County (the "Site"). The approximate location of the Site is shown on **Figure 1**. This ESI was performed on behalf of Prologis, L.P. (User) to assist with development and/or future leasing of the Site.

The Site encompasses approximately 115 acres and is comprised of the following San Bernardino County Assessor's Parcel Numbers (APNs): 0459-041-24, 0459-041-23, and 0459-041-32. The Site consists of vacant, almost entirely undeveloped land at the western boundary of the Southern California Logistics Airport (SCLA). The Site is bound to the north and west by vacant land, to the south by an existing warehouse and vacant land, and to the east by other peripheral areas of the SCLA.

A review of online documents indicate that the Site is currently owned by Stirling Capital Investments (Stirling). The Site is currently unused and unoccupied, but was used by Volkswagen for the storage of vehicles as recently as 2017.

The implemented scope of services for this ESI included conducting a geophysical survey and collecting shallow composite soil samples from 13 locations, soil samples from seven soil borings, and soil vapor samples from nine temporary probes. The sample locations are included on **Figure 2**.

2.0 BACKGROUND

2.1 Site History

This Site is located in an area that was originally the western-most edge of the former George Air Force Base (GAFB). GAFB was established in 1941 and was closed in 1992 as part of the federal government's Base Realignment and Closure (BRAC) program. Much of the land of the former base was transitioned to a non-military airfield now known as the SCLA. The Site was included within a 548-acre portion of a "Parcel B" that was transferred in 2003 from the United States Air Force (USAF) to the SCLA, with ownership of the parcels now comprising the Site obtained by Stirling as of 2018.

The land comprising the Site was originally part of GAFB's western airfield operations area, and included a portion of a northwest-southeast aligned runway, supporting taxiways and vehicle roadways, and a collection of historic flight or aircraft support features. Specific, known former base features located within the Site boundary include a mid-runway radar siting and/or gun target structured and berms referred to as a "Firing-in-Butt" facility, and three adobe revetments south of the runway. The Firing-in-Butt feature persisted in an apparently active form until the late 1980s, with the building portion of the original feature still present. The airplane staging features generally appeared to have become obsolete and/or unused by the early 1960s and were removed during the mid-2000s.

The Site has predominantly been vacant, unused land since closure of the GAFB. The exceptions include a portion of the former taxiway and runway areas within the Site having been used for airplane staging from the early 2000s to approximately 2016, and the full Site area having been used for storage of automobiles during the 2017/2018 time period for Volkswagen vehicles affected by the 2015 turbo diesel recall process. The airplane staging use appears to have predominately been temporary storage of planes to be sold or demolished elsewhere, although aerial photos show one plane being deconstructed on a taxiway in the north-central portion of the Site in the 2005 time period and a regulatory record describing an environmental cleanup needed circa 2002 from a plane dismantling operation. The car staging activity appears to have only included storage, without facilities for onsite maintenance or scrapping.

2.2 Phase I ESA Findings

Langan conducted a Phase I Environmental Site Assessment (ESA) for the Site dated April 27, 2021. The Phase I ESA has identified the following items of environmental note:

- A former runway and several associated taxiways that date back to the base's initial formation circa 1942 have extended across the Site until the late 2010s. Active use appears to have ceased by the late 1950s.

- Two former GAFB environmental investigation sites/areas are within the Site footprint: Site ZZ050 and a portion of Site SD018. Both are listed as "OU-3 Soil Sites" and were closed during the 1990s with a No Further Action designation by the USAF and United States Environmental Protection Agency (USEPA). The ZZ050 site is a former "Firing-In Butt" facility reportedly used for aircraft radar siting and ammunition (shooting) target, that still includes an approximately 3,000 sq. foot concrete structure with a contained sand pile.

- Three World War II airplane revetment structures formerly present in the southern portion of the Site. These structures were removed in the mid 2000s, but were reportedly historically excluded from the GAFB environmental sampling.

- Periodic storage of airplanes was conducted from the early 2000s to approximately 2016 on the former runway and taxiways, with one aerial photograph and one environmental record suggesting localized aircraft disassembly.

- The Site used as a vehicle storage lot for approximately 1 year circa 2017 associated with the recall of clean burning diesel Volkswagen cars. The storage included an estimated 10,000 to 20,000 cars.

- Two areas of piled debris were noted in the 2012/2013 time period and interpreted as wood or other construction material.

- A third GAFB site (ZZ051) was present approximately 300 feet southeast of the Site, and was reportedly an "engine test cell" area that included several USTs with historical releases of jet fuel to the subsurface. Remediation was implemented by the USAF, including bioventing and the operation of soil vapor extraction (SVE) systems, with the SVE system operated 2000 through 2015. A site closure request appears in process but a formal closure has not yet granted by the oversight regulator.

- A Kinder Morgan finished fuel pipeline is located along the western Site boundary inside the fence line. Two additional Kinder Morgan pipelines are located just outside the Site fence line along Adelanto Road.

- An existing industrial waste/sewer line (or lines) is located along the eastern Site edge.

This ESI was performed to obtain additional environmental information regarding:

- Overall shallow soil quality associated with former Site structures and historic activities, with an emphasis on the ZZ050, the three removed revetment structures, and the former runway areas. Additional sampling was also performed at select locations to attempt to identify if there is impacted soil from the former debris storage and car storage lot uses.

- Shallow soil conditions along the western Site boundary to evaluate if the operating fuel line has affected Site conditions.

- Soil vapor conditions in the southeast portion of Site to evaluate the potential of the presence of volatile fuel vapor encroachment from the remediated ZZ051 site.
- Potential indicators of soil vapor issues beneath the proposed building footprint

This summary report describes the scope of services conducted and the results of the investigation.

3.0 ENVIRONMENTAL SITE INVESTIGATION

3.1 Scope and Timing

Langan completed the following scope of services from March 19 to March 23, 2021:

- Conducted a geophysical survey;
- Collected 25 shallow composite soil sample from 13 locations;
- Collected 14 soil samples from 7 soil borings; and
- Collected nine soil vapor samples from nine temporary probes.

A summary of the analysis performed on the samples collected is presented in **Table 1**, and the location of completed investigation points is shown in **Figure 2.**

3.2 Field Investigation Methods

Langan contracted Ground Penetrating Radar Systems LLC (GPRS) to conduct the geophysical survey, ABC Liovin Drilling, Inc. (ABC), a licensed drilling contractor, to provide drilling services, and Advanced Technology Laboratories (ATL), a California certified laboratory, to provide analytical testing services. Field investigation was preceded by Langan contacting DigAlert (811) as a notification of drilling and provide utility operators the opportunity to locate and mark their subsurface utilities in the investigation area.

3.2.1 Geophysical Survey

Langan contracted GPRS to conduct a geophysical survey ahead of the onset of the site investigation and as part of evaluation activities. The survey work consisted of generalized scanning at the Z0050, at the former revetment, and at the former runway areas. The scope of the survey consisted of grid review patterns at the revetment areas and two linear swaths at the Z0050 area and the runway features. Survey work was also conducted at each of the sampling locations to scan for buried utility lines and provide an independent clearance of drilling locations beyond the 811

process. The survey work used ground penetrating radar (GPR) and electromagnetic detection equipment.

3.2.2 Soil Investigation

Langan collected 25 shallow composite soil samples at 13 locations (CS-01 to CS-13) using a hand auger and trowel. The shallow soil sample at the Firing-In-Butt structure was collected as a composite of the stored sand, with four samples collected at different locations that were accessible and estimated as representative. The other 24 shallow composite soil samples were collected at 12 locations. At each location samples were collected at two intervals (upper two inches and four to six inches below ground surface [bgs]). The samples were collected as 4 to 1 lab composited samples, using 25-foot-centers in the four cardinal directions from a central location. The composite samples mostly targeted specific known features as described in **Table 1**, but also included four samples from a grid pattern in the middle of the Site to evaluate overall soil quality in area that previously had parked vehicles (**Figure 2**). The composite soil sampling log is included in **Appendix B**.

Additionally, Langan contracted ABC to advance seven soil borings (SB-01 to SB-07) with a direct-push Geoprobe® rig to a depth of 10 feet bgs. One boring, SB-01, was advanced to a depth of 20 feet bgs to classify the soil between 10 and 20 feet (ft) bgs.

The seven soil borings were located at the three former revetments, the ZZ050 site, the intersection of the runway and taxiway, and the western perimeter (**Figure 2**). Soil cores were collected continuously from each boring, screened for organic vapors with a photoionization detector (PID), and examined for visual and olfactory evidence of potential impacts. One shallow soil sample (approx. 0.5 to 1 ft bgs) and one deeper sample (approx. 5 to 7.5 ft bgs) were collected from each boring. Following sample collections, the boreholes were backfilled with soil cuttings. The boring logs are included in **Appendix A**.

The soil samples were delivered to ATL via courier on March 22 and March 23. The samples were tested for a combination of the following parameters:

- Total petroleum hydrocarbons (TPH) as jet fuel and diesel by EPA Method 8015,
- Volatile organic compounds (VOCs) by EPA Method 8260B,
- Semivolatile organic compounds (SVOCs) by EPA Method 8270, and

- CAM 17 metals by EPA Methods 6010B and 7174A.

Table 1 outlines the testing performed for each feature and sample type.

3.2.3 Soil Vapor Investigation

The soil vapor points were installed by ABC with a direct-push Geoprobe® rig at nine soil boring locations (SV-01 through SV-09). Three of these locations were located in the southeastern corner of the Site proximate to the ZZ051 site, and the other six were spaced throughout the planned warehouse building footprint (**Figure 2**). The soil vapor probes and vapor samples were collected using guidance from the following two documents:

- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board (LA RWQCB), and San Francisco Regional Water Quality Control Board (SF RWQCB) Advisory for Active Soil Gas Investigations , July 2015; and

- United States EPA Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, June 2015.

The soil vapor samples were collected using a temporarily constructed soil vapor probe located at 5.5 feet bgs. Each probe was set within one foot of clean sand, followed by one foot of dry granular bentonite, followed by hydrated granular bentonite to ground surface. The soil vapor points were sealed and allowed to equilibrate for a period of at least two hours prior to sampling.

Prior to sample collection, Langan completed a shut-in test and a helium test at each vapor point location as a quality control measure. The shut-in test confirms the absence of punctures or loose fittings in the sample tubing (the sample train) that allowing ambient air to infiltrate the sample canister. The shut-in test was completed by applying a vacuum and a pressure gauge to the sample train. A negative pressure, approximately -10 inches of mercury, was applied to the sample train using a hand-held syringe. The pressure was monitored for at least one minute to make sure there were no leaks present.

After the shut-in test, a tracer gas test was implemented to evaluate the integrity of the borehole grout surface seal. The tracer gas test can determine whether the surface seal has been compromised and if ambient air is being drawn down the borehole to the vapor point screen and,

subsequently, up through the sample tubing and into the sample canister. A shroud was placed over each borehole and 99% ultra-pure helium was introduced into the shroud. Langan then collected a vapor sample using a syringe and screened the sample for the presence of helium using a MGD dielectric helium gas meter.

Once Langan determined no helium was present in the samples and, therefore, the vapor points were properly sealed, the points were purged with a GilAir pump at a rate of 200 milliliters per minutes (mL/min), to remove three pore volumes. After purging, a GEM 5000 was used to record various parameters within the sample line. The soil vapor samples were then collected into laboratory-provided batch-certified Summa® canisters. Soil vapor sampling logs are included in **Appendix C**. After sample collection, the temporary vapor points and associated tubing were pulled and the boreholes were backfilled with soil cuttings.

Five of the soil vapor samples were delivered to ATL via courier on March 23. The remaining samples were delivered to ATL via Langan personnel the following day. The samples were tested for VOCs via EPA Method TO-15 and helium via ASTM D1946 (**Table 1**).

It should be recognized that soil vapor sample results are influenced by a variety of factors including soil moisture content, barometric pressure, relative humidity and surface coverings. The results for subsurface soils that are not covered with pavement or concrete slabs may vary from those measured after slabs and pavement are placed and the subsurface soils achieve moisture equilibrium under the slab or pavement.

4.0 RESULTS

4.1 Geophysical Survey

The geophysical survey did not detect material anomalies at the former revetment and runway areas. One minor anomaly was detected northwest of ZZ050, with the GPRS technician inferring based on the nature of the return signals, that the subsurface includes rocks or concrete debris. No anomalies suggestive of rebar, piping, or underground structures were detected in the surveys.

4.2 Soil Evaluation

The soil analytical results were compared to the following screening levels:

- United States EPA Regional Screening Levels (RSLs): Industrial Soil Carcinogenic and Noncancer criteria, using a target cancer risk (TCR) of $1x10^{-6}$ and a target hazard quotient (THQ) of 1 (November 2020); and

- San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs): Soil Direct Exposure Human Health Risk Levels for Commercial/Industrial Cancer and Noncancer values (July 2019).

Tables 2 and 3 summarizes the soil analytical data. **Appendix D** contains the laboratory analytical reports. The key findings are summarized below:

- VOCs were not detected above reporting limits in any of the soil samples.

- SVOCs were detected in three of the soil samples (CS-04-0/2, CS-08-0/2, and CS-12/0-2). However, none of the detections exceeded applicable screening levels.

- Petroleum hydrocarbons were detected in the diesel range for one soil sample (SB-04/1-2) at 200 milligrams per kilogram (mg/kg) but did not exceed applicable screening levels.

- Metals were detected in all but nine of the soil samples (including one of the two duplicate samples). However, only arsenic detections exceeded applicable screening levels. The arsenic exceedances are summarized below:

    - Arsenic was detected in 32 of the soil samples (including one of the two duplicate samples) at concentrations ranging from 1.0 to 6.3 mg/kg. All detected concentrations exceed at least one applicable screening level.

    - Arsenic is known to be naturally occurring at elevated concentrations in this region of California. Based on the "Determination of a Southern California Regional Background Arsenic Concentration in Soil" published by the DTSC in 2008, the average background arsenic concentration in soil of the Southern California region is considered to be approximately 12 mg/kg; with a maximum background concentration of 19.63 mg/kg. All detected concentrations of arsenic are below the 12 mg/kg background concentration.

4.3 Soil Vapor Evaluation

The soil vapor analytical results were compared to the following screening levels:

- United States EPA RSLs: Industrial Air Carcinogenic and Noncancer criteria, using a TCR of $1x10^{-6}$ and a THQ of 1, divided by an attenuation factor of 0.03 (November 2020); and

- SF RWQCB ESLs: Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels for Commercial/Industrial Cancer and Noncancer values (July 2019).

Table 4 summarizes the soil vapor analytical data. **Appendix D** contains the laboratory analytical reports. The key findings include:

- VOCs were detected in each of the soil gas samples. However, none of the detections exceeded applicable screening levels.

- Helium not detected above the reporting limit in the soil vapor samples, verifying the results of the field helium test.

5.0 FINDINGS

The following is a summary of findings from the ESI:

- Twenty-five (25) shallow composite soil samples were collected from 13 locations and 14 soil samples were collected from seven soil borings at the Site. VOCs, SVOC, and petroleum hydrocarbons were not detected above applicable screening levels in the soil samples.

- Of the metals detected in the soil samples, only arsenic was detected above applicable screening levels. The highest concentration of arsenic detected was 6.3 mg/kg, which is below the generally accepted background level of 12 mg/kg in Southern California.

- Nine soil vapor samples were collected from nine temporary probes. VOCs were not detected above the applicable screening levels in the samples.

REFERENCES

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board (LA RWQCB), and San Francisco Regional Water Quality Control Board (SF RWQCB) Advisory for Active Soil Gas Investigations , July 2015.

DTSC, 2008. Determination of a Southern California Regional Background Arsenic Concentration in Soil, G. Chernoff, W. Bosan, and D. Oudiz. 2008

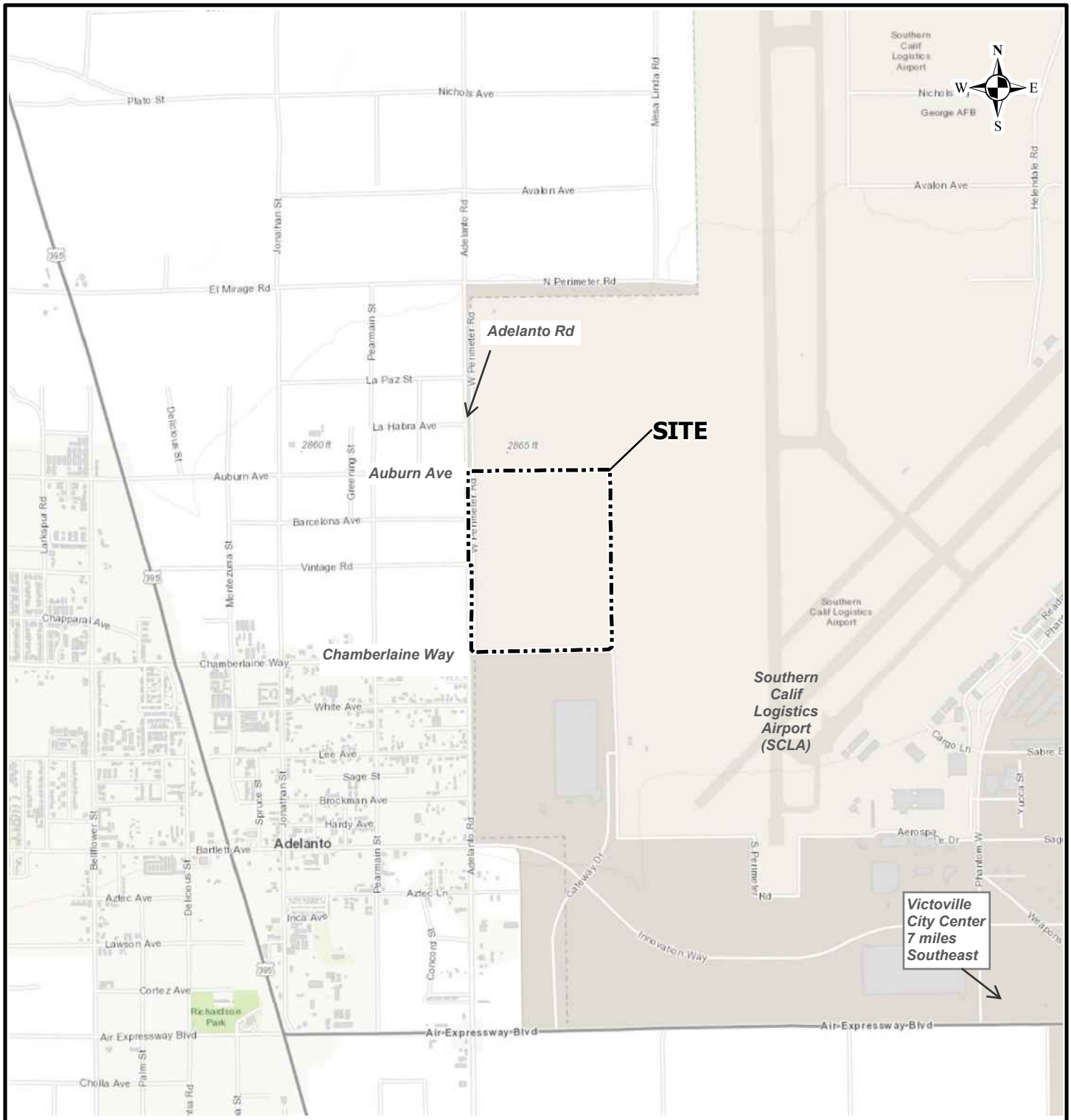
Langan, 2021. Phase I Environmental Site Assessment, SBD4, Victorville, California. 27 January.

San Francisco Bay Regional Water Quality Control Board (SF RWQCB), 2019. Environmental Screening Levels, Rev 2. July.

United States EPA Regional Screening Levels (RSLs): Online tables. https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables/, November, 2020.

United States EPA Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, June 2015.

FIGURES



Legend

Approximate Site Boundary

Notes:
1. Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online Copyright: © 2011 National Geographic Society, i-cubed.

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Langan Engineering & Environmental Services, Inc.
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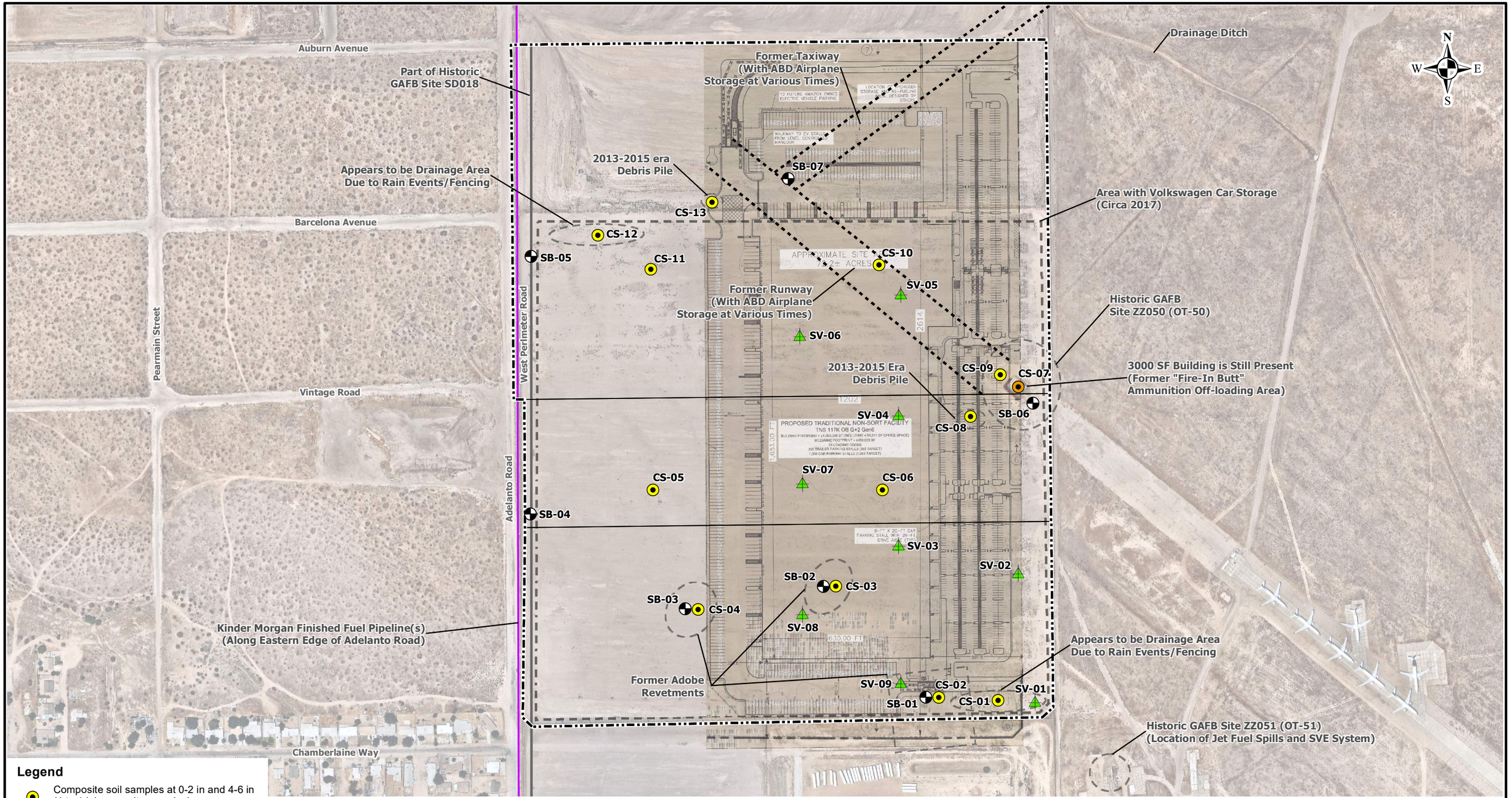
Langan International, LLC

Collectively known as Langan

Project	PROLOGIS/ SBD4/VICTORVILLE VICTORVILLE SAN BERNARDINO COUNTY CALIFORNIA
Drawing Title	SITE LOCATION MAP
Project No.	700089101
Date	2/1/2021
Scale	1 " = 2,000 '
Drawn By	JNE
Figure	1

Path: \\langan.com\data\IRV\data1\700089101\Project Data\ArcGIS\MXD\Environmental_Figures\Figure 1 - Site Location.mxd



Legend

- Composite soil samples at 0-2 in and 4-6 in (4 to 1 lab compsite samples)
- Composite surficial soil samples (4 to 1 lab composite samples)
- Soil samples (from soil borings)
- Soil vapor samples (from temporary probes)
- Approximate area of former GAFB features
- Parcel boundary
- Site boundary

Notes:
1. Aerial imagery provided by Langan's subscription to Nearmap.com. Aerial flown 07/02/2020.
2. All features shown are approximate.

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Project	PROLOGIS/ SBD4/VICTORVILLE
	VICTORVILLE
	SAN BERNARDINO COUNTY CALIFORNIA
Figure Title	SAMPLE LOCATION MAP
Project No.	700089101
Date	4/19/2021
Scale	1 " = 350 '
Drawn By	NB
Figure	2

Path: \\Langan.com\data\IRV\data1\700089101\Project Data\ArcGIS\MXD\Environmental_Figures\Phase II\Figure 2 - Sample Location Map.mxd

TABLES

Table 1
Summary of Collected Samples
SBD4 - Victorville, California

Feature / Item of Interest	Media of Concern	Sample Type	Number of Locations	Location	Sample Depth *(inches or feet bgs)*	Total Number of Samples	Chemical Testing			
							TPH (EPA Method 8015)	VOCs (EPA Method 8260B and TO-15)	SVOCs (EPA Method 8270)	CAM-17 Metals (EPA Method 6010B and 7174A
Proposed Warehouse Building Footprint	Soil Vapor	Sample Gas from Temporary Probe	6	SV-03 to SV-08	5 - 6 ft	6		X		
	Surface Soil	*Seven of the composite soil sample locations (14 composite samples) and four of the soil borings (8 soil samples) described below are within the planned building footprint*								
ZZ050 Firing-In-Butt Area *Inside Structure*	Stockpiled material	Composite Soil	1	CS-07	0-2 in	1	X		X	X
	Surface and Subgrade Soils	Composite Soil	1	CS-09	0-2 in	1	X		X	X
			1		4-6 in	1				
Peripheral Areas		Discrete Soil	1	SB-06	1-2 ft	1	X	X	X	X
			1		5-7.5 ft	1	X	X		
Western Boundary *(Former SD-18 Site, and Kinder Morgan Finished Fuels Piepeline)*	Surface and Subgrade Soils	Discrete Soil	2	SB-04 and SB-05	1-2 ft	2	X	X	X	X
			2		5-7.5 ft	2	X	X		
Affect of Off-property ZZ051 Site	Soil Vapor	Sample Gas from Temporary Probe	3	SV-01, SV-02 and SV-09	5 - 6 ft	3		X		
Former Volkswagon Car Storage	Surface Soil	Composite Soil	4	CS-05, CS-06, CS-10, and CS-11	0-2 in	4	X		X	X
			4		4-6 in	4				
Intersection of Runway/Taxiway *(near observed aircraft disassembly)*	Surface and Subgrade Soils	Discrete Soil	1	SB-07	1-2 ft	1	X	X	X	X
			1		5-7.5 ft	1	X	X		
Former Adobe Revetments Areas	Surface and Subgrade Soils	Composite Soil	3	CS-02 to CS-04	0-2 in	3	X		X	X
			3		4-6 in	3				
		Discrete Soil	3	SB-01 to SB-03	1-2 ft	3	X	X	X	X
			3		5-7.5 ft	3	X	X		
Potential Areas of Standing Water	Surface Soil	Composite Soil	2	CS-01 and CS-12	0-2 in	2	X		X	X
			2		4-6 in	2				
Noted Debris Piles	Surface Soil	Composite Soil	2	CS-08 and CS-13	0-2 in	2	X		X	X
			2		4-6 in	2				
		Sums				***soil tests***	***39***	***14***	***32***	***32***
						vapor tests	- -	***9***	- -	- -

Total Composite Soil Samples	**25**
Total Discrete Soil Samples	**14**
Total Soil Vapor Samples	**9**

Notes:

- 115,000 sq. foot building on ~ 115 acres
- Composite soil samples were 4 to 1 lab composited samples, collected using hand tools (hand auger, drive sampler, or trowels)
- Discrete soil and soil gas samples were collected with the aid of a Geoprobe direct-push drill rig
- Soil gas samples were collected from a temporary soil vapor probe installed with the aid of a Geoprobe direct-push drill rig

TPH - total petroleum hydrocarbons

VOCs - volatile organic compounds

SVOCs - semivolatile organic compounds

CAM - California Assessment Manual

ft bgs- feet below ground surface

Table 2
Summary of Soil Analytical Results for TPH and SVOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Near Surface Composite Samples										
						Location	CS-01	CS-01	CS-01	CS-02	CS-02	CS-03	CS-03	CS-04	CS-04	CS-05	CS-05
						Sample Name	CS-01-0/2	DUP-032221	CS-01-4/6	CS-02-0/2	CS-02-4/6	CS-03-0/2	CS-03-4/6	CS-04-0/2	CS-04-4/6	CS-05-0/2	CS-05-4/6
						Sample Date	22-Mar-21	3/22/2021	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21
						Sample Depth (ft bgs)	0-2	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6
						Units	--	--	--	--	--	--	--	--	--	--	--
Petroleum Hydrocarbons																	
as Jet Fuel (Jet A)	8008-20-6	NS	NS	NS	1400	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
as Diesel Range Organics	PHCD	NS	420	NS	1200	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Semi-Volatile Organic Compounds																	
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,2-Oxybis(2-Chloropropane)	39638-32-9	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,4,5-Trichlorophenol	95-95-4	NS	82000	NS	120000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,4,6-Trichlorophenol	88-06-2	210	820	47	1200	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,4-Dichlorophenol	120-83-2	NS	2500	NS	3500	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
2,4-Dimethylphenol	105-67-9	NS	16000	NS	23000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,4-Dinitrophenol	51-28-5	NS	1600	NS	2300	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
2,4-Dinitrotoluene	121-14-2	7.4	1600	11	2300	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2,6-Dinitrotoluene	606-20-2	1.5	250	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2-Chloronaphthalene	91-58-7	NS	60000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2-Chlorophenol	95-57-8	NS	5800	NS	5800	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2-Methylnaphthalene	91-57-6	NS	3000	NS	3000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2-Methylphenol (o-Cresol)	95-48-7	NS	41000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
2-Nitroaniline	88-74-4	NS	8000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
2-Nitrophenol	88-75-5	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
3,3'-Dichlorobenzidine	91-94-1	5.1	NS	2.7	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
3-Nitroaniline	99-09-2	NS	NS	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
4,6-Dinitro-2-Methylphenol	534-52-1	NS	66	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
4-Chloro-3-Methylphenol	59-50-7	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
4-Chloroaniline	106-47-8	11	3300	16	4700	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
4-Methylphenol (P-Cresol)	106-44-5	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
4-Nitroaniline	100-01-6	110	3300	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
4-Nitrophenol	100-02-7	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Acenaphthene	83-32-9	NS	45000	NS	45000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Acenaphthylene	208-96-8	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Anthracene	120-12-7	NS	230000	NS	230000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzidine	92-87-5	0.01	2500	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzo(a)anthracene	56-55-3	21	NS	20	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzo(a)pyrene	50-32-8	2.1	220	2.1	220	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzo(b)fluoranthene	205-99-2	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzo(g,h,i)Perylene	191-24-2	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzo(k)fluoranthene	207-08-9	210	NS	210	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Benzoic Acid	65-85-0	NS	3300000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzyl Alcohol	100-51-6	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
Benzyl Butyl Phthalate	85-68-7	1200	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Bis(2-chloroethoxy) methane	111-91-1	NS	2500	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	1	NS	0.47	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Bis(2-ethylhexyl) phthalate	117-81-7	160	16000	160	16000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Chrysene	218-01-9	2100	NS	2100	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Dibenz(a,h)anthracene	53-70-3	2.1	NS	2.1	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Dibenzofuran	132-64-9	NS	1200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Dibutyl phthalate	84-74-2	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Diethyl phthalate	84-66-2	NS	660000	NS	660000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Dimethyl phthalate	131-11-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Dioctyl phthalate	117-84-0	NS	8200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Fluoranthene	206-44-0	NS	30000	NS	30000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.57	<0.33	<0.33	<0.33
Fluorene	86-73-7	NS	30000	NS	30000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Hexachlorobenzene	118-74-1	0.96	930	0.78	770	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
Hexachlorocyclopentadiene	77-47-4	NS	7.5	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66
Hexachloroethane	67-72-1	8	460	7.8	370	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Indeno(1,2,3-cd)pyrene	193-39-5	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Isophorone	78-59-1	2400	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Nitrobenzene	98-95-3	22	1300	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
n-Nitrosodiphenylamine	86-30-6	470	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Pentachlorophenol	87-86-5	4	2800	4	2800	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Phenanthrene	85-01-8	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.7	<0.33	<0.33	<0.33
Phenol	108-95-2	NS	250000	NS	350000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33
Pyrene	129-00-0	NS	23000	NS	23000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	0.7	<0.33	<0.33	<0.33
Pyridine	110-86-1	NS	1200	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6

Table 2
Summary of Soil Analytical Results for TPH and SVOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Near Surface Composite Samples										
						Location	CS-06	CS-06	CS-07	CS-08	CS-08	CS-09	CS-09	CS-10	CS-10	CS-11	CS-11
						Sample Name	CS-06-0/2	CS-06-4/6	CS-07/0-2	CS-08-0/2	CS-08-4/6	CS-09-0/2	CS-09-4/6	CS-10/0-2	CS-10/4-6	CS-11/0-2	CS-11/4-6
						Sample Date	22-Mar-21	22-Mar-21	23-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	0-2	4-6	0-2	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6
						Units	--	--	--	--	--	--	--	--	--	--	--
Petroleum Hydrocarbons																	
as Jet Fuel (Jet A)	8008-20-6	NS	NS	NS	1400	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<1,000	<200	<10
as Diesel Range Organics	PHCD	NS	420	NS	1200	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<1,000	<200	<10
Semi-Volatile Organic Compounds																	
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,2-Oxybis(2-Chloropropane)	39638-32-9	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,4,5-Trichlorophenol	95-95-4	NS	82000	NS	120000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,4,6-Trichlorophenol	88-06-2	210	820	47	1200	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,4-Dichlorophenol	120-83-2	NS	2500	NS	3500	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
2,4-Dimethylphenol	105-67-9	NS	16000	NS	23000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,4-Dinitrophenol	51-28-5	NS	1600	NS	2300	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
2,4-Dinitrotoluene	121-14-2	7.4	1600	11	2300	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2,6-Dinitrotoluene	606-20-2	1.5	250	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2-Chloronaphthalene	91-58-7	NS	60000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2-Chlorophenol	95-57-8	NS	5800	NS	5800	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2-Methylnaphthalene	91-57-6	NS	3000	NS	3000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2-Methylphenol (o-Cresol)	95-48-7	NS	41000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
2-Nitroaniline	88-74-4	NS	8000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
2-Nitrophenol	88-75-5	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
3,3'-Dichlorobenzidine	91-94-1	5.1	NS	2.7	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
3-Nitroaniline	99-09-2	NS	NS	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
4,6-Dinitro-2-Methylphenol	534-52-1	NS	66	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
4-Chloro-3-Methylphenol	59-50-7	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
4-Chloroaniline	106-47-8	11	3300	16	4700	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
4-Methylphenol (P-Cresol)	106-44-5	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
4-Nitroaniline	100-01-6	110	3300	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
4-Nitrophenol	100-02-7	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Acenaphthene	83-32-9	NS	45000	NS	45000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Acenaphthylene	208-96-8	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Anthracene	120-12-7	NS	230000	NS	230000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzidine	92-87-5	0.01	2500	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
Benzo(a)anthracene	56-55-3	21	NS	20	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzo(a)pyrene	50-32-8	2.1	220	2.1	220	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzo(b)fluoranthene	205-99-2	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	0.4	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzo(g,h,i)Perylene	191-24-2	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzo(k)fluoranthene	207-08-9	210	NS	210	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Benzoic Acid	65-85-0	NS	3300000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
Benzyl Alcohol	100-51-6	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
Benzyl Butyl Phthalate	85-68-7	1200	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Bis(2-chloroethoxy) methane	111-91-1	NS	2500	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	1	NS	0.47	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Bis(2-ethylhexyl) phthalate	117-81-7	160	16000	160	16000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Chrysene	218-01-9	2100	NS	2100	NS	mg/kg	<0.33	<0.33	<0.33	0.36	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Dibenz(a,h)anthracene	53-70-3	2.1	NS	2.1	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Dibenzofuran	132-64-9	NS	1200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Dibutyl phthalate	84-74-2	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Diethyl phthalate	84-66-2	NS	660000	NS	660000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Dimethyl phthalate	131-11-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Dioctyl phthalate	117-84-0	NS	8200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Fluoranthene	206-44-0	NS	30000	NS	30000	mg/kg	<0.33	<0.33	<0.33	1.4	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Fluorene	86-73-7	NS	30000	NS	30000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Hexachlorobenzene	118-74-1	0.96	930	0.78	770	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
Hexachlorocyclopentadiene	77-47-4	NS	7.5	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<1.3	<0.66	<0.66	<0.66	<66	<0.66	<0.66
Hexachloroethane	67-72-1	8	460	7.8	370	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Indeno(1,2,3-cd)pyrene	193-39-5	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Isophorone	78-59-1	2400	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Nitrobenzene	98-95-3	22	1300	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
n-Nitrosodiphenylamine	86-30-6	470	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Pentachlorophenol	87-86-5	4	2800	4	2800	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6
Phenanthrene	85-01-8	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	1.4	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Phenol	108-95-2	NS	250000	NS	350000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Pyrene	129-00-0	NS	23000	NS	23000	mg/kg	<0.33	<0.33	<0.33	1.7	<0.66	<0.33	<0.33	<0.33	<33	<0.33	<0.33
Pyridine	110-86-1	NS	1200	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<3.3	<1.6	<1.6	<1.6	<160	<1.6	<1.6

Table 2
Summary of Soil Analytical Results for TPH and SVOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Near Surface Composite Samples				Soil Boring Samples					
						Location	CS-12	CS-12	CS-13	CS-13	SB-01	SB-01	SB-01	SB-01	SB-02	SB-02
						Sample Name	CS-12/0-2	CS-12/4-6	CS-13/0-2	CS-13/4-6	SB-01/1-2	SB-01/1-2	SB-01/5-7.5	SB-01/5-7.5	SB-02/1-2	SB-02/5-7.5
						Sample Date	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	22-Mar-21	23-Mar-21	22-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	0-2	4-6	0-2	4-6	1-2	1-2	5-7.5	5-7.5	1-2	5-7.5
						Units	--	--	--	--	--	--	--	--	--	--
Petroleum Hydrocarbons																
as Jet Fuel (Jet A)	8008-20-6	NS	NS	NS	1400	mg/kg	<50	<50	<10	<50	<10	<10	<10	<10	<10	<10
as Diesel Range Organics	PHCD	NS	420	NS	1200	mg/kg	<50	<50	<10	<50	<10	<10	<10	<10	<10	<10
Semi-Volatile Organic Compounds																
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,2-Oxybis(2-Chloropropane)	39638-32-9	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,4,5-Trichlorophenol	95-95-4	NS	82000	NS	120000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,4,6-Trichlorophenol	88-06-2	210	820	47	1200	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,4-Dichlorophenol	120-83-2	NS	2500	NS	3500	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
2,4-Dimethylphenol	105-67-9	NS	16000	NS	23000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,4-Dinitrophenol	51-28-5	NS	1600	NS	2300	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
2,4-Dinitrotoluene	121-14-2	7.4	1600	11	2300	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2,6-Dinitrotoluene	606-20-2	1.5	250	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2-Chloronaphthalene	91-58-7	NS	60000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2-Chlorophenol	95-57-8	NS	5800	NS	5800	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2-Methylnaphthalene	91-57-6	NS	3000	NS	3000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2-Methylphenol (o-Cresol)	95-48-7	NS	41000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
2-Nitroaniline	88-74-4	NS	8000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
2-Nitrophenol	88-75-5	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
3,3'-Dichlorobenzidine	91-94-1	5.1	NS	2.7	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
3-Nitroaniline	99-09-2	NS	NS	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
4,6-Dinitro-2-Methylphenol	534-52-1	NS	66	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
4-Chloro-3-Methylphenol	59-50-7	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
4-Chloroaniline	106-47-8	11	3300	16	4700	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
4-Methylphenol (P-Cresol)	106-44-5	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
4-Nitroaniline	100-01-6	110	3300	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
4-Nitrophenol	100-02-7	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Acenaphthene	83-32-9	NS	45000	NS	45000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Acenaphthylene	208-96-8	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Anthracene	120-12-7	NS	230000	NS	230000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzidine	92-87-5	0.01	2500	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
Benzo(a)anthracene	56-55-3	21	NS	20	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzo(a)pyrene	50-32-8	2.1	220	2.1	220	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzo(b)fluoranthene	205-99-2	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzo(g,h,i)Perylene	191-24-2	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzo(k)fluoranthene	207-08-9	210	NS	210	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Benzoic Acid	65-85-0	NS	3300000	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
Benzyl Alcohol	100-51-6	NS	82000	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
Benzyl Butyl Phthalate	85-68-7	1200	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Bis(2-chloroethoxy) methane	111-91-1	NS	2500	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	1	NS	0.47	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Bis(2-ethylhexyl) phthalate	117-81-7	160	16000	160	16000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Chrysene	218-01-9	2100	NS	2100	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Dibenz(a,h)anthracene	53-70-3	2.1	NS	2.1	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Dibenzofuran	132-64-9	NS	1200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Dibutyl phthalate	84-74-2	NS	82000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Diethyl phthalate	84-66-2	NS	660000	NS	660000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Dimethyl phthalate	131-11-3	NS	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Dioctyl phthalate	117-84-0	NS	8200	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Fluoranthene	206-44-0	NS	30000	NS	30000	mg/kg	0.62	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Fluorene	86-73-7	NS	30000	NS	30000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Hexachlorobenzene	118-74-1	0.96	930	0.78	770	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
Hexachlorocyclopentadiene	77-47-4	NS	7.5	NS	NS	mg/kg	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	--	--	<0.66	--
Hexachloroethane	67-72-1	8	460	7.8	370	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Indeno(1,2,3-cd)pyrene	193-39-5	21	NS	21	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Isophorone	78-59-1	2400	160000	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Nitrobenzene	98-95-3	22	1300	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
n-Nitrosodiphenylamine	86-30-6	470	NS	NS	NS	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Pentachlorophenol	87-86-5	4	2800	4	2800	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--
Phenanthrene	85-01-8	NS	NS	NS	NS	mg/kg	0.47	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Phenol	108-95-2	NS	250000	NS	350000	mg/kg	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Pyrene	129-00-0	NS	23000	NS	23000	mg/kg	0.78	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	<0.33	--
Pyridine	110-86-1	NS	1200	NS	NS	mg/kg	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	--	--	<1.6	--

Table 2
Summary of Soil Analytical Results for TPH and SVOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Soil Boring Samples										
						Location	SB-03	SB-03	SB-04	SB-04	SB-05	SB-05	SB-05	SB-06	SB-06	SB-07	SB-07
						Sample Name	SB-03/1-2	SB-03/5-7.5	SB-04/1-2	SB-04/5-7.5	SB-05/1-2	SB-05/5-7.5	DUP - 03232021	SB-06/1-2	SB-06/5-7.5	SB-07/1-2	SB-07/5-7.5
						Sample Date	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	1-2	5-7.5	1-2	5-7.5	1-2	5-7.5	5-7.5	1-2	5-7.5	1-2	5-7.5
						Units	--	--	--	--	--	--	--	--	--	--	--
Petroleum Hydrocarbons																	
as Jet Fuel (Jet A)	8008-20-6	NS	NS	NS	1400	mg/kg	<10	<10	<100	<10	<50	<10	<10	<10	<10	<10	<10
as Diesel Range Organics	PHCD	NS	420	NS	1200	mg/kg	<10	<10	200	<10	<50	<10	<10	<10	<10	<10	<10
Semi-Volatile Organic Compounds																	
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,2-Oxybis(2-Chloropropane)	39638-32-9	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,4,5-Trichlorophenol	95-95-4	NS	82000	NS	120000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,4,6-Trichlorophenol	88-06-2	210	820	47	1200	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,4-Dichlorophenol	120-83-2	NS	2500	NS	3500	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
2,4-Dimethylphenol	105-67-9	NS	16000	NS	23000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,4-Dinitrophenol	51-28-5	NS	1600	NS	2300	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
2,4-Dinitrotoluene	121-14-2	7.4	1600	11	2300	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2,6-Dinitrotoluene	606-20-2	1.5	250	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2-Chloronaphthalene	91-58-7	NS	60000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2-Chlorophenol	95-57-8	NS	5800	NS	5800	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2-Methylnaphthalene	91-57-6	NS	3000	NS	3000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2-Methylphenol (o-Cresol)	95-48-7	NS	41000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
2-Nitroaniline	88-74-4	NS	8000	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
2-Nitrophenol	88-75-5	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
3,3'-Dichlorobenzidine	91-94-1	5.1	NS	2.7	NS	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
3-Nitroaniline	99-09-2	NS	NS	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
4,6-Dinitro-2-Methylphenol	534-52-1	NS	66	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
4-Bromophenyl Phenyl Ether	101-55-3	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
4-Chloro-3-Methylphenol	59-50-7	NS	82000	NS	NS	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
4-Chloroaniline	106-47-8	11	3300	16	4700	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
4-Chlorophenyl Phenyl Ether	7005-72-3	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
4-Methylphenol (P-Cresol)	106-44-5	NS	82000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
4-Nitroaniline	100-01-6	110	3300	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
4-Nitrophenol	100-02-7	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Acenaphthene	83-32-9	NS	45000	NS	45000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Acenaphthylene	208-96-8	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Anthracene	120-12-7	NS	230000	NS	230000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzidine	92-87-5	0.01	2500	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
Benzo(a)anthracene	56-55-3	21	NS	20	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzo(a)pyrene	50-32-8	2.1	220	2.1	220	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzo(b)fluoranthene	205-99-2	21	NS	21	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzo(g,h,i)Perylene	191-24-2	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzo(k)fluoranthene	207-08-9	210	NS	210	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Benzoic Acid	65-85-0	NS	3300000	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
Benzyl Alcohol	100-51-6	NS	82000	NS	NS	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
Benzyl Butyl Phthalate	85-68-7	1200	160000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Bis(2-chloroethoxy) methane	111-91-1	NS	2500	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Bis(2-chloroethyl) ether (2-chloroethyl ether)	111-44-4	1	NS	0.47	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Bis(2-ethylhexyl) phthalate	117-81-7	160	16000	160	16000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Chrysene	218-01-9	2100	NS	2100	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Dibenz(a,h)anthracene	53-70-3	2.1	NS	2.1	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Dibenzofuran	132-64-9	NS	1200	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Dibutyl phthalate	84-74-2	NS	82000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Diethyl phthalate	84-66-2	NS	660000	NS	660000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Dimethyl phthalate	131-11-3	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Dioctyl phthalate	117-84-0	NS	8200	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Fluoranthene	206-44-0	NS	30000	NS	30000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Fluorene	86-73-7	NS	30000	NS	30000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Hexachlorobenzene	118-74-1	0.96	930	0.78	770	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
Hexachlorocyclopentadiene	77-47-4	NS	7.5	NS	NS	mg/kg	<0.66	--	<33	--	<33	--	--	<0.66	--	<0.66	--
Hexachloroethane	67-72-1	8	460	7.8	370	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Indeno(1,2,3-cd)pyrene	193-39-5	21	NS	21	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Isophorone	78-59-1	2400	160000	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Nitrobenzene	98-95-3	22	1300	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
n-Nitrosodiphenylamine	86-30-6	470	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Pentachlorophenol	87-86-5	4	2800	4	2800	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--
Phenanthrene	85-01-8	NS	NS	NS	NS	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Phenol	108-95-2	NS	250000	NS	350000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Pyrene	129-00-0	NS	23000	NS	23000	mg/kg	<0.33	--	<16	--	<16	--	--	<0.33	--	<0.33	--
Pyridine	110-86-1	NS	1200	NS	NS	mg/kg	<1.6	--	<82	--	<82	--	--	<1.6	--	<1.6	--

Table 2
Summary of Soil Analytical Results for TPH and SVOCs
SBD4 - Victorville, California

Notes:

Soil results were compared to USEPA RSL Commercial/Industrial Carcinogenic and Noncancer criteria using a TCR of 1x10-6 and a THQ of 1 (November 2020) and to the California RWQCB ESL Human Health Risk Levels for Commercial/Inudstrial Cancer and Noncancer values (July 2019).

The USEPA RSL used for comparison to diesel is conservatively based on the lowest of the noncancer screening levels for all of the total petroleum hydrocarbons listed which is 420 mg/kg for Total Petroleum Hydrocarbon (Aromatic Low).

USEPA - United States Environmental Protection Agency
RSL - Regional Screening Level
TCR - Target cancer risk
THQ - Target hazard quotient
RWQCB - Regional Water Quality Control Board
ESL - Environmental Screening Level
CAS - Chemical Abstract Service
NS - No standard
mg/kg - Milligrams per kilogram
NA - Not Analyzed
RL - Reporting Limit
<RL - Not detected
ft bgs - feet below ground surface

Exceedance Summary:

10 - Result exceeds EPA RSL - Industrial Soil - Carcinogenic
10 - Result exceeds EPA RSL - Industrial Soil - Noncarcinogenic
10 - Result exceeds RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk
10 - Result exceeds RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard

Table 3
Summary of Soil Analytical Results for Metals and VOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Near Surface Composite Samples											
						Location	CS-01	CS-01	CS-01	CS-02	CS-02	CS-03	CS-03	CS-04	CS-04	CS-05	CS-05	CS-06
						Sample Name	CS-01-0/2	DUP-032221	CS-01-4/6	CS-02-0/2	CS-02-4/6	CS-03-0/2	CS-03-4/6	CS-04-0/2	CS-04-4/6	CS-05-0/2	CS-05-4/6	CS-06-0/2
						Sample Date	22-Mar-21	3/22/2021	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21
						Sample Depth (ft bgs)	0-2	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2
						Units	--	--	--	--	--	--	--	--	--	--	--	--
Metals																		
Antimony	7440-36-0	NS	470	NS	160	mg/kg	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	7440-38-2	3	480	0.31	3.6	mg/kg	1.0	1.0	2.0	**4.2**	**4.8**	**5.5**	**4.6**	**4.3**	3.0	**3.5**	1.3	**4.4**
Barium	7440-39-3	NS	220000	NS	220000	mg/kg	45	37	42	120	67	180	81	170	110	130	49	140
Beryllium	7440-41-7	6900	2300	6900	230	mg/kg	1.3	1.2	1.2	2	1.5	2.4	1.5	2.2	2.1	2.1	1.7	2
Cadmium	7440-43-9	9300	980	4000	1100	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, Total	7440-47-3	NS	NS	NS	NS	mg/kg	14	13	14	22	17	24	15	22	22	20	16	20
Cobalt	7440-48-4	1900	350	1900	350	mg/kg	3.7	3.7	4.1	5.3	3.7	5.9	3.5	5.7	9	5.5	5.1	5.1
Copper	7440-50-8	NS	47000	NS	47000	mg/kg	9.7	9.4	11	20	15	23	14	20	17	17	12	16
Lead	7439-92-1	NS	800	380	320	mg/kg	6	4	4.4	23	8.7	35	10	37	14	28	6.1	15
Mercury	7439-97-6	NS	46	NS	190	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	7439-98-7	NS	5800	NS	5800	mg/kg	<1	<1	<1	<1	<1	<1	<1	1.1	<1	<1	<1	<1
Nickel	7440-02-0	64000	22000	64000	11000	mg/kg	10	9.9	11	14	11	16	11	15	17	14	12	14
Selenium	7782-49-2	NS	5800	NS	5800	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	7440-22-4	NS	5800	NS	5800	mg/kg	1.7	1.5	1.3	2.9	2.3	3.7	2.4	3.3	3.2	3.2	2.3	3.1
Thallium	7440-28-0	NS	12	NS	12	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	7440-62-2	NS	5800	NS	5800	mg/kg	22	22	25	37	26	43	26	40	35	35	27	34
Zinc	7440-66-6	NS	350000	NS	350000	mg/kg	29	23	26	71	51	68	42	67	47	57	32	54
Volatile Organic Compounds																		
1,1,1,2-Tetrachloroethane	630-20-6	8.8	35000	8.9	35000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	71-55-6	NS	36000	NS	7300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	2.7	23000	2.7	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	28000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	79-00-5	5	6.3	5.1	6.4	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	75-34-3	16	230000	16	230000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	75-35-4	NS	1000	NS	350	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	87-61-6	NS	930	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	96-18-4	0.11	21	0.11	21	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	95-63-6	NS	1800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane	96-12-8	0.064	25	0.059	26	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.16	330	0.16	30	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	107-06-2	2	140	2.1	140	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	78-87-5	11	66	4.4	66	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	1500	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	142-28-9	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	95-49-8	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	106-43-4	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	71-43-2	5.1	420	1.4	47	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	108-86-1	NS	1800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	74-97-5	NS	630	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	1.3	23000	1.3	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	75-25-2	86	23000	80	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane	74-83-9	NS	30	NS	30	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Butane, 2-Methoxy-2-Methyl	994-05-8	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Disulfide	75-15-0	NS	3500	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Tetrachloride	56-23-5	2.9	570	2.7	250	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	108-90-7	NS	1300	NS	1300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	75-00-3	NS	57000	NS	59000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform	67-66-3	1.4	1000	1.4	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane	74-87-3	NS	460	NS	470	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cis-1,2-Dichloroethene	156-59-2	NS	2300	NS	85	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	124-48-1	39	23000	39	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	74-95-3	NS	99	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	75-71-8	NS	370	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl Ether (Ethyl Ether)	60-29-7	NS	230000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl Acetate	141-78-6	NS	2600	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl Tert-Butyl Ether	637-92-3	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	100-41-4	25	20000	26	21000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl Ether	108-20-3	NS	9400	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene (Cumene)	98-82-8	NS	9900	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
M,P-Xylene	179601-23-1	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	75-09-2	1000	3200	25	2500	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
n-Butylbenzene	104-51-8	NS	58000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	103-65-1	NS	24000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	2800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Sec-Butylbenzene	135-98-8	NS	120000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	100-42-5	NS	35000	NS	33000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
T-Butylbenzene	98-06-6	NS	120000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tert-Butyl Alcohol	75-65-0	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tert-Butyl Methyl Ether	1634-04-4	210	64000	210	66000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	127-18-4	100	390	2.7	390	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	108-88-3	NS	47000	NS	5300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trans-1,2-Dichloroethene	156-60-5	NS	300	NS	600	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	79-01-6	6	19	6.1	19	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane	75-69-4	NS	350000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Acetate	108-05-4	NS	3800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	75-01-4	1.7	370	0.15	380	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Summary of Soil Analytical Results for Metals and VOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Near Surface Composite Samples										Near Surface Cor	
						Location	CS-06	CS-07	CS-08	CS-08	CS-09	CS-09	CS-10	CS-10	CS-11	CS-11	CS-12	CS-12
						Sample Name	CS-06-4/6	CS-07/0-2	CS-08-0/2	CS-08-4/6	CS-09-0/2	CS-09-4/6	CS-10/0-2	CS-10/4-6	CS-11/0-2	CS-11/4-6	CS-12/0-2	CS-12/4-6
						Sample Date	22-Mar-21	23-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	22-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	4-6	0-2	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6
						Units	--	--	--	--	--	--	--	--	--	--	--	--
Metals																		
Antimony	7440-36-0	NS	470	NS	160	mg/kg	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	7440-38-2	3	480	0.31	3.6	mg/kg	**3.3**	<1	**6.3**	2.7	3.0	2.6	**4.6**	**3.8**	**3.6**	1.2	**4.2**	<1
Barium	7440-39-3	NS	220000	NS	220000	mg/kg	110	59	180	74	72	64	160	92	130	41	150	39
Beryllium	7440-41-7	6900	2300	6900	230	mg/kg	2	1.3	3.2	1.5	1.4	1.3	2.7	1.7	2.2	1.4	2.4	1.3
Cadmium	7440-43-9	9300	980	4000	1100	mg/kg	<1	<1	1.1	<1	<1	<1	1	9	<1	<1	<1	<1
Chromium, Total	7440-47-3	NS	NS	NS	NS	mg/kg	18	11	29	15	16	14	22	21	20	13	21	12
Cobalt	7440-48-4	1900	350	1900	350	mg/kg	4.9	6.8	7.8	4.1	4.4	3.7	6.3	4.3	5.5	3.9	6.1	3.2
Copper	7440-50-8	NS	47000	NS	47000	mg/kg	15	14	25	13	13	11	23	28	22	12	25	8.7
Lead	7439-92-1	NS	800	380	320	mg/kg	14	5.8	28	8.2	6.2	4.5	36	65	26	4.8	140	4.3
Mercury	7439-97-6	NS	46	NS	190	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	7439-98-7	NS	5800	NS	5800	mg/kg	<1	<1	1.9	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	7440-02-0	64000	22000	64000	11000	mg/kg	13	7.1	20	11	12	10	16	14	14	9.7	16	9
Selenium	7782-49-2	NS	5800	NS	5800	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver	7440-22-4	NS	5800	NS	5800	mg/kg	2.9	1.8	5.2	2	1.6	1.7	4.4	2.7	3.5	1.8	3.8	1.7
Thallium	7440-28-0	NS	12	NS	12	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	7440-62-2	NS	5800	NS	5800	mg/kg	31	39	48	27	29	26	41	30	36	24	39	22
Zinc	7440-66-6	NS	350000	NS	350000	mg/kg	48	37	85	37	33	27	76	68	72	27	69	23
Volatile Organic Compounds																		
1,1,1,2-Tetrachloroethane	630-20-6	8.8	35000	8.9	35000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	71-55-6	NS	36000	NS	7300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	2.7	23000	2.7	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	28000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	79-00-5	5	6.3	5.1	6.4	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	75-34-3	16	230000	16	230000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	75-35-4	NS	1000	NS	350	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	87-61-6	NS	930	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	96-18-4	0.11	21	0.11	21	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	95-63-6	NS	1800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-Chloropropane	96-12-8	0.064	25	0.059	26	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.16	330	0.16	30	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	107-06-2	2	140	2.1	140	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	78-87-5	11	66	4.4	66	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	1500	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	142-28-9	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	95-49-8	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	106-43-4	NS	23000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	71-43-2	5.1	420	1.4	47	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromobenzene	108-86-1	NS	1800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	74-97-5	NS	630	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	75-27-4	1.3	23000	1.3	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	75-25-2	86	23000	80	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane	74-83-9	NS	30	NS	30	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Butane, 2-Methoxy-2-Methyl	994-05-8	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Disulfide	75-15-0	NS	3500	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Carbon Tetrachloride	56-23-5	2.9	570	2.7	250	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	108-90-7	NS	1300	NS	1300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	75-00-3	NS	57000	NS	59000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform	67-66-3	1.4	1000	1.4	1000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane	74-87-3	NS	460	NS	470	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cis-1,2-Dichloroethene	156-59-2	NS	2300	NS	85	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	124-48-1	39	23000	39	23000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	74-95-3	NS	99	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Dichlorodifluoromethane	75-71-8	NS	370	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl Ether (Ethyl Ether)	60-29-7	NS	230000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl Acetate	141-78-6	NS	2600	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethyl Tert-Butyl Ether	637-92-3	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	100-41-4	25	20000	26	21000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Isopropyl Ether	108-20-3	NS	9400	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene (Cumene)	98-82-8	NS	9900	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
M,P-Xylene	179601-23-1	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Methylene Chloride	75-09-2	1000	3200	25	2500	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
n-Butylbenzene	104-51-8	NS	58000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	103-65-1	NS	24000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	2800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Sec-Butylbenzene	135-98-8	NS	120000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	100-42-5	NS	35000	NS	33000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
T-Butylbenzene	98-06-6	NS	120000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tert-Butyl Alcohol	75-65-0	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tert-Butyl Methyl Ether	1634-04-4	210	64000	210	66000	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene (PCE)	127-18-4	100	390	2.7	390	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	108-88-3	NS	47000	NS	5300	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trans-1,2-Dichloroethene	156-60-5	NS	300	NS	600	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene (TCE)	79-01-6	6	19	6.1	19	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane	75-69-4	NS	350000	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Acetate	108-05-4	NS	3800	NS	NS	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	75-01-4	1.7	370	0.15	380	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
Summary of Soil Analytical Results for Metals and VOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Composite Samples		Soil Boring Samples					
						Location	CS-13	CS-13	SB-01	SB-01	SB-01	SB-01	SB-02	SB-02
						Sample Name	CS-13/0-2	CS-13/4-6	SB-01/1-2	SB-01/1-2	SB-01/5-7.5	SB-01/5-7.5	SB-02/1-2	SB-02/5-7.5
						Sample Date	23-Mar-21	23-Mar-21	22-Mar-21	23-Mar-21	22-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	0-2	4-6	1-2	1-2	5-7.5	5-7.5	1-2	5-7.5
						Units	--	--	--	--	--	--	--	--
Metals														
Antimony	7440-36-0	NS	470	NS	160	mg/kg	<2	<2	<2	<2	--	--	<2	--
Arsenic	7440-38-2	3	480	0.31	3.6	mg/kg	2.6	2.7	1.4	1.1	--	--	1.5	--
Barium	7440-39-3	NS	220000	NS	220000	mg/kg	77	100	38	37	--	--	41	--
Beryllium	7440-41-7	6900	2300	6900	230	mg/kg	1.8	2	1.2	1.3	--	--	1.2	--
Cadmium	7440-43-9	9300	980	4000	1100	mg/kg	<1	<1	<1	<1	--	--	<1	--
Chromium, Total	7440-47-3	NS	NS	NS	NS	mg/kg	15	16	12	15	--	--	12	--
Cobalt	7440-48-4	1900	350	1900	350	mg/kg	4.2	4.4	3.2	3.1	--	--	3.4	--
Copper	7440-50-8	NS	47000	NS	47000	mg/kg	22	25	9.1	8.7	--	--	9.6	--
Lead	7439-92-1	NS	800	380	320	mg/kg	44	64	3.9	3.7	--	--	3.7	--
Mercury	7439-97-6	NS	46	NS	190	mg/kg	<0.1	<0.1	<0.1	<0.1	--	--	<0.1	--
Molybdenum	7439-98-7	NS	5800	NS	5800	mg/kg	<1	<1	<1	<1	--	--	<1	--
Nickel	7440-02-0	64000	22000	64000	11000	mg/kg	10	11	8.8	60	--	--	9.2	--
Selenium	7782-49-2	NS	5800	NS	5800	mg/kg	<1	<1	<1	<1	--	--	<1	--
Silver	7440-22-4	NS	5800	NS	5800	mg/kg	2.9	3.3	1.5	1.7	--	--	1.6	--
Thallium	7440-28-0	NS	12	NS	12	mg/kg	<1	<1	<1	<1	--	--	<1	--
Vanadium	7440-62-2	NS	5800	NS	5800	mg/kg	27	29	20	20	--	--	21	--
Zinc	7440-66-6	NS	350000	NS	350000	mg/kg	90	100	23	22	--	--	28	--
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane	630-20-6	8.8	35000	8.9	35000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1,1-Trichloroethane	71-55-6	NS	36000	NS	7300	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1,2,2-Tetrachloroethane	79-34-5	2.7	23000	2.7	23000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	28000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1,2-Trichloroethane	79-00-5	5	6.3	5.1	6.4	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1-Dichloroethane	75-34-3	16	230000	16	230000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1-Dichloroethene	75-35-4	NS	1000	NS	350	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2,3-Trichlorobenzene	87-61-6	NS	930	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2,3-Trichloropropane	96-18-4	0.11	21	0.11	21	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2,4-Trimethylbenzene	95-63-6	NS	1800	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2-Dibromo-3-Chloropropane	96-12-8	0.064	25	0.059	26	mg/kg	--	--	--	<0.0084	--	<0.0089	<0.0087	<0.0091
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.16	330	0.16	30	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2-Dichloroethane	107-06-2	2	140	2.1	140	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,2-Dichloropropane	78-87-5	11	66	4.4	66	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	1500	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,3-Dichloropropane	142-28-9	NS	23000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
2-Chlorotoluene	95-49-8	NS	23000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
4-Chlorotoluene	106-43-4	NS	23000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Benzene	71-43-2	5.1	420	1.4	47	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Bromobenzene	108-86-1	NS	1800	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Bromochloromethane	74-97-5	NS	630	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Bromodichloromethane	75-27-4	1.3	23000	1.3	23000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Bromoform	75-25-2	86	23000	80	23000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Bromomethane	74-83-9	NS	30	NS	30	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Butane, 2-Methoxy-2-Methyl	994-05-8	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Carbon Disulfide	75-15-0	NS	3500	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Carbon Tetrachloride	56-23-5	2.9	570	2.7	250	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Chlorobenzene	108-90-7	NS	1300	NS	1300	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Chloroethane	75-00-3	NS	57000	NS	59000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Chloroform	67-66-3	1.4	1000	1.4	1000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Chloromethane	74-87-3	NS	460	NS	470	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Cis-1,2-Dichloroethene	156-59-2	NS	2300	NS	85	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Dibromochloromethane	124-48-1	39	23000	39	23000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Dibromomethane	74-95-3	NS	99	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Dichlorodifluoromethane	75-71-8	NS	370	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Diethyl Ether (Ethyl Ether)	60-29-7	NS	230000	NS	NS	mg/kg	--	--	--	<0.042	--	<0.045	<0.044	<0.045
Ethyl Acetate	141-78-6	NS	2600	NS	NS	mg/kg	--	--	--	<0.042	--	<0.045	<0.044	<0.045
Ethyl Tert-Butyl Ether	637-92-3	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Ethylbenzene	100-41-4	25	20000	26	21000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Isopropyl Ether	108-20-3	NS	9400	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Isopropylbenzene (Cumene)	98-82-8	NS	9900	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
M,P-Xylene	179601-23-1	NS	NS	NS	NS	mg/kg	--	--	--	<0.0084	--	<0.0089	<0.0087	<0.0091
Methylene Chloride	75-09-2	1000	3200	25	2500	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
n-Butylbenzene	104-51-8	NS	58000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
n-Propylbenzene	103-65-1	NS	24000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	2800	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Sec-Butylbenzene	135-98-8	NS	120000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Styrene	100-42-5	NS	35000	NS	33000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
T-Butylbenzene	98-06-6	NS	120000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Tert-Butyl Alcohol	75-65-0	NS	NS	NS	NS	mg/kg	--	--	--	<0.084	--	<0.089	<0.087	<0.091
Tert-Butyl Methyl Ether	1634-04-4	210	64000	210	66000	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Tetrachloroethene (PCE)	127-18-4	100	390	2.7	390	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Toluene	108-88-3	NS	47000	NS	5300	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Trans-1,2-Dichloroethene	156-60-5	NS	300	NS	600	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Trichloroethene (TCE)	79-01-6	6	19	6.1	19	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Trichlorofluoromethane	75-69-4	NS	350000	NS	NS	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045
Vinyl Acetate	108-05-4	NS	3800	NS	NS	mg/kg	--	--	--	<0.042	--	<0.045	<0.044	<0.045
Vinyl Chloride	75-01-4	1.7	370	0.15	380	mg/kg	--	--	--	<0.0042	--	<0.0045	<0.0044	<0.0045

Table 3
Summary of Soil Analytical Results for Metals and VOCs
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Soil - Carcinogenic	EPA RSL - Industrial Soil - Noncarcinogenic	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Sample Type	Soil Boring Samples										
						Location	SB-03	SB-03	SB-04	SB-04	SB-05	SB-05	SB-05	SB-06	SB-06	SB-07	SB-07
						Sample Name	SB-03/1-2	SB-03/5-7.5	SB-04/1-2	SB-04/5-7.5	SB-05/1-2	SB-05/5-7.5	DUP - 03232021	SB-06/1-2	SB-06/5-7.5	SB-07/1-2	SB-07/5-7.5
						Sample Date	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Sample Depth (ft bgs)	1-2	5-7.5	1-2	5-7.5	1-2	5-7.5	5-7.5	1-2	5-7.5	1-2	5-7.5
						Units	--	--	--	--	--	--	--	--	--	--	--
Metals																	
Antimony	7440-36-0	NS	470	NS	160	mg/kg	<2	--	<2	--	<2	--	--	<2	--	<2	--
Arsenic	7440-38-2	3	480	0.31	3.6	mg/kg	1.8	--	2.6	--	1.7	--	--	2.0	--	**3.5**	--
Barium	7440-39-3	NS	220000	NS	220000	mg/kg	40	--	120	--	230	--	--	53	--	65	--
Beryllium	7440-41-7	6900	2300	6900	230	mg/kg	1.2	--	1.7	--	1.4	--	--	1.4	--	1.6	--
Cadmium	7440-43-9	9300	980	4000	1100	mg/kg	<1	--	<1	--	<1	--	--	<1	--	<1	--
Chromium, Total	7440-47-3	NS	NS	NS	NS	mg/kg	11	--	15	--	12	--	--	15	--	16	--
Cobalt	7440-48-4	1900	350	1900	350	mg/kg	3.1	--	4.8	--	3.6	--	--	4	--	4.2	--
Copper	7440-50-8	NS	47000	NS	47000	mg/kg	9.1	--	15	--	13	--	--	11	--	15	--
Lead	7439-92-1	NS	800	380	320	mg/kg	3.7	--	9.9	--	7.1	--	--	4.1	--	6.4	--
Mercury	7439-97-6	NS	46	NS	190	mg/kg	<0.1	--	<0.1	--	<0.1	--	--	<0.1	--	<0.1	--
Molybdenum	7439-98-7	NS	5800	NS	5800	mg/kg	<1	--	<1	--	<1	--	--	<1	--	<1	--
Nickel	7440-02-0	64000	22000	64000	11000	mg/kg	8.6	--	13	--	10	--	--	9.8	--	12	--
Selenium	7782-49-2	NS	5800	NS	5800	mg/kg	<1	--	<1	--	<1	--	--	<1	--	<1	--
Silver	7440-22-4	NS	5800	NS	5800	mg/kg	1.6	--	2.4	--	2.1	--	--	1.9	--	2.2	--
Thallium	7440-28-0	NS	12	NS	12	mg/kg	<1	--	<1	--	<1	--	--	<1	--	<1	--
Vanadium	7440-62-2	NS	5800	NS	5800	mg/kg	19	--	29	--	24	--	--	25	--	24	--
Zinc	7440-66-6	NS	350000	NS	350000	mg/kg	25	--	40	--	48	--	--	27	--	37	--
Volatile Organic Compounds																	
1,1,1,2-Tetrachloroethane	630-20-6	8.8	35000	8.9	35000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1,1-Trichloroethane	71-55-6	NS	36000	NS	7300	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1,2,2-Tetrachloroethane	79-34-5	2.7	23000	2.7	23000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	28000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1,2-Trichloroethane	79-00-5	5	6.3	5.1	6.4	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1-Dichloroethane	75-34-3	16	230000	16	230000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1-Dichloroethene	75-35-4	NS	1000	NS	350	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,1-Dichloropropene	563-58-6	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2,3-Trichlorobenzene	87-61-6	NS	930	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2,3-Trichloropropane	96-18-4	0.11	21	0.11	21	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2,4-Trichlorobenzene	120-82-1	110	260	110	260	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2,4-Trimethylbenzene	95-63-6	NS	1800	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2-Dibromo-3-Chloropropane	96-12-8	0.064	25	0.059	26	mg/kg	<0.0096	<0.0089	<0.0083	<0.01	<0.0083	<0.0096	<0.0094	<0.0082	<0.0097	<0.0096	<0.01
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.16	330	0.16	30	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2-Dichlorobenzene	95-50-1	NS	9300	NS	9400	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2-Dichloroethane	107-06-2	2	140	2.1	140	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,2-Dichloropropane	78-87-5	11	66	4.4	66	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	1500	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,3-Dichloropropane	142-28-9	NS	23000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
1,4-Dichlorobenzene	106-46-7	11	25000	12	26000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
2,2-Dichloropropane	594-20-7	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
2-Chlorotoluene	95-49-8	NS	23000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
4-Chlorotoluene	106-43-4	NS	23000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Benzene	71-43-2	5.1	420	1.4	47	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Bromobenzene	108-86-1	NS	1800	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Bromochloromethane	74-97-5	NS	630	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Bromodichloromethane	75-27-4	1.3	23000	1.3	23000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Bromoform	75-25-2	86	23000	80	23000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Bromomethane	74-83-9	NS	30	NS	30	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Butane, 2-Methoxy-2-Methyl	994-05-8	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Carbon Disulfide	75-15-0	NS	3500	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Carbon Tetrachloride	56-23-5	2.9	570	2.7	250	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Chlorobenzene	108-90-7	NS	1300	NS	1300	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Chloroethane	75-00-3	NS	57000	NS	59000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Chloroform	67-66-3	1.4	1000	1.4	1000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Chloromethane	74-87-3	NS	460	NS	470	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Cis-1,2-Dichloroethene	156-59-2	NS	2300	NS	85	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Cymene	99-87-6	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Dibromochloromethane	124-48-1	39	23000	39	23000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Dibromomethane	74-95-3	NS	99	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Dichlorodifluoromethane	75-71-8	NS	370	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Diethyl Ether (Ethyl Ether)	60-29-7	NS	230000	NS	NS	mg/kg	<0.048	<0.044	<0.041	<0.05	<0.041	<0.048	<0.047	<0.041	<0.048	<0.048	<0.052
Ethyl Acetate	141-78-6	NS	2600	NS	NS	mg/kg	<0.048	<0.044	<0.041	<0.05	<0.041	<0.048	<0.047	<0.041	<0.048	<0.048	<0.052
Ethyl Tert-Butyl Ether	637-92-3	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Ethylbenzene	100-41-4	25	20000	26	21000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Hexachlorobutadiene	87-68-3	5.3	1200	5.3	1200	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Isopropyl Ether	108-20-3	NS	9400	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Isopropylbenzene (Cumene)	98-82-8	NS	9900	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
M,P-Xylene	179601-23-1	NS	NS	NS	NS	mg/kg	<0.0096	<0.0089	<0.0083	<0.01	<0.0083	<0.0096	<0.0094	<0.0082	<0.0097	<0.0096	<0.01
Methylene Chloride	75-09-2	1000	3200	25	2500	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Naphthalene	91-20-3	8.6	590	17	580	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
n-Butylbenzene	104-51-8	NS	58000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
n-Propylbenzene	103-65-1	NS	24000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	2800	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Sec-Butylbenzene	135-98-8	NS	120000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Styrene	100-42-5	NS	35000	NS	33000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
T-Butylbenzene	98-06-6	NS	120000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Tert-Butyl Alcohol	75-65-0	NS	NS	NS	NS	mg/kg	<0.096	<0.089	<0.083	<0.1	<0.083	<0.096	<0.094	<0.082	<0.097	<0.096	<0.1
Tert-Butyl Methyl Ether	1634-04-4	210	64000	210	66000	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Tetrachloroethene (PCE)	127-18-4	100	390	2.7	390	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Toluene	108-88-3	NS	47000	NS	5300	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Trans-1,2-Dichloroethene	156-60-5	NS	300	NS	600	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Trichloroethene (TCE)	79-01-6	6	19	6.1	19	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Trichlorofluoromethane	75-69-4	NS	350000	NS	NS	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052
Vinyl Acetate	108-05-4	NS	3800	NS	NS	mg/kg	<0.048	<0.044	<0.041	<0.05	<0.041	<0.048	<0.047	<0.041	<0.048	<0.048	<0.052
Vinyl Chloride	75-01-4	1.7	370	0.15	380	mg/kg	<0.0048	<0.0044	<0.0041	<0.005	<0.0041	<0.0048	<0.0047	<0.0041	<0.0048	<0.0048	<0.0052

Table 3
Summary of Soil Analytical Results for Metals and VOCs
SBD4 - Victorville, California

Notes:

Soil results were compared to USEPA RSL Commercial/Industrial Carcinogenic and Noncancer criteria using a TCR of 1x10-6 and a THQ of 1 (November 2020) and to the California RWQCB ESL Human Health Risk Levels for Commercial/Inudstrial Cancer and Noncancer values (July 2019).

Based on the "Determination of a Southern California Regional Background Arsenic Concentration in Soil" published by the DTSC in 2008, the average background arsenic concentration in soil of the Southern California Region was determined to be approximately 12 mg/kg; with a maximum background concentration of 19.63 mg/kg.

USEPA - United States Environmental Protection Agency
RSL - Regional Screening Level
TCR - Target cancer risk
THQ - Target hazard quotient
RWQCB - Regional Water Quality Control Board
ESL - Environmental Screening Level
CAS - Chemical Abstract Service
NS - No standard
mg/kg - Milligrams per kilogram
NA - Not Analyzed
RL - Reporting Limit
<RL - Not detected
ft bgs - feet below ground surface

Exceedance Summary:

10 - Result exceeds EPA RSL - Industrial Soil - Carcinogenic
10 - Result exceeds EPA RSL - Industrial Soil - Noncarcinogenic
10 - Result exceeds RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Cancer Risk
10 - Result exceeds RWQCB ESL - Soil Direct Exposure Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard

Table 4
Summary of Soil Vapor Analytical Results
SBD4 - Victorville, California

Analyte	CAS Number	EPA RSL - Industrial Air - Carcinogenic, Attenuation Factor 0.03	EPA RSL - Industrial Air - Noncarcinogenic, Attenuation Factor 0.03	RWQCB ESL - Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels - Commercial/Industrial - Cancer Risk	RWQCB ESL - Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard	Location	SV-01	SV-02	SV-03	SV-04	SV-05	SV-06	SV-07	SV-08	SV-09
						Sample Name	SV-01	SV-02	SV-03	SV-04	SV-05	SV-06	SV-07	SV-08	SV-09
						Sample Date	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21	23-Mar-21
						Unit	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds															
1,1,1,2-Tetrachloroethane	630-20-6	57	NS	55	NS	ug/m3	<14	<14	<14	<14	<14	<14	<14	<14	<14
1,1,1-Trichloroethane	71-55-6	NS	733333	NS	150000	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
1,1,2,2-Tetrachloroethane	79-34-5	7	NS	7	NS	ug/m3	<14	<14	<14	<14	<14	<14	<14	<14	<14
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	733333	NS	NS	ug/m3	<15	<15	<15	<15	<15	<15	<15	<15	<15
1,1,2-Trichloroethane	79-00-5	26	29	26	29	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
1,1-Dichloroethane	75-34-3	257	NS	260	NS	ug/m3	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1
1,1-Dichloroethene	75-35-4	NS	29333	NS	10000	ug/m3	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9
1,2,4-Trichlorobenzene	120-82-1	NS	293	NS	290	ug/m3	<15	<15	<15	<15	<15	<15	<15	<15	<15
1,2,4-Trimethylbenzene	95-63-6	NS	8667	NS	NS	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	1	1300	0.68	120	ug/m3	<15	<15	<15	<15	<15	<15	<15	<15	<15
1,2-Dichlorobenzene	95-50-1	NS	29333	NS	29000	ug/m3	<12	<12	<12	<12	<12	<12	<12	<12	<12
1,2-Dichloroethane	107-06-2	16	1033	16	1000	ug/m3	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1	<8.1
1,2-Dichloropropane	78-87-5	110	600	41	580	ug/m3	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2
1,2-Dichlorotetrafluoroethane	76-14-2	NS	NS	NS	NS	ug/m3	<14	<14	<14	<14	<14	<14	<14	<14	<14
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	8667	NS	NS	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
1,3-Butadiene	106-99-0	14	293	NS	NS	ug/m3	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
1,3-Dichlorobenzene	541-73-1	NS	NS	NS	NS	ug/m3	<12	<12	<12	<12	<12	<12	<12	<12	<12
1,4-Dichlorobenzene	106-46-7	37	116667	37	120000	ug/m3	<12	<12	<12	<12	<12	<12	<12	<12	<12
1,4-Dioxane (P-Dioxane)	123-91-1	83	4333	53	4400	ug/m3	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
2,2,4-Trimethylpentane	540-84-1	NS	NS	NS	NS	ug/m3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3
2-Chlorotoluene	95-49-8	NS	NS	NS	NS	ug/m3	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	591-78-6	NS	4333	NS	NS	ug/m3	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2
4-Ethyltoluene	622-96-8	NS	NS	NS	NS	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
Acetone	67-64-1	NS	4666667	NS	4500000	ug/m3	26	32	130	140	48	160	27	28	21
Acetonitrile	75-05-8	NS	8667	NS	NS	ug/m3	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
Acrolein	107-02-8	NS	3	NS	NS	ug/m3	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6
Acrylonitrile	107-13-1	6	293	NS	NS	ug/m3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3
Benzene	71-43-2	53	4333	14	440	ug/m3	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
Benzyl Chloride	100-44-7	8	147	NS	NS	ug/m3	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	75-27-4	11	NS	11	NS	ug/m3	<13	<13	<13	<13	<13	<13	<13	<13	<13
Bromoform	75-25-2	367	NS	370	NS	ug/m3	<21	<21	<21	<21	<21	<21	<21	<21	<21
Bromomethane	74-83-9	NS	733	NS	730	ug/m3	<7.8	<7.8	<7.8	<7.8	<7.8	<7.8	<7.8	<7.8	<7.8
Carbon Disulfide	75-15-0	NS	103333	NS	NS	ug/m3	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2	<6.2
Carbon Tetrachloride	56-23-5	67	14667	68	5800	ug/m3	<13	<13	<13	<13	<13	<13	<13	<13	<13
Chlorobenzene	108-90-7	NS	7333	NS	7300	ug/m3	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2
Chloroethane	75-00-3	NS	1466667	NS	1500000	ug/m3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
Chloroform	67-66-3	18	14333	18	14000	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
Chloromethane	74-87-3	NS	13000	NS	13000	ug/m3	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
Cis-1,2-Dichloroethene	156-59-2	NS	NS	NS	1200	ug/m3	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9
Cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	ug/m3	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1
Cyclohexane	110-82-7	NS	866667	NS	NS	ug/m3	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
Dibromochloromethane	124-48-1	NS	NS	NS	NS	ug/m3	<17	<17	<17	<17	<17	<17	<17	<17	<17
Dichlorodifluoromethane	75-71-8	NS	14667	NS	NS	ug/m3	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9	<9.9
Ethanol	64-17-5	NS	NS	NS	NS	ug/m3	9.6	5.6	15	9.5	7.3	9.6	<3.8	4.6	4.9
Ethylbenzene	100-41-4	163	146667	160	150000	ug/m3	<8.7	31	<8.7	<8.7	<8.7	<8.7	41	<8.7	21
Hexachlorobutadiene	87-68-3	19	NS	19	NS	ug/m3	<21	<21	<21	<21	<21	<21	<21	<21	<21
Isopropanol	67-63-0	NS	29333	NS	NS	ug/m3	<4.9	6.1	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene (Cumene)	98-82-8	NS	60000	NS	NS	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
M,P-Xylene	179601-23-1	NS	NS	NS	NS	ug/m3	<35	150	<35	<35	<35	<35	170	<35	100
Methyl Ethyl Ketone (2-Butanone)	78-93-3	NS	733333	NS	730000	ug/m3	6.9	8.5	7.7	7.9	<5.9	6.1	<5.9	<5.9	<5.9
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	433333	NS	440000	ug/m3	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2	<8.2
Methylene Chloride	75-09-2	40000	86667	410	58000	ug/m3	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
Naphthalene	91-20-3	12	433	12	440	ug/m3	<10	<10	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	104-51-8	NS	NS	NS	NS	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
n-Propylbenzene	103-65-1	NS	146667	NS	NS	ug/m3	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8	<9.8
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	14667	NS	NS	ug/m3	<8.7	45	<8.7	<8.7	<8.7	<8.7	48	<8.7	28
Sec-Butylbenzene	135-98-8	NS	NS	NS	NS	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
Styrene	100-42-5	NS	146667	NS	130000	ug/m3	<8.5	<8.5	<8.5	<8.5	<8.5	<8.5	<8.5	<8.5	<8.5
T-Butylbenzene	98-06-6	NS	NS	NS	NS	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
Tert-Butyl Methyl Ether	1634-04-4	1567	433333	1600	440000	ug/m3	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
Tetrachloroethene (PCE)	127-18-4	1567	6000	67	5800	ug/m3	<14	<14	<14	<14	<14	<14	<14	<14	<14
Toluene	108-88-3	NS	733333	NS	44000	ug/m3	16	14	9.9	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
Trans-1,2-Dichloroethene	156-60-5	NS	6000	NS	12000	ug/m3	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9	<7.9
Trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	ug/m3	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1	<9.1
Trichloroethene (TCE)	79-01-6	100	293	100	290	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
Trichlorofluoromethane	75-69-4	NS	NS	NS	NS	ug/m3	<11	<11	<11	<11	<11	<11	<11	<11	<11
Vinyl Acetate	108-05-4	NS	29333	NS	NS	ug/m3	<7	<7	<7	<7	<7	<7	<7	<7	<7
Vinyl Chloride	75-01-4	93	14667	5.2	15000	ug/m3	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
General Chemistry															
Helium	7440-59-7	NS	NS	NS	NS	%v/v	<0.27	<0.29	<0.28	<0.29	<0.28	<0.27	<0.24	<0.28	<0.27

Table 4
Summary of Soil Vapor Analytical Results
SBD4 - Victorville, California

Notes:

Soil vapor results were compared to USEPA RSL Commercial/Industrial Carcinogenic and Noncancer criteria using a TCR of 1x10-6 and a THQ of 1, attenuation factor of 0.03 (November 2020) and to the California RWQCB ESL Human Health Risk Levels for Commercial/Inudstrial Cancer and Noncancer values (July 2019).

USEPA - United States Environmental Protection Agency

RSL - Regional Screening Level

TCR - Target cancer risk

THQ - Target hazard quotient

RWQCB - Regional Water Quality Control Board

ESL - Environmental Screening Level

CAS - Chemical Abstract Service

NS - No standard

ug/m3 - Micrograms per cubic meter

NA - Not Analyzed

RL - Reporting Limit

<RL - Not detected

Exceedance Summary:

10 - Result exceeds EPA RSL - Industrial Air; Carcinogenic, Attenuation Factor 0.03

10 - Result exceeds EPA RSL - Industrial Air; Noncarcinogenic, Attenuation Factor 0.03

10 - Result exceeds RWQCB ESL - Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels - Commercial/Industrial - Cancer Risk

10 - Result exceeds RWQCB ESL - Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels - Commercial/Industrial - Non-Cancer Hazard

APPENDIX A

Boring Logs

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Log of Boring **SB-01** Sheet 1 of 2

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 20 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 10:55.
		Brown, SILT (ML), (dry).	0.0	1					Sample from 1-2 feet collected at 11:00.
		Red brown, clayey SILT (ML), (dry).	0.0	2	0-5	MACROCORE	48		
		Tan, sandy SILT (ML), some gravel, (dry).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), (moist).		5					Sample from 5-7.5 feet collected at 11:10.
		Tan, coarse SAND (SP), (moist).	0.0	6					
		Tan, coarse SAND (SP), (moist).	0.0	7	5-10	MACROCORE	48		
		Tan, coarse SAND (SP), (moist).	0.0	8					
		No recovery.	0.0	9					
		Light tan to gray, coarse SAND (SP), trace fine gravel, (moist).		10					
		Tan, coarse SAND (SP), (moist).	0.0	11	10-15	MACROCORE	48		
				12					

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Log of Boring **SB-01** Sheet 2 of 2

Project	Project No.
ARS Fulfillment Center - Prokect Loki / SBD4	700089101
Location	**Elevation and Datum**
Victorville, California	

MATERIAL SYMBOL	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Sample Data: Type	Sample Data: Recov. (in)	Sample Data: Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Tan, coarse SAND (SP), (moist).	0.0	12					
		Tan, fine SAND (SP), (moist).	0.0	13	10-15	MACROCORE	48		
		No recovery.	0.0	14					
		Gray, clayey SILT (ML), (moist).		15					
		Gray, clayey SILT (ML), (moist).	0.0	16					
		Brown, SILT (ML), (moist).	0.0	17	15-20	MACROCORE	60		
		Brown, silty SAND (SM), (moist).	0.0	18					
		Brown, silty SAND (SM), (moist).	0.0	19					
		Boring completed at 20 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.	0.0	20					Finish: 11:25.
				21					
				22					
				23					
				24					
				25					
				26					
				27					

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Log of Boring **SB-02** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown to tan, SILT (ML), (dry).		0					Start: 07:40.
		Brown, SILT (ML), (dry).	0.0	1					Sample from 1-2 feet collected at 07:55.
		Brown, sandy SILT (ML), (dry).	0.0	2	0-5	MACROCORE	42		
		Red brown with white mottling, SILT (ML), (dry).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), with fine gravel, (moist).		5					Sample from 5-7.5 feet collected at 08:00.
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	6					
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	7	5-10	MACROCORE	36		
		No recovery.	0.0	8					
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 08:10.
				11					
				12					

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Log of Boring **SB-03** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First - / Completion - / 24 HR. -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown to tan, SILT (ML), (dry).		0					Start: 08:15.
		Light brown, SILT (ML), some fine gravel, (dry).	0.0	1					Sample from 1-2 feet collected at 08:25.
		Brown, SILT (ML), (dry).	0.0	2	0-5	MACROCORE	48		
		Red brown with white mottling, SILT (ML), with fine gravel, (dry).	0.0	3					
		No recovery.	0.0	4					
		Red brown with white mottling, SILT (ML), with fine gravel, (moist).		5					Sample from 5-7.5 feet collected at 08:30.
		Orange brown, coarse SAND (SP), with fine gravel, (moist).	0.0	6					
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	7	5-10	MACROCORE	42		
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	8					
		No recovery.	0.0	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 08:35.
				11					
				12					

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Log of Boring **SB-04** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Dark brown, SILT (ML), with fine gravel, (dry).		0					Start: 08:40.
		Brown, SILT (ML), (dry).	0.0	1					Sample from 1-2 feet collected at 08:55.
		Red brown, sandy SILT (ML), with fine gravel, (moist).	0.0	2	0-5	MACROCORE	48		
		Tan, coarse SAND (SP), (moist).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), (moist).		5					Sample from 5-7.5 feet collected at 09:05.
		Tan, coarse SAND (SP), (moist).	0.0	6					
		Tan, coarse SAND (SP), (moist).	0.0	7	5-10	MACROCORE	36		
		No recovery.	0.0	8					
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 09:10.
				11					
				12					

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Log of Boring **SB-05** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Dark brown, SILT (ML), with fine gravel, (dry).		0					Weather: Light rain (Samples got wet). Start: 09:20.
		Red brown, sandy SILT (ML), with fine gravel, (dry).	0.0	1					Sample from 1-2 feet collected at 09:25.
		Red brown, SAND (SP), with fine gravel, (dry).	0.0	2	0-5	MACROCORE	48		
		Tan, sandy SILT (ML), (dry).	0.0	3					
		No recovery.	0.0	4					
		Light tan, SILT (ML), with fine gravel, (moist).		5					Sample from 5-7.5 feet collected at 09:35.
		Light tan, SILT (ML), with fine gravel, (moist).	0.0	6					
		Light tan, SILT (ML), (moist).	0.0	7	5-10	MACROCORE	54		
		Light tan, coarse SAND (SP), (moist).	0.0	8					
		No recovery.	0.0	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.	0.0	10					Finish: 09:45.
				11					
				12					

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Log of Boring **SB-06** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Light brown, SITL (ML), with fine gravel, (dry).		0					Start: 10:26.
		Brown, sandy SILT (ML), (dry).	0.0	1					Sample from 1-2 feet collected at 10:30.
		Red brown with white specs, SAND (SP), cemented(dry).	0.0	2	0-5	MACROCORE	48		
		Red brown, coarse SAND (SP), (dry).	0.0	3					
		No recovery.	0.0	4					
		Light orange tan, coarse SAND (SP), with fine gravel, (moist).		5					Sample from 5-7 feet collected at 10:40.
		Light orange tan, coarse SAND (SP), with fine gravel, (moist).	0.0	6					
		Light orange tan, coarse SAND (SP), with fine gravel, (moist).	0.0	7	5-10	MACROCORE	48		
		Light orange tan, coarse SAND (SP), with fine gravel, (moist).	0.0	8					
		No recovery.	0.0	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 10:45.
				11					
				12					

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Log of Boring **SB-07** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/23/21 / Date Finished: 3/23/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Dark brown gray, SILT (ML), with coarse gravel, (dry).		0					Start: 12:30.
		Light tan gray, SILT (ML), with coarse gravel, (dry).							
		Brown, sandy SILT (ML), (dry).	0.0	1					Sample from 1-2 feet collected at 12:50.
		No recovery.	0.0	2	0-5	MACROCORE	24		
				3					
				4					
		Tan, coarse SAND (SP), (moist).		5					Sample from 5-7.5 feet collected at 13:00.
		Tan, coarse SAND (SP), (moist).	0.0	6					
		Tan, coarse SAND (SP), (moist).	0.0	7	5-10	MACROCORE	42		
			0.0	8					
		No recovery.		9					
				10					Finish: 13:05.
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		11					
				12					

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Log of Boring **SV-01** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), some fine gravel, (dry).		0					Start: 07:45.
		Brown, clayey SILT (ML), some fine gravel, (dry).	0.0	1					
		Brown, clayey fine SAND (SC), some fine gravel, (moist).	0.0	2	0-5	MACROCORE	48		
		Light brown, medium SAND (SP), some fine gravel, (moist).	0.0	3					
		No recovery.	0.0	4					
		Light brown, medium SAND (SP), some fine gravel, (moist).		5					
		Light gray, SILT (ML), (moist).	0.0	6					
		Light gray, SILT (ML), (moist).	0.0	7	5-10	MACROCORE	48		
		Light gray, SILT (ML), (moist).	0.0	8					
		Boring refusal at 9 feet bgs. No groundwater encountered. Borehole backfilled with soil cuttings.	0.0	9					Liner jam at 9 feet. Finish: 08:30. Borehole partially backfilled and probe set at 5.5 feet.
				10					
				11					
				12					

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Log of Boring **SV-02** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), some fine gravel, (dry).		0					Start: 08:40.
		Reddish brown, SILT (ML), some fine gravel, (dry).	0.0	1					
		Light brown gray, coarse SAND (SP), some fine gravel, (dry).	0.0	2	0-5	MACROCORE	42		
			0.0	3					
		No recovery.	0.0	4					
		Light gray, SILT (ML), trace fine sand, (moist).		5					
		Light gray, SILT (ML), trace fine sand, (moist).	0.0	6					
			0.0	7					
		No recovery.	0.0	8	5-10	MACROCORE	30		
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 09:20. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

LANGAN

Log of Boring **SV-03** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 09:50.
		Red brown, SILT (ML), some fine gravel, (dry).	0.0	1					
		Light tan, SILT (ML), (dry).	0.0	2	0-5	MACROCORE	48		
		Light brown, coarse SAND (SP), (dry).	0.0	3					
		No recovery.	0.0	4					
		Light brown, coarse SAND (SP), (moist).		5					
		Light brown, coarse SAND (SP), (moist).	0.0	6					
		Light brown, coarse SAND (SP), (moist).	0.0	7	5-10	MACROCORE	60		
		Light brown, sandy SILT (ML), (moist).	0.0	8					
		Light brown, sandy SILT (ML), (moist).	0.0	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.	0.0	10					Finish: 10:15. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

LANGAN

Log of Boring **SV-04** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 10:25.
		Red brown, SILT (ML), trace fine gravel, (dry).	0.0	1					
		Red brown, SILT (ML), trace fine gravel, (dry).	0.0	2	0-5	MACROCORE	42		
		Light brown, coarse SAND (SP), (moist).	0.0	3					
		No recovery.	0.0	4					
		Light brown, coarse SAND (SP), (moist).		5					
		Light brown, coarse SAND (SP), (moist).	0.0	6					
		Light brown, coarse SAND (SP), (moist).	0.0	7	5-10	MACROCORE	36		
		No recovery.	0.0	8					
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 10:45. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

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Log of Boring **SV-05** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), trace asphalt debris, (dry).		0					Start: 11:00.
		Brown, SILT (ML), (dry).	0.2	1					
		Brown, SILT (ML), (dry).	0.0	2	0-5	MACROCORE	54		
		Brown, SILT (ML), (dry).	0.0	3					
		Brown, SILT (ML), (dry).	0.9	4					
		No recovery.							
		Red brown, SILT (ML), trace fine gravel.	1.2	5					
		Red brown with black mottling, SILT (ML), trace fine gravel, (moist).	0.2	6					
		Light brown, coarse SAND (SP), (moist).	0.4	7	5-10	MACROCORE	42		
		Tan, coarse SAND (SP), some gravel.	0.2	8					
		No recovery.	0.2	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 11:25. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

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Log of Boring **SV-06** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 11:30.
		Red brown, clayey SILT (ML), trace fine gravel, (dry).	0.0	1					
		Light brown, coarse SAND (SP), (moist).	0.0	2	0-5	MACROCORE	48		
		Brown, coarse SAND (SP), some cobbles, (moist).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), some fine to medium gravel, (moist).		5					
		Tan, coarse SAND (SP), some fine to medium gravel, (moist).	0.1	6					
		Tan, coarse SAND (SP), some fine to medium gravel, (moist).	0.0	7	5-10	MACROCORE	42		
		No recovery.	0.0	8					
			0.0	9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 11:45. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

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Log of Boring **SV-07** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 12:50.
		Brown, SILT (ML), (dry).	0.1	1					
		Brown, SILT (ML), some fine gravel, (dry).	0.0	2	0-5	MACROCORE	42		
		Brown, coarse SAND (SP), with gravel, (dry).	0.0	3					
		No recovery.	0.0	4					
		Red brown, SILT (ML), trace small gravel, (moist).		5					
		Red brown, coarse SAND (SP), (moist).	0.0	6					
		Red brown, SILT (ML), trace fine gravel, (moist).	0.0	7	5-10	MACROCORE	60		
		Tan, SILT (ML), with fine gravel, (moist).		8					
		Tan, SILT (ML), with fine gravel, (moist).		9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 13:15. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

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Log of Boring **SV-08** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 14:05.
		Red brown, clayey SILT (ML), trace fine gravel, (dry).	0.0	1					
		Tan, coarse SAND (SP), trace fine gravel, (dry).	0.0	2	0-5	MACROCORE	48		
		Tan, coarse SAND (SP), trace fine gravel, (dry).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), trace fine gravel, (moist).		5					
		Tan, coarse SAND (SP), trace fine gravel, (moist).	0.0	6					
		Tan, coarse SAND (SP), trace fine gravel, (moist).	0.0	7	5-10	MACROCORE	36		
		No recovery.	0.0	8					
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					Finish: 14:20. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

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Log of Boring **SV-09** Sheet 1 of 1

Project: ARS Fulfillment Center - Prokect Loki / SBD4	Project No.: 700089101
Location: Victorville, California	Elevation and Datum:
Drilling Company: ABC	Date Started: 3/22/21 / Date Finished: 3/22/21
Drilling Equipment: Truck-mouted Geoprobe	Completion Depth: 10 ft / Rock Depth: -
Size and Type of Bit: 2.25-inch I.D. Hollow Stem Auger	Number of Samples: Disturbed / Undisturbed / Core
Casing Diameter (in): - / Casing Depth (ft): -	Water Level (ft.): First ▽ - / Completion ▼ - / 24 HR. ▼ -
Casing Hammer: - / Weight (lbs): - / Drop (in): -	Drilling Foreman: -
Sampler: 2-inch by 60-inch Acetate Liner	Field Engineer: M. Ritsema
Sampler Hammer: - / Weight (lbs): - / Drop (in): -	

Material Symbol	Elev. (ft)	Sample Description	PID Reading (ppm)	Depth Scale	Sample Data: Number	Type	Recov. (in)	Penetr. resist BL/6in	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
		Brown, SILT (ML), (dry).		0					Start: 14:30.
		Red brown, clayey SILT (ML), with fine gravel, (dry).	0.0	1					
		Red brown, clayey SILT (ML), with fine gravel, (dry).	0.0	2	0-5	MACROCORE	48		
		Light brown to tan, coarse SAND (SP), with fine gravel, (dry).	0.0	3					
		No recovery.	0.0	4					
		Tan, coarse SAND (SP), with fine gravel, (moist).		5					
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	6					
		Tan, coarse SAND (SP), with fine gravel, (moist).	0.0	7	5-10	MACROCORE	36		
		No recovery.	0.0	8					
				9					
		Boring completed at 10 feet bgs. Groundwater not encountered. Borehole backfilled with soil cuttings.		10					End: 14:55. Borehole partially backfilled and probe set at 5.5 feet.
				11					
				12					

APPENDIX B

Composite Soil Sampling Logs

Composite Soil Sampling Log

Site: SBD4 - Victorville, California

Samplers: Shari Schwartzer and Megan Ritsema

Date: March 22 and 23, 2021

Sample ID	Date	Time	PID (ppm)	Notes
CS-01-0/2	3/22/2021	930	2.4	tan sandy silt, some gravel, dry; duplicate sample collected (DUP-032221)
CS-01-4/6	3/22/2021	940	5.0	light brown, some moisture
CS-02-0/2	3/22/2021	1010	3.0	dark gray, no odor, some gravel, very hard
CS-02-4/6	3/22/2021	1015	2.2	light tan, dry, cobbles
CS-03-0/2	3/22/2021	1610	0.5	dark gray, gravelly sand, no odor
CS-03-4/6	3/22/2021	1620	1.7	tan silt, no odor
CS-04-0/2	3/22/2021	1350	0.6	hard gravelly cracked surface
CS-04-4/6	3/22/2021	1400	1.4	light tan sandy silt
CS-05-0/2	3/22/2021	1500	0.7	dark gray, breaks apart gravel/pebbles
CS-05-4/6	3/22/2021	1510	4.2	light tan to gray silt, slight moisture
CS-06-0/2	3/22/2021	1530	0.9	brown/gray, gravelly but easy to break
CS-06-4/6	3/22/2021	1540	1.0	dark gray and light tan silt
CS-07/0-2	3/23/2021	1350	1.3	tan medium grained sand
CS-08-0/2	3/22/2021	1110	0.3	gray/brown sand
CS-08-4/6	3/22/2021	1120	1.2	silty sand
CS-09-0/2	3/22/2021	1240	0.2	dark brown with gravel
CS-09-4/6	3/22/2021	1250	2.5	brown sandy silt
CS-10/0-2	3/23/2021	1400	1.5	brown silt with some very small gravel
CS-10/4-6	3/23/2021	1410	1.4	brown silt with some very small gravel
CS-11/0-2	3/23/2021	1420	1.3	dark brown silt with small gravel
CS-11/4-6	3/23/2021	1430	3.6	brown silt
CS-12/0-2	3/23/2021	1440	0.7	dark brown silt with small gravel
CS-12/4-6	3/23/2021	1450	3.7	brown silt
CS-13/0-2	3/23/2021	1310	0.7	dark gray silty sand with small gravel
CS-13/4-6	3/23/2021	1320	0.6	dark gray silty sand with some gravel

APPENDIX C

Soil Vapor Sampling Logs

Soil Vapor Sampling Log

Site: SBD4 - Victorville, California

Samplers: Shari Schwartzer

Date: March 23, 2021

Sample Type	Soil vapor	Soil vapor	Soil vapor	Soil vapor	Soil vapor
Sample #	SV-01	SV-02	SV-03	SV-04	SV-05
Location	SV-01	SV-02	SV-03	SV-04	SV-05
Summa Canister ID	ATL00293	ATL00309	ATL00239	ATL00102	ATL00240
Flow Controller ID	ATL00403	ATL00404	ATL00388	ATL00578	ATL00406
Successful Shut-In Test?	YES	YES	YES	YES	YES
Total Purge Time (min)	11	11	12	11	11
Purge Volume (mL)	2200	2200	2400	2200	2200
Initial Tracer Gas Results in Sampling Line (%)	0	0	0	0	0
Minimum Tracer Gas Results in Shroud (%)	6.3	8	6.7	7.4	6.4
Maximum Tracer Gas Results in Shroud (%)	8.8	12.4	9.8	3.8	4.3
Successful Leak Test?	YES	YES	YES	YES	YES
Pressure Gauge - Before Sampling ("Hg)	-30+	-26	-25	-24	-25
Sample Time (Start)	0753	0927	1105	1340	1422
Sample Time (Stop)	0758	0933	1114	1344	1428
Total Sample Time (min)	5	6	9	4	6
Pressure Gauge - After Sampling ("Hg)	-12	-5	-5	-7	-5.5
Sample Volume (Summa) (L)	1	1	1	1	1
Canister Pressure Went to Ambient Pressure?	NO	NO	NO	NO	NO
Duplicate Sample Collected?	NO	NO	NO	NO	NO
Duplicate Sample Name/Summa	N/A	N/A	N/A	N/A	N/A
GEM Reading (CH_4/C)/O_2/H_2S/VOCs)	0.0/0.4/21.1	0.1/0.2/21.5	0.0/0.2/19.9	0.0/0.2/21.5/0.0/0.1	0.0/0.1/21.4/0.0/0.2
General Comments	Guage initially at -10 with canister at -30+		Issues with first two sampling trains; worked on third attempt		

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Soil Vapor Sampling Log

Site: SBD4 - Victorville, California

Samplers: Shari Schwartzer

Date: March 23, 2021

Sample Type	Soil vapor	Soil vapor	Soil vapor	Soil vapor
Sample #	SV-06	SV-07	SV-08	SV-09
Location	SV-06	SV-07	SV-08	SV-09
Summa Canister ID	ATL00100	ATL00183	ATL00316	ATL00111
Flow Controller ID	ATL00396	ATL00380	ATL00405	ATL00390
Successful Shut-In Test?	YES	YES	YES	YES
Total Purge Time (min)	11	11	11	11
Purge Volume (mL)	2200	2200	2200	2200
Initial Tracer Gas Results in Sampling Line (%)	0	0	0	0
Minimum Tracer Gas Results in Shroud (%)	7.3	10.5	20	6.6
Maximum Tracer Gas Results in Shroud (%)	15.5	14.1	12.1	13.1
Successful Leak Test?	YES	YES	YES	YES
Pressure Gauge - Before Sampling ("Hg)	-28	-28	-19	-26
Sample Time (Start)	1529	1622	1706	1744
Sample Time (Stop)	1535	1626	1711	1751
Total Sample Time (min)	6	4	5	7
Pressure Gauge - After Sampling ("Hg)	-2	-6	2	-4
Sample Volume (Summa) (L)	1	1	1	1
Canister Pressure Went to Ambient Pressure?	NO	NO	NO	NO
Duplicate Sample Collected?	NO	NO	NO	NO
Duplicate Sample Name/Summa	N/A	N/A	N/A	N/A
GEM Reading (CH_4/C)/O_2/H_2S/VOCs)	0.0/0.2/21.3/0.0/0.1	0.0/0.1/21.5/0.0/0.1	0.0/0.1/21.7/0.0/0.0	0.0/0.1/22.0/0.0/0.1
General Comments				

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APPENDIX D

Laboratory Analytical Reports

ADVANCED TECHNOLOGY LABORATORIES

April 02, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

Re: ATL Work Order Number : 2100719
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March 22, 2021 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 your Project Manager.

Sincerely,

Edgar P. Caballero
Laboratory Director

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-01-0/2	2100719-01	Soil	3/22/21 9:30	3/22/21 16:37
CS-01-4/6	2100719-02	Soil	3/22/21 9:40	3/22/21 16:37
CS-02-0/2	2100719-03	Soil	3/22/21 10:10	3/22/21 16:37
CS-02-4/6	2100719-04	Soil	3/22/21 10:15	3/22/21 16:37
CS-04-0/2	2100719-05	Soil	3/22/21 13:50	3/22/21 16:37
CS-04-4/6	2100719-06	Soil	3/22/21 14:00	3/22/21 16:37
CS-05-0/2	2100719-07	Soil	3/22/21 15:00	3/22/21 16:37
CS-05-4/6	2100719-08	Soil	3/22/21 15:10	3/22/21 16:37
CS-06-0/2	2100719-09	Soil	3/22/21 15:30	3/22/21 16:37
CS-06-4/6	2100719-10	Soil	3/22/21 15:40	3/22/21 16:37
CS-08-0/2	2100719-11	Soil	3/22/21 11:10	3/22/21 16:37
CS-08-4/6	2100719-12	Soil	3/22/21 11:20	3/22/21 16:37
CS-09-0/2	2100719-13	Soil	3/22/21 12:40	3/22/21 16:37
CS-09-4/6	2100719-14	Soil	3/22/21 12:50	3/22/21 16:37
SB-01/1-2	2100719-15	Soil	3/22/21 15:15	3/22/21 16:37
SB-01/5-7.5	2100719-16	Soil	3/22/21 15:20	3/22/21 16:37
DUP-032221	2100719-17	Soil	3/22/21 0:00	3/22/21 16:37
CS-03-0/2	2100719-18	Soil	3/22/21 16:10	3/22/21 16:37
CS-03-4/6	2100719-19	Soil	3/22/21 16:20	3/22/21 16:37

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-0/2

Lab ID: 2100719-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Arsenic	**1.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Barium	**45**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Beryllium	**1.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Chromium	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Cobalt	**3.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Copper	**9.7**	2.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Lead	**6.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Nickel	**10**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Silver	**1.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Vanadium	**22**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	
Zinc	**29**	1.0	1	B1C0456	03/23/2021	03/25/21 11:23	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:04	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 18:01	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 18:01	
Surrogate: p-Terphenyl	*115 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 18:01*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-0/2

Lab ID: 2100719-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-0/2

Lab ID: 2100719-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 12:27	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:27	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:27	
Surrogate: 1,2-Dichlorobenzene-d4	*54.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: 2,4,6-Tribromophenol	*92.2 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: 2-Chlorophenol-d4	*56.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: 2-Fluorobiphenyl	*64.1 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: 2-Fluorophenol	*50.6 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: 4-Terphenyl-d14	*69.4 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 12:27*	
Surrogate: Nitrobenzene-d5	*59.1 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 12:27*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-0/2

Lab ID: 2100719-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*55.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 12:27*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-4/6

Lab ID: 2100719-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Arsenic	**2.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Barium	**42**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Beryllium	**1.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Chromium	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Cobalt	**4.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Copper	**11**	2.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Lead	**4.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Nickel	**11**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Silver	**1.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Vanadium	**25**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	
Zinc	**26**	1.0	1	B1C0456	03/23/2021	03/25/21 11:33	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:28	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 18:28	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 18:28	
Surrogate: p-Terphenyl	*112 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 18:28*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-4/6

Lab ID: 2100719-02

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-4/6

Lab ID: 2100719-02

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 12:53	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 12:53	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 12:53	
Surrogate: 1,2-Dichlorobenzene-d4	*50.9 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: 2,4,6-Tribromophenol	*83.6 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: 2-Chlorophenol-d4	*51.0 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: 2-Fluorobiphenyl	*58.8 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: 2-Fluorophenol	*45.5 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: 4-Terphenyl-d14	*62.8 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 12:53*	
Surrogate: Nitrobenzene-d5	*53.3 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 12:53*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-01-4/6

Lab ID: 2100719-02

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*50.3 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 12:53*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-0/2

Lab ID: 2100719-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Arsenic	**4.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Barium	**120**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Beryllium	**2.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Chromium	**22**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Cobalt	**5.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Copper	**20**	2.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Lead	**23**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Nickel	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Silver	**2.9**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Vanadium	**37**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	
Zinc	**71**	1.0	1	B1C0456	03/23/2021	03/25/21 11:38	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:31	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 18:54	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 18:54	
Surrogate: p-Terphenyl	*96.6 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 18:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-0/2

Lab ID: 2100719-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-0/2

Lab ID: 2100719-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 13:19	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:19	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:19	
Surrogate: 1,2-Dichlorobenzene-d4	*53.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: 2,4,6-Tribromophenol	*94.1 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: 2-Chlorophenol-d4	*54.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: 2-Fluorobiphenyl	*65.3 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: 2-Fluorophenol	*46.7 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: 4-Terphenyl-d14	*62.7 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 13:19*	
Surrogate: Nitrobenzene-d5	*57.9 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 13:19*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-0/2

Lab ID: 2100719-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*51.3 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 13:19*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-4/6

Lab ID: 2100719-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Arsenic	**4.8**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Barium	**67**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Beryllium	**1.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Chromium	**17**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Cobalt	**3.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Copper	**15**	2.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Lead	**8.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Nickel	**11**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Silver	**2.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Vanadium	**26**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	
Zinc	**51**	1.0	1	B1C0456	03/23/2021	03/25/21 11:39	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:33	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 19:20	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 19:20	
Surrogate: p-Terphenyl	*97.4 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 19:20*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-4/6

Lab ID: 2100719-04

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

Client Sample ID: CS-02-4/6

Lab ID: 2100719-04

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 13:44	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 13:44	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 13:44	
Surrogate: 1,2-Dichlorobenzene-d4	*56.7 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: 2,4,6-Tribromophenol	*88.7 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: 2-Chlorophenol-d4	*57.8 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: 2-Fluorobiphenyl	*69.0 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: 2-Fluorophenol	*53.2 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: 4-Terphenyl-d14	*76.4 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 13:44*	
Surrogate: Nitrobenzene-d5	*61.9 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 13:44*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-02-4/6

Lab ID: 2100719-04

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*57.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 13:44*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-04-0/2

Lab ID: 2100719-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Arsenic	**4.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Barium	**170**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Beryllium	**2.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Chromium	**22**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Cobalt	**5.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Copper	**20**	2.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Lead	**37**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Molybdenum	**1.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Nickel	**15**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Silver	**3.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Vanadium	**40**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	
Zinc	**67**	1.0	1	B1C0456	03/23/2021	03/25/21 11:41	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:35	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 19:47	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 19:47	
Surrogate: p-Terphenyl	*108 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 19:47*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-04-0/2

Lab ID: 2100719-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-04-0/2

Lab ID: 2100719-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Fluoranthene	**570**	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 14:10	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
Phenanthrene	**700**	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Pyrene	**700**	330	1	B1C0460	03/23/2021	03/24/21 14:10	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:10	
Surrogate: 1,2-Dichlorobenzene-d4	*54.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: 2,4,6-Tribromophenol	*78.4 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: 2-Chlorophenol-d4	*52.7 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: 2-Fluorobiphenyl	*63.3 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: 2-Fluorophenol	*45.9 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: 4-Terphenyl-d14	*65.6 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 14:10*	
Surrogate: Nitrobenzene-d5	*56.9 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 14:10*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-04-0/2

Lab ID: 2100719-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*46.8 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 14:10*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-04-4/6

Lab ID: 2100719-06

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Arsenic	**3.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Barium	**110**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Beryllium	**2.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Chromium	**22**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Cobalt	**9.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Copper	**17**	2.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Lead	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Nickel	**17**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Silver	**3.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Vanadium	**35**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	
Zinc	**47**	1.0	1	B1C0456	03/23/2021	03/25/21 11:42	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:38	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 20:13	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 20:13	
Surrogate: p-Terphenyl	*111 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 20:13*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-04-4/6

Lab ID: 2100719-06

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-04-4/6

Lab ID: 2100719-06

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 14:36	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 14:36	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 14:36	
Surrogate: 1,2-Dichlorobenzene-d4	*63.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: 2,4,6-Tribromophenol	*112 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: 2-Chlorophenol-d4	*63.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: 2-Fluorobiphenyl	*74.3 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: 2-Fluorophenol	*57.7 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: 4-Terphenyl-d14	*70.3 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 14:36*	
Surrogate: Nitrobenzene-d5	*67.0 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 14:36*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-04-4/6

Lab ID: 2100719-06

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*61.5 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 14:36*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-0/2

Lab ID: 2100719-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Arsenic	**3.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Barium	**130**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Beryllium	**2.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Chromium	**20**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Cobalt	**5.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Copper	**17**	2.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Lead	**28**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Nickel	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Silver	**3.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Vanadium	**35**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	
Zinc	**57**	1.0	1	B1C0456	03/23/2021	03/25/21 11:44	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:40	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 20:39	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 20:39	
Surrogate: p-Terphenyl	*105 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 20:39*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-0/2

Lab ID: 2100719-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-05-0/2

Lab ID: 2100719-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:02	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:02	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:02	
Surrogate: 1,2-Dichlorobenzene-d4	*46.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: 2,4,6-Tribromophenol	*68.4 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: 2-Chlorophenol-d4	*45.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: 2-Fluorobiphenyl	*52.7 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: 2-Fluorophenol	*38.5 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: 4-Terphenyl-d14	*57.4 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 15:02*	
Surrogate: Nitrobenzene-d5	*49.5 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 15:02*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-0/2

Lab ID: 2100719-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*39.9 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 15:02*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-4/6

Lab ID: 2100719-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Arsenic	**1.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Barium	**49**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Beryllium	**1.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Chromium	**16**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Cobalt	**5.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Copper	**12**	2.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Lead	**6.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Nickel	**12**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Silver	**2.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Vanadium	**27**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	
Zinc	**32**	1.0	1	B1C0456	03/23/2021	03/25/21 11:45	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:42	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 21:06	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 21:06	
Surrogate: p-Terphenyl	*101 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 21:06*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-4/6

Lab ID: 2100719-08

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-4/6

Lab ID: 2100719-08

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:28	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:28	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:28	
Surrogate: 1,2-Dichlorobenzene-d4	*56.1 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: 2,4,6-Tribromophenol	*85.7 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: 2-Chlorophenol-d4	*54.8 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: 2-Fluorobiphenyl	*61.4 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: 2-Fluorophenol	*50.9 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: 4-Terphenyl-d14	*67.0 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 15:28*	
Surrogate: Nitrobenzene-d5	*57.8 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 15:28*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-05-4/6

Lab ID: 2100719-08

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*52.6 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 15:28*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-0/2

Lab ID: 2100719-09

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Arsenic	**4.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Barium	**140**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Beryllium	**2.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Chromium	**20**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Cobalt	**5.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Copper	**16**	2.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Lead	**15**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Nickel	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Silver	**3.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Vanadium	**34**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	
Zinc	**54**	1.0	1	B1C0456	03/23/2021	03/25/21 11:47	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:45	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 21:32	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 21:32	
Surrogate: p-Terphenyl	*107 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 21:32*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-06-0/2

Lab ID: 2100719-09

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-0/2

Lab ID: 2100719-09

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 15:54	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 15:54	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 15:54	
Surrogate: 1,2-Dichlorobenzene-d4	*57.7 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: 2,4,6-Tribromophenol	*90.1 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: 2-Chlorophenol-d4	*57.2 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: 2-Fluorobiphenyl	*66.9 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: 2-Fluorophenol	*50.8 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: 4-Terphenyl-d14	*75.7 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 15:54*	
Surrogate: Nitrobenzene-d5	*60.8 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 15:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-0/2

Lab ID: 2100719-09

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*53.6 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 15:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-4/6

Lab ID: 2100719-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Arsenic	**3.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Barium	**110**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Beryllium	**2.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Chromium	**18**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Cobalt	**4.9**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Copper	**15**	2.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Lead	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Nickel	**13**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Silver	**2.9**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Vanadium	**31**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	
Zinc	**48**	1.0	1	B1C0456	03/23/2021	03/25/21 11:48	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:47	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 21:58	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 21:58	
Surrogate: p-Terphenyl	*94.7 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 21:58*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-4/6

Lab ID: 2100719-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-06-4/6

Lab ID: 2100719-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 16:20	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:20	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:20	
Surrogate: 1,2-Dichlorobenzene-d4	*61.7 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: 2,4,6-Tribromophenol	*101 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: 2-Chlorophenol-d4	*63.1 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: 2-Fluorobiphenyl	*75.2 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: 2-Fluorophenol	*55.0 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: 4-Terphenyl-d14	*72.3 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 16:20*	
Surrogate: Nitrobenzene-d5	*65.8 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 16:20*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-06-4/6

Lab ID: 2100719-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*62.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 16:20*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-0/2

Lab ID: 2100719-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Arsenic	**6.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Barium	**180**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Beryllium	**3.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Cadmium	**1.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Chromium	**29**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Cobalt	**7.8**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Copper	**25**	2.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Lead	**28**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Molybdenum	**1.9**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Nickel	**20**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Silver	**5.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Vanadium	**48**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	
Zinc	**85**	1.0	1	B1C0456	03/23/2021	03/25/21 11:50	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:54	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 22:24	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 22:24	
Surrogate: p-Terphenyl	*97.0 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 22:24*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-0/2

Lab ID: 2100719-11

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzo(b)fluoranthene	**400**	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-08-0/2

Lab ID: 2100719-11

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Chrysene	**360**	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Fluoranthene	**1400**	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 16:45	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
Phenanthrene	**1400**	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Pyrene	**1700**	330	1	B1C0460	03/23/2021	03/24/21 16:45	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 16:45	
Surrogate: 1,2-Dichlorobenzene-d4	*51.0 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: 2,4,6-Tribromophenol	*96.7 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: 2-Chlorophenol-d4	*53.3 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: 2-Fluorobiphenyl	*64.6 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: 2-Fluorophenol	*44.0 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: 4-Terphenyl-d14	*56.4 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 16:45*	
Surrogate: Nitrobenzene-d5	*57.8 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 16:45*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-0/2

Lab ID: 2100719-11

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*51.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 16:45*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-4/6

Lab ID: 2100719-12

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Arsenic	**2.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Barium	**74**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Beryllium	**1.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Chromium	**15**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Cobalt	**4.1**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Copper	**13**	2.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Lead	**8.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Nickel	**11**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Silver	**2.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Vanadium	**27**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	
Zinc	**37**	1.0	1	B1C0456	03/23/2021	03/25/21 11:51	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:57	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 22:51	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 22:51	
Surrogate: p-Terphenyl	*96.1 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 22:51*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-4/6

Lab ID: 2100719-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
1,2-Dichlorobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
1,3-Dichlorobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
1,4-Dichlorobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4,5-Trichlorophenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4,6-Trichlorophenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4-Dichlorophenol	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4-Dimethylphenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4-Dinitrophenol	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,4-Dinitrotoluene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2,6-Dinitrotoluene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Chloronaphthalene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Chlorophenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Methylnaphthalene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Methylphenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Nitroaniline	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
2-Nitrophenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
3,3´-Dichlorobenzidine	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
3-Nitroaniline	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4,6-Dinitro-2-methyphenol	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Bromophenyl-phenylether	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Chloro-3-methylphenol	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Chloroaniline	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Chlorophenyl-phenylether	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Methylphenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Nitroaniline	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
4-Nitrophenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Acenaphthene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Acenaphthylene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Anthracene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzidine (M)	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzo(a)anthracene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzo(a)pyrene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzo(b)fluoranthene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzo(g,h,i)perylene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzo(k)fluoranthene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Benzoic acid	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-4/6

Lab ID: 2100719-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
bis(2-chloroethoxy)methane	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
bis(2-Chloroethyl)ether	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
bis(2-chloroisopropyl)ether	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
bis(2-ethylhexyl)phthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Butylbenzylphthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Chrysene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Di-n-butylphthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Di-n-octylphthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Dibenz(a,h)anthracene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Dibenzofuran	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Diethyl phthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Dimethyl phthalate	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Fluoranthene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Fluorene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Hexachlorobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Hexachlorobutadiene	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Hexachlorocyclopentadiene	ND	1300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Hexachloroethane	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Indeno(1,2,3-cd)pyrene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Isophorone	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
N-Nitroso-di-n propylamine	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
N-Nitrosodiphenylamine	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Naphthalene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Nitrobenzene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Pentachlorophenol	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Phenanthrene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Phenol	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Pyrene	ND	660	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Pyridine	ND	3300	2	B1C0460	03/23/2021	03/24/21 17:11	D1
Surrogate: 1,2-Dichlorobenzene-d4	*66.3 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: 2,4,6-Tribromophenol	*106 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: 2-Chlorophenol-d4	*70.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: 2-Fluorobiphenyl	*83.2 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: 2-Fluorophenol	*57.9 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: 4-Terphenyl-d14	*81.1 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 17:11*	D1
Surrogate: Nitrobenzene-d5	*71.6 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 17:11*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-08-4/6

Lab ID: 2100719-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*70.6 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 17:11*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-0/2

Lab ID: 2100719-13

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Arsenic	**3.0**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Barium	**72**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Beryllium	**1.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Chromium	**16**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Cobalt	**4.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Copper	**13**	2.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Lead	**6.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Nickel	**12**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Silver	**1.6**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Vanadium	**29**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	
Zinc	**33**	1.0	1	B1C0456	03/23/2021	03/25/21 11:56	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:59	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 23:17	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 23:17	
Surrogate: p-Terphenyl	*107 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 23:17*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-0/2

Lab ID: 2100719-13

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-09-0/2

Lab ID: 2100719-13

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 17:37	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 17:37	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 17:37	
Surrogate: 1,2-Dichlorobenzene-d4	*58.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: 2,4,6-Tribromophenol	*99.2 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: 2-Chlorophenol-d4	*57.7 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: 2-Fluorobiphenyl	*68.4 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: 2-Fluorophenol	*50.2 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: 4-Terphenyl-d14	*77.1 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 17:37*	
Surrogate: Nitrobenzene-d5	*62.3 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 17:37*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-0/2

Lab ID: 2100719-13

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*57.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 17:37*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-4/6

Lab ID: 2100719-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Arsenic	**2.6**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Barium	**64**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Beryllium	**1.3**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Chromium	**14**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Cobalt	**3.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Copper	**11**	2.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Lead	**4.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Nickel	**10**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Silver	**1.7**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Vanadium	**26**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	
Zinc	**27**	1.0	1	B1C0456	03/23/2021	03/25/21 11:58	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 17:01	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/01/21 23:43	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/01/21 23:43	
Surrogate: p-Terphenyl	*102 %*	*62 - 141*		B1C0453	03/23/2021	*04/01/21 23:43*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

Client Sample ID: CS-09-4/6

Lab ID: 2100719-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-4/6

Lab ID: 2100719-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:02	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:02	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:02	
Surrogate: 1,2-Dichlorobenzene-d4	*44.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: 2,4,6-Tribromophenol	*84.6 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: 2-Chlorophenol-d4	*45.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: 2-Fluorobiphenyl	*53.4 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: 2-Fluorophenol	*39.3 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: 4-Terphenyl-d14	*66.1 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 18:02*	
Surrogate: Nitrobenzene-d5	*47.6 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 18:02*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-09-4/6

Lab ID: 2100719-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*44.2 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 18:02*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100719-15

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Arsenic	**1.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Barium	**38**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Beryllium	**1.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Chromium	**12**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Cobalt	**3.2**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Copper	**9.1**	2.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Lead	**3.9**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Nickel	**8.8**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Silver	**1.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Vanadium	**20**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	
Zinc	**23**	1.0	1	B1C0456	03/23/2021	03/25/21 11:59	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 17:04	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/02/21 00:09	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/02/21 00:09	
Surrogate: p-Terphenyl	*101 %*	*62 - 141*		B1C0453	03/23/2021	*04/02/21 00:09*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100719-15

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
3,3′-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100719-15

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:28	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:28	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:28	
Surrogate: 1,2-Dichlorobenzene-d4	*54.5 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: 2,4,6-Tribromophenol	*90.4 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: 2-Chlorophenol-d4	*54.3 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: 2-Fluorobiphenyl	*61.8 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: 2-Fluorophenol	*47.4 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: 4-Terphenyl-d14	*66.2 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 18:28*	
Surrogate: Nitrobenzene-d5	*56.6 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 18:28*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100719-15

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*54.0 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 18:28*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/5-7.5

Lab ID: 2100719-16

Diesel Range Organics by EPA 8015B **Analyst: AC**

Analyte		Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO		ND	10	1	B1C0453	03/23/2021	04/02/21 00:35	
Jet Fuel (Jet A)		ND	10	1	B1C0453	03/23/2021	04/02/21 00:35	
Surrogate: p-Terphenyl	*109 %*		*62 - 141*		B1C0453	03/23/2021	*04/02/21 00:35*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: DUP-032221

Lab ID: 2100719-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Arsenic	**1.0**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Barium	**37**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Beryllium	**1.2**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Chromium	**13**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Cobalt	**3.7**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Copper	**9.4**	2.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Lead	**4.0**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Nickel	**9.9**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Silver	**1.5**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Vanadium	**22**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	
Zinc	**23**	1.0	1	B1C0456	03/23/2021	03/25/21 12:00	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 17:06	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/02/21 01:01	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/02/21 01:01	
Surrogate: p-Terphenyl	*84.1 %*	*62 - 141*		B1C0453	03/23/2021	*04/02/21 01:01*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: DUP-032221

Lab ID: 2100719-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: DUP-032221

Lab ID: 2100719-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 18:54	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 18:54	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 18:54	
Surrogate: 1,2-Dichlorobenzene-d4	*39.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: 2,4,6-Tribromophenol	*64.5 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: 2-Chlorophenol-d4	*39.6 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: 2-Fluorobiphenyl	*47.2 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: 2-Fluorophenol	*35.0 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: 4-Terphenyl-d14	*59.7 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 18:54*	
Surrogate: Nitrobenzene-d5	*41.8 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 18:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: DUP-032221

Lab ID: 2100719-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*38.1 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 18:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-0/2

Lab ID: 2100719-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Arsenic	**5.5**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Barium	**180**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Beryllium	**2.4**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Chromium	**24**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Cobalt	**5.9**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Copper	**23**	2.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Lead	**35**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Nickel	**16**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Silver	**3.7**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Vanadium	**43**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	
Zinc	**68**	1.0	1	B1C0456	03/23/2021	03/25/21 12:02	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 17:08	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/02/21 01:27	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/02/21 01:27	
Surrogate: p-Terphenyl	*103 %*	*62 - 141*		B1C0453	03/23/2021	*04/02/21 01:27*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-0/2

Lab ID: 2100719-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-03-0/2

Lab ID: 2100719-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 19:20	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:20	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:20	
Surrogate: 1,2-Dichlorobenzene-d4	*20.0 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 19:20*	S10
Surrogate: 2,4,6-Tribromophenol	*33.3 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 19:20*	
Surrogate: 2-Chlorophenol-d4	*19.9 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 19:20*	S10
Surrogate: 2-Fluorobiphenyl	*23.1 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 19:20*	S10
Surrogate: 2-Fluorophenol	*16.2 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 19:20*	S10
Surrogate: 4-Terphenyl-d14	*29.7 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 19:20*	S10
Surrogate: Nitrobenzene-d5	*20.1 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 19:20*	S10

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-0/2

Lab ID: 2100719-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*18.7 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 19:20*	S10

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-4/6

Lab ID: 2100719-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Arsenic	**4.6**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Barium	**81**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Beryllium	**1.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Cadmium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Chromium	**15**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Cobalt	**3.5**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Copper	**14**	2.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Lead	**10**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Molybdenum	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Nickel	**11**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Selenium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Silver	**2.4**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Thallium	ND	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Vanadium	**26**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	
Zinc	**42**	1.0	1	B1C0456	03/23/2021	03/25/21 11:26	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0477	03/24/2021	03/25/21 16:08	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0453	03/23/2021	04/02/21 01:53	
Jet Fuel (Jet A)	ND	10	1	B1C0453	03/23/2021	04/02/21 01:53	
Surrogate: p-Terphenyl	*105 %*	*62 - 141*		B1C0453	03/23/2021	*04/02/21 01:53*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-4/6

Lab ID: 2100719-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
1,2-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
1,3-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
1,4-Dichlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4,5-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4,6-Trichlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4-Dichlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4-Dimethylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4-Dinitrophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
2,4-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2,6-Dinitrotoluene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Chloronaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Chlorophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Methylnaphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
2-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
3,3´-Dichlorobenzidine	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
3-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Bromophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Chloro-3-methylphenol	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Chloroaniline	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Chlorophenyl-phenylether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Methylphenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Nitroaniline	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
4-Nitrophenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Acenaphthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Acenaphthylene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzidine (M)	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzo(a)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzo(a)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzo(b)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzo(g,h,i)perylene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzo(k)fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Benzoic acid	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-4/6

Lab ID: 2100719-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
bis(2-chloroethoxy)methane	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
bis(2-Chloroethyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Butylbenzylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Chrysene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Di-n-butylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Di-n-octylphthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Dibenz(a,h)anthracene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Dibenzofuran	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Diethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Dimethyl phthalate	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Fluoranthene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Fluorene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Hexachlorobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Hexachlorobutadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
Hexachlorocyclopentadiene	ND	660	1	B1C0460	03/23/2021	03/24/21 19:46	
Hexachloroethane	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Isophorone	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
N-Nitroso-di-n propylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
N-Nitrosodiphenylamine	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Naphthalene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Nitrobenzene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Pentachlorophenol	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
Phenanthrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Phenol	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Pyrene	ND	330	1	B1C0460	03/23/2021	03/24/21 19:46	
Pyridine	ND	1600	1	B1C0460	03/23/2021	03/24/21 19:46	
Surrogate: 1,2-Dichlorobenzene-d4	*51.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: 2,4,6-Tribromophenol	*80.0 %*	*11 - 144*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: 2-Chlorophenol-d4	*50.4 %*	*34 - 104*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: 2-Fluorobiphenyl	*59.5 %*	*36 - 113*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: 2-Fluorophenol	*46.1 %*	*27 - 97*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: 4-Terphenyl-d14	*66.9 %*	*36 - 136*		B1C0460	03/23/2021	*03/24/21 19:46*	
Surrogate: Nitrobenzene-d5	*55.3 %*	*35 - 110*		B1C0460	03/23/2021	*03/24/21 19:46*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-03-4/6

Lab ID: 2100719-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*50.4 %*	*26 - 108*		B1C0460	03/23/2021	*03/24/21 19:46*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0456 - EPA 3050B_S										
Blank (B1C0456-BLK1)					Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B1C0456-BS1)					Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	26.7355	2.0	0.51	25.0000		107	80 - 120			
Arsenic	26.5940	1.0	0.12	25.0000		106	80 - 120			
Barium	26.2600	1.0	0.12	25.0000		105	80 - 120			
Beryllium	27.7140	1.0	0.03	25.0100		111	80 - 120			
Cadmium	26.7955	1.0	0.14	25.0000		107	80 - 120			
Chromium	26.5038	1.0	0.26	25.0000		106	80 - 120			
Cobalt	26.5528	1.0	0.07	25.0000		106	80 - 120			
Copper	25.8268	2.0	0.19	25.0000		103	80 - 120			
Lead	29.5006	1.0	0.18	25.0000		118	80 - 120			
Molybdenum	28.0702	1.0	0.12	25.0000		112	80 - 120			
Nickel	27.0906	1.0	0.18	25.0000		108	80 - 120			
Selenium	27.4804	1.0	0.40	25.0000		110	80 - 120			
Silver	13.0240	1.0	0.12	12.5000		104	80 - 120			
Thallium	27.1953	1.0	0.38	25.0000		109	80 - 120			
Vanadium	24.7534	1.0	0.06	25.0000		99.0	80 - 120			
Zinc	27.1476	1.0	0.15	25.0000		109	80 - 120			
Duplicate (B1C0456-DUP1)				**Source: 2100719-01**	Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	ND	2.0	0.51		ND			NR	20	
Arsenic	1.18434	1.0	0.12		1.03738			13.2	20	
Barium	45.2512	1.0	0.12		45.3345			0.184	20	
Beryllium	1.26143	1.0	0.03		1.26719			0.455	20	

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Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0456 - EPA 3050B_S (continued)										
Duplicate (B1C0456-DUP1) - Continued			**Source: 2100719-01**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Cadmium	0.304960	1.0	0.14		0.322090			5.46	20	
Chromium	14.0374	1.0	0.26		14.0384			0.00683	20	
Cobalt	3.59308	1.0	0.07		3.65224			1.63	20	
Copper	9.67844	2.0	0.19		9.65440			0.249	20	
Lead	5.94774	1.0	0.18		6.00259			0.918	20	
Molybdenum	0.125156	1.0	0.12		0.176752			34.2	20	
Nickel	10.3687	1.0	0.18		10.4355			0.642	20	
Selenium	ND	1.0	0.40		ND			NR	20	
Silver	1.67628	1.0	0.12		1.70034			1.43	20	
Thallium	ND	1.0	0.38		ND			NR	20	
Vanadium	21.7629	1.0	0.06		21.6556			0.494	20	
Zinc	28.1511	1.0	0.15		28.5435			1.38	20	
Duplicate (B1C0456-DUP2)			**Source: 2100719-19**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	0.834356	2.0	0.51		0.773734			7.54	20	
Arsenic	4.62474	1.0	0.12		4.60603			0.405	20	
Barium	80.6056	1.0	0.12		80.8764			0.335	20	
Beryllium	1.55080	1.0	0.03		1.54370			0.458	20	
Cadmium	0.412696	1.0	0.14		0.421148			2.03	20	
Chromium	14.2777	1.0	0.26		14.5171			1.66	20	
Cobalt	3.41516	1.0	0.07		3.48291			1.96	20	
Copper	14.1749	2.0	0.19		14.1826			0.0541	20	
Lead	9.92346	1.0	0.18		10.1647			2.40	20	
Molybdenum	ND	1.0	0.12		ND			NR	20	
Nickel	10.6306	1.0	0.18		10.8191			1.76	20	
Selenium	ND	1.0	0.40		ND			NR	20	
Silver	2.36296	1.0	0.12		2.38259			0.828	20	
Thallium	ND	1.0	0.38		ND			NR	20	
Vanadium	25.8246	1.0	0.06		25.9071			0.319	20	
Zinc	41.5333	1.0	0.15		41.8349			0.724	20	
Matrix Spike (B1C0456-MS1)			**Source: 2100719-01**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	22.4841	2.0	0.51	25.0000	ND	89.9	0 - 102			
Arsenic	24.9164	1.0	0.12	25.0000	1.03738	95.5	55 - 117			
Barium	65.6959	1.0	0.12	25.0000	45.3345	81.4	11 - 177			
Beryllium	27.1842	1.0	0.03	25.0100	1.26719	104	64 - 115			
Cadmium	24.6988	1.0	0.14	25.0000	0.322090	97.5	62 - 116			
Chromium	37.7801	1.0	0.26	25.0000	14.0384	95.0	42 - 145			
Cobalt	29.1068	1.0	0.07	25.0000	3.65224	102	60 - 126			
Copper	34.3278	2.0	0.19	25.0000	9.65440	98.7	37 - 163			
Lead	31.1276	1.0	0.18	25.0000	6.00259	100	26 - 161			
Molybdenum	25.5708	1.0	0.12	25.0000	0.176752	102	31 - 122			

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Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0456 - EPA 3050B_S (continued)										
Matrix Spike (B1C0456-MS1) - Continued			**Source: 2100719-01**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Nickel	35.9961	1.0	0.18	25.0000	10.4355	102	52 - 130			
Selenium	24.4708	1.0	0.40	25.0000	ND	97.9	25 - 129			
Silver	14.3269	1.0	0.12	12.5000	1.70034	101	48 - 133			
Thallium	21.3437	1.0	0.38	25.0000	ND	85.4	25 - 119			
Vanadium	44.2097	1.0	0.06	25.0000	21.6556	90.2	51 - 141			
Zinc	48.9214	1.0	0.15	25.0000	28.5435	81.5	8 - 170			
Matrix Spike (B1C0456-MS2)			**Source: 2100719-19**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	16.3308	2.0	0.51	25.0000	0.773734	62.2	0 - 102			
Arsenic	29.5332	1.0	0.12	25.0000	4.60603	99.7	55 - 117			
Barium	108.101	1.0	0.12	25.0000	80.8764	109	11 - 177			
Beryllium	27.9218	1.0	0.03	25.0100	1.54370	105	64 - 115			
Cadmium	24.3063	1.0	0.14	25.0000	0.421148	95.5	62 - 116			
Chromium	39.6047	1.0	0.26	25.0000	14.5171	100	42 - 145			
Cobalt	29.0329	1.0	0.07	25.0000	3.48291	102	60 - 126			
Copper	42.3660	2.0	0.19	25.0000	14.1826	113	37 - 163			
Lead	36.0166	1.0	0.18	25.0000	10.1647	103	26 - 161			
Molybdenum	27.3497	1.0	0.12	25.0000	ND	109	31 - 122			
Nickel	37.0198	1.0	0.18	25.0000	10.8191	105	52 - 130			
Selenium	24.1355	1.0	0.40	25.0000	ND	96.5	25 - 129			
Silver	15.6930	1.0	0.12	12.5000	2.38259	106	48 - 133			
Thallium	19.6141	1.0	0.38	25.0000	ND	78.5	25 - 119			
Vanadium	51.5162	1.0	0.06	25.0000	25.9071	102	51 - 141			
Zinc	74.8238	1.0	0.15	25.0000	41.8349	132	8 - 170			
Matrix Spike Dup (B1C0456-MSD1)			**Source: 2100719-01**		Prepared: 3/23/2021 Analyzed: 3/25/2021					
Antimony	22.6983	2.0	0.51	25.0000	ND	90.8	0 - 102	0.948	20	
Arsenic	25.1894	1.0	0.12	25.0000	1.03738	96.6	55 - 117	1.09	20	
Barium	65.6833	1.0	0.12	25.0000	45.3345	81.4	11 - 177	0.0192	20	
Beryllium	27.3217	1.0	0.03	25.0100	1.26719	104	64 - 115	0.504	20	
Cadmium	24.7269	1.0	0.14	25.0000	0.322090	97.6	62 - 116	0.114	20	
Chromium	37.7457	1.0	0.26	25.0000	14.0384	94.8	42 - 145	0.0913	20	
Cobalt	29.3323	1.0	0.07	25.0000	3.65224	103	60 - 126	0.771	20	
Copper	34.4310	2.0	0.19	25.0000	9.65440	99.1	37 - 163	0.300	20	
Lead	31.4730	1.0	0.18	25.0000	6.00259	102	26 - 161	1.10	20	
Molybdenum	25.7447	1.0	0.12	25.0000	0.176752	102	31 - 122	0.678	20	
Nickel	36.2679	1.0	0.18	25.0000	10.4355	103	52 - 130	0.752	20	
Selenium	24.5721	1.0	0.40	25.0000	ND	98.3	25 - 129	0.413	20	
Silver	14.3424	1.0	0.12	12.5000	1.70034	101	48 - 133	0.109	20	
Thallium	21.4507	1.0	0.38	25.0000	ND	85.8	25 - 119	0.500	20	
Vanadium	44.2237	1.0	0.06	25.0000	21.6556	90.3	51 - 141	0.0317	20	
Zinc	48.8320	1.0	0.15	25.0000	28.5435	81.2	8 - 170	0.183	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0477 - EPA 7471_S										
Blank (B1C0477-BLK1)					Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	ND	0.10	0.01							
LCS (B1C0477-BS1)					Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	0.406196	0.10	0.01	0.416667		97.5	80 - 120			
Duplicate (B1C0477-DUP1)			**Source: 2100719-01**		Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	ND	0.10	0.01		ND			NR	20	
Duplicate (B1C0477-DUP2)			**Source: 2100719-19**		Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	ND	0.10	0.01		ND			NR	20	
Matrix Spike (B1C0477-MS1)			**Source: 2100719-01**		Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	0.427054	0.10	0.01	0.416667	ND	102	70 - 130			
Matrix Spike (B1C0477-MS2)			**Source: 2100719-19**		Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	0.398450	0.10	0.01	0.416667	ND	95.6	70 - 130			
Matrix Spike Dup (B1C0477-MSD1)			**Source: 2100719-01**		Prepared: 3/24/2021 Analyzed: 3/25/2021					
Mercury	0.422108	0.10	0.01	0.416667	ND	101	70 - 130	1.16	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0477 - EPA 7471_S									
Post Spike (B1C0477-PS1)			**Source: 2100719-01**		Prepared: 3/24/2021 Analyzed: 3/25/2021				
Mercury	5.0378E-3		5.00000E-3	0.000012	101	85 - 115			

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Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0453 - GCSEMI_DRO_S										
Blank (B1C0453-BLK1)						Prepared: 3/23/2021 Analyzed: 4/1/2021				
DRO	ND	10	10							
Jet Fuel (Jet A)	ND	10	10							
Surrogate: p-Terphenyl	*91.79*			*80.0000*		*115*	*62 - 141*			
LCS (B1C0453-BS1)						Prepared: 3/23/2021 Analyzed: 4/1/2021				
DRO	916.673	10	10	1000.00		91.7	56 - 139			
Surrogate: p-Terphenyl	*87.00*			*80.0000*		*109*	*62 - 141*			
LCS Dup (B1C0453-BSD1)						Prepared: 3/23/2021 Analyzed: 4/1/2021				
DRO	999.840	10	10	1000.00		100	56 - 139	8.68	20	
Surrogate: p-Terphenyl	*90.84*			*80.0000*		*114*	*62 - 141*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S										
Blank (B1C0460-BLK1)					Prepared: 3/23/2021 Analyzed: 3/24/2021					
1,2,4-Trichlorobenzene	ND	330	50							
1,2-Dichlorobenzene	ND	330	26							
1,3-Dichlorobenzene	ND	330	27							
1,4-Dichlorobenzene	ND	330	27							
2,4,5-Trichlorophenol	ND	330	30							
2,4,6-Trichlorophenol	ND	330	35							
2,4-Dichlorophenol	ND	1600	34							
2,4-Dimethylphenol	ND	330	26							
2,4-Dinitrophenol	ND	1600	86							
2,4-Dinitrotoluene	ND	330	33							
2,6-Dinitrotoluene	ND	330	49							
2-Chloronaphthalene	ND	330	28							
2-Chlorophenol	ND	330	31							
2-Methylnaphthalene	ND	330	27							
2-Methylphenol	ND	330	36							
2-Nitroaniline	ND	1600	43							
2-Nitrophenol	ND	330	45							
3,3´-Dichlorobenzidine	ND	660	280							
3-Nitroaniline	ND	1600	49							
4,6-Dinitro-2-methyphenol	ND	1600	41							
4-Bromophenyl-phenylether	ND	330	64							
4-Chloro-3-methylphenol	ND	660	71							
4-Chloroaniline	ND	660	53							
4-Chlorophenyl-phenylether	ND	330	33							
4-Methylphenol	ND	330	57							
4-Nitroaniline	ND	1600	37							
4-Nitrophenol	ND	330	64							
Acenaphthene	ND	330	43							
Acenaphthylene	ND	330	62							
Anthracene	ND	330	51							
Benzidine (M)	ND	1600	1400							
Benzo(a)anthracene	ND	330	44							
Benzo(a)pyrene	ND	330	64							
Benzo(b)fluoranthene	ND	330	65							
Benzo(g,h,i)perylene	ND	330	81							
Benzo(k)fluoranthene	ND	330	33							
Benzoic acid	ND	1600	890							
Benzyl alcohol	ND	660	32							
bis(2-chloroethoxy)methane	ND	330	64							
bis(2-Chloroethyl)ether	ND	330	66							
bis(2-chloroisopropyl)ether	ND	330	76							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S (continued)										
Blank (B1C0460-BLK1) - Continued						Prepared: 3/23/2021 Analyzed: 3/24/2021				
bis(2-ethylhexyl)phthalate	ND	330	63							
Butylbenzylphthalate	ND	330	41							
Chrysene	ND	330	84							
Di-n-butylphthalate	ND	330	51							
Di-n-octylphthalate	ND	330	63							
Dibenz(a,h)anthracene	ND	330	45							
Dibenzofuran	ND	330	58							
Diethyl phthalate	ND	330	58							
Dimethyl phthalate	ND	330	40							
Fluoranthene	ND	330	60							
Fluorene	ND	330	110							
Hexachlorobenzene	ND	330	55							
Hexachlorobutadiene	ND	660	53							
Hexachlorocyclopentadiene	ND	660	70							
Hexachloroethane	ND	330	94							
Indeno(1,2,3-cd)pyrene	ND	330	75							
Isophorone	ND	330	85							
N-Nitroso-di-n propylamine	ND	330	60							
N-Nitrosodiphenylamine	ND	330	32							
Naphthalene	ND	330	56							
Nitrobenzene	ND	330	57							
Pentachlorophenol	ND	1600	50							
Phenanthrene	ND	330	67							
Phenol	ND	330	34							
Pyrene	ND	330	72							
Pyridine	ND	1600	270							
Surrogate: 1,2-Dichlorobenzene-d	*2091*			*3333.33*		*62.7*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*2782*			*3325.00*		*83.7*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*2049*			*3325.00*		*61.6*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2232*			*3333.33*		*67.0*	*36 - 113*			
Surrogate: 2-Fluorophenol	*1878*			*3325.00*		*56.5*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2280*			*3333.33*		*68.4*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2206*			*3333.33*		*66.2*	*35 - 110*			
Surrogate: Phenol-d6	*1914*			*3325.00*		*57.6*	*26 - 108*			
LCS (B1C0460-BS1)						Prepared: 3/23/2021 Analyzed: 3/24/2021				
1,2,4-Trichlorobenzene	2163.67	330	50	3333.33		64.9	54 - 103			
1,2-Dichlorobenzene	2051.33	330	26	3333.33		61.5	56 - 89			
1,3-Dichlorobenzene	1989.33	330	27	3333.33		59.7	53 - 91			
1,4-Dichlorobenzene	2007.67	330	27	3333.33		60.2	55 - 85			
2,4,5-Trichlorophenol	2441.33	330	30	3333.33		73.2	53 - 106			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S (continued)										
LCS (B1C0460-BS1) - Continued					Prepared: 3/23/2021 Analyzed: 3/24/2021					
2,4,6-Trichlorophenol	2492.33	330	35	3333.33		74.8	52 - 118			
2,4-Dichlorophenol	2360.33	1600	34	3333.33		70.8	57 - 101			
2,4-Dimethylphenol	2325.67	330	26	3333.33		69.8	30 - 90			
2,4-Dinitrophenol	2312.00	1600	86	3333.33		69.4	12 - 206			
2,4-Dinitrotoluene	3002.33	330	33	3333.33		90.1	46 - 146			
2,6-Dinitrotoluene	2927.67	330	49	3333.33		87.8	50 - 137			
2-Chloronaphthalene	2544.00	330	28	3333.33		76.3	55 - 113			
2-Chlorophenol	2048.67	330	31	3333.33		61.5	60 - 79			
2-Methylnaphthalene	2284.33	330	27	3333.33		68.5	60 - 98			
2-Methylphenol	1974.67	330	36	3333.33		59.2	52 - 75			
2-Nitroaniline	2826.33	1600	43	3333.33		84.8	59 - 108			
2-Nitrophenol	2073.33	330	45	3333.33		62.2	53 - 110			
3,3´-Dichlorobenzidine	2657.00	660	280	3333.33		79.7	58 - 96			
3-Nitroaniline	2743.00	1600	49	3333.33		82.3	55 - 110			
4,6-Dinitro-2-methyphenol	2637.33	1600	41	3333.33		79.1	37 - 148			
4-Bromophenyl-phenylether	2935.67	330	64	3333.33		88.1	57 - 108			
4-Chloro-3-methylphenol	2635.67	660	71	3333.33		79.1	57 - 108			
4-Chloroaniline	2430.67	660	53	3333.33		72.9	42 - 103			
4-Chlorophenyl-phenylether	2751.33	330	33	3333.33		82.5	56 - 104			
4-Methylphenol	2350.67	330	57	3333.33		70.5	51 - 82			
4-Nitroaniline	2743.00	1600	37	3333.33		82.3	55 - 110			
4-Nitrophenol	2768.67	330	64	3333.33		83.1	48 - 126			
Acenaphthene	2420.33	330	43	3333.33		72.6	61 - 92			
Acenaphthylene	2404.67	330	62	3333.33		72.1	61 - 91			
Anthracene	2454.00	330	51	3333.33		73.6	64 - 98			
Benzidine (M)	6233.00	1600	1400	3333.33		187	0 - 254			
Benzo(a)anthracene	2208.67	330	44	3333.33		66.3	65 - 95			
Benzo(a)pyrene	2285.33	330	64	3333.33		68.6	60 - 105			
Benzo(b)fluoranthene	2286.00	330	65	3333.33		68.6	49 - 105			
Benzo(g,h,i)perylene	2291.33	330	81	3333.33		68.7	51 - 105			
Benzo(k)fluoranthene	2290.67	330	33	3333.33		68.7	53 - 104			
Benzoic acid	1969.33	1600	890	3333.33		59.1	7 - 93			
Benzyl alcohol	2265.33	660	32	3333.33		68.0	56 - 93			
bis(2-chloroethoxy)methane	2454.33	330	64	3333.33		73.6	59 - 81			
bis(2-Chloroethyl)ether	2303.00	330	66	3333.33		69.1	53 - 81			
bis(2-chloroisopropyl)ether	2239.33	330	76	3333.33		67.2	41 - 94			
bis(2-ethylhexyl)phthalate	3008.67	330	63	3333.33		90.3	57 - 123			
Butylbenzylphthalate	3006.33	330	41	3333.33		90.2	64 - 106			
Chrysene	2249.33	330	84	3333.33		67.5	61 - 93			
Di-n-butylphthalate	2856.00	330	51	3333.33		85.7	64 - 99			
Di-n-octylphthalate	2964.00	330	63	3333.33		88.9	55 - 122			
Dibenz(a,h)anthracene	2296.67	330	45	3333.33		68.9	51 - 109			

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S (continued)										
LCS (B1C0460-BS1) - Continued					Prepared: 3/23/2021 Analyzed: 3/24/2021					
Dibenzofuran	2522.33	330	58	3333.33		75.7	60 - 100			
Diethyl phthalate	2869.67	330	58	3333.33		86.1	62 - 99			
Dimethyl phthalate	2770.33	330	40	3333.33		83.1	61 - 93			
Fluoranthene	2405.33	330	60	3333.33		72.2	60 - 100			
Fluorene	2366.33	330	110	3333.33		71.0	62 - 93			
Hexachlorobenzene	3027.67	330	55	3333.33		90.8	54 - 120			
Hexachlorobutadiene	2098.00	660	53	3333.33		62.9	52 - 94			
Hexachlorocyclopentadiene	2653.67	660	70	3333.33		79.6	26 - 135			
Hexachloroethane	2119.33	330	94	3333.33		63.6	54 - 89			
Indeno(1,2,3-cd)pyrene	2291.33	330	75	3333.33		68.7	50 - 106			
Isophorone	2628.67	330	85	3333.33		78.9	47 - 89			
N-Nitroso-di-n propylamine	2524.67	330	60	3333.33		75.7	58 - 91			
N-Nitrosodiphenylamine	2811.67	330	32	3333.33		84.4	61 - 100			
Naphthalene	1968.00	330	56	3333.33		59.0	60 - 83			L4
Nitrobenzene	2364.67	330	57	3333.33		70.9	56 - 104			
Pentachlorophenol	2630.33	1600	50	3333.33		78.9	20 - 115			
Phenanthrene	2526.33	330	67	3333.33		75.8	65 - 93			
Phenol	2154.33	330	34	3333.33		64.6	57 - 87			
Pyrene	2333.00	330	72	3333.33		70.0	58 - 101			
Pyridine	1338.00	1600	270	3333.33		40.1	0 - 69			
Surrogate: 1,2-Dichlorobenzene-d	*1712*			*3333.33*		*51.4*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*3195*			*3325.00*		*96.1*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*1807*			*3325.00*		*54.3*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2253*			*3333.33*		*67.6*	*36 - 113*			
Surrogate: 2-Fluorophenol	*1664*			*3325.00*		*50.0*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2544*			*3333.33*		*76.3*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2126*			*3333.33*		*63.8*	*35 - 110*			
Surrogate: Phenol-d6	*1916*			*3325.00*		*57.6*	*26 - 108*			
LCS Dup (B1C0460-BSD1)					Prepared: 3/23/2021 Analyzed: 3/24/2021					
1,2,4-Trichlorobenzene	2191.67	330	50	3333.33		65.8	54 - 103	1.29	20	
1,2-Dichlorobenzene	2074.67	330	26	3333.33		62.2	56 - 89	1.13	20	
1,3-Dichlorobenzene	2052.67	330	27	3333.33		61.6	53 - 91	3.13	20	
1,4-Dichlorobenzene	2081.33	330	27	3333.33		62.4	55 - 85	3.60	20	
2,4,5-Trichlorophenol	2532.33	330	30	3333.33		76.0	53 - 106	3.66	20	
2,4,6-Trichlorophenol	2544.33	330	35	3333.33		76.3	52 - 118	2.06	20	
2,4-Dichlorophenol	2416.00	1600	34	3333.33		72.5	57 - 101	2.33	20	
2,4-Dimethylphenol	2328.33	330	26	3333.33		69.8	30 - 90	0.115	20	
2,4-Dinitrophenol	2372.33	1600	86	3333.33		71.2	12 - 206	2.58	20	
2,4-Dinitrotoluene	3014.67	330	33	3333.33		90.4	46 - 146	0.410	20	
2,6-Dinitrotoluene	2985.67	330	49	3333.33		89.6	50 - 137	1.96	20	

Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles , CA 900071

Project Number : Project Loki / SBD4
Report To : Shari Schwartzer
Reported : 04/02/2021

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S (continued)										
LCS Dup (B1C0460-BSD1) - Continued					Prepared: 3/23/2021 Analyzed: 3/24/2021					
2-Chloronaphthalene	2627.33	330	28	3333.33		78.8	55 - 113	3.22	20	
2-Chlorophenol	2028.33	330	31	3333.33		60.8	60 - 79	0.997	20	
2-Methylnaphthalene	2326.33	330	27	3333.33		69.8	60 - 98	1.82	20	
2-Methylphenol	1958.33	330	36	3333.33		58.8	52 - 75	0.831	20	
2-Nitroaniline	2829.00	1600	43	3333.33		84.9	59 - 108	0.0943	20	
2-Nitrophenol	2142.67	330	45	3333.33		64.3	53 - 110	3.29	20	
3,3´-Dichlorobenzidine	2812.33	660	280	3333.33		84.4	58 - 96	5.68	20	
3-Nitroaniline	2821.00	1600	49	3333.33		84.6	55 - 110	2.80	20	
4,6-Dinitro-2-methyphenol	2784.33	1600	41	3333.33		83.5	37 - 148	5.42	20	
4-Bromophenyl-phenylether	3223.33	330	64	3333.33		96.7	57 - 108	9.34	20	
4-Chloro-3-methylphenol	2612.67	660	71	3333.33		78.4	57 - 108	0.876	20	
4-Chloroaniline	2442.00	660	53	3333.33		73.3	42 - 103	0.465	20	
4-Chlorophenyl-phenylether	2817.67	330	33	3333.33		84.5	56 - 104	2.38	20	
4-Methylphenol	2285.00	330	57	3333.33		68.6	51 - 82	2.83	20	
4-Nitroaniline	2819.67	1600	37	3333.33		84.6	55 - 110	2.76	20	
4-Nitrophenol	2611.33	330	64	3333.33		78.3	48 - 126	5.85	20	
Acenaphthene	2440.33	330	43	3333.33		73.2	61 - 92	0.823	20	
Acenaphthylene	2419.33	330	62	3333.33		72.6	61 - 91	0.608	20	
Anthracene	2589.67	330	51	3333.33		77.7	64 - 98	5.38	20	
Benzidine (M)	5568.00	1600	1400	3333.33		167	0 - 254	11.3	20	
Benzo(a)anthracene	2305.67	330	44	3333.33		69.2	65 - 95	4.30	20	
Benzo(a)pyrene	2329.00	330	64	3333.33		69.9	60 - 105	1.89	20	
Benzo(b)fluoranthene	2299.33	330	65	3333.33		69.0	49 - 105	0.582	20	
Benzo(g,h,i)perylene	2389.33	330	81	3333.33		71.7	51 - 105	4.19	20	
Benzo(k)fluoranthene	2308.33	330	33	3333.33		69.2	53 - 104	0.768	20	
Benzoic acid	2100.33	1600	890	3333.33		63.0	7 - 93	6.44	20	
Benzyl alcohol	2166.33	660	32	3333.33		65.0	56 - 93	4.47	20	
bis(2-chloroethoxy)methane	2453.00	330	64	3333.33		73.6	59 - 81	0.0543	20	
bis(2-Chloroethyl)ether	2290.67	330	66	3333.33		68.7	53 - 81	0.537	20	
bis(2-chloroisopropyl)ether	2264.67	330	76	3333.33		67.9	41 - 94	1.12	20	
bis(2-ethylhexyl)phthalate	2994.33	330	63	3333.33		89.8	57 - 123	0.478	20	
Butylbenzylphthalate	3036.67	330	41	3333.33		91.1	64 - 106	1.00	20	
Chrysene	2366.33	330	84	3333.33		71.0	61 - 93	5.07	20	
Di-n-butylphthalate	3007.33	330	51	3333.33		90.2	64 - 99	5.16	20	
Di-n-octylphthalate	2775.00	330	63	3333.33		83.3	55 - 122	6.59	20	
Dibenz(a,h)anthracene	2390.67	330	45	3333.33		71.7	51 - 109	4.01	20	
Dibenzofuran	2573.00	330	58	3333.33		77.2	60 - 100	1.99	20	
Diethyl phthalate	2854.33	330	58	3333.33		85.6	62 - 99	0.536	20	
Dimethyl phthalate	2831.00	330	40	3333.33		84.9	61 - 93	2.17	20	
Fluoranthene	2477.33	330	60	3333.33		74.3	60 - 100	2.95	20	
Fluorene	2365.67	330	110	3333.33		71.0	62 - 93	0.0281	20	
Hexachlorobenzene	3299.00	330	55	3333.33		99.0	54 - 120	8.58	20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0460 - MSSEMI_S (continued)										
LCS Dup (B1C0460-BSD1) - Continued					Prepared: 3/23/2021 Analyzed: 3/24/2021					
Hexachlorobutadiene	2182.33	660	53	3333.33		65.5	52 - 94	3.94	20	
Hexachlorocyclopentadiene	2767.67	660	70	3333.33		83.0	26 - 135	4.21	20	
Hexachloroethane	2158.00	330	94	3333.33		64.7	54 - 89	1.81	20	
Indeno(1,2,3-cd)pyrene	2389.33	330	75	3333.33		71.7	50 - 106	4.19	20	
Isophorone	2668.33	330	85	3333.33		80.0	47 - 89	1.50	20	
N-Nitroso-di-n propylamine	2525.67	330	60	3333.33		75.8	58 - 91	0.0396	20	
N-Nitrosodiphenylamine	3045.00	330	32	3333.33		91.4	61 - 100	7.97	20	
Naphthalene	2010.33	330	56	3333.33		60.3	60 - 83	2.13	20	
Nitrobenzene	2393.67	330	57	3333.33		71.8	56 - 104	1.22	20	
Pentachlorophenol	2722.33	1600	50	3333.33		81.7	20 - 115	3.44	20	
Phenanthrene	2677.00	330	67	3333.33		80.3	65 - 93	5.79	20	
Phenol	2116.33	330	34	3333.33		63.5	57 - 87	1.78	20	
Pyrene	2354.00	330	72	3333.33		70.6	58 - 101	0.896	20	
Pyridine	1202.00	1600	270	3333.33		36.1	0 - 69	10.7	20	
Surrogate: 1,2-Dichlorobenzene-d	*1792*			*3333.33*		*53.8*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*3150*			*3325.00*		*94.7*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*1843*			*3325.00*		*55.4*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2257*			*3333.33*		*67.7*	*36 - 113*			
Surrogate: 2-Fluorophenol	*1749*			*3325.00*		*52.6*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2634*			*3333.33*		*79.0*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2088*			*3333.33*		*62.6*	*35 - 110*			
Surrogate: Phenol-d6	*1915*			*3325.00*		*57.6*	*26 - 108*			

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Notes and Definitions

S10	Surrogate recovery was outside of laboratory acceptance limit due to possible matrix interference.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
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.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 2

Instruction: Complete all shaded areas.

21 00719

For Laboratory Use Only — ATLCOC Ver:20210101

Method of Transport			Sample Conditions Upon Receipt					
			Condition	Y	N	Condition	Y	N
☐ Client	☑ ATL		1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☑	☐
☐ FedEx	☐ OnTrac		2. HEADSPACE (VOA) < 6mm	☐	☐	6. PRESERVED	☑	☐
☐ GSO			3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	3.3	
☐ Other:			4. SEALED	☐	☐	8. THERMOMETER ID:	SCECT11	

CUSTOMER

Company: Langan

Address:

City: State: Zip: Tel: Fax:

SEND REPORT TO:
Attn: Shari Schwartzer Email: sschwartzer@Langan.com
Company: Langan
Address:
City: State: Zip:

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____

QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: Project Loki / SBD4
Project No.: 700089101
Sampler: Shari Schwartzer / Megan Ritsema
Quote #:
PO #:

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Location	Date	Time	TPH as DRO	TPH as jet fuel	SVOCs	CA Metals	VOCs	Sample Matrix	Turnaround Time (TAT)	Container: Quantity	Container: Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7=Canister	Container: Material: 1=Glass; 2=Plastic; 3=Metal	Container: Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=ZnAc2; 6=NaOH; 7=NA2S2O3	Remarks
1	01	CS-01-0/2	CS-01	3/22/21	0930	X	X	X	X			7	1	5	1		
2	02	CS-01-4/6	CS-01		0940												
3	03	CS-02-0/2	CS-02		1010												
4	04	CS-02-4/6	CS-02		1015												
5	05	CS-04-0/2	CS-04		1350												
6	06	CS-04-4/6	CS-04		1400												
7	07	CS-05-0/2	CS-05		1500												
8	08	CS-05-4/6	CS-05		1510												
9	09	CS-06-0/2	CS-06		1530												
10	10	CS-06-4/6	CS-06		1540												

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	3/22/21	1637	Max Rothrock	3/22/21	1637
Max Rothrock	3/22/21	1846	[signature]	3/23/21	8:00
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 2 of 2

Instruction: Complete all shaded areas.

21 00719

For Laboratory Use Only — ATLCOC Ver:20210101

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☑ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other:	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☑	☐
	2. HEADSPACE (VOA) < 6mm	☐	☑	6. PRESERVED	☑	☐
	3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	3.3	
	4. SEALED	☐	☑	8. THERMOMETER ID:	SCDT11	

CUSTOMER

Company: Langan
Address: — Tel: —
City: — State: — Zip: — Fax: —

SEND REPORT TO:
Attn: Shari Schwartzer — Email:
Company: Langan
Address: 515 S Flower St Suite 2860
City: Los Angeles — State: CA — Zip: 90071

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: — Email:
Company:
Address:
City: — State: — Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: Project Loki / SBD4
Project No.: 700089101
Quote #:
PO #:
Sampler: Shari Schwartzer / Megan Ritsema

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Location	Date	Time	TPH as DRO	TPH as jet fuel	SVOCs	CA Metals	VOCs	Sample Matrix	Turnaround Time (TAT)	Container: Quantity	Container: Type	Container: Material	Container: Preservative	Remarks
1	11	CS-08-0/2	CS-08	3/22/21	1110	X	X	X	X			7	1	5	1		
2	12	CS-08-4/6	CS-08	"	1120	X	X	X	X			1	1	5			
3	13	CS-09-0/2	CS-09		1240	X	X	X	X				1	5			
4	14	CS-09-4/6	CS-09		1250	X	X	X	X				1	5			
5	15	SB-01/1-2	SB-01		1515	X	X	X	X	X			4	5/2			
6	16	SB-01/5-7.5	SB-01		1520	X	X		X	X			4	5/2			
7	17	DUP-032221	—		—	X	X	X	X				1	5			
8	18	CS-03-0/2	CS-03		1610	X	X	X	X				1	5			
9	19	CS-03-4/6	CS-03		1620	X	X	X	X				1	5			
10																	

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	3/22/21	1617	Max Rothman	3/22/21	1637
Max Rothman	3/22/21	1940	[signature]	3/23/21	8:00
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

Erick Ovalle

From: Shari Schwartzer <sschwartzer@langan.com>
Sent: Tuesday, March 23, 2021 10:02 AM
To: Erick Ovalle; Megan Ritsema
Subject: Re: Project Loki - Response requested

Hi Erick,

Thanks for letting us know. Please put those samples on hold for all analyses. We may be re-drilling that boring today and can provide new samples.

Thanks,

Shari Schwartzer
Project Engineer
LANGAN
Celebrating 50 years in business | 1970-2020
Mobile: 213.259.7889

Get Outlook for iOS

From: Erick Ovalle <Erick.Ovalle@atlglobal.com>
Sent: Tuesday, March 23, 2021 9:55 AM
To: Shari Schwartzer; Megan Ritsema
Subject: Project Loki - Response requested

Good morning Shari,

Upon reviewing the containers that were provided, we noticed the 5035 kit that we received for sample SB-01 ½ contained two VOA vials with methanol and one with NaHSO4. We will have one container to analyze the sample once and if we need to rerun, we will need to use soil from the jar.

On sample SB-01-5-7.5 we received three vials with NaHSO4 and no VOA vial with Methanol. If the concentrations are over our calibration limit, we will not be able to perform a dilution using the 5035 kit and will need to use soil from the jar.

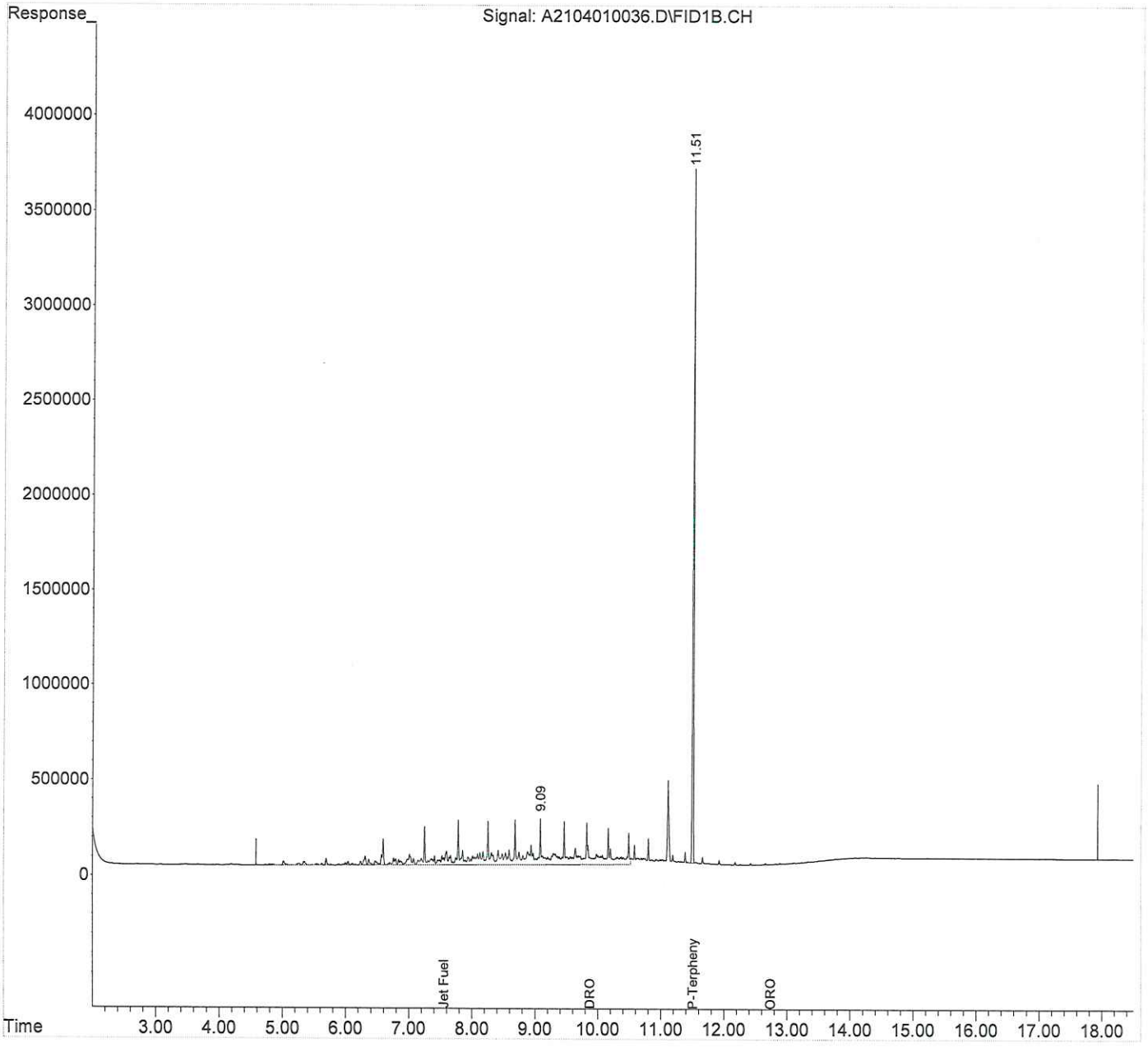
Best regards,

Erick Ovalle | Project Manager
ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Avenue, Signal Hill CA 90755 | www.atlglobal.com
Email: Erick.Ovalle@atlglobal.com
Tel: 562.989.4045 ext. 237 | Fax: 562.989.6348
Laboratory Excellence Defined

Data Path : D:\Data\040121A\
Data File : A2104010036.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 3:37 am
Operator : AC
Sample : S1C0287-CCV1
Misc : 1,Diesel,500/80
ALS Vial : 98 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:48:42 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

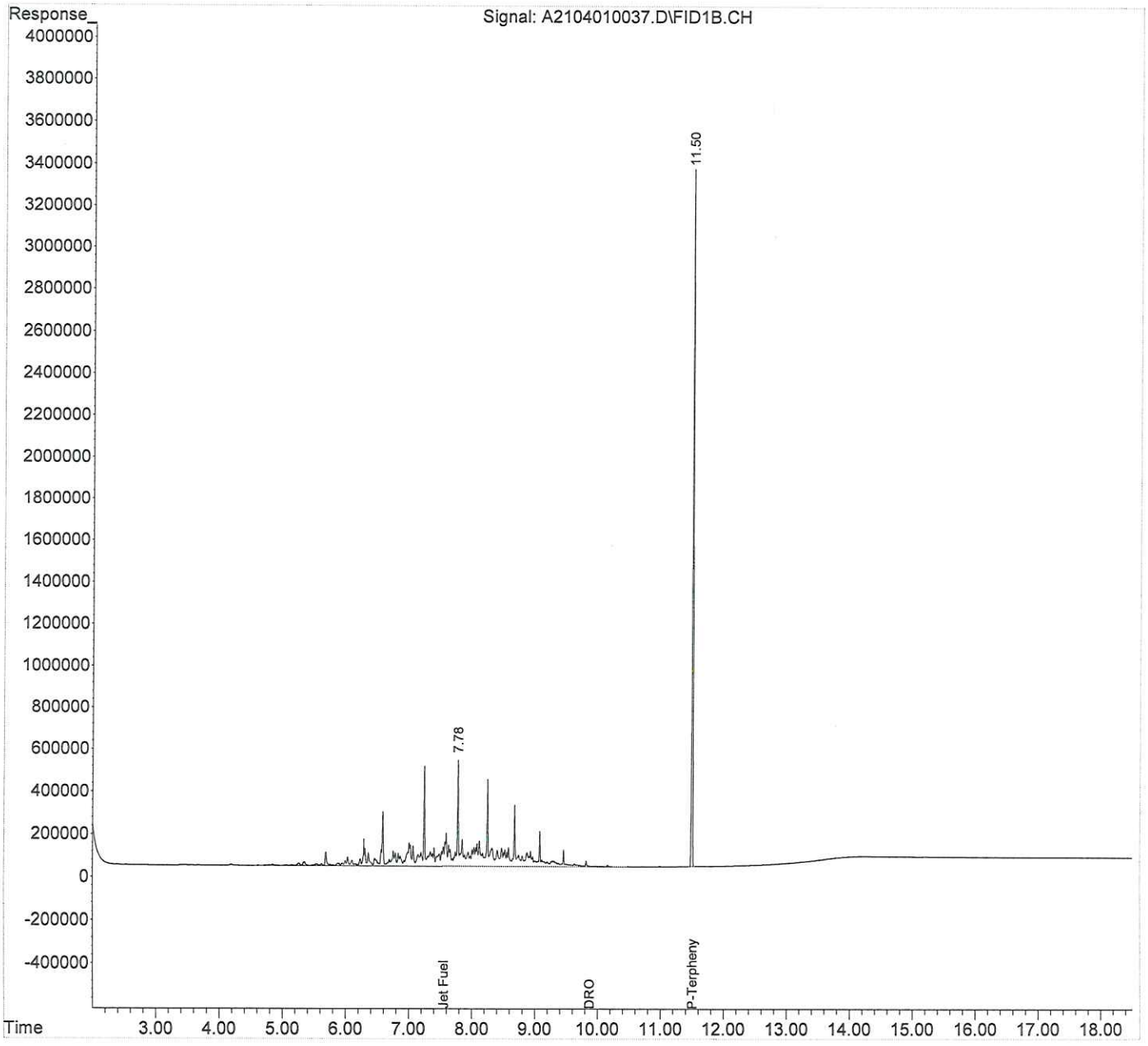
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010037.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 4:03 am
Operator : AC
Sample : S1C0287-CCV2
Misc : 1,Jet Fuel,500/80
ALS Vial : 99 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:49:04 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

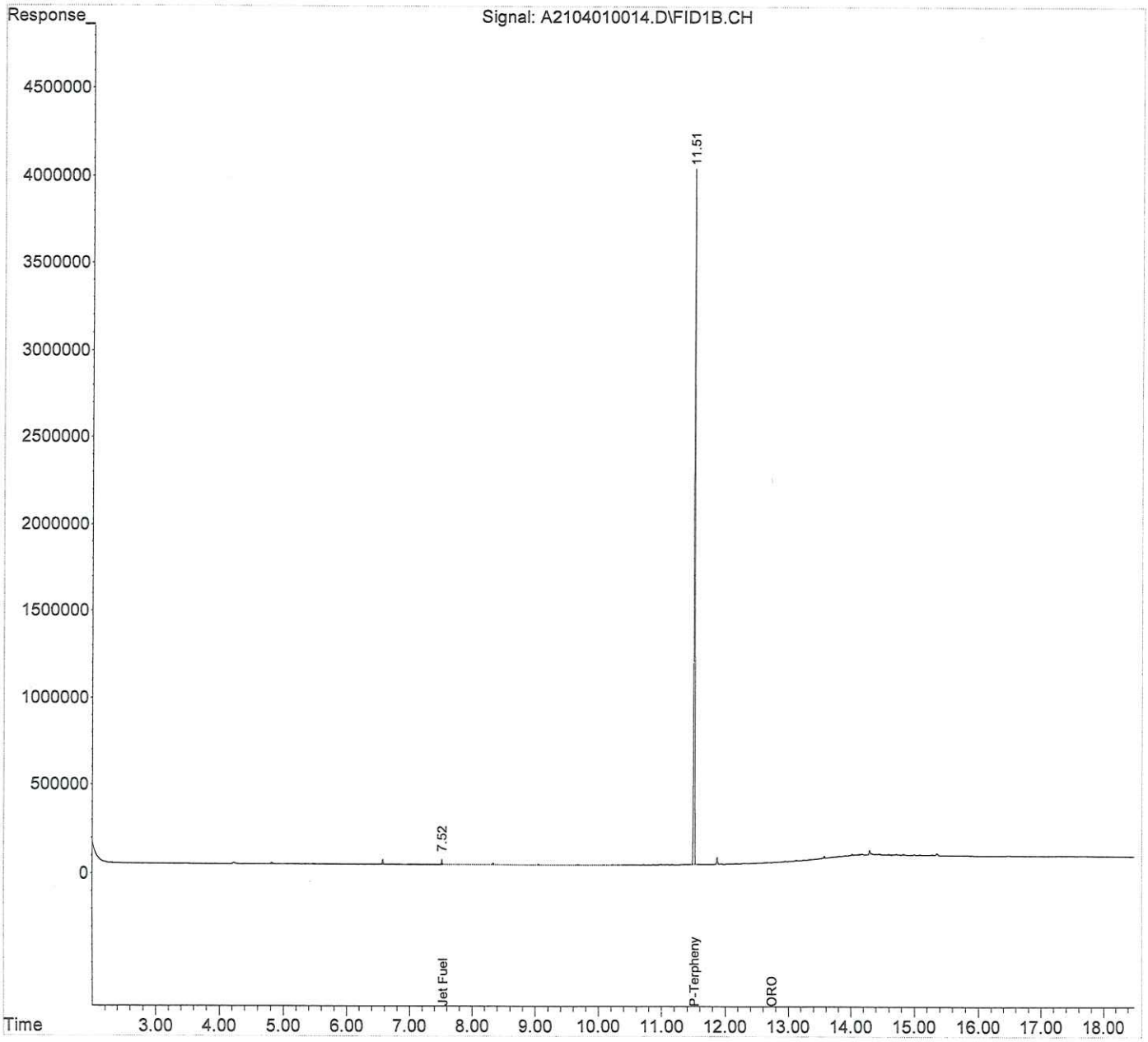


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010014.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 6:01 pm
Operator : AC
Sample : 2100719-01
Misc : 1,B1C0453
ALS Vial : 4 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:40:02 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

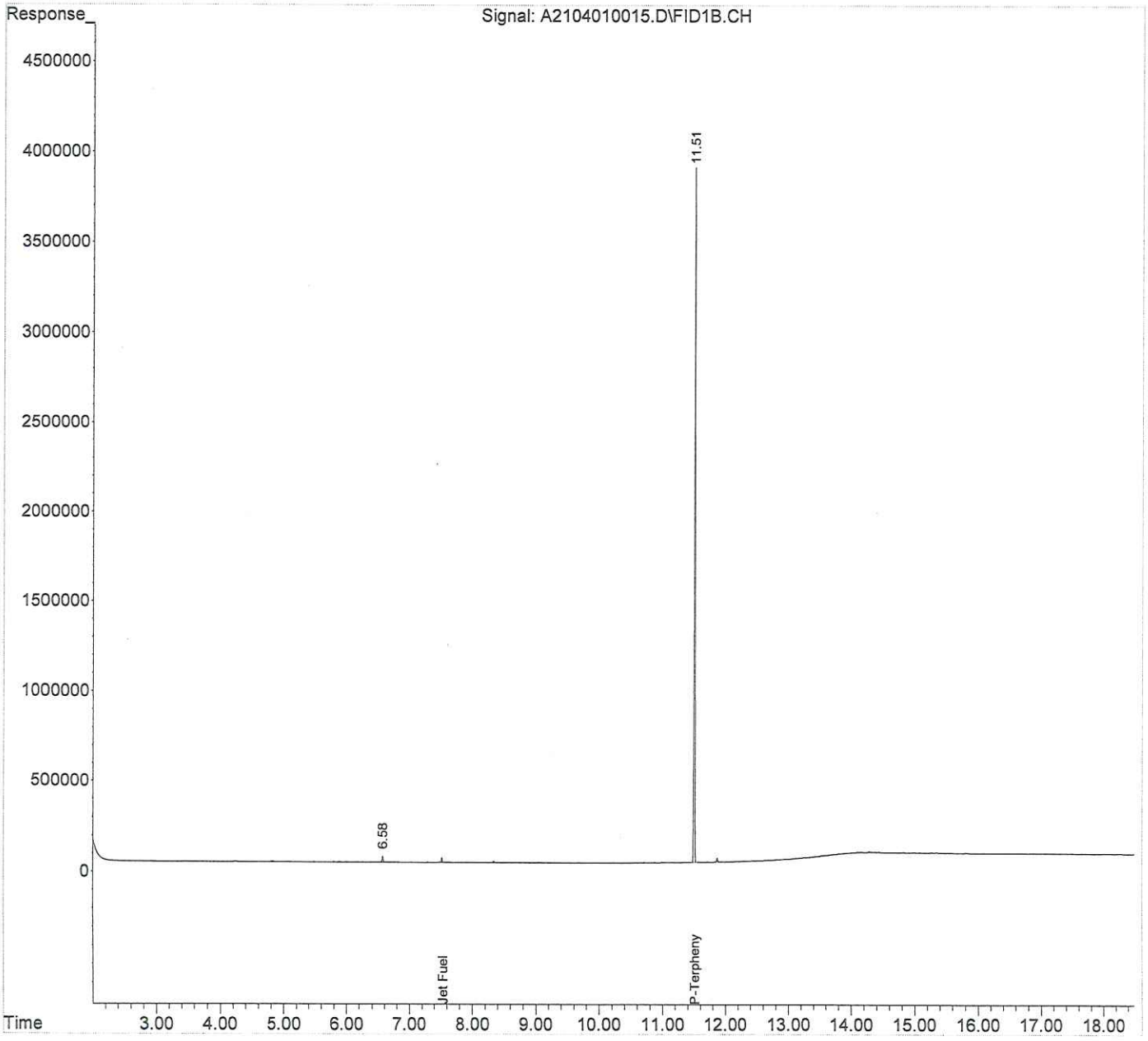


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010015.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 6:28 pm
Operator : AC
Sample : 2100719-02
Misc : 1,B1C0453
ALS Vial : 5 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:40:24 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

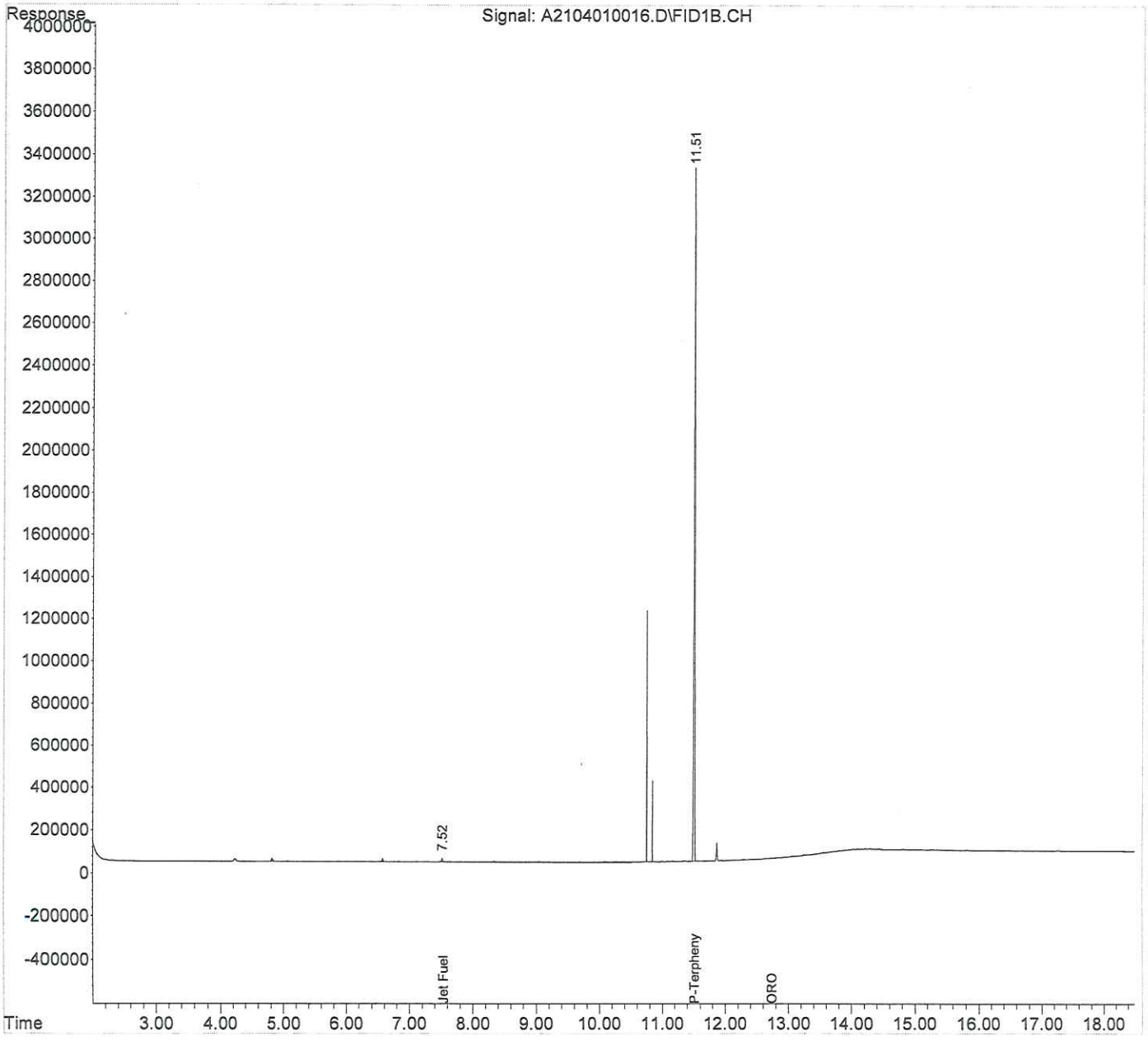


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010016.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 6:54 pm
Operator : AC
Sample : 2100719-03
Misc : 1,B1C0453
ALS Vial : 6 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:40:40 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

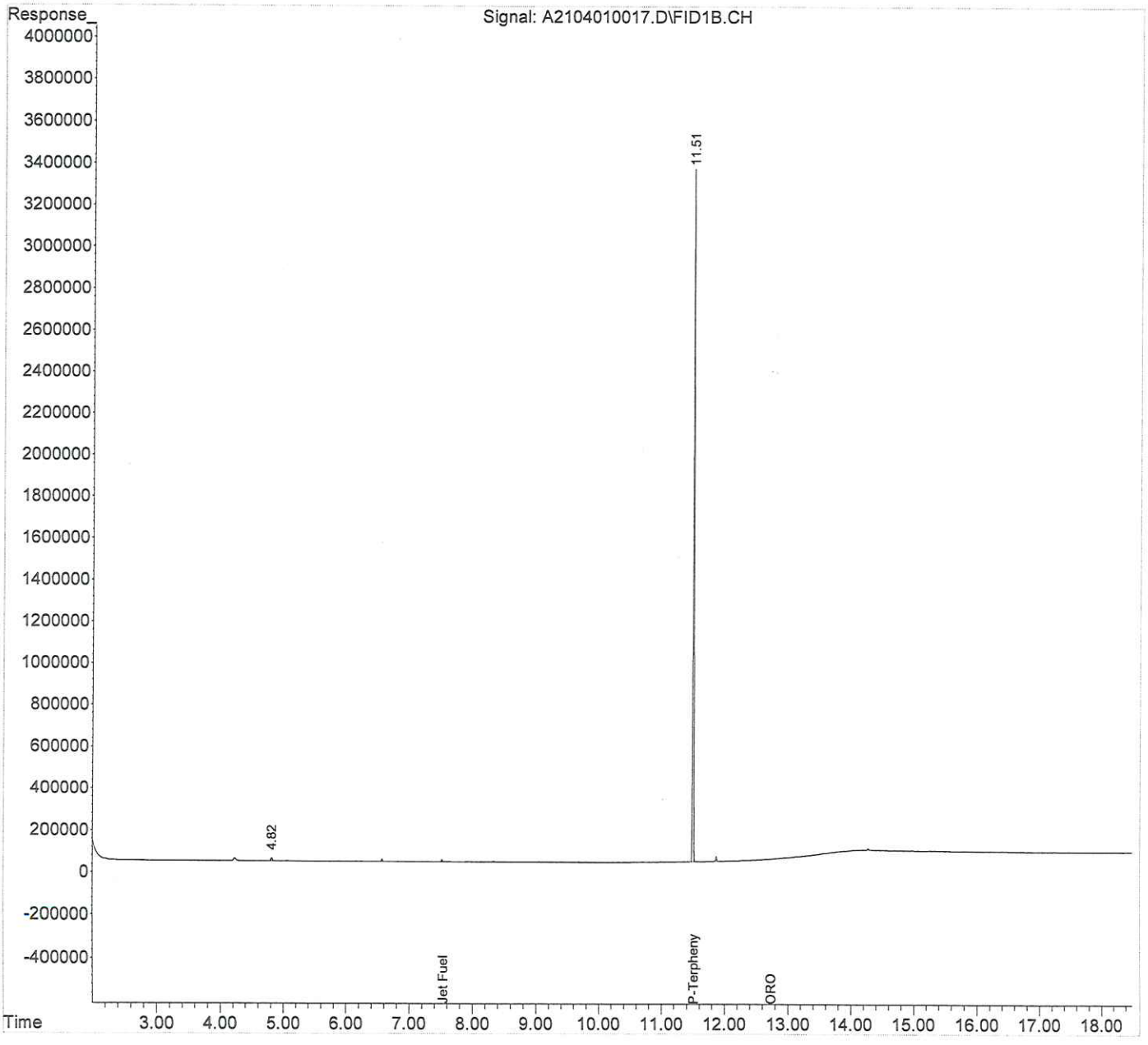


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010017.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 7:20 pm
Operator : AC
Sample : 2100719-04
Misc : 1,B1C0453
ALS Vial : 7 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:41:05 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

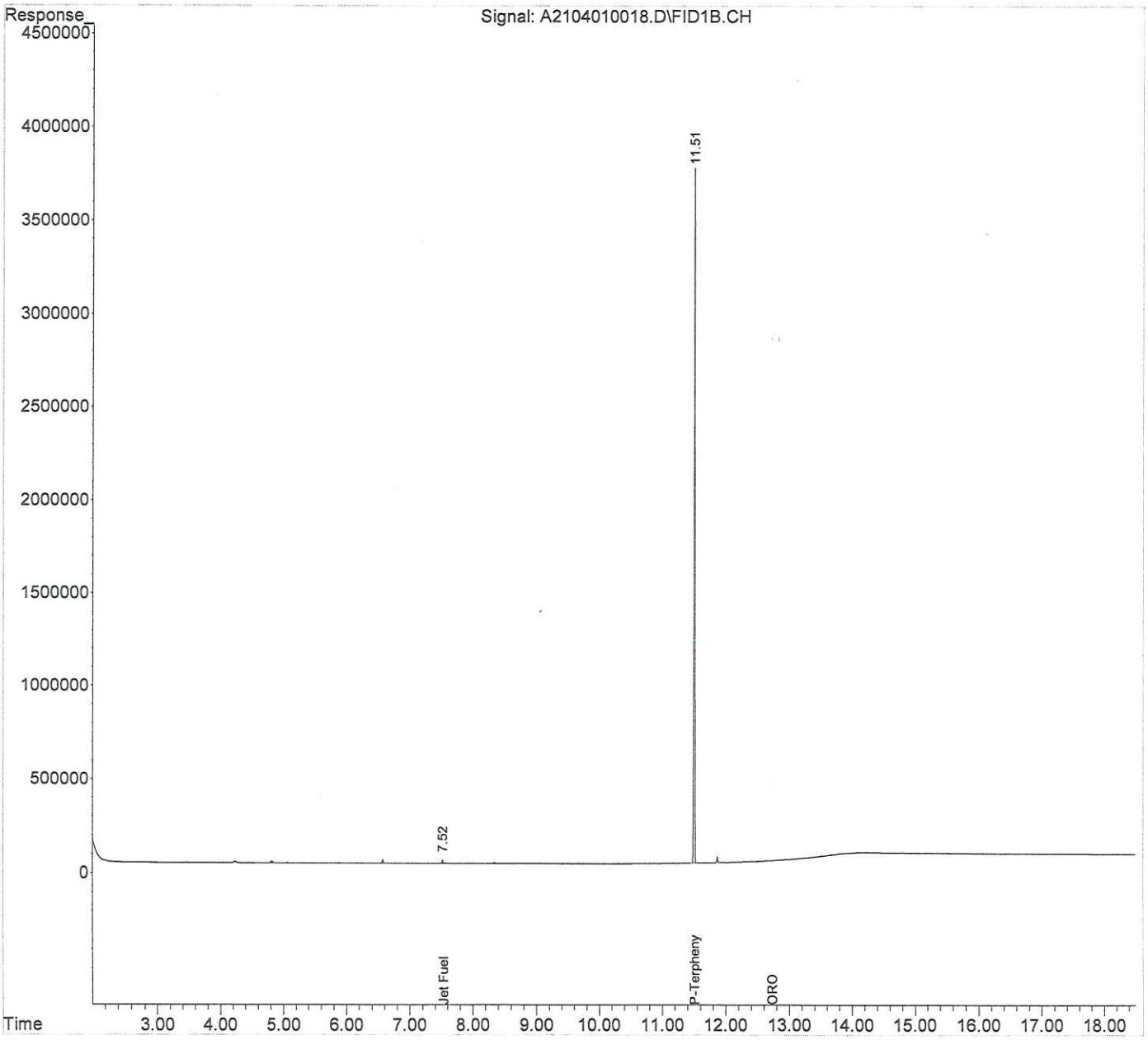


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010018.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 7:47 pm
Operator : AC
Sample : 2100719-05
Misc : 1,B1C0453
ALS Vial : 8 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:41:21 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

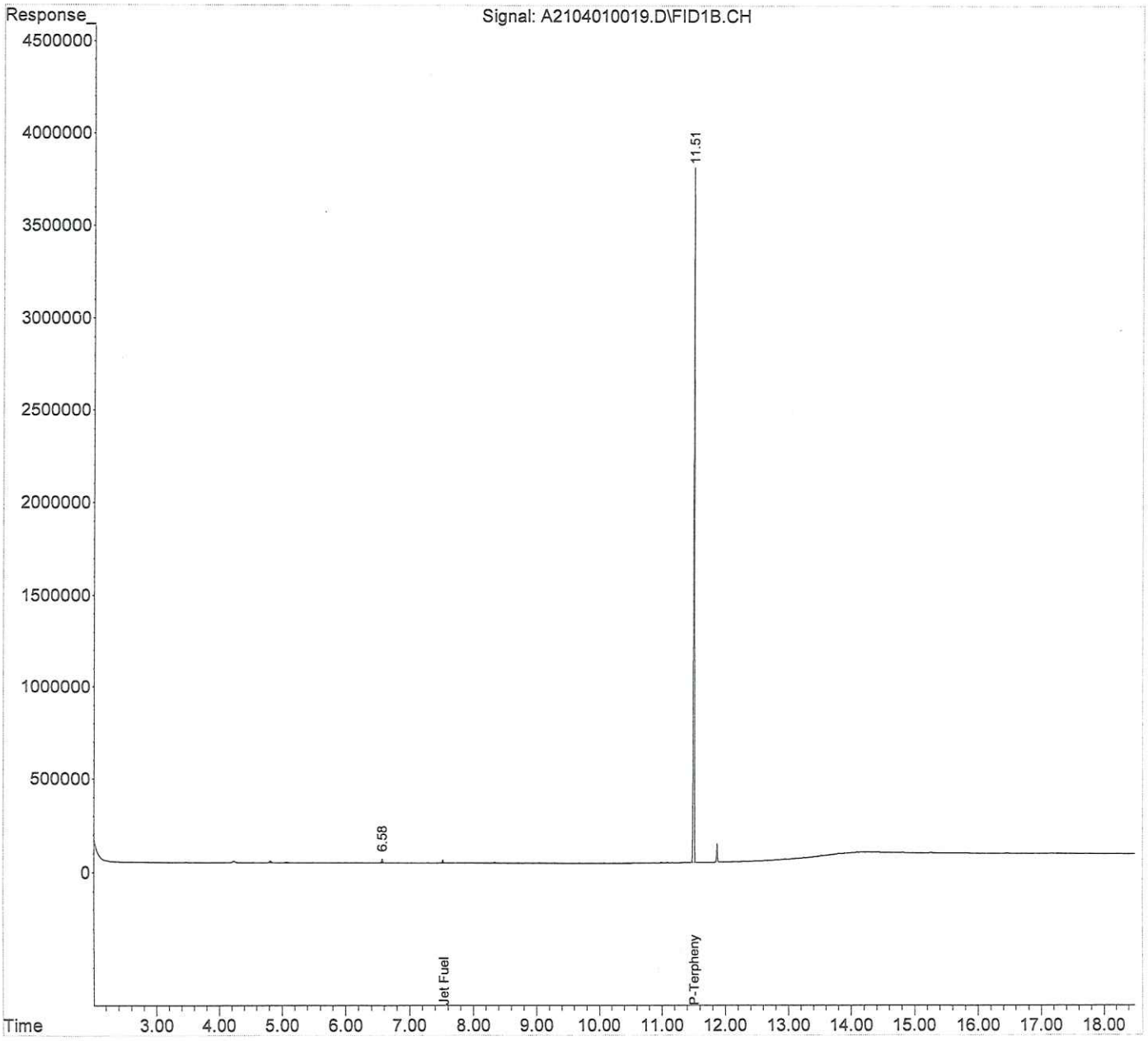


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010019.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 8:13 pm
Operator : AC
Sample : 2100719-06
Misc : 1,B1C0453
ALS Vial : 9 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:41:36 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

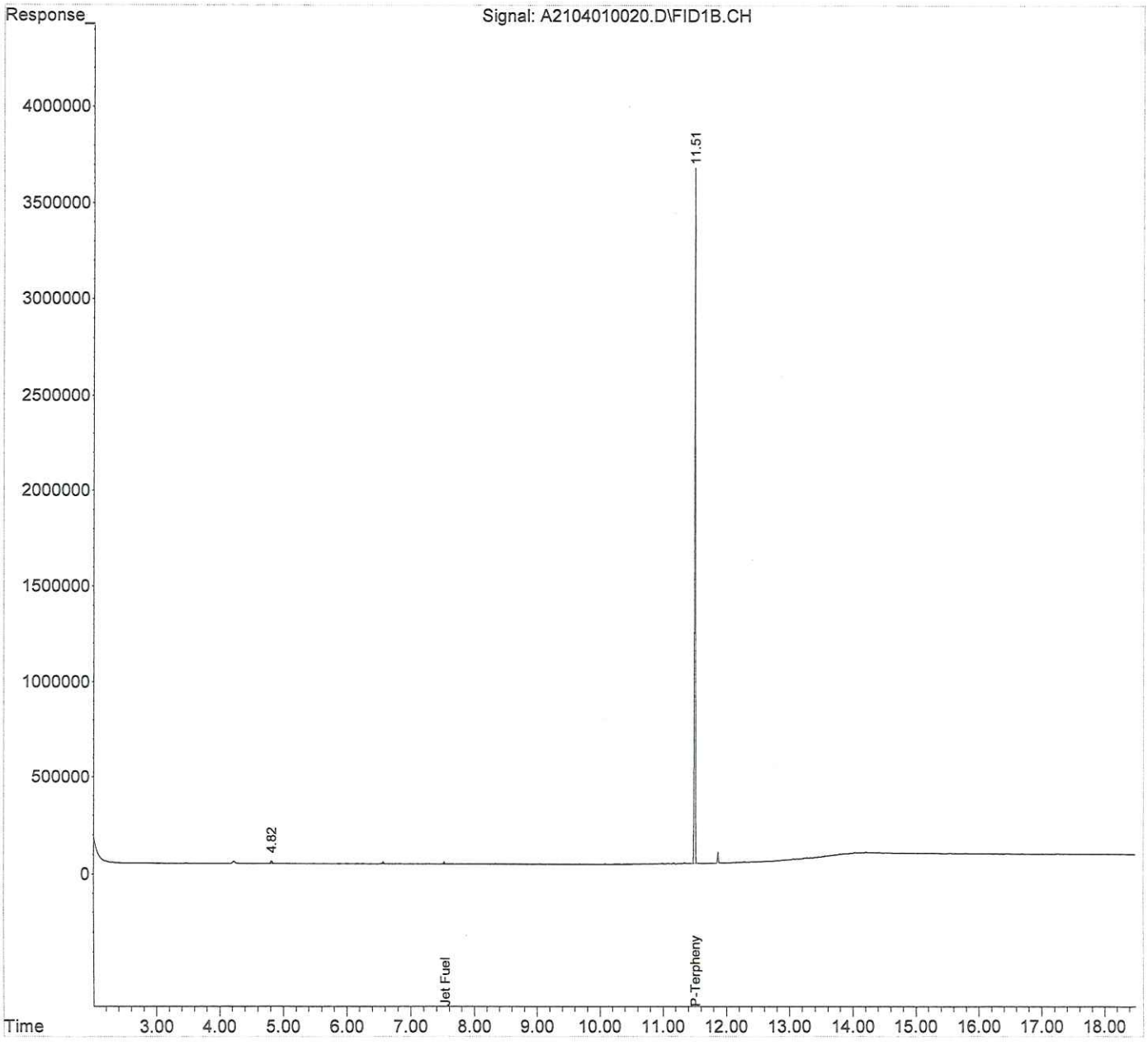


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010020.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 8:39 pm
Operator : AC
Sample : 2100719-07
Misc : 1,B1C0453
ALS Vial : 10 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:41:53 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

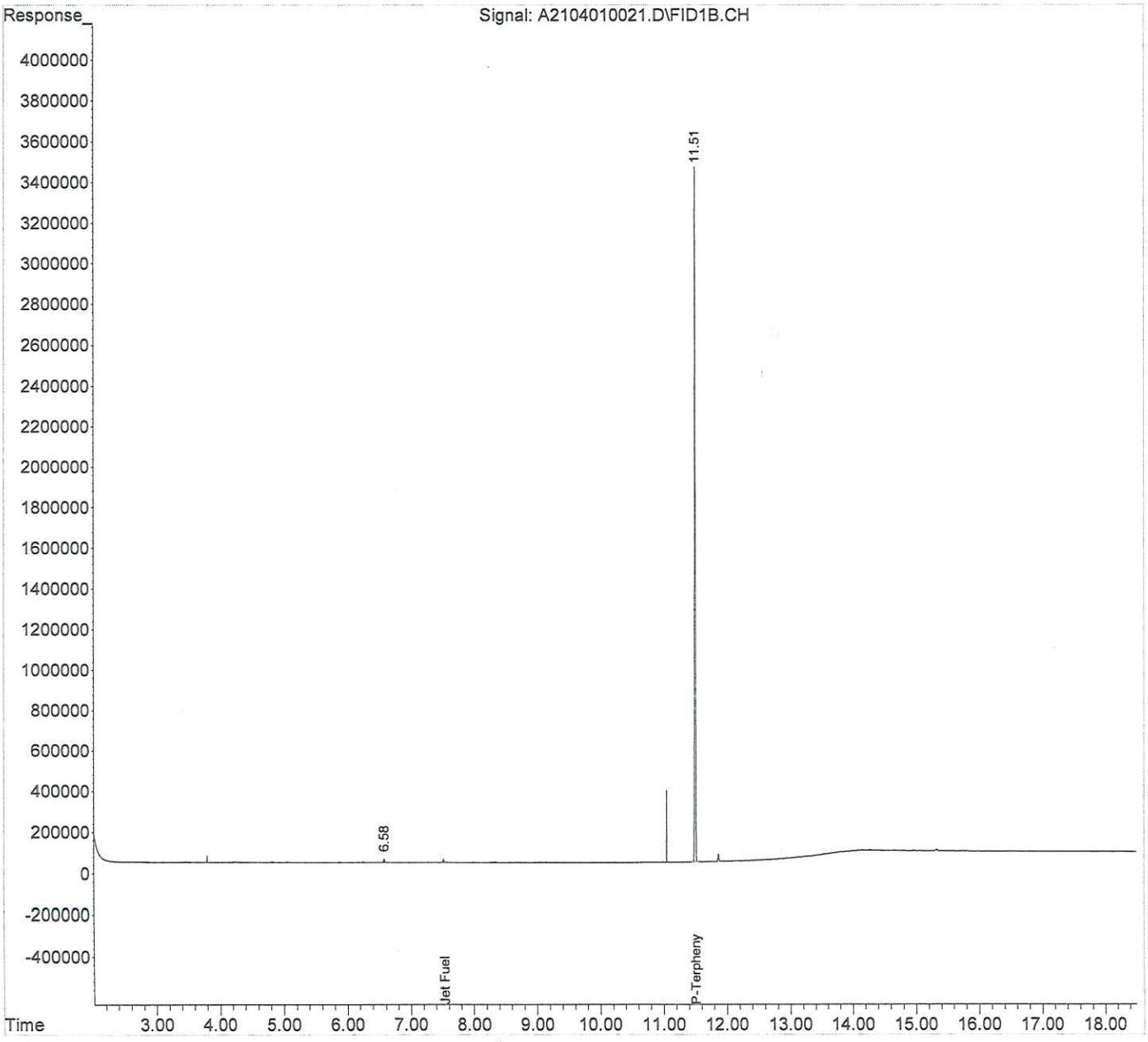


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010021.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 9:06 pm
Operator : AC
Sample : 2100719-08
Misc : 1,B1C0453
ALS Vial : 11 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:42:26 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

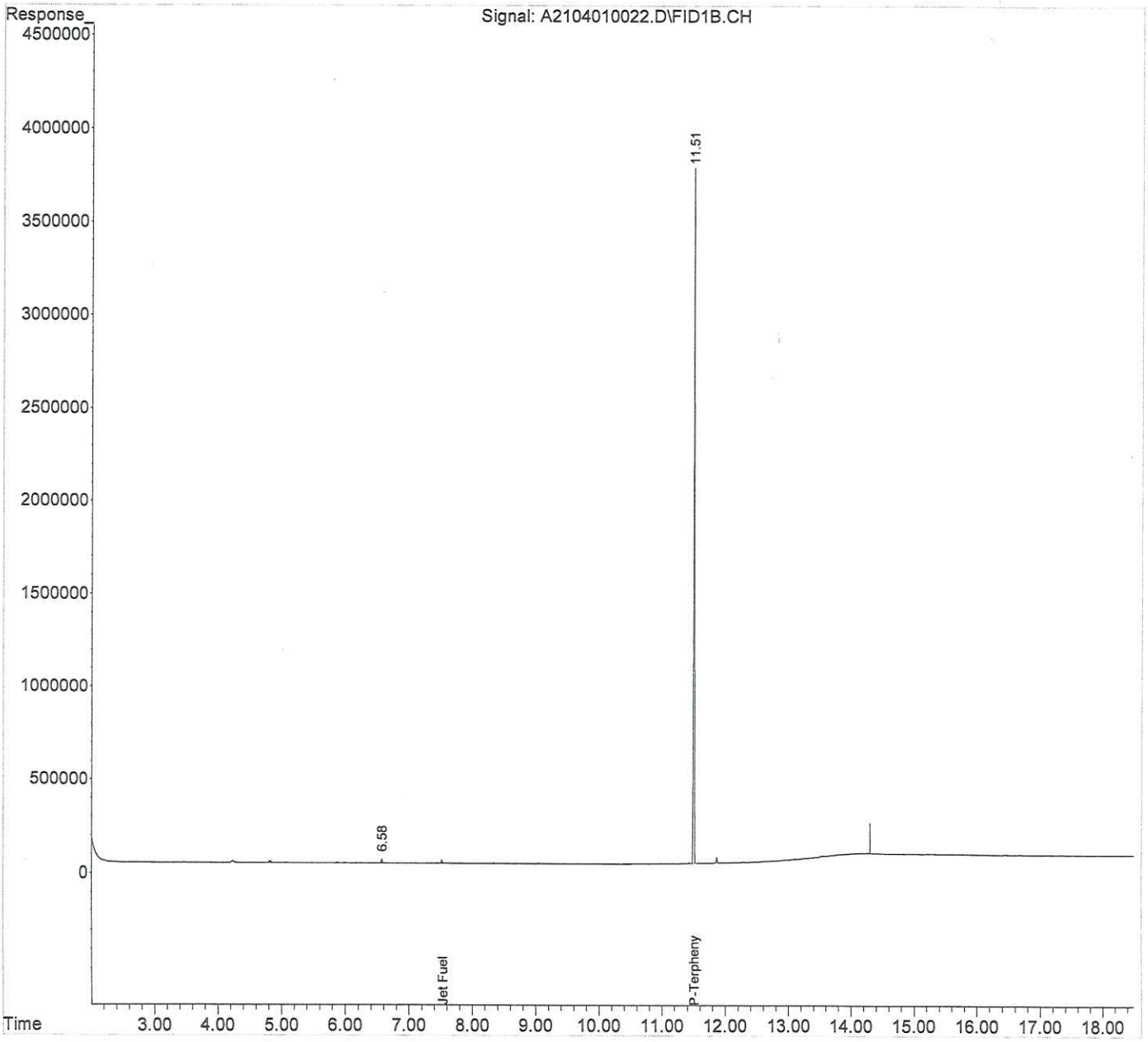


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010022.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 9:32 pm
Operator : AC
Sample : 2100719-09
Misc : 1,B1C0453
ALS Vial : 12 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:42:39 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

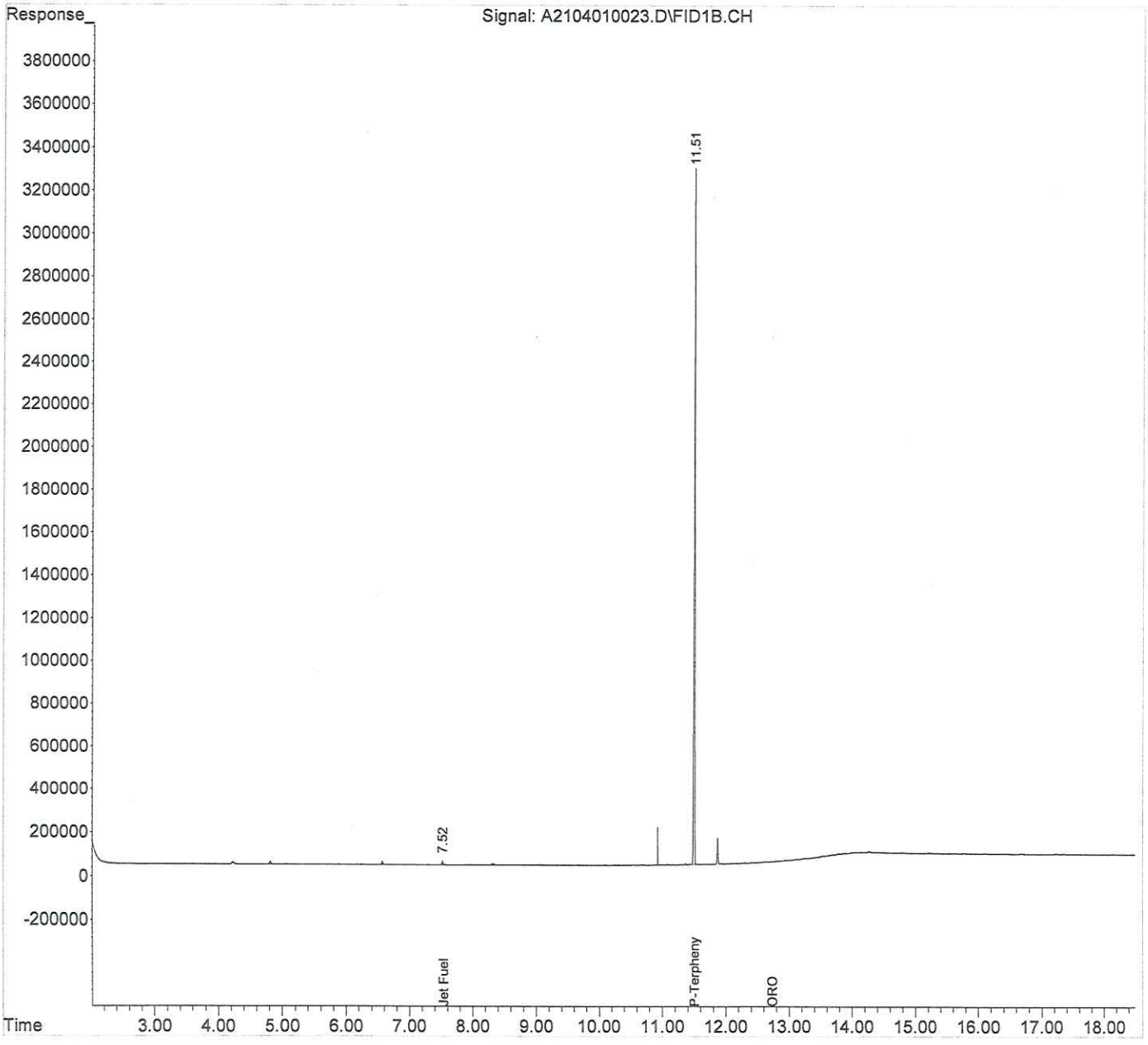
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010023.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 9:58 pm
Operator : AC
Sample : 2100719-10
Misc : 1,B1C0453
ALS Vial : 13 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:42:55 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

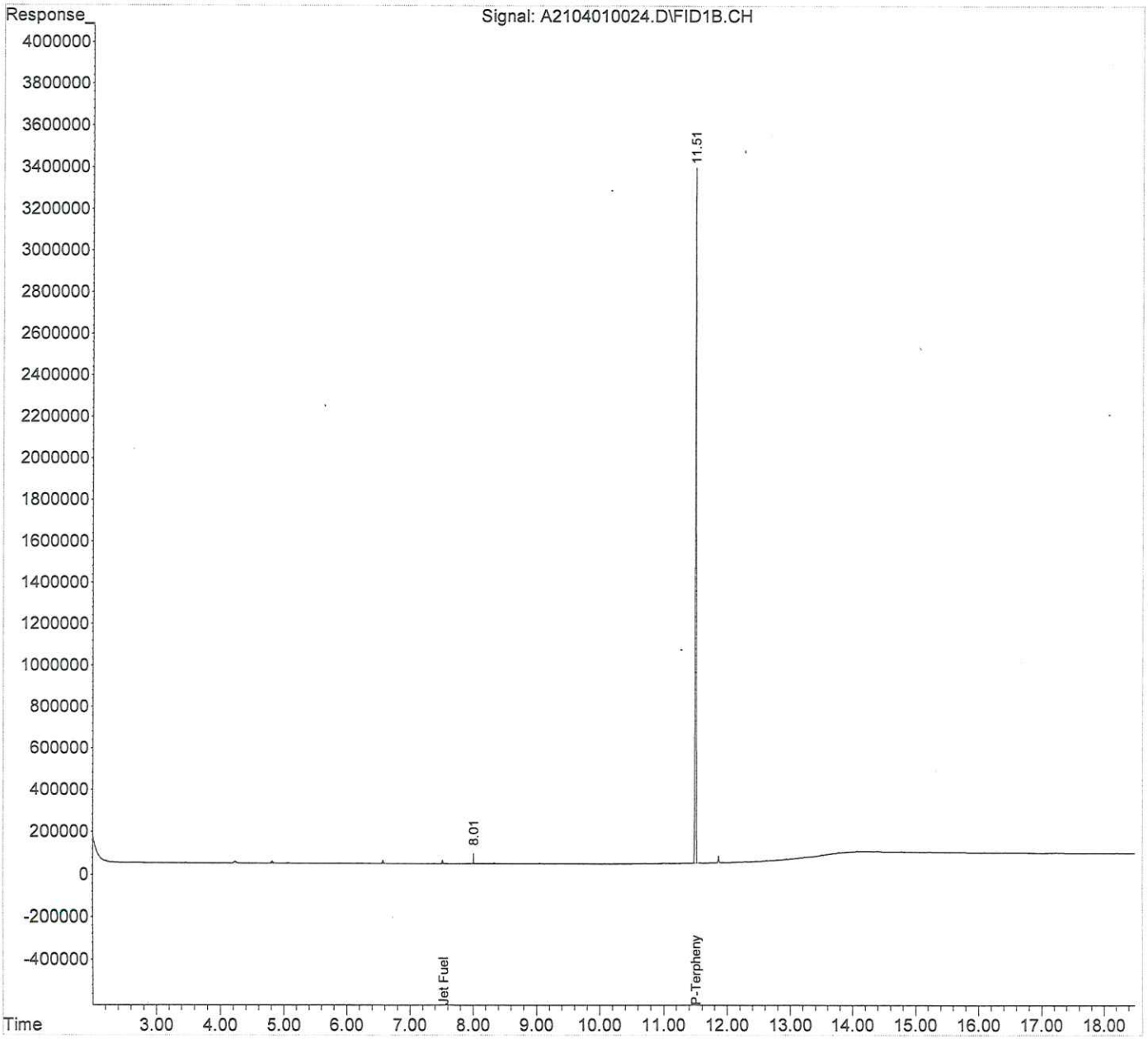
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010024.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 10:24 pm
Operator : AC
Sample : 2100719-11
Misc : 1,B1C0453
ALS Vial : 14 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:43:11 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

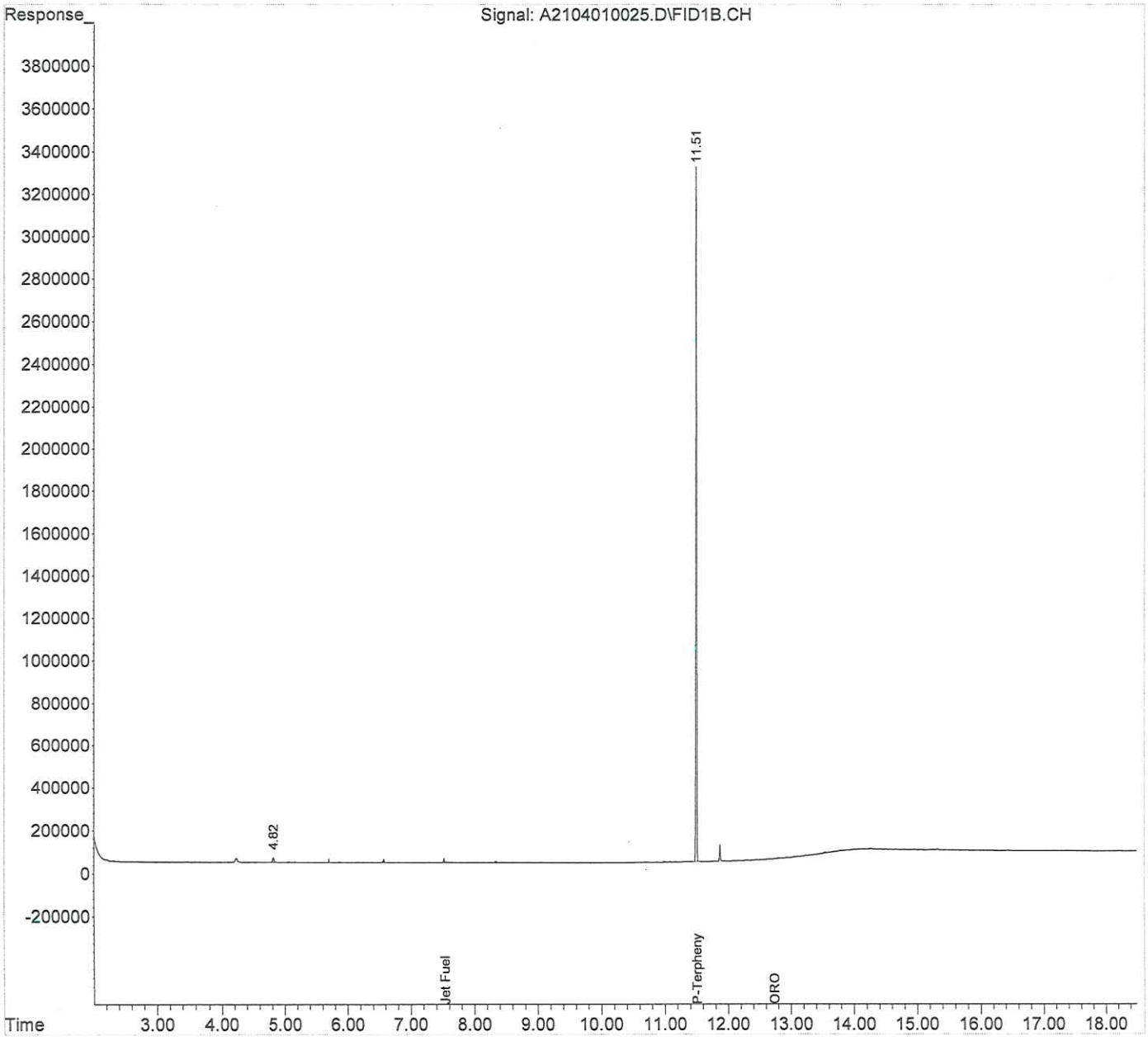


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010025.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 10:51 pm
Operator : AC
Sample : 2100719-12
Misc : 1,B1C0453
ALS Vial : 15 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:43:24 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

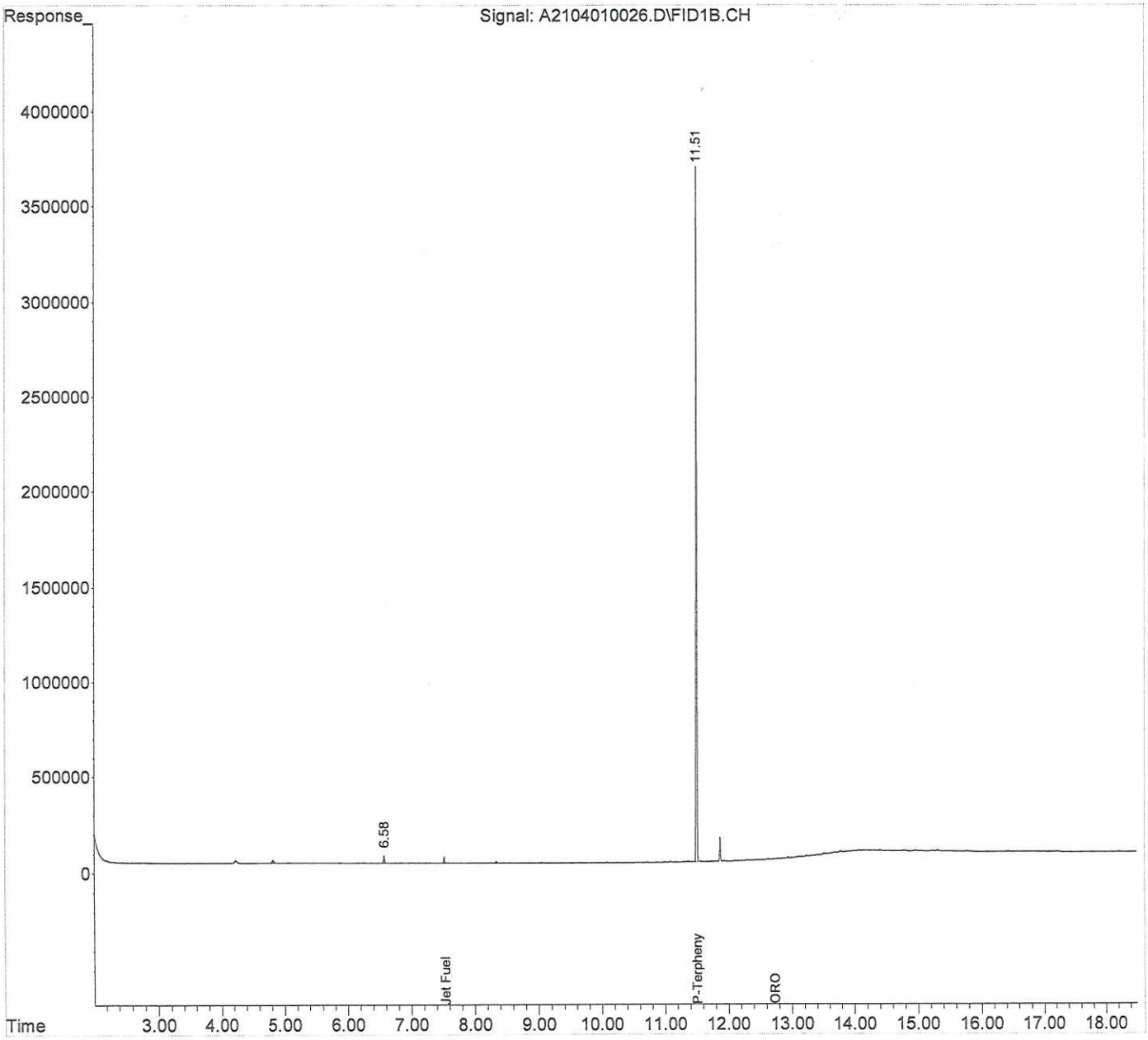
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010026.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 11:17 pm
Operator : AC
Sample : 2100719-13
Misc : 1,B1C0453
ALS Vial : 16 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:43:37 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

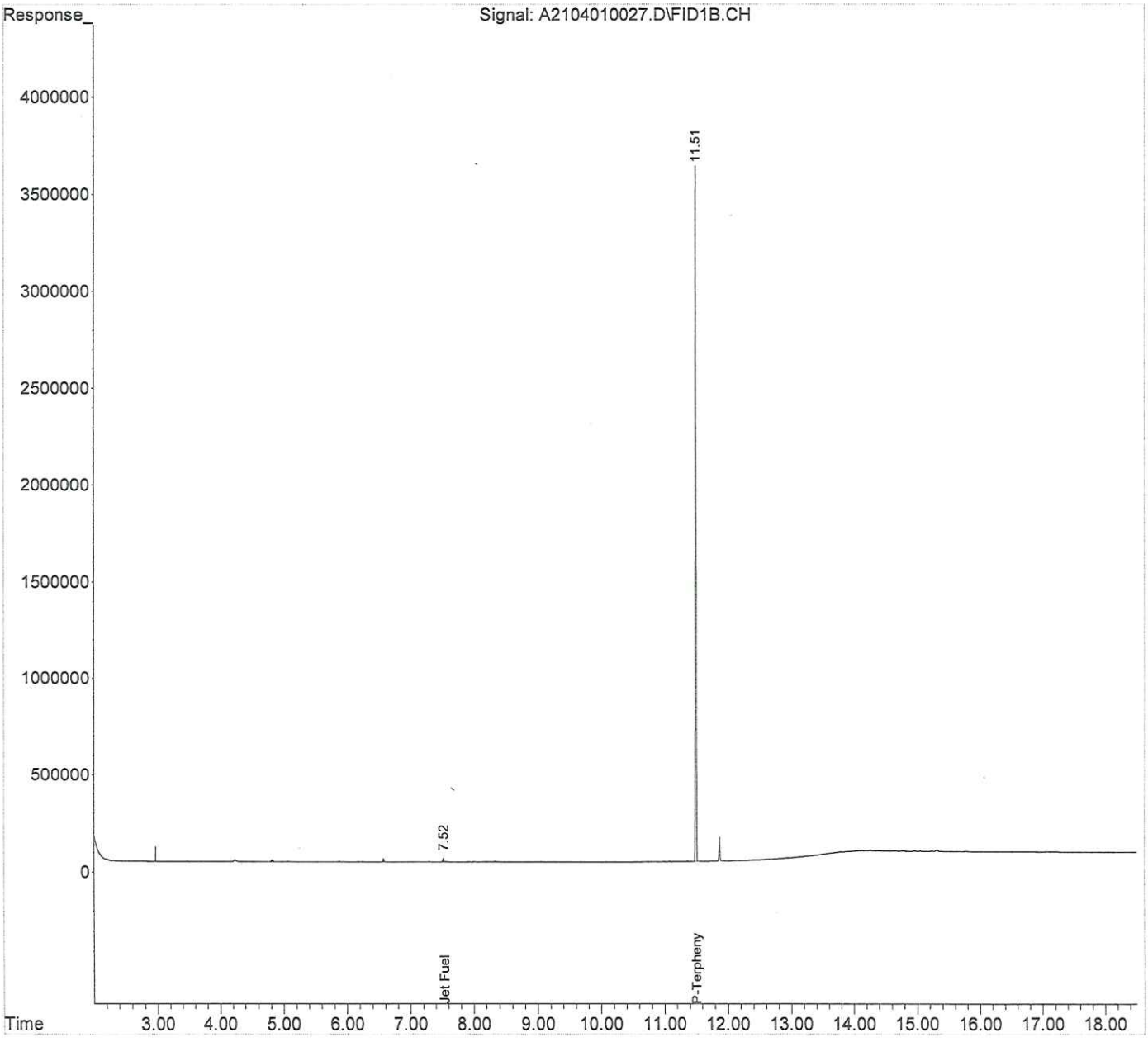


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010027.D
Signal(s) : FID1B.CH
Acq On : 01 Apr 2021 11:43 pm
Operator : AC
Sample : 2100719-14
Misc : 1,B1C0453
ALS Vial : 17 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:43:51 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

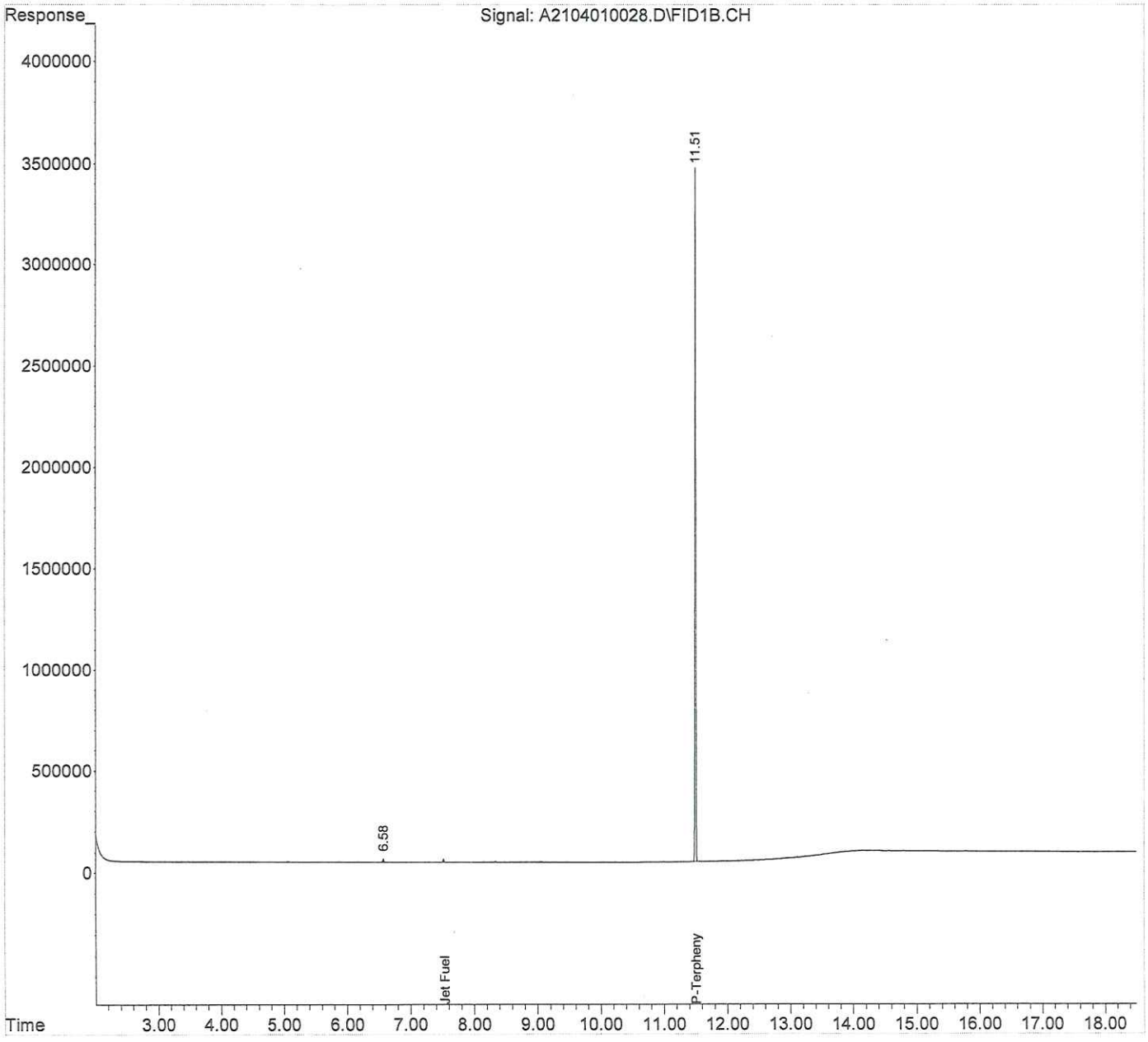
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010028.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 12:09 am
Operator : AC
Sample : 2100719-15
Misc : 1,B1C0453
ALS Vial : 18 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:44:20 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

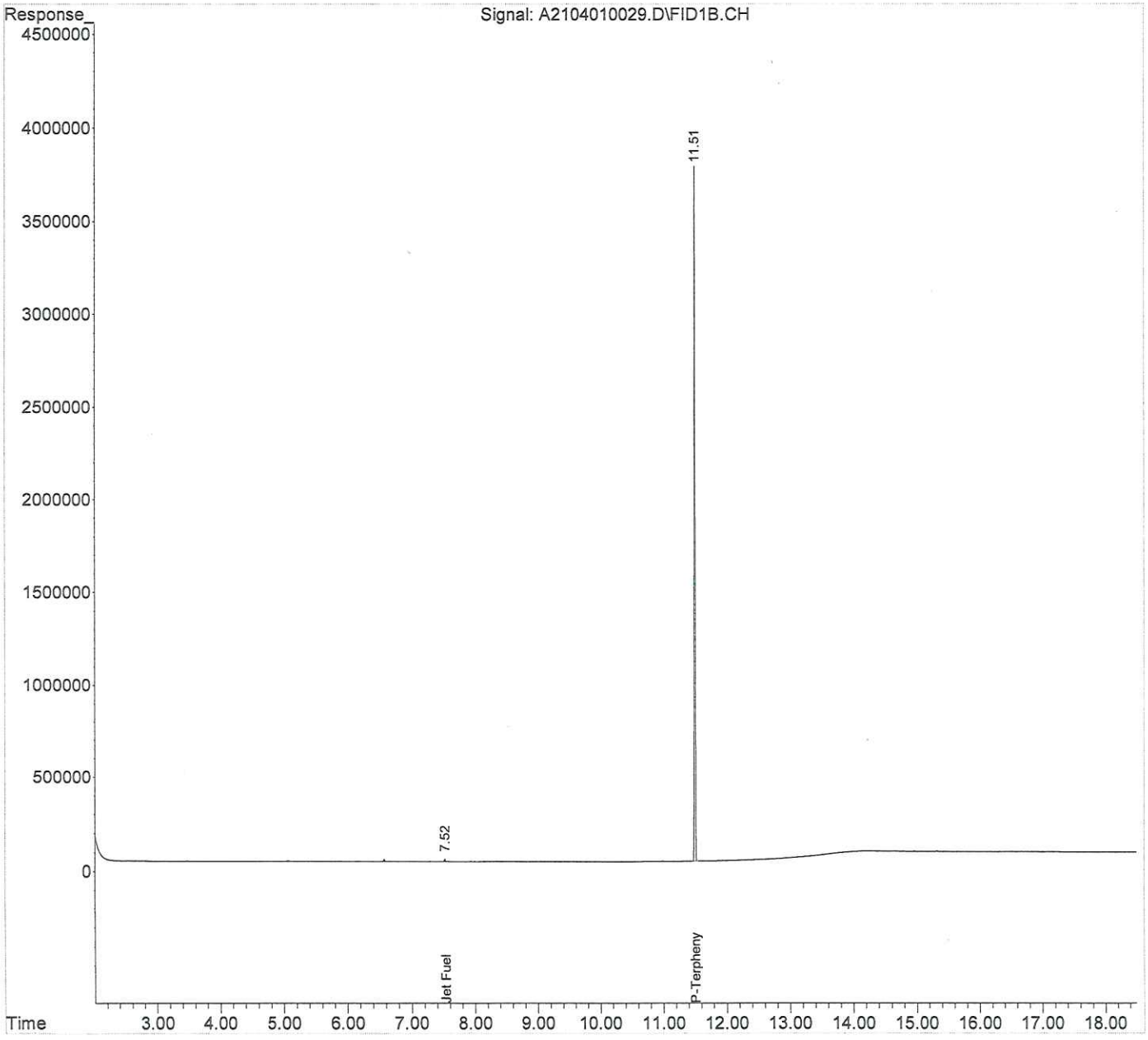


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010029.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 12:35 am
Operator : AC
Sample : 2100719-16
Misc : 1,B1C0453
ALS Vial : 19 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:44:36 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

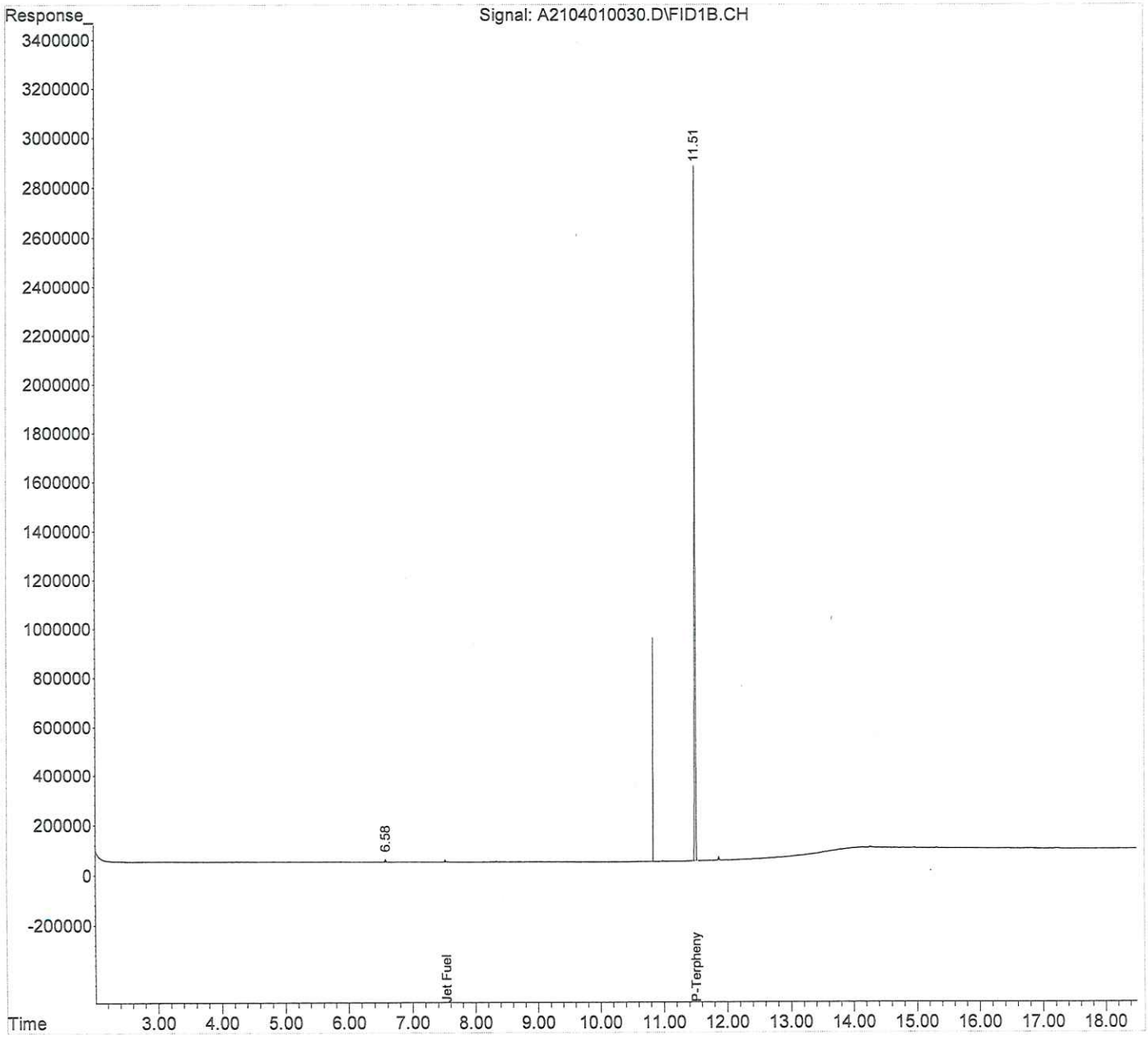


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010030.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 1:01 am
Operator : AC
Sample : 2100719-17
Misc : 1,B1C0453
ALS Vial : 20 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:44:50 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

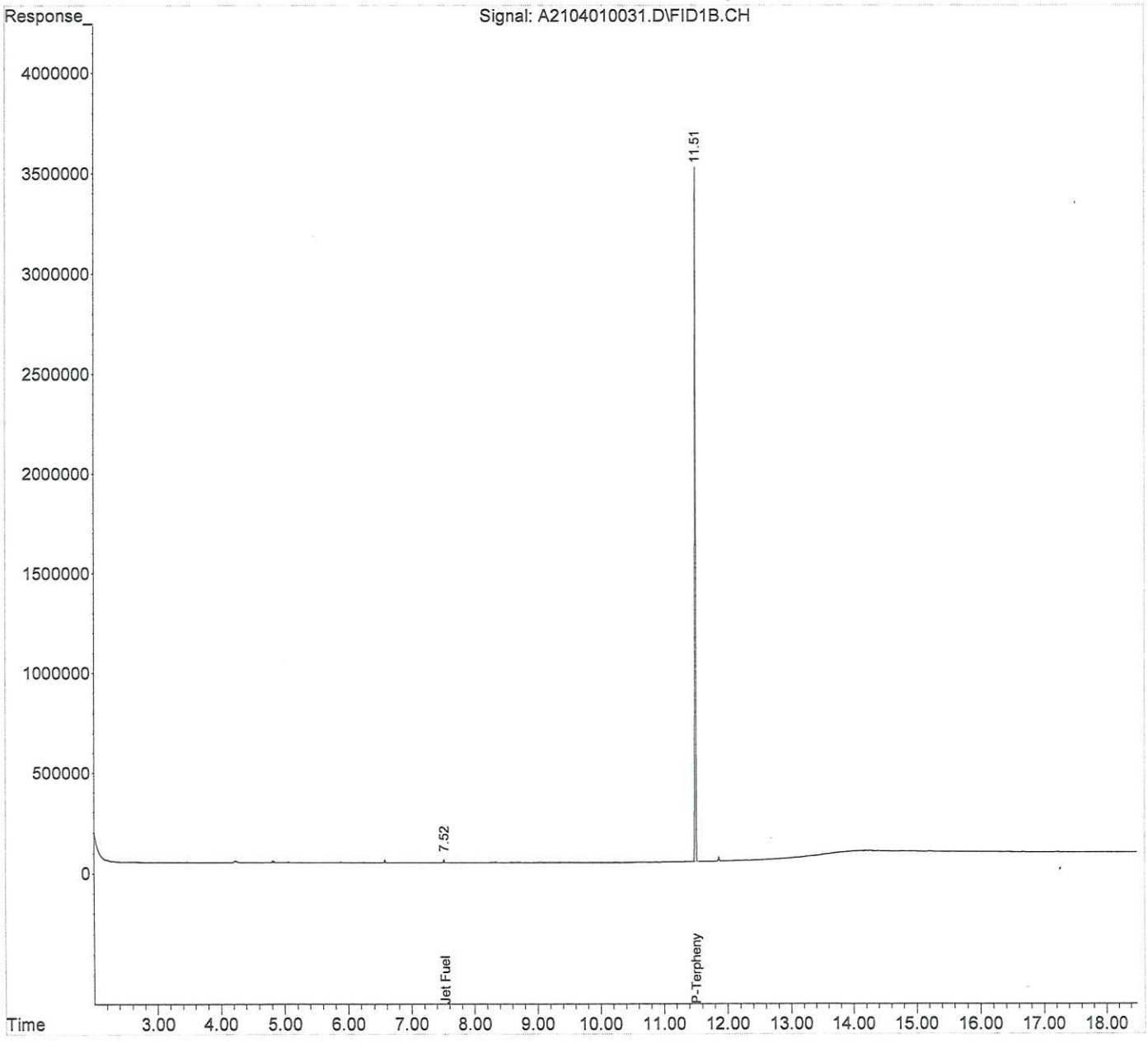


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010031.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 1:27 am
Operator : AC
Sample : 2100719-18
Misc : 1,B1C0453
ALS Vial : 21 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:48:10 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

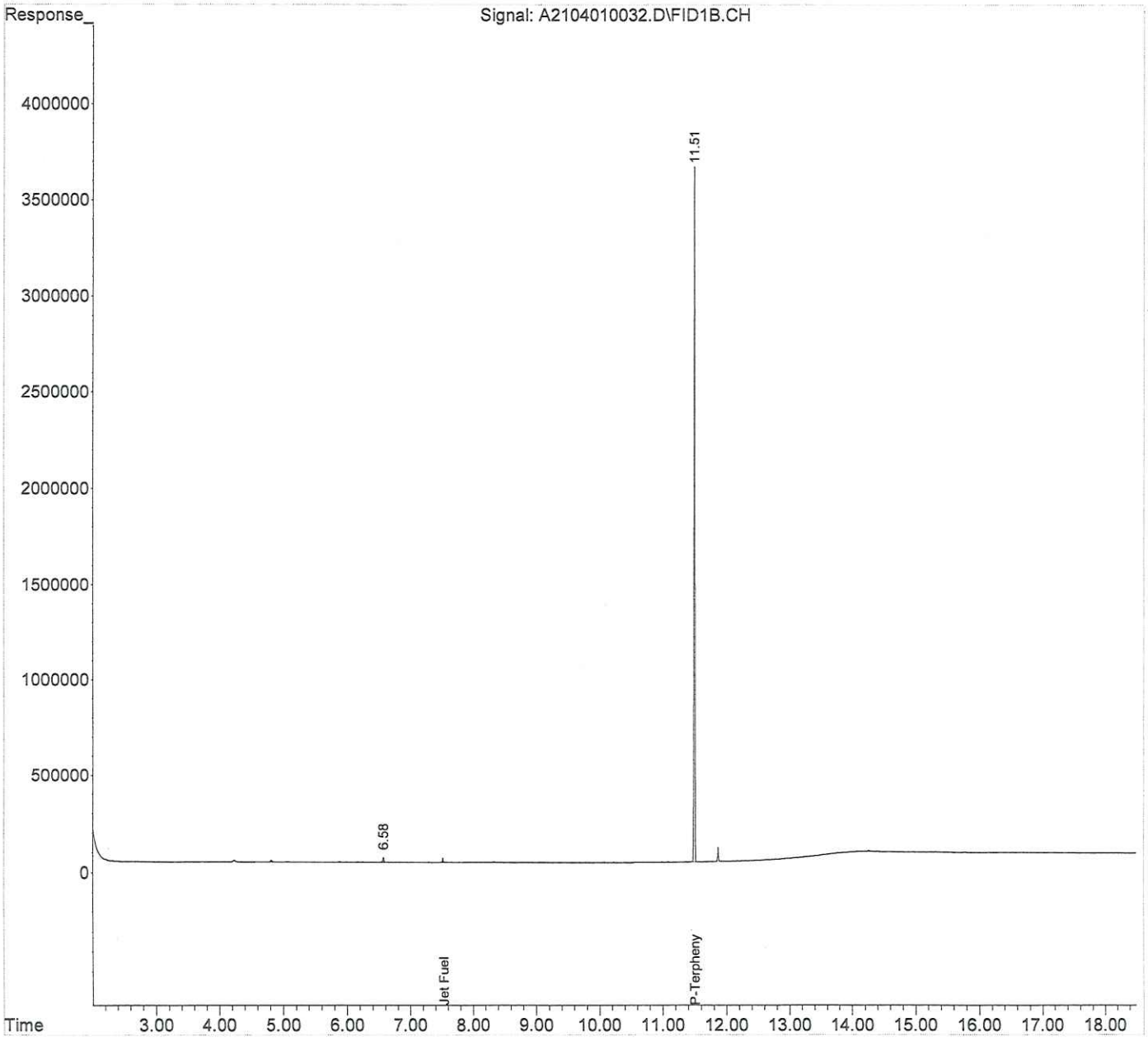


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010032.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 1:53 am
Operator : AC
Sample : 2100719-19
Misc : 1,B1C0453
ALS Vial : 22 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:48:25 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



April 02, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

Re: ATL Work Order Number : 2100732
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March 23, 2021 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 your Project Manager.

Sincerely,

Edgar P. Caballero
Laboratory Director

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-02/1-2	2100732-01	Soil	3/23/21 7:55	3/23/21 16:45
SB-02/5-7.5	2100732-02	Soil	3/23/21 8:00	3/23/21 16:45
SB-03/1-2	2100732-03	Soil	3/23/21 8:25	3/23/21 16:45
SB-03/5-7.5	2100732-04	Soil	3/23/21 8:30	3/23/21 16:45
SB-04/1-2	2100732-05	Soil	3/23/21 8:55	3/23/21 16:45
SB-04/5-7.5	2100732-06	Soil	3/23/21 9:05	3/23/21 16:45
SB-05/1-2	2100732-07	Soil	3/23/21 9:25	3/23/21 16:45
SB-05/5-7.5	2100732-08	Soil	3/23/21 9:35	3/23/21 16:45
DUP - 03232021	2100732-09	Soil	3/23/21 0:00	3/23/21 16:45
SB-06/1-2	2100732-10	Soil	3/23/21 10:30	3/23/21 16:45
SB-06/5-7.5	2100732-11	Soil	3/23/21 10:40	3/23/21 16:45
SB-01/1-2	2100732-12	Soil	3/23/21 11:00	3/23/21 16:45
SB-01/5-7.5	2100732-13	Soil	3/23/21 11:10	3/23/21 16:45
SB-07/1-2	2100732-14	Soil	3/23/21 12:50	3/23/21 16:45
SB-07/5-7.5	2100732-15	Soil	3/23/21 13:00	3/23/21 16:45
CS-13/0-2	2100732-16	Soil	3/23/21 13:10	3/23/21 16:45
CS-13/4-6	2100732-17	Soil	3/23/21 13:20	3/23/21 16:45
CS-07/0-2	2100732-18	Soil	3/23/21 13:50	3/23/21 16:45
CS-10/0-2	2100732-19	Soil	3/23/21 14:00	3/23/21 16:45
CS-10/4-6	2100732-20	Soil	3/23/21 14:10	3/23/21 16:45
CS-11/0-2	2100732-21	Soil	3/23/21 14:20	3/23/21 16:45
CS-11/4-6	2100732-22	Soil	3/23/21 14:30	3/23/21 16:45
CS-12/0-2	2100732-23	Soil	3/23/21 14:40	3/23/21 16:45
CS-12/4-6	2100732-24	Soil	3/23/21 14:50	3/23/21 16:45

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Arsenic	**1.5**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Barium	**41**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Beryllium	**1.2**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Chromium	**12**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Cobalt	**3.4**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Copper	**9.6**	2.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Lead	**3.7**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Nickel	**9.2**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Silver	**1.6**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Vanadium	**21**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	
Zinc	**28**	1.0	1	B1C0490	03/25/2021	03/25/21 14:40	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:16	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 05:46	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 05:46	
Surrogate: p-Terphenyl	*112 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 05:46*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1,1-Trichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1,2,2-Tetrachloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1,2-Trichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1-Dichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,1-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2,3-Trichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2,3-Trichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2,4-Trichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2,4-Trimethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2-Dibromo-3-chloropropane	ND	8.7	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2-Dibromoethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2-Dichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,2-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,3,5-Trimethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,3-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,3-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
1,4-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
2,2-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
2-Chlorotoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
4-Chlorotoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
4-Isopropyltoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Benzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Bromobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Bromochloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Bromodichloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Bromoform	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Bromomethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Carbon disulfide	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Carbon tetrachloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Chlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Chloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Chloroform	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Chloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
cis-1,2-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Di-isopropyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Dibromochloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Dibromomethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Dichlorodifluoromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Ethyl Acetate	ND	44	1	B1C0465	03/24/2021	03/24/21 15:24	
Ethyl Ether	ND	44	1	B1C0465	03/24/2021	03/24/21 15:24	
Ethyl tert-butyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Ethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Freon-113	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Hexachlorobutadiene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Isopropylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
m,p-Xylene	ND	8.7	1	B1C0465	03/24/2021	03/24/21 15:24	
Methylene chloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
MTBE	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
n-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
n-Propylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Naphthalene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
o-Xylene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
sec-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Styrene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
tert-Amyl methyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
tert-Butanol	ND	87	1	B1C0465	03/24/2021	03/24/21 15:24	
tert-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Tetrachloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Toluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
trans-1,2-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
trans-1,3-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Trichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Trichlorofluoromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Vinyl acetate	ND	44	1	B1C0465	03/24/2021	03/24/21 15:24	
Vinyl chloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 15:24	
Surrogate: 1,2-Dichloroethane-d4	*101 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 15:24*	
Surrogate: 4-Bromofluorobenzene	*95.9 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 15:24*	
Surrogate: Dibromofluoromethane	*91.0 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 15:24*	
Surrogate: Toluene-d8	*93.0 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 15:24*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 16:00	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:00	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:00	
Surrogate: 1,2-Dichlorobenzene-d4	*51.6 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: 2,4,6-Tribromophenol	*43.4 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: 2-Chlorophenol-d4	*53.1 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: 2-Fluorobiphenyl	*59.4 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: 2-Fluorophenol	*46.5 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: 4-Terphenyl-d14	*61.3 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 16:00*	
Surrogate: Nitrobenzene-d5	*56.9 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 16:00*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/1-2

Lab ID: 2100732-01

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*48.1 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 16:00*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/5-7.5

Lab ID: 2100732-02

Diesel Range Organics by EPA 8015B — **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 06:12	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 06:12	
Surrogate: p-Terphenyl	*110 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 06:12*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B — **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1,1-Trichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1,2,2-Tetrachloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1,2-Trichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1-Dichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,1-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2,3-Trichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2,3-Trichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2,4-Trichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2,4-Trimethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2-Dibromo-3-chloropropane	ND	9.1	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2-Dibromoethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2-Dichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,2-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,3,5-Trimethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,3-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,3-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
1,4-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
2,2-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
2-Chlorotoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
4-Chlorotoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
4-Isopropyltoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Benzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Bromobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Bromochloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Bromodichloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Bromoform	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-02/5-7.5

Lab ID: 2100732-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Carbon disulfide	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Carbon tetrachloride	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Chlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Chloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Chloroform	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Chloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
cis-1,2-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
cis-1,3-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Di-isopropyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Dibromochloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Dibromomethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Dichlorodifluoromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Ethyl Acetate	ND	45	1	B1C0465	03/24/2021	03/24/21 15:50	
Ethyl Ether	ND	45	1	B1C0465	03/24/2021	03/24/21 15:50	
Ethyl tert-butyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Ethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Freon-113	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Hexachlorobutadiene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Isopropylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
m,p-Xylene	ND	9.1	1	B1C0465	03/24/2021	03/24/21 15:50	
Methylene chloride	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
MTBE	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
n-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
n-Propylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Naphthalene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
o-Xylene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
sec-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Styrene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
tert-Amyl methyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
tert-Butanol	ND	91	1	B1C0465	03/24/2021	03/24/21 15:50	
tert-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Tetrachloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Toluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
trans-1,2-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
trans-1,3-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Trichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-02/5-7.5

Lab ID: 2100732-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Vinyl acetate	ND	45	1	B1C0465	03/24/2021	03/24/21 15:50	
Vinyl chloride	ND	4.5	1	B1C0465	03/24/2021	03/24/21 15:50	
Surrogate: 1,2-Dichloroethane-d4	*109 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 15:50*	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 15:50*	
Surrogate: Dibromofluoromethane	*88.5 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 15:50*	
Surrogate: Toluene-d8	*92.8 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 15:50*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Arsenic	**1.8**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Barium	**40**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Beryllium	**1.2**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Chromium	**11**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Cobalt	**3.1**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Copper	**9.1**	2.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Lead	**3.7**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Nickel	**8.6**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Silver	**1.6**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Vanadium	**19**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	
Zinc	**25**	1.0	1	B1C0490	03/25/2021	03/25/21 14:51	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:18	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 06:38	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 06:38	
Surrogate: p-Terphenyl	*114 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 06:38*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1,1-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1,2,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1,2-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,1-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2,3-Trichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2,3-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2,4-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2,4-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2-Dibromo-3-chloropropane	ND	9.6	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2-Dibromoethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,3,5-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,3-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,3-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
1,4-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
2,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
2-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
4-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
4-Isopropyltoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Benzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Bromobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Bromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Bromodichloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Bromoform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Bromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Carbon disulfide	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Carbon tetrachloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Chlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Chloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Chloroform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Chloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
cis-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Di-isopropyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Dibromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Dibromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Dichlorodifluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Ethyl Acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 16:17	
Ethyl Ether	ND	48	1	B1C0465	03/24/2021	03/24/21 16:17	
Ethyl tert-butyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Ethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Freon-113	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Hexachlorobutadiene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Isopropylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
m,p-Xylene	ND	9.6	1	B1C0465	03/24/2021	03/24/21 16:17	
Methylene chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
MTBE	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
n-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
n-Propylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Naphthalene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
o-Xylene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
sec-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Styrene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
tert-Amyl methyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
tert-Butanol	ND	96	1	B1C0465	03/24/2021	03/24/21 16:17	
tert-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Tetrachloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Toluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
trans-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
trans-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Trichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Trichlorofluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Vinyl acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 16:17	
Vinyl chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 16:17	
Surrogate: 1,2-Dichloroethane-d4	*92.3 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 16:17*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 16:17*	
Surrogate: Dibromofluoromethane	*94.8 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 16:17*	
Surrogate: Toluene-d8	*95.5 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 16:17*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 16:25	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 16:25	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 16:25	
Surrogate: 1,2-Dichlorobenzene-d4	*48.4 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: 2,4,6-Tribromophenol	*54.9 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: 2-Chlorophenol-d4	*49.4 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: 2-Fluorobiphenyl	*56.5 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: 2-Fluorophenol	*43.8 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: 4-Terphenyl-d14	*62.0 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 16:25*	
Surrogate: Nitrobenzene-d5	*51.2 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 16:25*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/1-2

Lab ID: 2100732-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*46.8 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 16:25*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-03/5-7.5

Lab ID: 2100732-04

Diesel Range Organics by EPA 8015B — **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 07:04	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 07:04	
Surrogate: p-Terphenyl	*109 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 07:04*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B — **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1,1-Trichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1,2,2-Tetrachloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1,2-Trichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1-Dichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,1-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2,3-Trichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2,3-Trichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2,4-Trichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2,4-Trimethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2-Dibromo-3-chloropropane	ND	8.9	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2-Dibromoethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2-Dichloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,2-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,3,5-Trimethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,3-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,3-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
1,4-Dichlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
2,2-Dichloropropane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
2-Chlorotoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
4-Chlorotoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
4-Isopropyltoluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Benzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Bromobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Bromochloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Bromodichloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Bromoform	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/5-7.5

Lab ID: 2100732-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Carbon disulfide	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Carbon tetrachloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Chlorobenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Chloroethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Chloroform	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Chloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
cis-1,2-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
cis-1,3-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Di-isopropyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Dibromochloromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Dibromomethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Dichlorodifluoromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Ethyl Acetate	ND	44	1	B1C0465	03/24/2021	03/24/21 16:43	
Ethyl Ether	ND	44	1	B1C0465	03/24/2021	03/24/21 16:43	
Ethyl tert-butyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Ethylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Freon-113	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Hexachlorobutadiene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Isopropylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
m,p-Xylene	ND	8.9	1	B1C0465	03/24/2021	03/24/21 16:43	
Methylene chloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
MTBE	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
n-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
n-Propylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Naphthalene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
o-Xylene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
sec-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Styrene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
tert-Amyl methyl ether	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
tert-Butanol	ND	89	1	B1C0465	03/24/2021	03/24/21 16:43	
tert-Butylbenzene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Tetrachloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Toluene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
trans-1,2-Dichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
trans-1,3-Dichloropropene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Trichloroethene	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-03/5-7.5

Lab ID: 2100732-04

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Vinyl acetate	ND	44	1	B1C0465	03/24/2021	03/24/21 16:43	
Vinyl chloride	ND	4.4	1	B1C0465	03/24/2021	03/24/21 16:43	
Surrogate: 1,2-Dichloroethane-d4	*102 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 16:43*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 16:43*	
Surrogate: Dibromofluoromethane	*102 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 16:43*	
Surrogate: Toluene-d8	*97.5 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 16:43*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Arsenic	**2.6**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Barium	**120**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Beryllium	**1.7**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Chromium	**15**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Cobalt	**4.8**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Copper	**15**	2.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Lead	**9.9**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Nickel	**13**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Silver	**2.4**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Vanadium	**29**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	
Zinc	**40**	1.0	1	B1C0490	03/25/2021	03/25/21 14:55	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:20	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**200**	100	10	B1C0495	03/25/2021	04/02/21 07:30	
Jet Fuel (Jet A)	ND	100	10	B1C0495	03/25/2021	04/02/21 07:30	
Surrogate: p-Terphenyl	*161 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 07:30*	S10

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1,1-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1,2,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1,2-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,1-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2,3-Trichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2,3-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2,4-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2,4-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2-Dibromo-3-chloropropane	ND	8.3	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2-Dibromoethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,3,5-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,3-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,3-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
1,4-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
2,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
2-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
4-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
4-Isopropyltoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Benzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Bromobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Bromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Bromodichloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Bromoform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Bromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Carbon disulfide	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Carbon tetrachloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Chlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Chloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Chloroform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Chloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
cis-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Di-isopropyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Dibromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Dibromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Dichlorodifluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Ethyl Acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 17:09	
Ethyl Ether	ND	41	1	B1C0465	03/24/2021	03/24/21 17:09	
Ethyl tert-butyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Ethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Freon-113	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Hexachlorobutadiene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Isopropylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
m,p-Xylene	ND	8.3	1	B1C0465	03/24/2021	03/24/21 17:09	
Methylene chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
MTBE	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
n-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
n-Propylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Naphthalene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
o-Xylene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
sec-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Styrene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
tert-Amyl methyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
tert-Butanol	ND	83	1	B1C0465	03/24/2021	03/24/21 17:09	
tert-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Tetrachloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Toluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
trans-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
trans-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Trichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Trichlorofluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Vinyl acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 17:09	
Vinyl chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 17:09	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 17:09*	
Surrogate: 4-Bromofluorobenzene	*92.3 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 17:09*	
Surrogate: Dibromofluoromethane	*96.7 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 17:09*	
Surrogate: Toluene-d8	*95.2 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 17:09*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
1,2-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
1,3-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
1,4-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4,5-Trichlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4,6-Trichlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4-Dichlorophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4-Dimethylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4-Dinitrophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,4-Dinitrotoluene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2,6-Dinitrotoluene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Chloronaphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Chlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Methylnaphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Methylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
2-Nitrophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
3,3′-Dichlorobenzidine	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
3-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4,6-Dinitro-2-methyphenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Bromophenyl-phenylether	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Chloro-3-methylphenol	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Chloroaniline	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Chlorophenyl-phenylether	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Methylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
4-Nitrophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Acenaphthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Acenaphthylene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzidine (M)	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzo(a)anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzo(a)pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzo(b)fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzo(g,h,i)perylene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzo(k)fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Benzoic acid	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
bis(2-chloroethoxy)methane	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
bis(2-Chloroethyl)ether	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
bis(2-chloroisopropyl)ether	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
bis(2-ethylhexyl)phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Butylbenzylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Chrysene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Di-n-butylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Di-n-octylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Dibenz(a,h)anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Dibenzofuran	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Diethyl phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Dimethyl phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Fluorene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Hexachlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Hexachlorobutadiene	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Hexachlorocyclopentadiene	ND	33000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Hexachloroethane	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Indeno(1,2,3-cd)pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Isophorone	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
N-Nitroso-di-n propylamine	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
N-Nitrosodiphenylamine	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Naphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Nitrobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Pentachlorophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Phenanthrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Phenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Pyridine	ND	82000	50	B1C0475	03/24/2021	03/25/21 16:51	D1
Surrogate: 1,2-Dichlorobenzene-d4	*70.0 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: 2,4,6-Tribromophenol	*60.7 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: 2-Chlorophenol-d4	*71.2 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: 2-Fluorobiphenyl	*83.5 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: 2-Fluorophenol	*56.6 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: 4-Terphenyl-d14	*82.0 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 16:51*	D1
Surrogate: Nitrobenzene-d5	*63.0 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 16:51*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/1-2

Lab ID: 2100732-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*54.6 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 16:51*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/5-7.5

Lab ID: 2100732-06

Diesel Range Organics by EPA 8015B — **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 07:56	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 07:56	
Surrogate: p-Terphenyl	*114 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 07:56*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B — **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1,1-Trichloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1,2,2-Tetrachloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1,2-Trichloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1-Dichloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1-Dichloroethene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,1-Dichloropropene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2,3-Trichloropropane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2,3-Trichlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2,4-Trichlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2,4-Trimethylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2-Dibromo-3-chloropropane	ND	10	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2-Dibromoethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2-Dichlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2-Dichloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,2-Dichloropropane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,3,5-Trimethylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,3-Dichlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,3-Dichloropropane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
1,4-Dichlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
2,2-Dichloropropane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
2-Chlorotoluene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
4-Chlorotoluene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
4-Isopropyltoluene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Benzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Bromobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Bromochloromethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Bromodichloromethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Bromoform	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/5-7.5

Lab ID: 2100732-06

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Carbon disulfide	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Carbon tetrachloride	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Chlorobenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Chloroethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Chloroform	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Chloromethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
cis-1,2-Dichloroethene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
cis-1,3-Dichloropropene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Di-isopropyl ether	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Dibromochloromethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Dibromomethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Dichlorodifluoromethane	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Ethyl Acetate	ND	50	1	B1C0465	03/24/2021	03/24/21 17:35	
Ethyl Ether	ND	50	1	B1C0465	03/24/2021	03/24/21 17:35	
Ethyl tert-butyl ether	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Ethylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Freon-113	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Hexachlorobutadiene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Isopropylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
m,p-Xylene	ND	10	1	B1C0465	03/24/2021	03/24/21 17:35	
Methylene chloride	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
MTBE	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
n-Butylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
n-Propylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Naphthalene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
o-Xylene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
sec-Butylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Styrene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
tert-Amyl methyl ether	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
tert-Butanol	ND	100	1	B1C0465	03/24/2021	03/24/21 17:35	
tert-Butylbenzene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Tetrachloroethene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Toluene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
trans-1,2-Dichloroethene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
trans-1,3-Dichloropropene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Trichloroethene	ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-04/5-7.5

Lab ID: 2100732-06

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane		ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Vinyl acetate		ND	50	1	B1C0465	03/24/2021	03/24/21 17:35	
Vinyl chloride		ND	5.0	1	B1C0465	03/24/2021	03/24/21 17:35	
Surrogate: 1,2-Dichloroethane-d4	*96.2 %*		*66 - 200*		B1C0465	03/24/2021	*03/24/21 17:35*	
Surrogate: 4-Bromofluorobenzene	*98.6 %*		*50 - 146*		B1C0465	03/24/2021	*03/24/21 17:35*	
Surrogate: Dibromofluoromethane	*99.0 %*		*77 - 159*		B1C0465	03/24/2021	*03/24/21 17:35*	
Surrogate: Toluene-d8	*91.4 %*		*81 - 128*		B1C0465	03/24/2021	*03/24/21 17:35*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Arsenic	**1.7**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Barium	**230**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Beryllium	**1.4**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Chromium	**12**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Cobalt	**3.6**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Copper	**13**	2.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Lead	**7.1**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Nickel	**10**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Silver	**2.1**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Vanadium	**24**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	
Zinc	**48**	1.0	1	B1C0490	03/25/2021	03/25/21 14:57	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:23	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	50	5	B1C0495	03/25/2021	04/02/21 08:22	
Jet Fuel (Jet A)	ND	50	5	B1C0495	03/25/2021	04/02/21 08:22	
Surrogate: p-Terphenyl	*216 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 08:22*	S1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1,1-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1,2,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1,2-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,1-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2,3-Trichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2,3-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2,4-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2,4-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2-Dibromo-3-chloropropane	ND	8.3	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2-Dibromoethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,3,5-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,3-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,3-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
1,4-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
2,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
2-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
4-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
4-Isopropyltoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Benzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Bromobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Bromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Bromodichloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Bromoform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Bromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Carbon disulfide	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Carbon tetrachloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Chlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Chloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Chloroform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Chloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
cis-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Di-isopropyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Dibromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Dibromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Dichlorodifluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Ethyl Acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 18:01	
Ethyl Ether	ND	41	1	B1C0465	03/24/2021	03/24/21 18:01	
Ethyl tert-butyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Ethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Freon-113	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Hexachlorobutadiene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Isopropylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
m,p-Xylene	ND	8.3	1	B1C0465	03/24/2021	03/24/21 18:01	
Methylene chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
MTBE	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
n-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
n-Propylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Naphthalene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
o-Xylene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
sec-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Styrene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
tert-Amyl methyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
tert-Butanol	ND	83	1	B1C0465	03/24/2021	03/24/21 18:01	
tert-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Tetrachloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Toluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
trans-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
trans-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Trichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Trichlorofluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Vinyl acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 18:01	
Vinyl chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 18:01	
Surrogate: 1,2-Dichloroethane-d4	*109 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 18:01*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 18:01*	
Surrogate: Dibromofluoromethane	*114 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 18:01*	
Surrogate: Toluene-d8	*94.7 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 18:01*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
1,2-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
1,3-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
1,4-Dichlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4,5-Trichlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4,6-Trichlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4-Dichlorophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4-Dimethylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4-Dinitrophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,4-Dinitrotoluene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2,6-Dinitrotoluene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Chloronaphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Chlorophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Methylnaphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Methylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
2-Nitrophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
3,3′-Dichlorobenzidine	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
3-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4,6-Dinitro-2-methyphenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Bromophenyl-phenylether	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Chloro-3-methylphenol	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Chloroaniline	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Chlorophenyl-phenylether	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Methylphenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Nitroaniline	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
4-Nitrophenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Acenaphthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Acenaphthylene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzidine (M)	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzo(a)anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzo(a)pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzo(b)fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzo(g,h,i)perylene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzo(k)fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Benzoic acid	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
bis(2-chloroethoxy)methane	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
bis(2-Chloroethyl)ether	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
bis(2-chloroisopropyl)ether	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
bis(2-ethylhexyl)phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Butylbenzylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Chrysene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Di-n-butylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Di-n-octylphthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Dibenz(a,h)anthracene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Dibenzofuran	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Diethyl phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Dimethyl phthalate	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Fluoranthene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Fluorene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Hexachlorobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Hexachlorobutadiene	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Hexachlorocyclopentadiene	ND	33000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Hexachloroethane	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Indeno(1,2,3-cd)pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Isophorone	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
N-Nitroso-di-n propylamine	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
N-Nitrosodiphenylamine	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Naphthalene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Nitrobenzene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Pentachlorophenol	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Phenanthrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Phenol	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Pyrene	ND	16000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Pyridine	ND	82000	50	B1C0475	03/24/2021	03/25/21 17:17	D1
Surrogate: 1,2-Dichlorobenzene-d4	*75.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 17:17*	D1
Surrogate: 2,4,6-Tribromophenol	*4.51 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 17:17*	D1, S10
Surrogate: 2-Chlorophenol-d4	*75.2 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 17:17*	D1
Surrogate: 2-Fluorobiphenyl	*99.5 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 17:17*	D1
Surrogate: 2-Fluorophenol	*57.1 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 17:17*	D1
Surrogate: 4-Terphenyl-d14	*102 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 17:17*	D1
Surrogate: Nitrobenzene-d5	*77.0 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 17:17*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/1-2

Lab ID: 2100732-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*66.2 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 17:17*	D1

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-05/5-7.5

Lab ID: 2100732-08

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 08:47	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 08:47	
Surrogate: p-Terphenyl	*116 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 08:47*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: TM

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1,1-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1,2,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1,2-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,1-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2,3-Trichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2,3-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2,4-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2,4-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2-Dibromo-3-chloropropane	ND	9.6	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2-Dibromoethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,3,5-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,3-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,3-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
1,4-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
2,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
2-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
4-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
4-Isopropyltoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Benzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Bromobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Bromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Bromodichloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Bromoform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/5-7.5

Lab ID: 2100732-08

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Carbon disulfide	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Carbon tetrachloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Chlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Chloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Chloroform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Chloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
cis-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
cis-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Di-isopropyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Dibromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Dibromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Dichlorodifluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Ethyl Acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 18:28	
Ethyl Ether	ND	48	1	B1C0465	03/24/2021	03/24/21 18:28	
Ethyl tert-butyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Ethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Freon-113	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Hexachlorobutadiene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Isopropylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
m,p-Xylene	ND	9.6	1	B1C0465	03/24/2021	03/24/21 18:28	
Methylene chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
MTBE	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
n-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
n-Propylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Naphthalene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
o-Xylene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
sec-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Styrene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
tert-Amyl methyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
tert-Butanol	ND	96	1	B1C0465	03/24/2021	03/24/21 18:28	
tert-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Tetrachloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Toluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
trans-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
trans-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Trichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-05/5-7.5

Lab ID: 2100732-08

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane		ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Vinyl acetate		ND	48	1	B1C0465	03/24/2021	03/24/21 18:28	
Vinyl chloride		ND	4.8	1	B1C0465	03/24/2021	03/24/21 18:28	
Surrogate: 1,2-Dichloroethane-d4	*101 %*		*66 - 200*		B1C0465	03/24/2021	*03/24/21 18:28*	
Surrogate: 4-Bromofluorobenzene	*98.5 %*		*50 - 146*		B1C0465	03/24/2021	*03/24/21 18:28*	
Surrogate: Dibromofluoromethane	*92.2 %*		*77 - 159*		B1C0465	03/24/2021	*03/24/21 18:28*	
Surrogate: Toluene-d8	*95.6 %*		*81 - 128*		B1C0465	03/24/2021	*03/24/21 18:28*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: DUP - 03232021

Lab ID: 2100732-09

Diesel Range Organics by EPA 8015B **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 09:13	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 09:13	
Surrogate: p-Terphenyl	*112 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 09:13*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1,1-Trichloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1,2,2-Tetrachloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1,2-Trichloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1-Dichloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1-Dichloroethene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,1-Dichloropropene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2,3-Trichloropropane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2,3-Trichlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2,4-Trichlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2,4-Trimethylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2-Dibromo-3-chloropropane	ND	9.4	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2-Dibromoethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2-Dichlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2-Dichloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,2-Dichloropropane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,3,5-Trimethylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,3-Dichlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,3-Dichloropropane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
1,4-Dichlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
2,2-Dichloropropane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
2-Chlorotoluene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
4-Chlorotoluene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
4-Isopropyltoluene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Benzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Bromobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Bromochloromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Bromodichloromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Bromoform	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: DUP - 03232021

Lab ID: 2100732-09

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Carbon disulfide	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Carbon tetrachloride	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Chlorobenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Chloroethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Chloroform	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Chloromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
cis-1,2-Dichloroethene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
cis-1,3-Dichloropropene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Di-isopropyl ether	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Dibromochloromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Dibromomethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Dichlorodifluoromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Ethyl Acetate	ND	47	1	B1C0465	03/24/2021	03/24/21 18:54	
Ethyl Ether	ND	47	1	B1C0465	03/24/2021	03/24/21 18:54	
Ethyl tert-butyl ether	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Ethylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Freon-113	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Hexachlorobutadiene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Isopropylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
m,p-Xylene	ND	9.4	1	B1C0465	03/24/2021	03/24/21 18:54	
Methylene chloride	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
MTBE	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
n-Butylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
n-Propylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Naphthalene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
o-Xylene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
sec-Butylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Styrene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
tert-Amyl methyl ether	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
tert-Butanol	ND	94	1	B1C0465	03/24/2021	03/24/21 18:54	
tert-Butylbenzene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Tetrachloroethene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Toluene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
trans-1,2-Dichloroethene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
trans-1,3-Dichloropropene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Trichloroethene	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: DUP - 03232021

Lab ID: 2100732-09

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Vinyl acetate	ND	47	1	B1C0465	03/24/2021	03/24/21 18:54	
Vinyl chloride	ND	4.7	1	B1C0465	03/24/2021	03/24/21 18:54	
Surrogate: 1,2-Dichloroethane-d4	*125 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 18:54*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 18:54*	
Surrogate: Dibromofluoromethane	*105 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 18:54*	
Surrogate: Toluene-d8	*94.2 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 18:54*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Arsenic	**2.0**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Barium	**53**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Beryllium	**1.4**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Chromium	**15**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Cobalt	**4.0**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Copper	**11**	2.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Lead	**4.1**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Nickel	**9.8**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Silver	**1.9**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Vanadium	**25**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	
Zinc	**27**	1.0	1	B1C0490	03/25/2021	03/25/21 14:58	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:25	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 09:39	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 09:39	
Surrogate: p-Terphenyl	*114 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 09:39*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1,1-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1,2,2-Tetrachloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1,2-Trichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,1-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2,3-Trichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2,3-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2,4-Trichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2,4-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2-Dibromo-3-chloropropane	ND	8.2	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2-Dibromoethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2-Dichloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,3,5-Trimethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,3-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,3-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
1,4-Dichlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
2,2-Dichloropropane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
2-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
4-Chlorotoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
4-Isopropyltoluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Benzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Bromobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Bromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Bromodichloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Bromoform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Bromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Carbon disulfide	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Carbon tetrachloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Chlorobenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Chloroethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Chloroform	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Chloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
cis-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Di-isopropyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Dibromochloromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Dibromomethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Dichlorodifluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Ethyl Acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 19:20	
Ethyl Ether	ND	41	1	B1C0465	03/24/2021	03/24/21 19:20	
Ethyl tert-butyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Ethylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Freon-113	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Hexachlorobutadiene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Isopropylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
m,p-Xylene	ND	8.2	1	B1C0465	03/24/2021	03/24/21 19:20	
Methylene chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
MTBE	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
n-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
n-Propylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Naphthalene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
o-Xylene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
sec-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Styrene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
tert-Amyl methyl ether	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
tert-Butanol	ND	82	1	B1C0465	03/24/2021	03/24/21 19:20	
tert-Butylbenzene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Tetrachloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Toluene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
trans-1,2-Dichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
trans-1,3-Dichloropropene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Trichloroethene	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Trichlorofluoromethane	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Vinyl acetate	ND	41	1	B1C0465	03/24/2021	03/24/21 19:20	
Vinyl chloride	ND	4.1	1	B1C0465	03/24/2021	03/24/21 19:20	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 19:20*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 19:20*	
Surrogate: Dibromofluoromethane	*106 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 19:20*	
Surrogate: Toluene-d8	*97.2 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 19:20*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 17:43	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 17:43	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 17:43	
Surrogate: 1,2-Dichlorobenzene-d4	*41.8 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: 2,4,6-Tribromophenol	*60.7 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: 2-Chlorophenol-d4	*44.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: 2-Fluorobiphenyl	*51.8 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: 2-Fluorophenol	*37.6 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: 4-Terphenyl-d14	*57.2 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 17:43*	
Surrogate: Nitrobenzene-d5	*45.1 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 17:43*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/1-2

Lab ID: 2100732-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*43.9 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 17:43*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-06/5-7.5

Lab ID: 2100732-11

Diesel Range Organics by EPA 8015B — **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 10:06	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 10:06	
Surrogate: p-Terphenyl	*114 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 10:06*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B — **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1,1-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1,2,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1,2-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,1-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2,3-Trichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2,3-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2,4-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2,4-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2-Dibromo-3-chloropropane	ND	9.7	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2-Dibromoethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,3,5-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,3-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,3-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
1,4-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
2,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
2-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
4-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
4-Isopropyltoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Benzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Bromobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Bromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Bromodichloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Bromoform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/5-7.5

Lab ID: 2100732-11

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Carbon disulfide	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Carbon tetrachloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Chlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Chloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Chloroform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Chloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
cis-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
cis-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Di-isopropyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Dibromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Dibromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Dichlorodifluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Ethyl Acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 19:46	
Ethyl Ether	ND	48	1	B1C0465	03/24/2021	03/24/21 19:46	
Ethyl tert-butyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Ethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Freon-113	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Hexachlorobutadiene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Isopropylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
m,p-Xylene	ND	9.7	1	B1C0465	03/24/2021	03/24/21 19:46	
Methylene chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
MTBE	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
n-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
n-Propylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Naphthalene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
o-Xylene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
sec-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Styrene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
tert-Amyl methyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
tert-Butanol	ND	97	1	B1C0465	03/24/2021	03/24/21 19:46	
tert-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Tetrachloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Toluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
trans-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
trans-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Trichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-06/5-7.5

Lab ID: 2100732-11

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane		ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Vinyl acetate		ND	48	1	B1C0465	03/24/2021	03/24/21 19:46	
Vinyl chloride		ND	4.8	1	B1C0465	03/24/2021	03/24/21 19:46	
Surrogate: 1,2-Dichloroethane-d4	*107 %*		*66 - 200*		B1C0465	03/24/2021	*03/24/21 19:46*	
Surrogate: 4-Bromofluorobenzene	*99.1 %*		*50 - 146*		B1C0465	03/24/2021	*03/24/21 19:46*	
Surrogate: Dibromofluoromethane	*101 %*		*77 - 159*		B1C0465	03/24/2021	*03/24/21 19:46*	
Surrogate: Toluene-d8	*94.7 %*		*81 - 128*		B1C0465	03/24/2021	*03/24/21 19:46*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Arsenic	**1.1**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Barium	**37**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Beryllium	**1.3**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Chromium	**15**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Cobalt	**3.1**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Copper	**8.7**	2.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Lead	**3.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Nickel	**60**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Silver	**1.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Vanadium	**20**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	
Zinc	**22**	1.0	1	B1C0490	03/25/2021	03/25/21 15:00	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:27	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 10:32	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 10:32	
Surrogate: p-Terphenyl	*113 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 10:32*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1,1-Trichloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1,2,2-Tetrachloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1,2-Trichloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1-Dichloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1-Dichloroethene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,1-Dichloropropene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2,3-Trichloropropane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2,3-Trichlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2,4-Trichlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2,4-Trimethylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2-Dibromo-3-chloropropane	ND	8.4	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2-Dibromoethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2-Dichlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2-Dichloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,2-Dichloropropane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,3,5-Trimethylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,3-Dichlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,3-Dichloropropane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
1,4-Dichlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
2,2-Dichloropropane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
2-Chlorotoluene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
4-Chlorotoluene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
4-Isopropyltoluene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Benzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Bromobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Bromochloromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Bromodichloromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Bromoform	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Bromomethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Carbon disulfide	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Carbon tetrachloride	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Chlorobenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Chloroethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Chloroform	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Chloromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
cis-1,2-Dichloroethene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Di-isopropyl ether	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Dibromochloromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Dibromomethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Dichlorodifluoromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Ethyl Acetate	ND	42	1	B1C0465	03/24/2021	03/24/21 20:12	
Ethyl Ether	ND	42	1	B1C0465	03/24/2021	03/24/21 20:12	
Ethyl tert-butyl ether	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Ethylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Freon-113	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Hexachlorobutadiene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Isopropylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
m,p-Xylene	ND	8.4	1	B1C0465	03/24/2021	03/24/21 20:12	
Methylene chloride	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
MTBE	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
n-Butylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
n-Propylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Naphthalene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
o-Xylene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
sec-Butylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Styrene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
tert-Amyl methyl ether	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
tert-Butanol	ND	84	1	B1C0465	03/24/2021	03/24/21 20:12	
tert-Butylbenzene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Tetrachloroethene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Toluene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
trans-1,2-Dichloroethene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
trans-1,3-Dichloropropene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Trichloroethene	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Trichlorofluoromethane	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Vinyl acetate	ND	42	1	B1C0465	03/24/2021	03/24/21 20:12	
Vinyl chloride	ND	4.2	1	B1C0465	03/24/2021	03/24/21 20:12	
Surrogate: 1,2-Dichloroethane-d4	*137 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 20:12*	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 20:12*	
Surrogate: Dibromofluoromethane	*125 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 20:12*	
Surrogate: Toluene-d8	*96.4 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 20:12*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 18:09	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:09	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:09	
Surrogate: 1,2-Dichlorobenzene-d4	*56.3 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: 2,4,6-Tribromophenol	*90.3 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: 2-Chlorophenol-d4	*56.4 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: 2-Fluorobiphenyl	*65.4 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: 2-Fluorophenol	*51.4 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: 4-Terphenyl-d14	*81.8 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 18:09*	
Surrogate: Nitrobenzene-d5	*59.5 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 18:09*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/1-2

Lab ID: 2100732-12

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*55.5 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 18:09*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-01/5-7.5

Lab ID: 2100732-13

Diesel Range Organics by EPA 8015B **Analyst: AC**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 10:58	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 10:58	
Surrogate: p-Terphenyl	*122 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 10:58*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1,1-Trichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1,2,2-Tetrachloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1,2-Trichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1-Dichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,1-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2,3-Trichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2,3-Trichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2,4-Trichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2,4-Trimethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2-Dibromo-3-chloropropane	ND	8.9	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2-Dibromoethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2-Dichloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,2-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,3,5-Trimethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,3-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,3-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
1,4-Dichlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
2,2-Dichloropropane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
2-Chlorotoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
4-Chlorotoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
4-Isopropyltoluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Benzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Bromobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Bromochloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Bromodichloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Bromoform	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/5-7.5

Lab ID: 2100732-13

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Carbon disulfide	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Carbon tetrachloride	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Chlorobenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Chloroethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Chloroform	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Chloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
cis-1,2-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
cis-1,3-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Di-isopropyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Dibromochloromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Dibromomethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Dichlorodifluoromethane	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Ethyl Acetate	ND	45	1	B1C0465	03/24/2021	03/24/21 20:38	
Ethyl Ether	ND	45	1	B1C0465	03/24/2021	03/24/21 20:38	
Ethyl tert-butyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Ethylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Freon-113	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Hexachlorobutadiene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Isopropylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
m,p-Xylene	ND	8.9	1	B1C0465	03/24/2021	03/24/21 20:38	
Methylene chloride	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
MTBE	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
n-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
n-Propylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Naphthalene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
o-Xylene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
sec-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Styrene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
tert-Amyl methyl ether	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
tert-Butanol	ND	89	1	B1C0465	03/24/2021	03/24/21 20:38	
tert-Butylbenzene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Tetrachloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Toluene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
trans-1,2-Dichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
trans-1,3-Dichloropropene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Trichloroethene	ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-01/5-7.5

Lab ID: 2100732-13

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane		ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Vinyl acetate		ND	45	1	B1C0465	03/24/2021	03/24/21 20:38	
Vinyl chloride		ND	4.5	1	B1C0465	03/24/2021	03/24/21 20:38	
Surrogate: 1,2-Dichloroethane-d4	*108 %*		*66 - 200*		B1C0465	03/24/2021	*03/24/21 20:38*	
Surrogate: 4-Bromofluorobenzene	*97.5 %*		*50 - 146*		B1C0465	03/24/2021	*03/24/21 20:38*	
Surrogate: Dibromofluoromethane	*102 %*		*77 - 159*		B1C0465	03/24/2021	*03/24/21 20:38*	
Surrogate: Toluene-d8	*99.5 %*		*81 - 128*		B1C0465	03/24/2021	*03/24/21 20:38*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Arsenic	**3.5**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Barium	**65**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Beryllium	**1.6**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Chromium	**16**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Cobalt	**4.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Copper	**15**	2.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Lead	**6.4**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Nickel	**12**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Silver	**2.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Vanadium	**24**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	
Zinc	**37**	1.0	1	B1C0490	03/25/2021	03/25/21 15:01	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:30	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 11:50	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 11:50	
Surrogate: p-Terphenyl	*118 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 11:50*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1,1-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1,2,2-Tetrachloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1,2-Trichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,1-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2,3-Trichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2,3-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2,4-Trichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2,4-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2-Dibromo-3-chloropropane	ND	9.6	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2-Dibromoethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2-Dichloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,3,5-Trimethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,3-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,3-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
1,4-Dichlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
2,2-Dichloropropane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
2-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
4-Chlorotoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
4-Isopropyltoluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Benzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Bromobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Bromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Bromodichloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Bromoform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Bromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Carbon disulfide	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Carbon tetrachloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Chlorobenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Chloroethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Chloroform	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Chloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
cis-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Di-isopropyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Dibromochloromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Dibromomethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Dichlorodifluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Ethyl Acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 21:05	
Ethyl Ether	ND	48	1	B1C0465	03/24/2021	03/24/21 21:05	
Ethyl tert-butyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Ethylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Freon-113	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Hexachlorobutadiene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Isopropylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
m,p-Xylene	ND	9.6	1	B1C0465	03/24/2021	03/24/21 21:05	
Methylene chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
MTBE	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
n-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
n-Propylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Naphthalene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
o-Xylene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
sec-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Styrene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
tert-Amyl methyl ether	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
tert-Butanol	ND	96	1	B1C0465	03/24/2021	03/24/21 21:05	
tert-Butylbenzene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Tetrachloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Toluene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
trans-1,2-Dichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
trans-1,3-Dichloropropene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Trichloroethene	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Trichlorofluoromethane	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Vinyl acetate	ND	48	1	B1C0465	03/24/2021	03/24/21 21:05	
Vinyl chloride	ND	4.8	1	B1C0465	03/24/2021	03/24/21 21:05	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*66 - 200*		B1C0465	03/24/2021	*03/24/21 21:05*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*50 - 146*		B1C0465	03/24/2021	*03/24/21 21:05*	
Surrogate: Dibromofluoromethane	*101 %*	*77 - 159*		B1C0465	03/24/2021	*03/24/21 21:05*	
Surrogate: Toluene-d8	*92.8 %*	*81 - 128*		B1C0465	03/24/2021	*03/24/21 21:05*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860	Report To :	Shari Schwartzer
Los Angeles , CA 900071	Reported :	04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 18:35	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 18:35	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 18:35	
Surrogate: 1,2-Dichlorobenzene-d4	*55.1 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: 2,4,6-Tribromophenol	*52.2 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: 2-Chlorophenol-d4	*56.8 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: 2-Fluorobiphenyl	*62.8 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: 2-Fluorophenol	*50.6 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: 4-Terphenyl-d14	*64.1 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 18:35*	
Surrogate: Nitrobenzene-d5	*58.8 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 18:35*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/1-2

Lab ID: 2100732-14

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*54.0 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 18:35*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: SB-07/5-7.5

Lab ID: 2100732-15

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 12:17	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 12:17	
Surrogate: p-Terphenyl	*120 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 12:17*	

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: TM

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1,1-Trichloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1,2,2-Tetrachloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1,2-Trichloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1-Dichloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1-Dichloroethene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,1-Dichloropropene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2,3-Trichloropropane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2,3-Trichlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2,4-Trichlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2,4-Trimethylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2-Dibromo-3-chloropropane	ND	10	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2-Dibromoethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2-Dichlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2-Dichloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,2-Dichloropropane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,3,5-Trimethylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,3-Dichlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,3-Dichloropropane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
1,4-Dichlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
2,2-Dichloropropane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
2-Chlorotoluene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
4-Chlorotoluene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
4-Isopropyltoluene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Benzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Bromobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Bromochloromethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Bromodichloromethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Bromoform	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/5-7.5

Lab ID: 2100732-15

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Carbon disulfide	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Carbon tetrachloride	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Chlorobenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Chloroethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Chloroform	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Chloromethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
cis-1,2-Dichloroethene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
cis-1,3-Dichloropropene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Di-isopropyl ether	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Dibromochloromethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Dibromomethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Dichlorodifluoromethane	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Ethyl Acetate	ND	52	1	B1C0465	03/24/2021	03/24/21 21:31	
Ethyl Ether	ND	52	1	B1C0465	03/24/2021	03/24/21 21:31	
Ethyl tert-butyl ether	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Ethylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Freon-113	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Hexachlorobutadiene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Isopropylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
m,p-Xylene	ND	10	1	B1C0465	03/24/2021	03/24/21 21:31	
Methylene chloride	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
MTBE	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
n-Butylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
n-Propylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Naphthalene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
o-Xylene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
sec-Butylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Styrene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
tert-Amyl methyl ether	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
tert-Butanol	ND	100	1	B1C0465	03/24/2021	03/24/21 21:31	
tert-Butylbenzene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Tetrachloroethene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Toluene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
trans-1,2-Dichloroethene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
trans-1,3-Dichloropropene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Trichloroethene	ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: SB-07/5-7.5

Lab ID: 2100732-15

Volatile Organic Compounds by EPA 5035 / EPA 8260B **Analyst: TM**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane		ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Vinyl acetate		ND	52	1	B1C0465	03/24/2021	03/24/21 21:31	
Vinyl chloride		ND	5.2	1	B1C0465	03/24/2021	03/24/21 21:31	
Surrogate: 1,2-Dichloroethane-d4	*109 %*		*66 - 200*		B1C0465	03/24/2021	*03/24/21 21:31*	
Surrogate: 4-Bromofluorobenzene	*102 %*		*50 - 146*		B1C0465	03/24/2021	*03/24/21 21:31*	
Surrogate: Dibromofluoromethane	*107 %*		*77 - 159*		B1C0465	03/24/2021	*03/24/21 21:31*	
Surrogate: Toluene-d8	*97.4 %*		*81 - 128*		B1C0465	03/24/2021	*03/24/21 21:31*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/0-2

Lab ID: 2100732-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Arsenic	**2.6**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Barium	**77**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Beryllium	**1.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Chromium	**15**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Cobalt	**4.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Copper	**22**	2.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Lead	**44**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Nickel	**10**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Silver	**2.9**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Vanadium	**27**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	
Zinc	**90**	1.0	1	B1C0490	03/25/2021	03/25/21 15:03	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:32	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 12:43	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 12:43	
Surrogate: p-Terphenyl	*116 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 12:43*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/0-2

Lab ID: 2100732-16

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/0-2

Lab ID: 2100732-16

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:01	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:01	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:01	
Surrogate: 1,2-Dichlorobenzene-d4	*59.2 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: 2,4,6-Tribromophenol	*72.3 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: 2-Chlorophenol-d4	*60.8 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: 2-Fluorobiphenyl	*66.8 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: 2-Fluorophenol	*53.4 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: 4-Terphenyl-d14	*72.1 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 19:01*	
Surrogate: Nitrobenzene-d5	*60.4 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 19:01*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/0-2

Lab ID: 2100732-16

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*57.3 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 19:01*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/4-6

Lab ID: 2100732-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Arsenic	**2.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Barium	**100**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Beryllium	**2.0**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Chromium	**16**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Cobalt	**4.4**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Copper	**25**	2.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Lead	**64**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Nickel	**11**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Silver	**3.3**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Vanadium	**29**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	
Zinc	**100**	1.0	1	B1C0490	03/25/2021	03/25/21 15:04	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:39	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	50	5	B1C0495	03/25/2021	04/02/21 13:09	
Jet Fuel (Jet A)	ND	50	5	B1C0495	03/25/2021	04/02/21 13:09	
Surrogate: p-Terphenyl	*137 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 13:09*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/4-6

Lab ID: 2100732-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-13/4-6

Lab ID: 2100732-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:27	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:27	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:27	
Surrogate: 1,2-Dichlorobenzene-d4	*63.3 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: 2,4,6-Tribromophenol	*83.5 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: 2-Chlorophenol-d4	*64.3 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: 2-Fluorobiphenyl	*71.4 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: 2-Fluorophenol	*57.6 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: 4-Terphenyl-d14	*77.3 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 19:27*	
Surrogate: Nitrobenzene-d5	*67.7 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 19:27*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-13/4-6

Lab ID: 2100732-17

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*60.9 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 19:27*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-07/0-2

Lab ID: 2100732-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Arsenic	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Barium	**59**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Beryllium	**1.3**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Chromium	**11**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Cobalt	**6.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Copper	**14**	2.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Lead	**5.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Nickel	**7.1**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Silver	**1.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Vanadium	**39**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	
Zinc	**37**	1.0	1	B1C0490	03/25/2021	03/25/21 15:06	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:42	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 13:36	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 13:36	
Surrogate: p-Terphenyl	*115 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 13:36*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-07/0-2

Lab ID: 2100732-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
3,3′-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-07/0-2

Lab ID: 2100732-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 19:52	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 19:52	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 19:52	
Surrogate: 1,2-Dichlorobenzene-d4	*56.2 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: 2,4,6-Tribromophenol	*70.6 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: 2-Chlorophenol-d4	*56.0 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: 2-Fluorobiphenyl	*66.8 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: 2-Fluorophenol	*51.0 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: 4-Terphenyl-d14	*75.5 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 19:52*	
Surrogate: Nitrobenzene-d5	*59.8 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 19:52*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-07/0-2

Lab ID: 2100732-18

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*53.8 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 19:52*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/0-2

Lab ID: 2100732-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Arsenic	**4.6**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Barium	**160**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Beryllium	**2.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Cadmium	**1.0**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Chromium	**22**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Cobalt	**6.3**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Copper	**23**	2.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Lead	**36**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Nickel	**16**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Silver	**4.4**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Vanadium	**41**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	
Zinc	**76**	1.0	1	B1C0490	03/25/2021	03/25/21 15:07	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0469	03/25/2021	03/26/21 12:44	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 14:02	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 14:02	
Surrogate: p-Terphenyl	*118 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 14:02*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-10/0-2

Lab ID: 2100732-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-10/0-2

Lab ID: 2100732-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 20:18	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 20:18	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 20:18	
Surrogate: 1,2-Dichlorobenzene-d4	*53.0 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: 2,4,6-Tribromophenol	*68.6 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: 2-Chlorophenol-d4	*55.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: 2-Fluorobiphenyl	*66.5 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: 2-Fluorophenol	*47.3 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: 4-Terphenyl-d14	*69.7 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 20:18*	
Surrogate: Nitrobenzene-d5	*57.8 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 20:18*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/0-2

Lab ID: 2100732-19

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*49.9 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 20:18*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/4-6

Lab ID: 2100732-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Arsenic	**3.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Barium	**92**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Beryllium	**1.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Cadmium	**9.0**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Chromium	**21**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Cobalt	**4.3**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Copper	**28**	2.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Lead	**65**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Nickel	**14**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Silver	**2.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Vanadium	**30**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	
Zinc	**68**	1.0	1	B1C0490	03/25/2021	03/25/21 15:09	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0491	03/26/2021	03/26/21 14:34	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	1000	100	B1C0496	03/25/2021	04/02/21 14:16	
Jet Fuel (Jet A)	ND	1000	100	B1C0496	03/25/2021	04/02/21 14:16	
Surrogate: p-Terphenyl	*0%*	*62 - 141*		B1C0496	03/25/2021	*04/02/21 14:16*	S4

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/4-6

Lab ID: 2100732-20

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
1,2-Dichlorobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
1,3-Dichlorobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
1,4-Dichlorobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4,5-Trichlorophenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4,6-Trichlorophenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4-Dichlorophenol	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4-Dimethylphenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4-Dinitrophenol	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,4-Dinitrotoluene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2,6-Dinitrotoluene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Chloronaphthalene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Chlorophenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Methylnaphthalene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Methylphenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Nitroaniline	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
2-Nitrophenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
3,3′-Dichlorobenzidine	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
3-Nitroaniline	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4,6-Dinitro-2-methyphenol	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Bromophenyl-phenylether	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Chloro-3-methylphenol	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Chloroaniline	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Chlorophenyl-phenylether	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Methylphenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Nitroaniline	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
4-Nitrophenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Acenaphthene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Acenaphthylene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Anthracene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzidine (M)	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzo(a)anthracene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzo(a)pyrene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzo(b)fluoranthene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzo(g,h,i)perylene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzo(k)fluoranthene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Benzoic acid	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1

Certificate of Analysis

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Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/4-6

Lab ID: 2100732-20

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
bis(2-chloroethoxy)methane	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
bis(2-Chloroethyl)ether	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
bis(2-chloroisopropyl)ether	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
bis(2-ethylhexyl)phthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Butylbenzylphthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Chrysene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Di-n-butylphthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Di-n-octylphthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Dibenz(a,h)anthracene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Dibenzofuran	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Diethyl phthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Dimethyl phthalate	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Fluoranthene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Fluorene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Hexachlorobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Hexachlorobutadiene	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Hexachlorocyclopentadiene	ND	66000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Hexachloroethane	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Indeno(1,2,3-cd)pyrene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Isophorone	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
N-Nitroso-di-n propylamine	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
N-Nitrosodiphenylamine	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Naphthalene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Nitrobenzene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Pentachlorophenol	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Phenanthrene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Phenol	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Pyrene	ND	33000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Pyridine	ND	160000	100	B1C0475	03/24/2021	03/25/21 20:44	D1
Surrogate: 1,2-Dichlorobenzene-d4	*57.0 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: 2,4,6-Tribromophenol	*16.0 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: 2-Chlorophenol-d4	*36.1 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: 2-Fluorobiphenyl	*61.0 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: 2-Fluorophenol	*33.1 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: 4-Terphenyl-d14	*63.0 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 20:44*	D1
Surrogate: Nitrobenzene-d5	*47.0 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 20:44*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-10/4-6

Lab ID: 2100732-20

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*36.1 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 20:44*	D1

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-11/0-2

Lab ID: 2100732-21

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Arsenic	**3.6**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Barium	**130**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Beryllium	**2.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Chromium	**20**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Cobalt	**5.5**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Copper	**22**	2.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Lead	**26**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Nickel	**14**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Silver	**3.5**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Vanadium	**36**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	
Zinc	**72**	1.0	1	B1C0490	03/25/2021	03/25/21 15:13	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0491	03/26/2021	03/26/21 14:36	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	200	20	B1C0496	03/25/2021	04/02/21 14:20	
Jet Fuel (Jet A)	ND	200	20	B1C0496	03/25/2021	04/02/21 14:20	
Surrogate: p-Terphenyl	*0%*	*62 - 141*		B1C0496	03/25/2021	*04/02/21 14:20*	S4

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-11/0-2

Lab ID: 2100732-21

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
3,3′-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-11/0-2

Lab ID: 2100732-21

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 21:09	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:09	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:09	
Surrogate: 1,2-Dichlorobenzene-d4	*66.9 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: 2,4,6-Tribromophenol	*95.2 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: 2-Chlorophenol-d4	*69.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: 2-Fluorobiphenyl	*80.3 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: 2-Fluorophenol	*58.6 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: 4-Terphenyl-d14	*82.8 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 21:09*	
Surrogate: Nitrobenzene-d5	*69.7 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 21:09*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-11/0-2

Lab ID: 2100732-21

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*65.5 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 21:09*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-11/4-6

Lab ID: 2100732-22

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Arsenic	**1.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Barium	**41**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Beryllium	**1.4**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Chromium	**13**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Cobalt	**3.9**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Copper	**12**	2.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Lead	**4.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Nickel	**9.7**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Silver	**1.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Vanadium	**24**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	
Zinc	**27**	1.0	1	B1C0490	03/25/2021	03/25/21 15:15	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0491	03/26/2021	03/26/21 14:39	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	10	1	B1C0495	03/25/2021	04/02/21 14:29	
Jet Fuel (Jet A)	ND	10	1	B1C0495	03/25/2021	04/02/21 14:29	
Surrogate: p-Terphenyl	*107 %*	*62 - 141*		B1C0495	03/25/2021	*04/02/21 14:29*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-11/4-6

Lab ID: 2100732-22

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-11/4-6

Lab ID: 2100732-22

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 21:35	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 21:35	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 21:35	
Surrogate: 1,2-Dichlorobenzene-d4	*63.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: 2,4,6-Tribromophenol	*83.2 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: 2-Chlorophenol-d4	*65.2 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: 2-Fluorobiphenyl	*76.4 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: 2-Fluorophenol	*56.4 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: 4-Terphenyl-d14	*92.0 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 21:35*	
Surrogate: Nitrobenzene-d5	*69.5 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 21:35*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-11/4-6

Lab ID: 2100732-22

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*60.6 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 21:35*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/0-2

Lab ID: 2100732-23

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Arsenic	**4.2**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Barium	**150**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Beryllium	**2.4**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Chromium	**21**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Cobalt	**6.1**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Copper	**25**	2.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Lead	**140**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Nickel	**16**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Silver	**3.8**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Vanadium	**39**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	
Zinc	**69**	1.0	1	B1C0490	03/25/2021	03/25/21 15:16	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0491	03/26/2021	03/26/21 14:41	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	50	5	B1C0496	03/25/2021	04/02/21 14:23	
Jet Fuel (Jet A)	ND	50	5	B1C0496	03/25/2021	04/02/21 14:23	
Surrogate: p-Terphenyl	*128 %*	*62 - 141*		B1C0496	03/25/2021	*04/02/21 14:23*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/0-2

Lab ID: 2100732-23

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
3,3′-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-12/0-2

Lab ID: 2100732-23

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Fluoranthene	**620**	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 22:00	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
Phenanthrene	**470**	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Pyrene	**780**	330	1	B1C0475	03/24/2021	03/25/21 22:00	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:00	
Surrogate: 1,2-Dichlorobenzene-d4	*59.9 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: 2,4,6-Tribromophenol	*93.4 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: 2-Chlorophenol-d4	*60.1 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: 2-Fluorobiphenyl	*68.5 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: 2-Fluorophenol	*51.0 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: 4-Terphenyl-d14	*67.3 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 22:00*	
Surrogate: Nitrobenzene-d5	*62.1 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 22:00*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/0-2

Lab ID: 2100732-23

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*54.7 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 22:00*	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/4-6

Lab ID: 2100732-24

Title 22 Metals by ICP-AES EPA 6010B

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Arsenic	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Barium	**39**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Beryllium	**1.3**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Cadmium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Chromium	**12**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Cobalt	**3.2**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Copper	**8.7**	2.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Lead	**4.3**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Molybdenum	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Nickel	**9.0**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Selenium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Silver	**1.7**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Thallium	ND	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Vanadium	**22**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	
Zinc	**23**	1.0	1	B1C0490	03/25/2021	03/25/21 14:43	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: AMP

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B1C0491	03/26/2021	03/26/21 14:43	

Diesel Range Organics by EPA 8015B

Analyst: AC

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	50	5	B1C0496	03/25/2021	04/02/21 14:25	
Jet Fuel (Jet A)	ND	50	5	B1C0496	03/25/2021	04/02/21 14:25	
Surrogate: p-Terphenyl	*125 %*	*62 - 141*		B1C0496	03/25/2021	*04/02/21 14:25*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Client Sample ID: CS-12/4-6

Lab ID: 2100732-24

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
1,2-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
1,3-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
1,4-Dichlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4,5-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4,6-Trichlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4-Dichlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4-Dimethylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4-Dinitrophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
2,4-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2,6-Dinitrotoluene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Chloronaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Chlorophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Methylnaphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
2-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
3,3´-Dichlorobenzidine	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
3-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
4,6-Dinitro-2-methyphenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Bromophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Chloro-3-methylphenol	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Chloroaniline	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Chlorophenyl-phenylether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Methylphenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Nitroaniline	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
4-Nitrophenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Acenaphthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Acenaphthylene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzidine (M)	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzo(a)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzo(a)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzo(b)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzo(g,h,i)perylene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzo(k)fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Benzoic acid	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/4-6

Lab ID: 2100732-24

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzyl alcohol	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
bis(2-chloroethoxy)methane	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
bis(2-Chloroethyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
bis(2-chloroisopropyl)ether	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
bis(2-ethylhexyl)phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Butylbenzylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Chrysene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Di-n-butylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Di-n-octylphthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Dibenz(a,h)anthracene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Dibenzofuran	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Diethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Dimethyl phthalate	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Fluoranthene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Fluorene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Hexachlorobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Hexachlorobutadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
Hexachlorocyclopentadiene	ND	660	1	B1C0475	03/24/2021	03/25/21 22:26	
Hexachloroethane	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Indeno(1,2,3-cd)pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Isophorone	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
N-Nitroso-di-n propylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
N-Nitrosodiphenylamine	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Naphthalene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Nitrobenzene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Pentachlorophenol	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
Phenanthrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Phenol	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Pyrene	ND	330	1	B1C0475	03/24/2021	03/25/21 22:26	
Pyridine	ND	1600	1	B1C0475	03/24/2021	03/25/21 22:26	
Surrogate: 1,2-Dichlorobenzene-d4	*63.6 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: 2,4,6-Tribromophenol	*72.6 %*	*11 - 144*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: 2-Chlorophenol-d4	*62.5 %*	*34 - 104*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: 2-Fluorobiphenyl	*73.9 %*	*36 - 113*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: 2-Fluorophenol	*55.3 %*	*27 - 97*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: 4-Terphenyl-d14	*86.6 %*	*36 - 136*		B1C0475	03/24/2021	*03/25/21 22:26*	
Surrogate: Nitrobenzene-d5	*68.6 %*	*35 - 110*		B1C0475	03/24/2021	*03/25/21 22:26*	

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Los Angeles , CA 900071		Reported :	04/02/2021

Client Sample ID: CS-12/4-6

Lab ID: 2100732-24

Semivolatile Organic Compounds by EPA 8270C **Analyst: EM**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Phenol-d6	*57.9 %*	*26 - 108*		B1C0475	03/24/2021	*03/25/21 22:26*	

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Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
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Los Angeles , CA 900071	Reported : 04/02/2021

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0490 - EPA 3050B_S										
Blank (B1C0490-BLK1)					Prepared: 3/25/2021 Analyzed: 3/25/2021					
Antimony	ND	2.0	0.51							
Arsenic	ND	1.0	0.12							
Barium	ND	1.0	0.12							
Beryllium	ND	1.0	0.03							
Cadmium	ND	1.0	0.14							
Chromium	ND	1.0	0.26							
Cobalt	ND	1.0	0.07							
Copper	ND	2.0	0.19							
Lead	ND	1.0	0.18							
Molybdenum	ND	1.0	0.12							
Nickel	ND	1.0	0.18							
Selenium	ND	1.0	0.40							
Silver	ND	1.0	0.12							
Thallium	ND	1.0	0.38							
Vanadium	ND	1.0	0.06							
Zinc	ND	1.0	0.15							
LCS (B1C0490-BS1)					Prepared: 3/25/2021 Analyzed: 3/25/2021					
Antimony	27.0021	2.0	0.51	25.0000		108	80 - 120			
Arsenic	26.8634	1.0	0.12	25.0000		107	80 - 120			
Barium	26.0960	1.0	0.12	25.0000		104	80 - 120			
Beryllium	28.3452	1.0	0.03	25.0100		113	80 - 120			
Cadmium	26.7900	1.0	0.14	25.0000		107	80 - 120			
Chromium	26.3995	1.0	0.26	25.0000		106	80 - 120			
Cobalt	27.1372	1.0	0.07	25.0000		109	80 - 120			
Copper	25.9913	2.0	0.19	25.0000		104	80 - 120			
Lead	29.6051	1.0	0.18	25.0000		118	80 - 120			
Molybdenum	28.3478	1.0	0.12	25.0000		113	80 - 120			
Nickel	27.1523	1.0	0.18	25.0000		109	80 - 120			
Selenium	27.9335	1.0	0.40	25.0000		112	80 - 120			
Silver	13.1976	1.0	0.12	12.5000		106	80 - 120			
Thallium	27.2899	1.0	0.38	25.0000		109	80 - 120			
Vanadium	24.4412	1.0	0.06	25.0000		97.8	80 - 120			
Zinc	27.3731	1.0	0.15	25.0000		109	80 - 120			
Duplicate (B1C0490-DUP1)				**Source: 2100732-01**	Prepared: 3/25/2021 Analyzed: 3/25/2021					
Antimony	ND	2.0	0.51		0.723826			NR	20	
Arsenic	1.82793	1.0	0.12		1.52473			18.1	20	
Barium	41.4144	1.0	0.12		41.3382			0.184	20	
Beryllium	1.21218	1.0	0.03		1.21468			0.206	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0490 - EPA 3050B_S (continued)										
Duplicate (B1C0490-DUP1) - Continued			**Source: 2100732-01**		Prepared: 3/25/2021 Analyzed: 3/25/2021					
Cadmium	0.263940	1.0	0.14		0.262814			0.427	20	
Chromium	11.9804	1.0	0.26		11.9071			0.613	20	
Cobalt	3.39101	1.0	0.07		3.38557			0.161	20	
Copper	9.57046	2.0	0.19		9.58864			0.190	20	
Lead	3.80267	1.0	0.18		3.70468			2.61	20	
Molybdenum	ND	1.0	0.12		ND			NR	20	
Nickel	9.27324	1.0	0.18		9.23524			0.411	20	
Selenium	ND	1.0	0.40		ND			NR	20	
Silver	1.59207	1.0	0.12		1.60673			0.917	20	
Thallium	ND	1.0	0.38		ND			NR	20	
Vanadium	20.9219	1.0	0.06		20.7291			0.926	20	
Zinc	27.9862	1.0	0.15		27.8768			0.391	20	
Duplicate (B1C0490-DUP2)			**Source: 2100732-24**		Prepared: 3/25/2021 Analyzed: 3/25/2021					
Antimony	ND	2.0	0.51		ND			NR	20	
Arsenic	1.01818	1.0	0.12		0.863432			16.4	20	
Barium	38.5818	1.0	0.12		38.9580			0.970	20	
Beryllium	1.27246	1.0	0.03		1.28671			1.11	20	
Cadmium	0.290790	1.0	0.14		0.284271			2.27	20	
Chromium	11.7722	1.0	0.26		11.7175			0.466	20	
Cobalt	3.22154	1.0	0.07		3.19442			0.845	20	
Copper	8.71590	2.0	0.19		8.74170			0.295	20	
Lead	4.19555	1.0	0.18		4.27255			1.82	20	
Molybdenum	ND	1.0	0.12		ND			NR	20	
Nickel	9.00616	1.0	0.18		8.96785			0.426	20	
Selenium	ND	1.0	0.40		ND			NR	20	
Silver	1.67080	1.0	0.12		1.67893			0.485	20	
Thallium	ND	1.0	0.38		ND			NR	20	
Vanadium	21.7430	1.0	0.06		21.8234			0.369	20	
Zinc	23.4010	1.0	0.15		23.3225			0.336	20	
Matrix Spike (B1C0490-MS1)			**Source: 2100732-01**		Prepared: 3/25/2021 Analyzed: 3/25/2021					
Antimony	21.1641	2.0	0.51	25.0000	0.723826	81.8	0 - 102			
Arsenic	24.7226	1.0	0.12	25.0000	1.52473	92.8	55 - 117			
Barium	60.9249	1.0	0.12	25.0000	41.3382	78.3	11 - 177			
Beryllium	26.6430	1.0	0.03	25.0100	1.21468	102	64 - 115			
Cadmium	23.8585	1.0	0.14	25.0000	0.262814	94.4	62 - 116			
Chromium	36.9076	1.0	0.26	25.0000	11.9071	100	42 - 145			
Cobalt	28.0801	1.0	0.07	25.0000	3.38557	98.8	60 - 126			
Copper	32.7848	2.0	0.19	25.0000	9.58864	92.8	37 - 163			
Lead	27.8957	1.0	0.18	25.0000	3.70468	96.8	26 - 161			
Molybdenum	24.3709	1.0	0.12	25.0000	ND	97.5	31 - 122			

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
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Los Angeles , CA 900071	Reported : 04/02/2021

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0490 - EPA 3050B_S (continued)										
Matrix Spike (B1C0490-MS1) - Continued			**Source: 2100732-01**			Prepared: 3/25/2021 Analyzed: 3/25/2021				
Nickel	33.3597	1.0	0.18	25.0000	9.23524	96.5	52 - 130			
Selenium	23.5369	1.0	0.40	25.0000	ND	94.1	25 - 129			
Silver	13.9220	1.0	0.12	12.5000	1.60673	98.5	48 - 133			
Thallium	20.1992	1.0	0.38	25.0000	ND	80.8	25 - 119			
Vanadium	41.3585	1.0	0.06	25.0000	20.7291	82.5	51 - 141			
Zinc	47.2252	1.0	0.15	25.0000	27.8768	77.4	8 - 170			
Matrix Spike (B1C0490-MS2)			**Source: 2100732-24**			Prepared: 3/25/2021 Analyzed: 3/25/2021				
Antimony	22.3220	2.0	0.51	25.0000	ND	89.3	0 - 102			
Arsenic	24.1028	1.0	0.12	25.0000	0.863432	93.0	55 - 117			
Barium	60.1462	1.0	0.12	25.0000	38.9580	84.8	11 - 177			
Beryllium	27.0342	1.0	0.03	25.0100	1.28671	103	64 - 115			
Cadmium	24.7275	1.0	0.14	25.0000	0.284271	97.8	62 - 116			
Chromium	37.2345	1.0	0.26	25.0000	11.7175	102	42 - 145			
Cobalt	28.5343	1.0	0.07	25.0000	3.19442	101	60 - 126			
Copper	33.2323	2.0	0.19	25.0000	8.74170	98.0	37 - 163			
Lead	28.7443	1.0	0.18	25.0000	4.27255	97.9	26 - 161			
Molybdenum	24.8930	1.0	0.12	25.0000	ND	99.6	31 - 122			
Nickel	33.3748	1.0	0.18	25.0000	8.96785	97.6	52 - 130			
Selenium	24.1504	1.0	0.40	25.0000	ND	96.6	25 - 129			
Silver	14.1985	1.0	0.12	12.5000	1.67893	100	48 - 133			
Thallium	20.8458	1.0	0.38	25.0000	ND	83.4	25 - 119			
Vanadium	43.7735	1.0	0.06	25.0000	21.8234	87.8	51 - 141			
Zinc	43.8747	1.0	0.15	25.0000	23.3225	82.2	8 - 170			
Matrix Spike Dup (B1C0490-MSD1)			**Source: 2100732-01**			Prepared: 3/25/2021 Analyzed: 3/25/2021				
Antimony	20.8341	2.0	0.51	25.0000	0.723826	80.4	0 - 102	1.57	20	
Arsenic	24.3590	1.0	0.12	25.0000	1.52473	91.3	55 - 117	1.48	20	
Barium	60.9156	1.0	0.12	25.0000	41.3382	78.3	11 - 177	0.0153	20	
Beryllium	26.5572	1.0	0.03	25.0100	1.21468	101	64 - 115	0.322	20	
Cadmium	23.7370	1.0	0.14	25.0000	0.262814	93.9	62 - 116	0.511	20	
Chromium	36.7396	1.0	0.26	25.0000	11.9071	99.3	42 - 145	0.456	20	
Cobalt	27.8825	1.0	0.07	25.0000	3.38557	98.0	60 - 126	0.706	20	
Copper	32.9171	2.0	0.19	25.0000	9.58864	93.3	37 - 163	0.403	20	
Lead	27.6902	1.0	0.18	25.0000	3.70468	95.9	26 - 161	0.739	20	
Molybdenum	24.2733	1.0	0.12	25.0000	ND	97.1	31 - 122	0.401	20	
Nickel	33.1821	1.0	0.18	25.0000	9.23524	95.8	52 - 130	0.534	20	
Selenium	23.4302	1.0	0.40	25.0000	ND	93.7	25 - 129	0.455	20	
Silver	13.8989	1.0	0.12	12.5000	1.60673	98.3	48 - 133	0.166	20	
Thallium	20.0132	1.0	0.38	25.0000	ND	80.1	25 - 119	0.925	20	
Vanadium	41.4345	1.0	0.06	25.0000	20.7291	82.8	51 - 141	0.184	20	
Zinc	46.8814	1.0	0.15	25.0000	27.8768	76.0	8 - 170	0.731	20	

Certificate of Analysis

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Los Angeles , CA 900071	Reported : 04/02/2021

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0469 - EPA 7471_S										
Blank (B1C0469-BLK1)					Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	ND	0.10	0.01							
LCS (B1C0469-BS1)					Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.369578	0.10	0.01	0.416667		88.7	80 - 120			
Duplicate (B1C0469-DUP1)			**Source: 2100725-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.043684	0.10	0.01		0.043739			0.125	20	
Duplicate (B1C0469-DUP2)			**Source: 2100728-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.072979	0.10	0.01		0.073178			0.272	20	
Matrix Spike (B1C0469-MS1)			**Source: 2100725-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.363556	0.10	0.01	0.416667	0.043739	76.8	70 - 130			
Matrix Spike (B1C0469-MS2)			**Source: 2100728-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.489446	0.10	0.01	0.416667	0.073178	99.9	70 - 130			
Matrix Spike Dup (B1C0469-MSD1)			**Source: 2100725-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021					
Mercury	0.363753	0.10	0.01	0.416667	0.043739	76.8	70 - 130	0.0542	20	

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0469 - EPA 7471_S									
Post Spike (B1C0469-PS1)			**Source: 2100725-01**		Prepared: 3/25/2021 Analyzed: 3/26/2021				
Mercury	0.005966		5.00000E-3	0.000525	109	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0491 - EPA 7471_S										
Blank (B1C0491-BLK1)					Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	ND	0.10	0.01							
LCS (B1C0491-BS1)					Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	0.417273	0.10	0.01	0.416667		100	80 - 120			
Duplicate (B1C0491-DUP1)			**Source: 2100742-01**		Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	ND	0.10	0.01		ND			NR	20	
Duplicate (B1C0491-DUP2)			**Source: 2100743-11**		Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	ND	0.10	0.01		ND			NR	20	
Matrix Spike (B1C0491-MS1)			**Source: 2100742-01**		Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	0.408044	0.10	0.01	0.416667	ND	97.9	70 - 130			
Matrix Spike (B1C0491-MS2)			**Source: 2100743-11**		Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	0.406465	0.10	0.01	0.416667	ND	97.6	70 - 130			
Matrix Spike Dup (B1C0491-MSD1)			**Source: 2100742-01**		Prepared: 3/26/2021 Analyzed: 3/26/2021					
Mercury	0.409145	0.10	0.01	0.416667	ND	98.2	70 - 130	0.269	20	

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Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0491 - EPA 7471_S									
Post Spike (B1C0491-PS1)			**Source: 2100742-01**		Prepared: 3/26/2021 Analyzed: 3/26/2021				
Mercury	0.004556		5.00000E-3	0.000108	89.0	85 - 115			

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Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0495 - GCSEMI_DRO_S										
Blank (B1C0495-BLK1)						Prepared: 3/25/2021 Analyzed: 4/2/2021				
DRO	ND	10	10							
Jet Fuel (Jet A)	ND	10	10							
Surrogate: p-Terphenyl	*104.6*			*80.0000*		*131*	*62 - 141*			
LCS (B1C0495-BS1)						Prepared: 3/25/2021 Analyzed: 4/2/2021				
DRO	907.897	10	10	1000.00		90.8	56 - 139			
Surrogate: p-Terphenyl	*87.93*			*80.0000*		*110*	*62 - 141*			
LCS Dup (B1C0495-BSD1)						Prepared: 3/25/2021 Analyzed: 4/2/2021				
DRO	1050.50	10	10	1000.00		105	56 - 139	14.6	20	
Surrogate: p-Terphenyl	*99.11*			*80.0000*		*124*	*62 - 141*			

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Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0496 - GCSEMI_DRO_S										
Blank (B1C0496-BLK1)						Prepared: 3/25/2021 Analyzed: 3/29/2021				
DRO	ND	10	10							
Jet Fuel (Jet A)	ND	10	10							
Surrogate: p-Terphenyl	*72.51*			*80.0000*		*90.6*	*62 - 141*			
Blank (B1C0496-BLK2)						Prepared: 3/25/2021 Analyzed: 4/1/2021				
DRO	ND	10	10							
Jet Fuel (Jet A)	ND	10	10							
Surrogate: p-Terphenyl	*84.44*			*80.0000*		*106*	*62 - 141*			
LCS (B1C0496-BS1)						Prepared: 3/25/2021 Analyzed: 3/29/2021				
DRO	1122.57	10	10	1000.00		112	56 - 139			
Surrogate: p-Terphenyl	*66.92*			*80.0000*		*83.6*	*62 - 141*			
LCS (B1C0496-BS2)						Prepared: 3/25/2021 Analyzed: 4/1/2021				
DRO	1292.29	10	10	1000.00		129	56 - 139			
Surrogate: p-Terphenyl	*70.22*			*80.0000*		*87.8*	*62 - 141*			
Matrix Spike (B1C0496-MS1)			**Source: 2100754-01**			Prepared: 3/25/2021 Analyzed: 3/29/2021				
DRO	5361.70	100	100	1000.00	ND	536	38 - 161			M2
Surrogate: p-Terphenyl	*31.30*			*80.0000*		*39.1*	*62 - 141*			S10
Matrix Spike Dup (B1C0496-MSD1)			**Source: 2100754-01**			Prepared: 3/25/2021 Analyzed: 3/29/2021				
DRO	2843.20	100	100	1000.00	ND	284	38 - 161	61.4	20	M2
Surrogate: p-Terphenyl	*307.9*			*80.0000*		*385*	*62 - 141*			S10

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S										
Blank (B1C0465-BLK1)							Prepared: 3/24/2021 Analyzed: 3/24/2021			
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							

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
Blank (B1C0465-BLK1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
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							
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	*60.37*			*50.0000*		*121*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*50.46*			*50.0000*		*101*	*50 - 146*			
Surrogate: Dibromofluoromethan	*57.69*			*50.0000*		*115*	*77 - 159*			
Surrogate: Toluene-d8	*47.74*			*50.0000*		*95.5*	*81 - 128*			
Blank (B1C0465-BLK2)					Prepared: 3/24/2021 Analyzed: 3/24/2021					
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							

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
Blank (B1C0465-BLK2) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
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							
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							

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
Blank (B1C0465-BLK2) - Continued						Prepared: 3/24/2021 Analyzed: 3/24/2021				
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	*50.21*			*50.0000*		*100*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*50.52*			*50.0000*		*101*	*50 - 146*			
Surrogate: Dibromofluoromethan	*47.60*			*50.0000*		*95.2*	*77 - 159*			
Surrogate: Toluene-d8	*47.17*			*50.0000*		*94.3*	*81 - 128*			
LCS (B1C0465-BS1)						Prepared: 3/24/2021 Analyzed: 3/24/2021				
1,1,1,2-Tetrachloroethane	47.3300	5.0	0.52	50.0000		94.7	84 - 123			
1,1,1-Trichloroethane	47.8100	5.0	0.26	50.0000		95.6	78 - 133			
1,1,2,2-Tetrachloroethane	48.9000	5.0	0.21	50.0000		97.8	63 - 127			
1,1,2-Trichloroethane	48.8500	5.0	0.40	50.0000		97.7	80 - 125			
1,1-Dichloroethane	48.8600	5.0	1.4	50.0000		97.7	77 - 128			
1,1-Dichloroethene	53.1100	5.0	1.9	50.0000		106	69 - 138			
1,1-Dichloropropene	48.2700	5.0	0.54	50.0000		96.5	80 - 133			
1,2,3-Trichloropropane	44.6200	5.0	0.40	50.0000		89.2	74 - 123			
1,2,3-Trichlorobenzene	45.6600	5.0	0.83	50.0000		91.3	79 - 133			
1,2,4-Trichlorobenzene	46.8600	5.0	0.80	50.0000		93.7	73 - 131			
1,2,4-Trimethylbenzene	45.7300	5.0	0.91	50.0000		91.5	86 - 137			
1,2-Dibromo-3-chloropropane	42.4200	10	1.1	50.0000		84.8	62 - 127			
1,2-Dibromoethane	51.5900	5.0	0.40	50.0000		103	83 - 126			
1,2-Dichlorobenzene	47.5700	5.0	0.21	50.0000		95.1	83 - 123			
1,2-Dichloroethane	44.8600	5.0	0.50	50.0000		89.7	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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
LCS (B1C0465-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,2-Dichloropropane	49.5600	5.0	0.46	50.0000		99.1	77 - 121			
1,3,5-Trimethylbenzene	45.6500	5.0	0.70	50.0000		91.3	84 - 135			
1,3-Dichlorobenzene	45.7900	5.0	0.36	50.0000		91.6	81 - 126			
1,3-Dichloropropane	48.2400	5.0	0.49	50.0000		96.5	80 - 118			
1,4-Dichlorobenzene	46.2000	5.0	0.27	50.0000		92.4	80 - 124			
2,2-Dichloropropane	45.5500	5.0	0.28	50.0000		91.1	72 - 135			
2-Chlorotoluene	44.8600	5.0	0.53	50.0000		89.7	81 - 127			
4-Chlorotoluene	45.1700	5.0	0.40	50.0000		90.3	83 - 127			
4-Isopropyltoluene	45.1000	5.0	0.81	50.0000		90.2	82 - 143			
Benzene	45.5200	5.0	0.36	50.0000		91.0	84 - 123			
Bromobenzene	47.0200	5.0	0.62	50.0000		94.0	80 - 122			
Bromochloromethane	51.6300	5.0	0.30	50.0000		103	83 - 127			
Bromodichloromethane	52.1700	5.0	0.52	50.0000		104	82 - 123			
Bromoform	47.3300	5.0	1.4	50.0000		94.7	80 - 132			
Bromomethane	46.7500	5.0	2.5	50.0000		93.5	67 - 176			
Carbon disulfide	38.6900	5.0	0.94	50.0000		77.4	75 - 138			
Carbon tetrachloride	50.5100	5.0	0.73	50.0000		101	76 - 131			
Chlorobenzene	46.2100	5.0	0.42	50.0000		92.4	84 - 119			
Chloroethane	119.020	5.0	1.5	50.0000		238	56 - 170			L5
Chloroform	49.4700	5.0	0.24	50.0000		98.9	78 - 129			
Chloromethane	44.4000	5.0	1.1	50.0000		88.8	63 - 141			
cis-1,2-Dichloroethene	49.0800	5.0	0.20	50.0000		98.2	83 - 125			
cis-1,3-Dichloropropene	45.7800	5.0	0.39	50.0000		91.6	76 - 129			
Di-isopropyl ether	51.2100	5.0	1.9	50.0000		102	73 - 132			
Dibromochloromethane	47.8400	5.0	0.81	50.0000		95.7	81 - 120			
Dibromomethane	50.1000	5.0	0.23	50.0000		100	79 - 124			
Dichlorodifluoromethane	48.5200	5.0	0.14	50.0000		97.0	18 - 199			
Ethyl Acetate	361.270	50	7.0	500.000		72.3	76 - 138			L3
Ethyl Ether	504.070	50	17	500.000		101	74 - 128			
Ethyl tert-butyl ether	52.5500	5.0	0.85	50.0000		105	50 - 175			
Ethylbenzene	45.9100	5.0	0.43	50.0000		91.8	86 - 130			
Freon-113	43.7000	5.0	1.3	50.0000		87.4	66 - 132			
Hexachlorobutadiene	44.5500	5.0	0.40	50.0000		89.1	64 - 135			
Isopropylbenzene	44.9200	5.0	0.79	50.0000		89.8	80 - 133			
m,p-Xylene	86.3400	10	0.98	100.000		86.3	89 - 133			L3
Methylene chloride	50.5000	5.0	2.2	50.0000		101	72 - 143			
MTBE	50.3200	5.0	0.81	50.0000		101	73 - 136			
n-Butylbenzene	45.1200	5.0	1.2	50.0000		90.2	76 - 144			
n-Propylbenzene	43.1100	5.0	0.78	50.0000		86.2	81 - 136			
Naphthalene	48.6600	5.0	1.1	50.0000		97.3	64 - 128			
o-Xylene	47.2800	5.0	0.67	50.0000		94.6	82 - 134			
sec-Butylbenzene	44.0100	5.0	0.63	50.0000		88.0	81 - 138			

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
LCS (B1C0465-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
Styrene	47.9100	5.0	0.45	50.0000		95.8	79 - 152			
tert-Amyl methyl ether	41.3500	5.0	1.1	50.0000		82.7	48 - 166			
tert-Butanol	247.140	100	11	250.000		98.9	48 - 148			
tert-Butylbenzene	44.3000	5.0	0.80	50.0000		88.6	81 - 135			
Tetrachloroethene	45.1900	5.0	0.31	50.0000		90.4	75 - 127			
Toluene	47.0600	5.0	0.27	50.0000		94.1	88 - 130			
trans-1,2-Dichloroethene	50.3500	5.0	0.56	50.0000		101	79 - 127			
trans-1,3-Dichloropropene	50.6800	5.0	0.59	50.0000		101	80 - 130			
Trichloroethene	47.2200	5.0	0.32	50.0000		94.4	83 - 126			
Trichlorofluoromethane	51.4200	5.0	1.0	50.0000		103	62 - 143			
Vinyl acetate	322.890	50	6.0	500.000		64.6	69 - 150			L4
Vinyl chloride	45.3900	5.0	0.92	50.0000		90.8	69 - 140			
Surrogate: 1,2-Dichloroethane-d4	*44.63*			*50.0000*		*89.3*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*49.07*			*50.0000*		*98.1*	*50 - 146*			
Surrogate: Dibromofluoromethan	*50.65*			*50.0000*		*101*	*77 - 159*			
Surrogate: Toluene-d8	*49.05*			*50.0000*		*98.1*	*81 - 128*			
LCS Dup (B1C0465-BSD1)					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,1,1,2-Tetrachloroethane	48.9500	5.0	0.52	50.0000		97.9	84 - 123	3.37	20	
1,1,1-Trichloroethane	48.4300	5.0	0.26	50.0000		96.9	78 - 133	1.29	20	
1,1,2,2-Tetrachloroethane	50.5900	5.0	0.21	50.0000		101	63 - 127	3.40	20	
1,1,2-Trichloroethane	48.8600	5.0	0.40	50.0000		97.7	80 - 125	0.0205	20	
1,1-Dichloroethane	49.9700	5.0	1.4	50.0000		99.9	77 - 128	2.25	20	
1,1-Dichloroethene	53.8700	5.0	1.9	50.0000		108	69 - 138	1.42	20	
1,1-Dichloropropene	48.5000	5.0	0.54	50.0000		97.0	80 - 133	0.475	20	
1,2,3-Trichloropropane	45.6900	5.0	0.40	50.0000		91.4	74 - 123	2.37	20	
1,2,3-Trichlorobenzene	46.2000	5.0	0.83	50.0000		92.4	79 - 133	1.18	20	
1,2,4-Trichlorobenzene	47.6600	5.0	0.80	50.0000		95.3	73 - 131	1.69	20	
1,2,4-Trimethylbenzene	47.0800	5.0	0.91	50.0000		94.2	86 - 137	2.91	20	
1,2-Dibromo-3-chloropropane	43.6600	10	1.1	50.0000		87.3	62 - 127	2.88	20	
1,2-Dibromoethane	52.2600	5.0	0.40	50.0000		105	83 - 126	1.29	20	
1,2-Dichlorobenzene	48.1200	5.0	0.21	50.0000		96.2	83 - 123	1.15	20	
1,2-Dichloroethane	46.2000	5.0	0.50	50.0000		92.4	76 - 128	2.94	20	
1,2-Dichloropropane	49.8300	5.0	0.46	50.0000		99.7	77 - 121	0.543	20	
1,3,5-Trimethylbenzene	47.3100	5.0	0.70	50.0000		94.6	84 - 135	3.57	20	
1,3-Dichlorobenzene	46.6700	5.0	0.36	50.0000		93.3	81 - 126	1.90	20	
1,3-Dichloropropane	50.4200	5.0	0.49	50.0000		101	80 - 118	4.42	20	
1,4-Dichlorobenzene	47.5700	5.0	0.27	50.0000		95.1	80 - 124	2.92	20	
2,2-Dichloropropane	47.2900	5.0	0.28	50.0000		94.6	72 - 135	3.75	20	
2-Chlorotoluene	46.3900	5.0	0.53	50.0000		92.8	81 - 127	3.35	20	
4-Chlorotoluene	46.4900	5.0	0.40	50.0000		93.0	83 - 127	2.88	20	

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
LCS Dup (B1C0465-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
4-Isopropyltoluene	46.6000	5.0	0.81	50.0000		93.2	82 - 143	3.27	20	
Benzene	46.9900	5.0	0.36	50.0000		94.0	84 - 123	3.18	20	
Bromobenzene	48.5800	5.0	0.62	50.0000		97.2	80 - 122	3.26	20	
Bromochloromethane	53.1300	5.0	0.30	50.0000		106	83 - 127	2.86	20	
Bromodichloromethane	53.1100	5.0	0.52	50.0000		106	82 - 123	1.79	20	
Bromoform	48.9400	5.0	1.4	50.0000		97.9	80 - 132	3.34	20	
Bromomethane	46.1700	5.0	2.5	50.0000		92.3	67 - 176	1.25	20	
Carbon disulfide	37.9900	5.0	0.94	50.0000		76.0	75 - 138	1.83	20	
Carbon tetrachloride	52.2500	5.0	0.73	50.0000		104	76 - 131	3.39	20	
Chlorobenzene	47.4700	5.0	0.42	50.0000		94.9	84 - 119	2.69	20	
Chloroethane	115.090	5.0	1.5	50.0000		230	56 - 170	3.36	20	L5
Chloroform	50.3100	5.0	0.24	50.0000		101	78 - 129	1.68	20	
Chloromethane	44.2800	5.0	1.1	50.0000		88.6	63 - 141	0.271	20	
cis-1,2-Dichloroethene	50.3800	5.0	0.20	50.0000		101	83 - 125	2.61	20	
cis-1,3-Dichloropropene	46.4700	5.0	0.39	50.0000		92.9	76 - 129	1.50	20	
Di-isopropyl ether	51.0100	5.0	1.9	50.0000		102	73 - 132	0.391	20	
Dibromochloromethane	48.7900	5.0	0.81	50.0000		97.6	81 - 120	1.97	20	
Dibromomethane	51.6200	5.0	0.23	50.0000		103	79 - 124	2.99	20	
Dichlorodifluoromethane	47.9100	5.0	0.14	50.0000		95.8	18 - 199	1.27	20	
Ethyl Acetate	374.680	50	7.0	500.000		74.9	76 - 138	3.64	20	L3
Ethyl Ether	508.480	50	17	500.000		102	74 - 128	0.871	20	
Ethyl tert-butyl ether	53.8600	5.0	0.85	50.0000		108	50 - 175	2.46	20	
Ethylbenzene	46.6600	5.0	0.43	50.0000		93.3	86 - 130	1.62	20	
Freon-113	43.7200	5.0	1.3	50.0000		87.4	66 - 132	0.0458	20	
Hexachlorobutadiene	44.7900	5.0	0.40	50.0000		89.6	64 - 135	0.537	20	
Isopropylbenzene	45.9500	5.0	0.79	50.0000		91.9	80 - 133	2.27	20	
m,p-Xylene	90.2600	10	0.98	100.000		90.3	89 - 133	4.44	20	
Methylene chloride	50.9700	5.0	2.2	50.0000		102	72 - 143	0.926	20	
MTBE	50.7500	5.0	0.81	50.0000		102	73 - 136	0.851	20	
n-Butylbenzene	46.1300	5.0	1.2	50.0000		92.3	76 - 144	2.21	20	
n-Propylbenzene	43.9900	5.0	0.78	50.0000		88.0	81 - 136	2.02	20	
Naphthalene	50.2600	5.0	1.1	50.0000		101	64 - 128	3.23	20	
o-Xylene	48.1500	5.0	0.67	50.0000		96.3	82 - 134	1.82	20	
sec-Butylbenzene	45.5000	5.0	0.63	50.0000		91.0	81 - 138	3.33	20	
Styrene	49.9100	5.0	0.45	50.0000		99.8	79 - 152	4.09	20	
tert-Amyl methyl ether	41.5500	5.0	1.1	50.0000		83.1	48 - 166	0.483	20	
tert-Butanol	242.970	100	11	250.000		97.2	48 - 148	1.70	20	
tert-Butylbenzene	46.0000	5.0	0.80	50.0000		92.0	81 - 135	3.77	20	
Tetrachloroethene	47.2100	5.0	0.31	50.0000		94.4	75 - 127	4.37	20	
Toluene	47.3600	5.0	0.27	50.0000		94.7	88 - 130	0.635	20	
trans-1,2-Dichloroethene	50.4600	5.0	0.56	50.0000		101	79 - 127	0.218	20	
trans-1,3-Dichloropropene	52.2700	5.0	0.59	50.0000		105	80 - 130	3.09	20	

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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 Limits	RPD	RPD Limit	Notes
Batch B1C0465 - MSVOA_S (continued)										
LCS Dup (B1C0465-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
Trichloroethene	47.6200	5.0	0.32	50.0000		95.2	83 - 126	0.844	20	
Trichlorofluoromethane	50.1600	5.0	1.0	50.0000		100	62 - 143	2.48	20	
Vinyl acetate	324.660	50	6.0	500.000		64.9	69 - 150	0.547	20	L4
Vinyl chloride	44.9800	5.0	0.92	50.0000		90.0	69 - 140	0.907	20	
Surrogate: 1,2-Dichloroethane-d4	*44.87*			*50.0000*		*89.7*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*50.28*			*50.0000*		*101*	*50 - 146*			
Surrogate: Dibromofluoromethan	*52.09*			*50.0000*		*104*	*77 - 159*			
Surrogate: Toluene-d8	*48.29*			*50.0000*		*96.6*	*81 - 128*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S										
Blank (B1C0475-BLK1)					Prepared: 3/24/2021 Analyzed: 3/25/2021					
1,2,4-Trichlorobenzene	ND	330	50							
1,2-Dichlorobenzene	ND	330	26							
1,3-Dichlorobenzene	ND	330	27							
1,4-Dichlorobenzene	ND	330	27							
2,4,5-Trichlorophenol	ND	330	30							
2,4,6-Trichlorophenol	ND	330	35							
2,4-Dichlorophenol	ND	1600	34							
2,4-Dimethylphenol	ND	330	26							
2,4-Dinitrophenol	ND	1600	86							
2,4-Dinitrotoluene	ND	330	33							
2,6-Dinitrotoluene	ND	330	49							
2-Chloronaphthalene	ND	330	28							
2-Chlorophenol	ND	330	31							
2-Methylnaphthalene	ND	330	27							
2-Methylphenol	ND	330	36							
2-Nitroaniline	ND	1600	43							
2-Nitrophenol	ND	330	45							
3,3´-Dichlorobenzidine	ND	660	280							
3-Nitroaniline	ND	1600	49							
4,6-Dinitro-2-methyphenol	ND	1600	41							
4-Bromophenyl-phenylether	ND	330	64							
4-Chloro-3-methylphenol	ND	660	71							
4-Chloroaniline	ND	660	53							
4-Chlorophenyl-phenylether	ND	330	33							
4-Methylphenol	ND	330	57							
4-Nitroaniline	ND	1600	37							
4-Nitrophenol	ND	330	64							
Acenaphthene	ND	330	43							
Acenaphthylene	ND	330	62							
Anthracene	ND	330	51							
Benzidine (M)	ND	1600	1400							
Benzo(a)anthracene	ND	330	44							
Benzo(a)pyrene	ND	330	64							
Benzo(b)fluoranthene	ND	330	65							
Benzo(g,h,i)perylene	ND	330	81							
Benzo(k)fluoranthene	ND	330	33							
Benzoic acid	ND	1600	890							
Benzyl alcohol	ND	660	32							
bis(2-chloroethoxy)methane	ND	330	64							
bis(2-Chloroethyl)ether	ND	330	66							
bis(2-chloroisopropyl)ether	ND	330	76							

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S (continued)										
Blank (B1C0475-BLK1) - Continued					Prepared: 3/24/2021 Analyzed: 3/25/2021					
bis(2-ethylhexyl)phthalate	ND	330	63							
Butylbenzylphthalate	ND	330	41							
Chrysene	ND	330	84							
Di-n-butylphthalate	ND	330	51							
Di-n-octylphthalate	ND	330	63							
Dibenz(a,h)anthracene	ND	330	45							
Dibenzofuran	ND	330	58							
Diethyl phthalate	ND	330	58							
Dimethyl phthalate	ND	330	40							
Fluoranthene	ND	330	60							
Fluorene	ND	330	110							
Hexachlorobenzene	ND	330	55							
Hexachlorobutadiene	ND	660	53							
Hexachlorocyclopentadiene	ND	660	70							
Hexachloroethane	ND	330	94							
Indeno(1,2,3-cd)pyrene	ND	330	75							
Isophorone	ND	330	85							
N-Nitroso-di-n propylamine	ND	330	60							
N-Nitrosodiphenylamine	ND	330	32							
Naphthalene	ND	330	56							
Nitrobenzene	ND	330	57							
Pentachlorophenol	ND	1600	50							
Phenanthrene	ND	330	67							
Phenol	ND	330	34							
Pyrene	ND	330	72							
Pyridine	ND	1600	270							
Surrogate: 1,2-Dichlorobenzene-d	*2288*			*3333.33*		*68.6*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*2939*			*3325.00*		*88.4*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*2252*			*3325.00*		*67.7*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2472*			*3333.33*		*74.2*	*36 - 113*			
Surrogate: 2-Fluorophenol	*2064*			*3325.00*		*62.1*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2541*			*3333.33*		*76.2*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2344*			*3333.33*		*70.3*	*35 - 110*			
Surrogate: Phenol-d6	*2123*			*3325.00*		*63.8*	*26 - 108*			
LCS (B1C0475-BS1)					Prepared: 3/24/2021 Analyzed: 3/25/2021					
1,2,4-Trichlorobenzene	2569.00	330	50	3333.33		77.1	54 - 103			
1,2-Dichlorobenzene	2526.00	330	26	3333.33		75.8	56 - 89			
1,3-Dichlorobenzene	2420.00	330	27	3333.33		72.6	53 - 91			
1,4-Dichlorobenzene	2438.33	330	27	3333.33		73.2	55 - 85			
2,4,5-Trichlorophenol	2746.67	330	30	3333.33		82.4	53 - 106			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S (continued)										
LCS (B1C0475-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/25/2021					
2,4,6-Trichlorophenol	2978.67	330	35	3333.33		89.4	52 - 118			
2,4-Dichlorophenol	2951.33	1600	34	3333.33		88.5	57 - 101			
2,4-Dimethylphenol	2666.33	330	26	3333.33		80.0	30 - 90			
2,4-Dinitrophenol	908.333	1600	86	3333.33		27.2	12 - 206			
2,4-Dinitrotoluene	3475.00	330	33	3333.33		104	46 - 146			
2,6-Dinitrotoluene	3362.33	330	49	3333.33		101	50 - 137			
2-Chloronaphthalene	2935.33	330	28	3333.33		88.1	55 - 113			
2-Chlorophenol	2447.33	330	31	3333.33		73.4	60 - 79			
2-Methylnaphthalene	2781.67	330	27	3333.33		83.5	60 - 98			
2-Methylphenol	2363.33	330	36	3333.33		70.9	52 - 75			
2-Nitroaniline	3251.33	1600	43	3333.33		97.5	59 - 108			
2-Nitrophenol	2559.67	330	45	3333.33		76.8	53 - 110			
3,3´-Dichlorobenzidine	3042.00	660	280	3333.33		91.3	58 - 96			
3-Nitroaniline	3236.00	1600	49	3333.33		97.1	55 - 110			
4,6-Dinitro-2-methyphenol	1895.67	1600	41	3333.33		56.9	37 - 148			
4-Bromophenyl-phenylether	3441.33	330	64	3333.33		103	57 - 108			
4-Chloro-3-methylphenol	3170.00	660	71	3333.33		95.1	57 - 108			
4-Chloroaniline	2894.67	660	53	3333.33		86.8	42 - 103			
4-Chlorophenyl-phenylether	3125.33	330	33	3333.33		93.8	56 - 104			
4-Methylphenol	2881.33	330	57	3333.33		86.4	51 - 82			L3
4-Nitroaniline	3236.00	1600	37	3333.33		97.1	55 - 110			
4-Nitrophenol	3279.00	330	64	3333.33		98.4	48 - 126			
Acenaphthene	2577.33	330	43	3333.33		77.3	61 - 92			
Acenaphthylene	2694.67	330	62	3333.33		80.8	61 - 91			
Anthracene	2791.33	330	51	3333.33		83.7	64 - 98			
Benzidine (M)	6791.00	1600	1400	3333.33		204	0 - 254			
Benzo(a)anthracene	2596.33	330	44	3333.33		77.9	65 - 95			
Benzo(a)pyrene	2639.33	330	64	3333.33		79.2	60 - 105			
Benzo(b)fluoranthene	2607.00	330	65	3333.33		78.2	49 - 105			
Benzo(g,h,i)perylene	2740.67	330	81	3333.33		82.2	51 - 105			
Benzo(k)fluoranthene	2599.33	330	33	3333.33		78.0	53 - 104			
Benzoic acid	ND	1600	890	3333.33		NR	7 - 93			L4
Benzyl alcohol	2723.33	660	32	3333.33		81.7	56 - 93			
bis(2-chloroethoxy)methane	3075.33	330	64	3333.33		92.3	59 - 81			L3
bis(2-Chloroethyl)ether	2823.00	330	66	3333.33		84.7	53 - 81			L3
bis(2-chloroisopropyl)ether	2768.00	330	76	3333.33		83.0	41 - 94			
bis(2-ethylhexyl)phthalate	3384.00	330	63	3333.33		102	57 - 123			
Butylbenzylphthalate	3400.67	330	41	3333.33		102	64 - 106			
Chrysene	2661.00	330	84	3333.33		79.8	61 - 93			
Di-n-butylphthalate	3179.00	330	51	3333.33		95.4	64 - 99			
Di-n-octylphthalate	3537.67	330	63	3333.33		106	55 - 122			
Dibenz(a,h)anthracene	2726.67	330	45	3333.33		81.8	51 - 109			

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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S (continued)										
LCS (B1C0475-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/25/2021					
Dibenzofuran	2873.33	330	58	3333.33		86.2	60 - 100			
Diethyl phthalate	3230.67	330	58	3333.33		96.9	62 - 99			
Dimethyl phthalate	3144.67	330	40	3333.33		94.3	61 - 93			L3
Fluoranthene	2601.33	330	60	3333.33		78.0	60 - 100			
Fluorene	2645.67	330	110	3333.33		79.4	62 - 93			
Hexachlorobenzene	3593.67	330	55	3333.33		108	54 - 120			
Hexachlorobutadiene	2436.00	660	53	3333.33		73.1	52 - 94			
Hexachlorocyclopentadiene	3127.67	660	70	3333.33		93.8	26 - 135			
Hexachloroethane	2544.67	330	94	3333.33		76.3	54 - 89			
Indeno(1,2,3-cd)pyrene	2740.67	330	75	3333.33		82.2	50 - 106			
Isophorone	3281.33	330	85	3333.33		98.4	47 - 89			L3
N-Nitroso-di-n propylamine	3278.00	330	60	3333.33		98.3	58 - 91			L3
N-Nitrosodiphenylamine	3231.33	330	32	3333.33		96.9	61 - 100			
Naphthalene	2405.67	330	56	3333.33		72.2	60 - 83			
Nitrobenzene	2797.67	330	57	3333.33		83.9	56 - 104			
Pentachlorophenol	2650.67	1600	50	3333.33		79.5	20 - 115			
Phenanthrene	2892.33	330	67	3333.33		86.8	65 - 93			
Phenol	2626.67	330	34	3333.33		78.8	57 - 87			
Pyrene	2526.33	330	72	3333.33		75.8	58 - 101			
Pyridine	1541.00	1600	270	3333.33		46.2	0 - 69			
Surrogate: 1,2-Dichlorobenzene-d	*2163*			*3333.33*		*64.9*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*3942*			*3325.00*		*119*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*2253*			*3325.00*		*67.7*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2635*			*3333.33*		*79.1*	*36 - 113*			
Surrogate: 2-Fluorophenol	*2117*			*3325.00*		*63.7*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2905*			*3333.33*		*87.1*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2604*			*3333.33*		*78.1*	*35 - 110*			
Surrogate: Phenol-d6	*2463*			*3325.00*		*74.1*	*26 - 108*			
LCS Dup (B1C0475-BSD1)					Prepared: 3/24/2021 Analyzed: 3/25/2021					
1,2,4-Trichlorobenzene	2664.00	330	50	3333.33		79.9	54 - 103	3.63	20	
1,2-Dichlorobenzene	2613.00	330	26	3333.33		78.4	56 - 89	3.39	20	
1,3-Dichlorobenzene	2547.67	330	27	3333.33		76.4	53 - 91	5.14	20	
1,4-Dichlorobenzene	2596.33	330	27	3333.33		77.9	55 - 85	6.28	20	
2,4,5-Trichlorophenol	2937.33	330	30	3333.33		88.1	53 - 106	6.71	20	
2,4,6-Trichlorophenol	3041.67	330	35	3333.33		91.3	52 - 118	2.09	20	
2,4-Dichlorophenol	3075.67	1600	34	3333.33		92.3	57 - 101	4.13	20	
2,4-Dimethylphenol	2735.33	330	26	3333.33		82.1	30 - 90	2.55	20	
2,4-Dinitrophenol	1013.67	1600	86	3333.33		30.4	12 - 206	11.0	20	
2,4-Dinitrotoluene	3679.67	330	33	3333.33		110	46 - 146	5.72	20	
2,6-Dinitrotoluene	3548.33	330	49	3333.33		106	50 - 137	5.38	20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S (continued)										
LCS Dup (B1C0475-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/25/2021					
2-Chloronaphthalene	3042.33	330	28	3333.33		91.3	55 - 113	3.58	20	
2-Chlorophenol	2547.00	330	31	3333.33		76.4	60 - 79	3.99	20	
2-Methylnaphthalene	2842.33	330	27	3333.33		85.3	60 - 98	2.16	20	
2-Methylphenol	2494.67	330	36	3333.33		74.8	52 - 75	5.41	20	
2-Nitroaniline	3374.33	1600	43	3333.33		101	59 - 108	3.71	20	
2-Nitrophenol	2697.67	330	45	3333.33		80.9	53 - 110	5.25	20	
3,3´-Dichlorobenzidine	3204.33	660	280	3333.33		96.1	58 - 96	5.20	20	L3
3-Nitroaniline	3397.67	1600	49	3333.33		102	55 - 110	4.87	20	
4,6-Dinitro-2-methyphenol	1983.67	1600	41	3333.33		59.5	37 - 148	4.54	20	
4-Bromophenyl-phenylether	3462.67	330	64	3333.33		104	57 - 108	0.618	20	
4-Chloro-3-methylphenol	3271.00	660	71	3333.33		98.1	57 - 108	3.14	20	
4-Chloroaniline	3041.67	660	53	3333.33		91.3	42 - 103	4.95	20	
4-Chlorophenyl-phenylether	3258.33	330	33	3333.33		97.8	56 - 104	4.17	20	
4-Methylphenol	3036.67	330	57	3333.33		91.1	51 - 82	5.25	20	L3
4-Nitroaniline	3395.00	1600	37	3333.33		102	55 - 110	4.80	20	
4-Nitrophenol	3520.33	330	64	3333.33		106	48 - 126	7.10	20	
Acenaphthene	2671.00	330	43	3333.33		80.1	61 - 92	3.57	20	
Acenaphthylene	2813.00	330	62	3333.33		84.4	61 - 91	4.30	20	
Anthracene	2873.67	330	51	3333.33		86.2	64 - 98	2.91	20	
Benzidine (M)	8148.00	1600	1400	3333.33		244	0 - 254	18.2	20	
Benzo(a)anthracene	2646.00	330	44	3333.33		79.4	65 - 95	1.89	20	
Benzo(a)pyrene	2682.67	330	64	3333.33		80.5	60 - 105	1.63	20	
Benzo(b)fluoranthene	2612.33	330	65	3333.33		78.4	49 - 105	0.204	20	
Benzo(g,h,i)perylene	2738.33	330	81	3333.33		82.2	51 - 105	0.0852	20	
Benzo(k)fluoranthene	2686.33	330	33	3333.33		80.6	53 - 104	3.29	20	
Benzoic acid	ND	1600	890	3333.33		NR	7 - 93	NR	20	L4
Benzyl alcohol	2856.67	660	32	3333.33		85.7	56 - 93	4.78	20	
bis(2-chloroethoxy)methane	3089.67	330	64	3333.33		92.7	59 - 81	0.465	20	L3
bis(2-Chloroethyl)ether	2988.67	330	66	3333.33		89.7	53 - 81	5.70	20	L3
bis(2-chloroisopropyl)ether	2890.33	330	76	3333.33		86.7	41 - 94	4.32	20	
bis(2-ethylhexyl)phthalate	3388.00	330	63	3333.33		102	57 - 123	0.118	20	
Butylbenzylphthalate	3462.67	330	41	3333.33		104	64 - 106	1.81	20	
Chrysene	2709.00	330	84	3333.33		81.3	61 - 93	1.79	20	
Di-n-butylphthalate	3287.00	330	51	3333.33		98.6	64 - 99	3.34	20	
Di-n-octylphthalate	3611.67	330	63	3333.33		108	55 - 122	2.07	20	
Dibenz(a,h)anthracene	2740.33	330	45	3333.33		82.2	51 - 109	0.500	20	
Dibenzofuran	2995.33	330	58	3333.33		89.9	60 - 100	4.16	20	
Diethyl phthalate	3365.00	330	58	3333.33		101	62 - 99	4.07	20	L3
Dimethyl phthalate	3300.00	330	40	3333.33		99.0	61 - 93	4.82	20	L3
Fluoranthene	2740.67	330	60	3333.33		82.2	60 - 100	5.22	20	
Fluorene	2755.67	330	110	3333.33		82.7	62 - 93	4.07	20	
Hexachlorobenzene	3662.67	330	55	3333.33		110	54 - 120	1.90	20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 04/02/2021

Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0475 - MSSEMI_S (continued)										
LCS Dup (B1C0475-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/25/2021					
Hexachlorobutadiene	2579.00	660	53	3333.33		77.4	52 - 94	5.70	20	
Hexachlorocyclopentadiene	3282.00	660	70	3333.33		98.5	26 - 135	4.82	20	
Hexachloroethane	2713.67	330	94	3333.33		81.4	54 - 89	6.43	20	
Indeno(1,2,3-cd)pyrene	2738.33	330	75	3333.33		82.2	50 - 106	0.0852	20	
Isophorone	3351.33	330	85	3333.33		101	47 - 89	2.11	20	L3
N-Nitroso-di-n propylamine	3393.33	330	60	3333.33		102	58 - 91	3.46	20	L3
N-Nitrosodiphenylamine	3357.00	330	32	3333.33		101	61 - 100	3.81	20	L3
Naphthalene	2477.33	330	56	3333.33		74.3	60 - 83	2.94	20	
Nitrobenzene	2878.00	330	57	3333.33		86.3	56 - 104	2.83	20	
Pentachlorophenol	2853.33	1600	50	3333.33		85.6	20 - 115	7.36	20	
Phenanthrene	2964.67	330	67	3333.33		88.9	65 - 93	2.47	20	
Phenol	2772.33	330	34	3333.33		83.2	57 - 87	5.40	20	
Pyrene	2615.33	330	72	3333.33		78.5	58 - 101	3.46	20	
Pyridine	2278.00	1600	270	3333.33		68.3	0 - 69	38.6	20	R
Surrogate: 1,2-Dichlorobenzene-d	*2217*			*3333.33*		*66.5*	*34 - 104*			
Surrogate: 2,4,6-Tribromophenol	*4183*			*3325.00*		*126*	*11 - 144*			
Surrogate: 2-Chlorophenol-d4	*2347*			*3325.00*		*70.6*	*34 - 104*			
Surrogate: 2-Fluorobiphenyl	*2681*			*3333.33*		*80.4*	*36 - 113*			
Surrogate: 2-Fluorophenol	*2155*			*3325.00*		*64.8*	*27 - 97*			
Surrogate: 4-Terphenyl-d14	*2916*			*3333.33*		*87.5*	*36 - 136*			
Surrogate: Nitrobenzene-d5	*2606*			*3333.33*		*78.2*	*35 - 110*			
Surrogate: Phenol-d6	*2524*			*3325.00*		*75.9*	*26 - 108*			

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/02/2021

Notes and Definitions

S4	Surrogate was diluted out.
S10	Surrogate recovery was outside of laboratory acceptance limit due to possible matrix interference.
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.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
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.
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.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 3

Instruction: Complete all shaded areas.

2100732

For Laboratory Use Only ATLCOC Ver:20210101

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☑ ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☑	☐
☐ FedEx ☐ OnTrac	2. HEADSPACE (VOA) < 6mm	☐	☑	6. PRESERVED	☑	☐
☐ GSO	3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C:	2.5, 2.9	
☐ Other:	4. SEALED	☐	☑	8. THERMOMETER ID:	SCIETY	

CUSTOMER

Company: Langan

Address: | City: | State: | Zip: | Tel: | Fax:

SEND REPORT TO:
Attn: Shari Schwartzer Email: sschwartzer@langan.com
Company: Langan
Address: 515 S Flower St Suite 2860
City: Los Angeles State: CA Zip: 90071

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: Project Loki / SBDH
Project No.: 7000 89101
Quote #:
PO #:
Sampler: Shari Schwartzer / Megan Ritsema

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Location	Date	Time	TPH as DRO	TPH as GRO	SVOCs	CA Metals	VOCs	Turnaround Time (TAT)	Container: Quantity	Container: Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7=Canister	Container: Material: 1=Glass; 2=Plastic; 3=Metal	Container: Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=Zn(Ac)2; 6=NaOH; 7=NA2S2O3	Remarks
1	01	SB-02/1-2	SB-02	3/23/21	0755	X	X	X	X	X	7	4	6	1		
2	02	SB-02/5-7.5	SB-02		0800	X	X			X		5				
3	03	SB-03/1-2	SB-03		0825	X	X	X	X	X		6				
4	04	SB-03/5-7.5	SB-03		0830	X	X			X		5				
5	05	SB-04/1-2	SB-04		0855	X	X	X	X	X		4				
6	06	SB-04/5-7.5	SB-04		0905	X	X			X		5				
7	07	SB-05/1-2	SB-05		0925	X	X	X	X	X		5				
8	08	SB-05/5-7.5	SB-05		0935	X	X			X		5				
9	09	DUP-03232021	—		—	X	X			X		5				
10	10	SB-06/1-2	SB-06	↓	1030	X	X	X	X	X	↓	4	↓	↓		

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Ritsema	3/23/21	1640	Max Rothach	3/23/21	1645
Max Rothach	3/23/21	1830		3/23/21	1Hr16 30
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Instruction: Complete all shaded areas.

21

For Laboratory Use Only — ATLCOC Ver:20210101

Method of Transport: ☐ Client ☑ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other: ______

Sample Conditions Upon Receipt:

Condition	Y	N	Condition	Y	N
1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☑	☐
2. HEADSPACE (VOA) < 6mm	☐	☑	6. PRESERVED	☑	☐
3. CONTAINER INTACT	☑	☐	7. COOLER TEMP, deg C: 2.5, 2.9		
4. SEALED	☐	☑	8. THERMOMETER ID: SC-IRT11		

CUSTOMER

Company:
Address: City: State: Zip: Tel: Fax:

SEND REPORT TO: Attn: Email: Company: Address: City: State: Zip:

SEND INVOICE TO: ☐ same as SEND REPORT TO Attn: Email: Company: Address: City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ ______

QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ ______

SEE PAGE 1

PROJECT SAMPLES

Project Name:
Project No.:
Sampler:
Quote #:
PO #:

ITEM	Lab ID (For Lab Use Only)	Sample ID	Location	Date	Time	TPH as DRO	TPH as jet fuel	SVOCs	CA Metals	VOCs	Turnaround Time (TAT)	Quantity	Type	Material	Preservative	Remarks
1	11	SB-06/5-7.5	SB-06	3/23/21	1040	X	X			X		4	5/2	1		
2	12	SB-01/1-2	SB-01	↓	1100	X	X	X	X	X		4	↓	↓		
3	13	SB-01/5-7.5	SB-01	↓	1110	X	X			X		4	↓	↓		
4	14	SB-07/1-2	SB-07	↓	1250	X	X	X	X	X		4	↓	↓		
5	15	SB-07/5-7.5	SB-07	↓	1300	X	X			X		4	↓	↓		
6	16	CS-13/0-2	CS-13	↓	1310	X	X	X	X			1	5	1		
7	17	CS-13/4-6	CS-13	↓	1320	↓	↓	↓	↓			↓	↓	↓		
8	18	CS-07/0-2	CS-07	↓	1350	↓	↓	↓	↓			↓	↓	↓		
9	19	CS-10/0-2	CS-10	↓	1400	↓	↓	↓	↓			↓	↓	↓		
10	20	CS-10/4-6	CS-10	↓	1410	↓	↓	↓	↓			↓	↓	↓		

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=4C; 5=Zn(Ac)2; 6=NaOH; 7=NA2S2O3

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Rosema	3/23/21	1640	Max Rothack	3/23/21	1645
Max Rothack	3/23/21	1810	[signature]	3/23/21	1810 30

2.5°, 29°C

eurofins | ATL Calscience

CHAIN OF CUSTODY RECORD

DATE:

PAGE: 3 OF 3

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

SEE PAGE 1

LABORATORY CLIENT:

ADDRESS:

CITY: STATE: ZIP:

TEL: E-MAIL:

CLIENT PROJECT NAME / NUMBER:

P.O. NO.:

PROJECT CONTACT:

SAMPLER(S): (PRINT)

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:
1 day TAT

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035): ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs: ☐ 8270 ☐ 8270 SIM	T22 Metals: ☐ 6010/747X ☐ 6020/747X	Cr(VI): ☐ 7196 ☐ 7199 ☐ 218.6				
	CS-11/0-2	3/23/21	1420	Soil	1																		X TPH as DRO	X TPH at jet fuel	X SVOCs	X CA Metals
	CS-11/4-6	↓	1430	↓	↓																		↓	↓	↓	↓
	CS-12/0-2		1440																							
	CS-12/4-6	↓	1450	↓	↓																		↓	↓	↓	↓

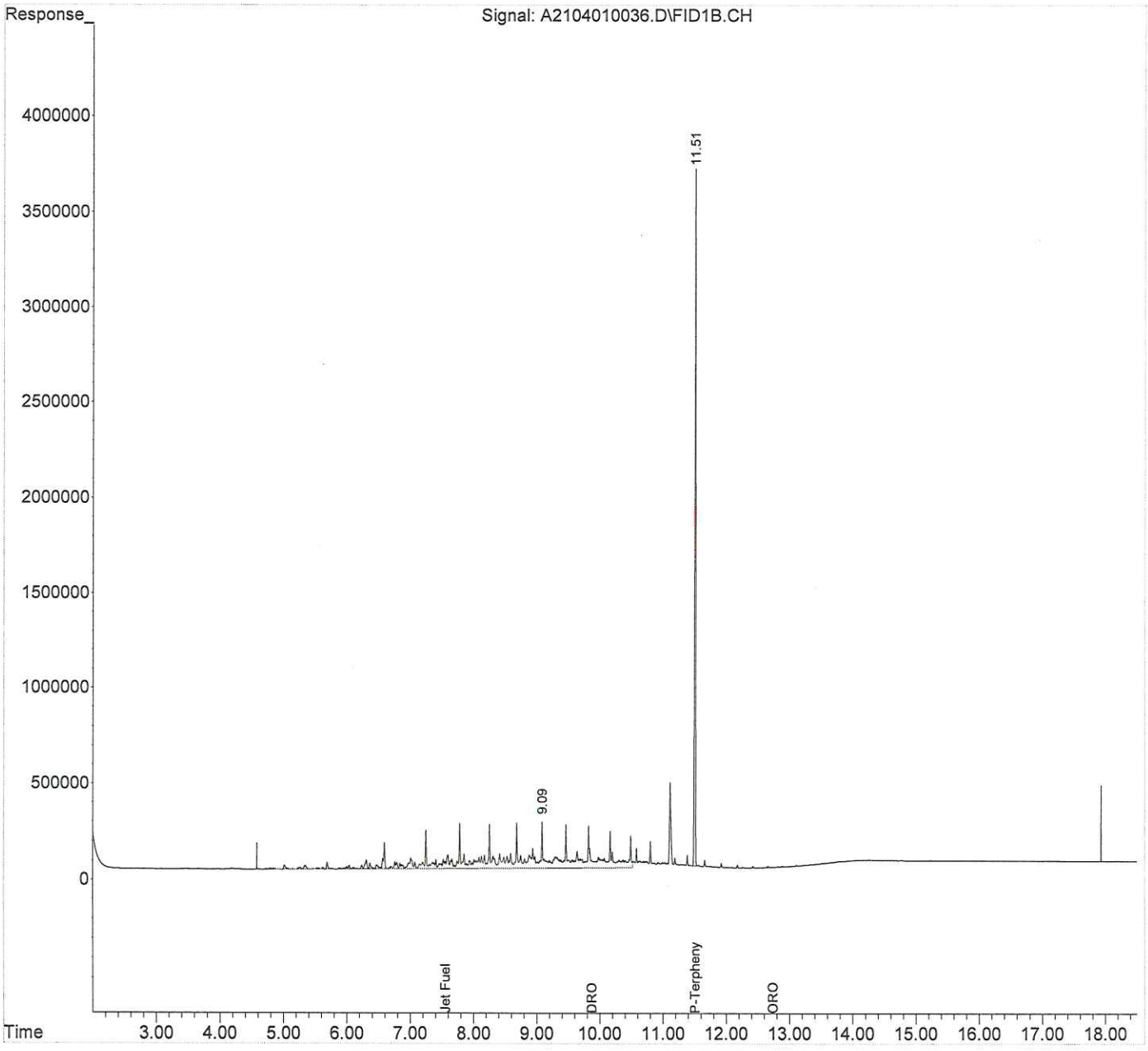
Relinquished by: (Signature)			Received by: (Signature/Affiliation)	Date:	Time:
Megan Ritsema	3/23/21	16:40	Max Rathacker	3/23/21	16 45
Relinquished by: (Signature)			Received by: (Signature/Affiliation)	Date:	Time:
Max Rathacker	3/23/21	18 30	[signature]	3/23/21	18:30
Relinquished by: (Signature)			Received by: (Signature/Affiliation)	Date:	Time:

06/02/14 Revision

Data Path : D:\Data\040121A\
Data File : A2104010036.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 3:37 am
Operator : AC
Sample : S1C0287-CCV1
Misc : 1,Diesel,500/80
ALS Vial : 98 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:48:42 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

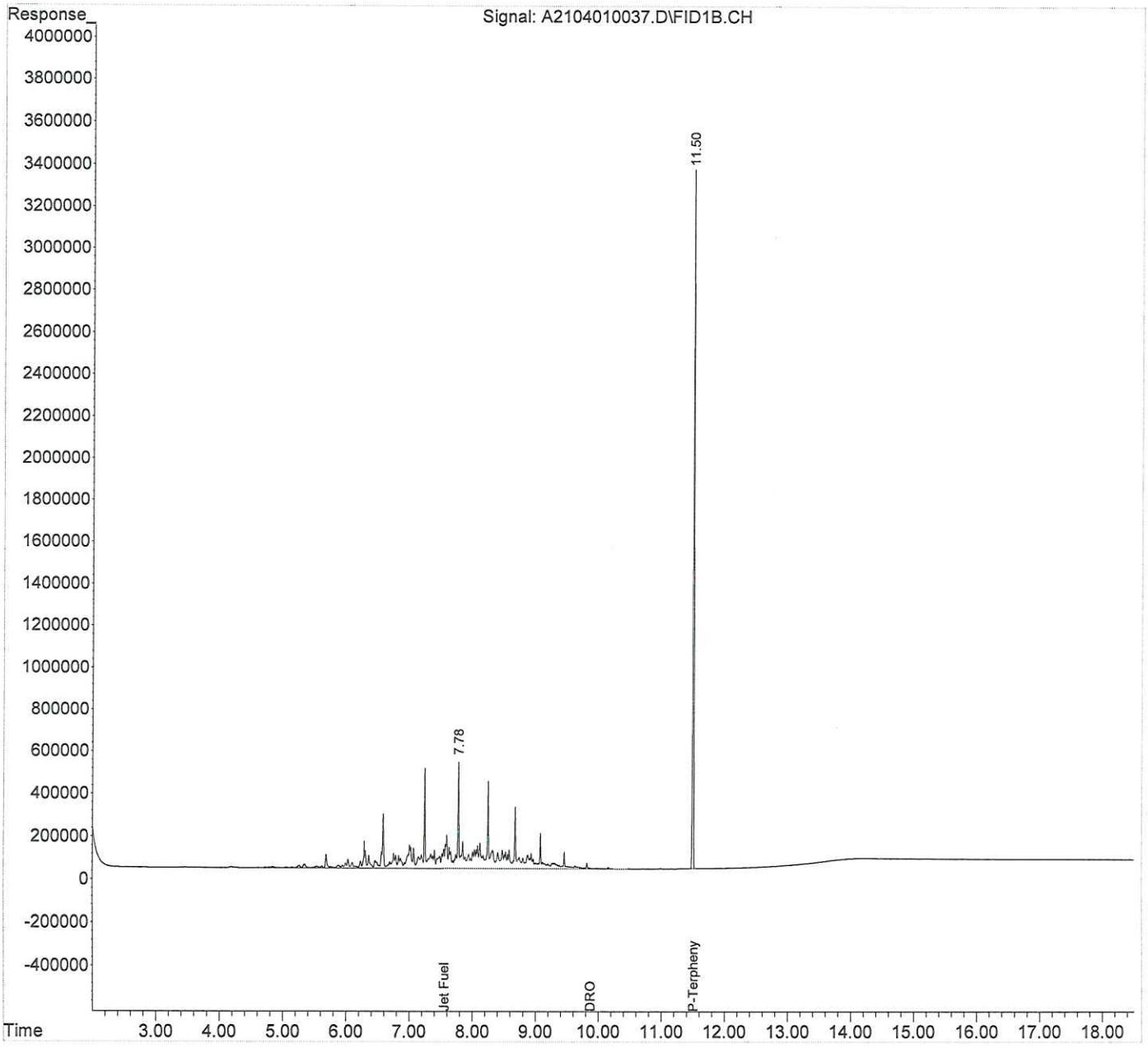
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010037.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 4:03 am
Operator : AC
Sample : S1C0287-CCV2
Misc : 1,Jet Fuel,500/80
ALS Vial : 99 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 11:49:04 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

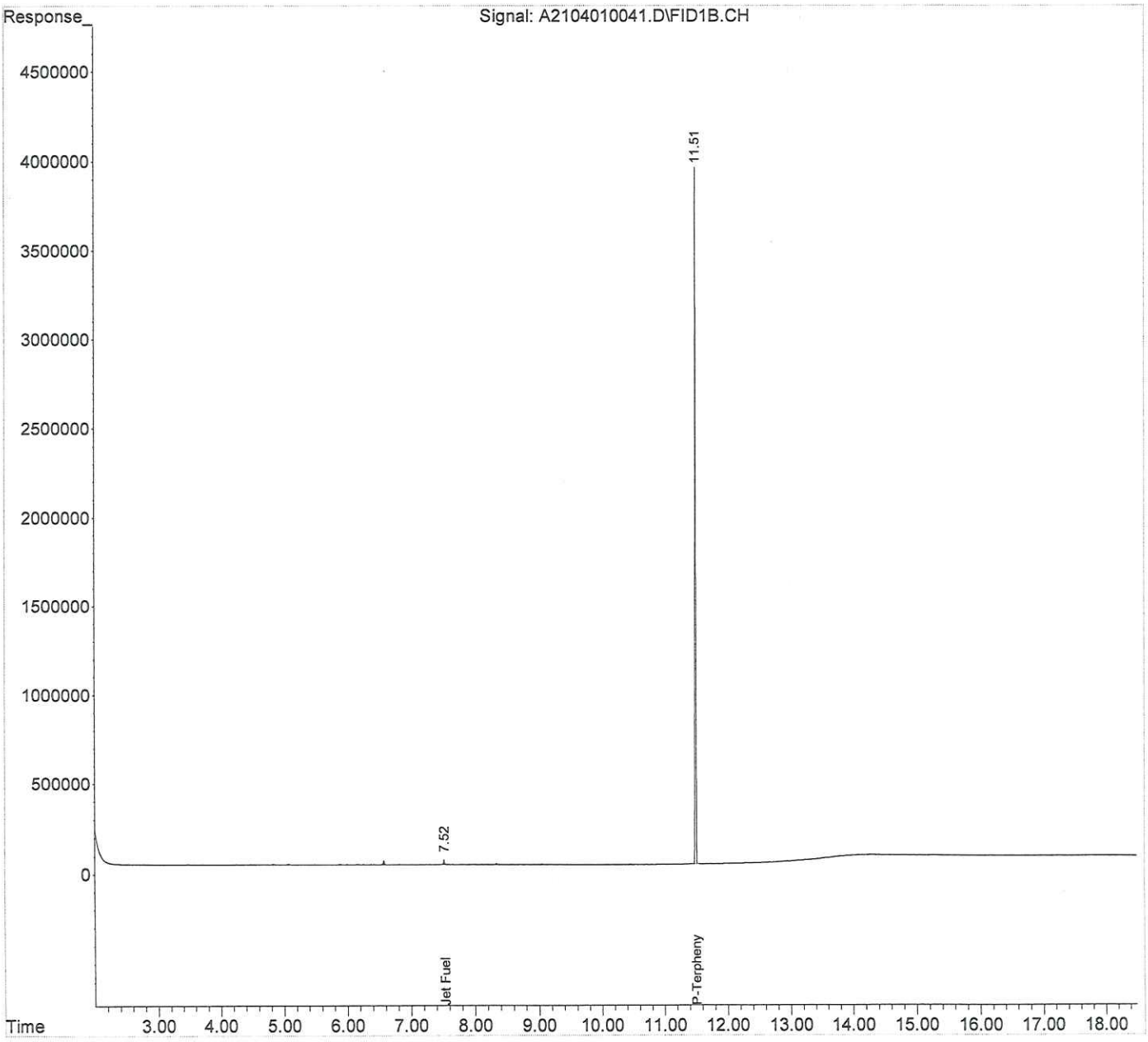


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010041.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 5:46 am
Operator : AC
Sample : 2100732-01
Misc : 1,B1C0495
ALS Vial : 26 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 14:45:00 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

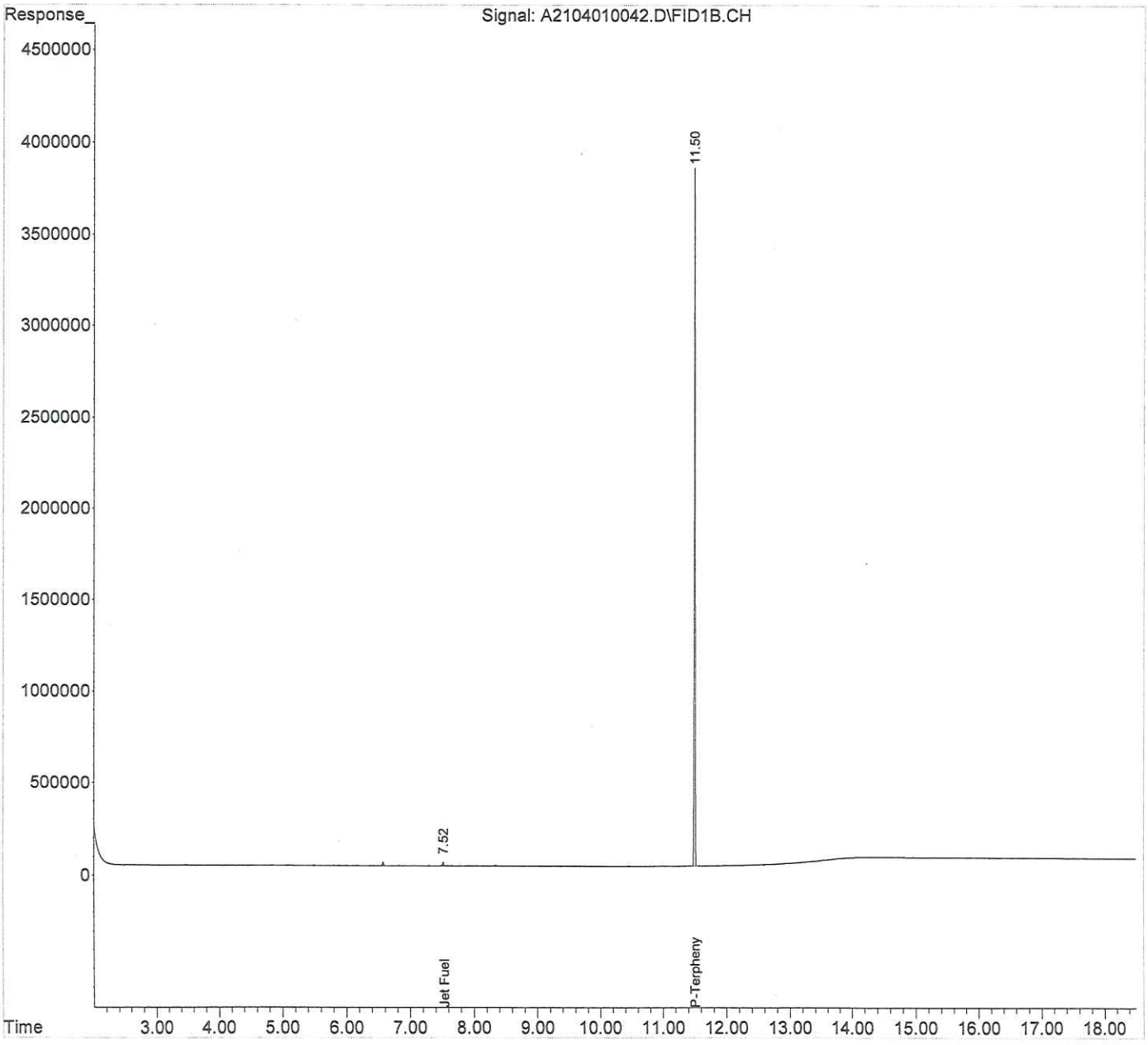
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010042.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 6:12 am
Operator : AC
Sample : 2100732-02
Misc : 1,B1C0495
ALS Vial : 27 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 14:46:51 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

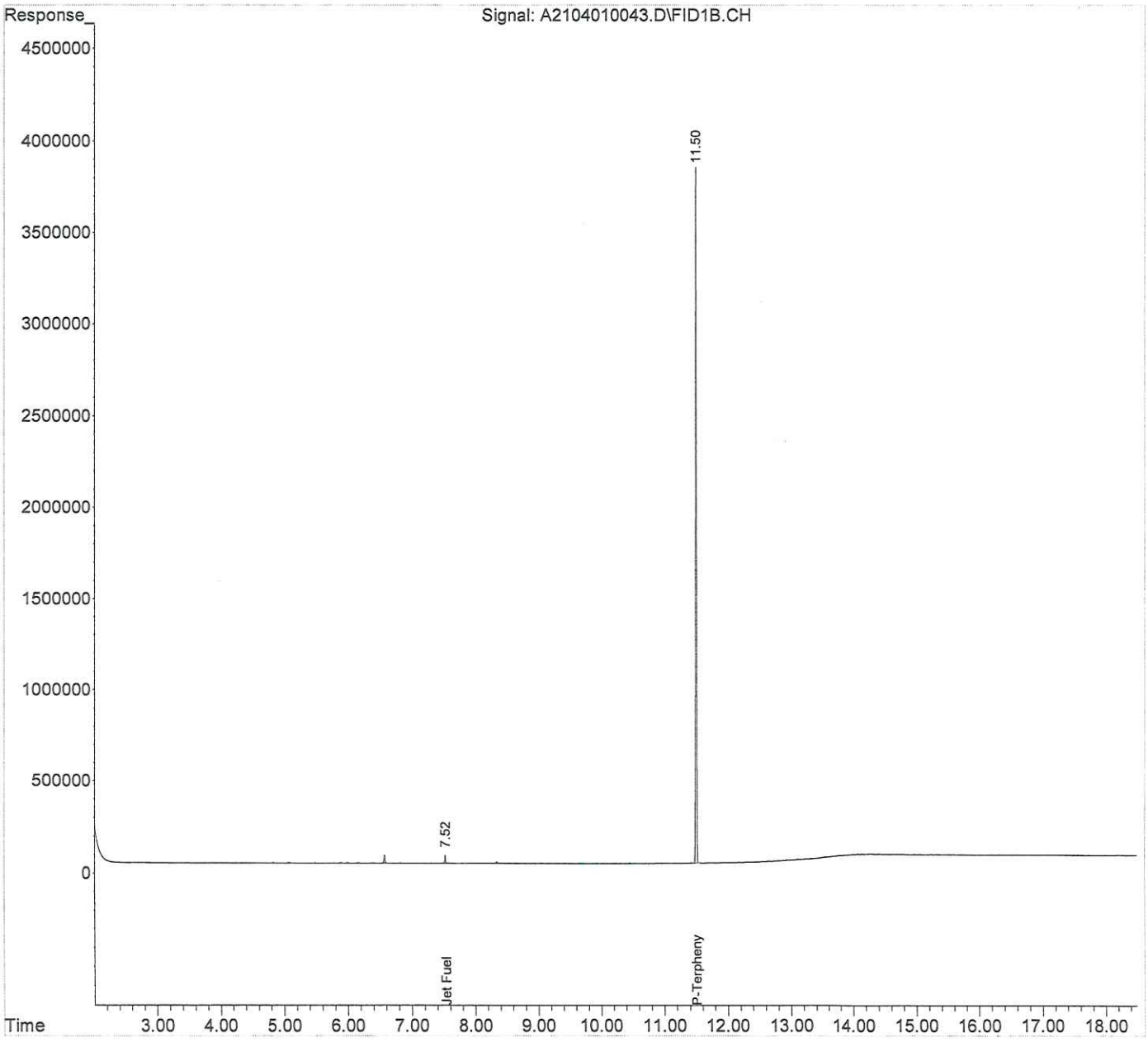


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010043.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 6:38 am
Operator : AC
Sample : 2100732-03
Misc : 1,B1C0495
ALS Vial : 28 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 14:47:04 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

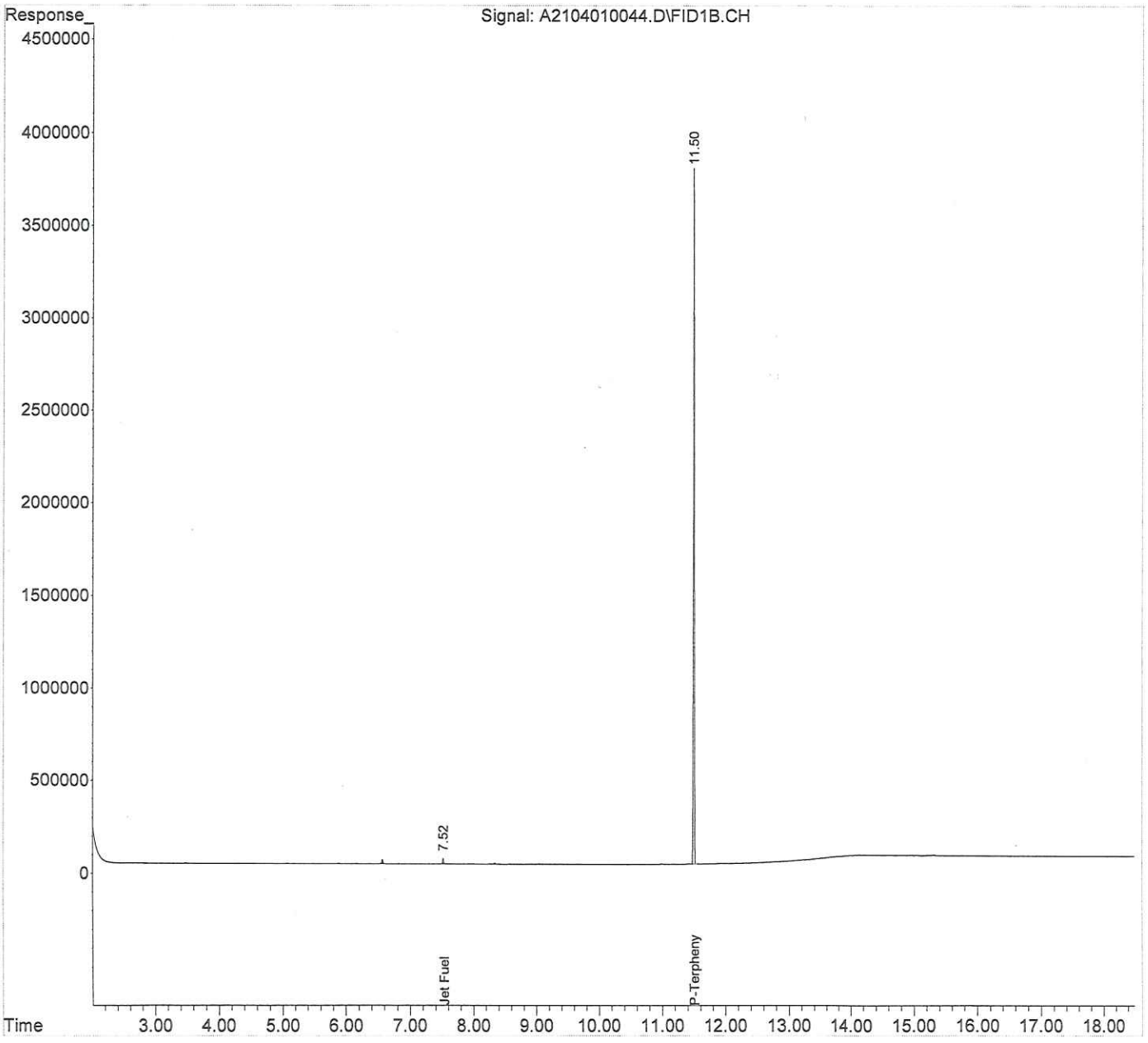
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010044.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 7:04 am
Operator : AC
Sample : 2100732-04
Misc : 1,B1C0495
ALS Vial : 29 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 14:47:20 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

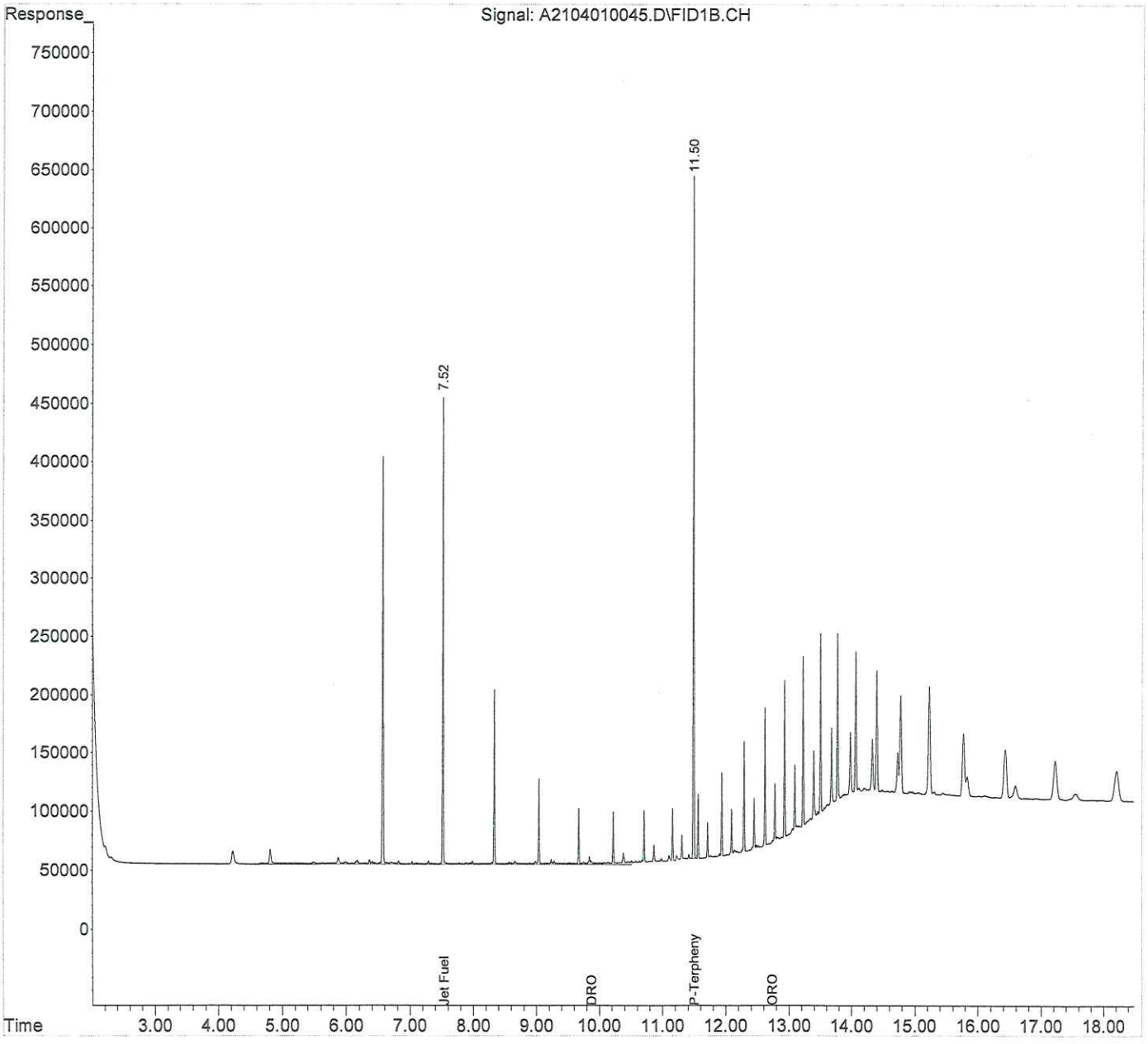


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010045.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 7:30 am
Operator : AC
Sample : 2100732-05
Misc : 10,B1C0495,50/500uL
ALS Vial : 30 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 14:47:47 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

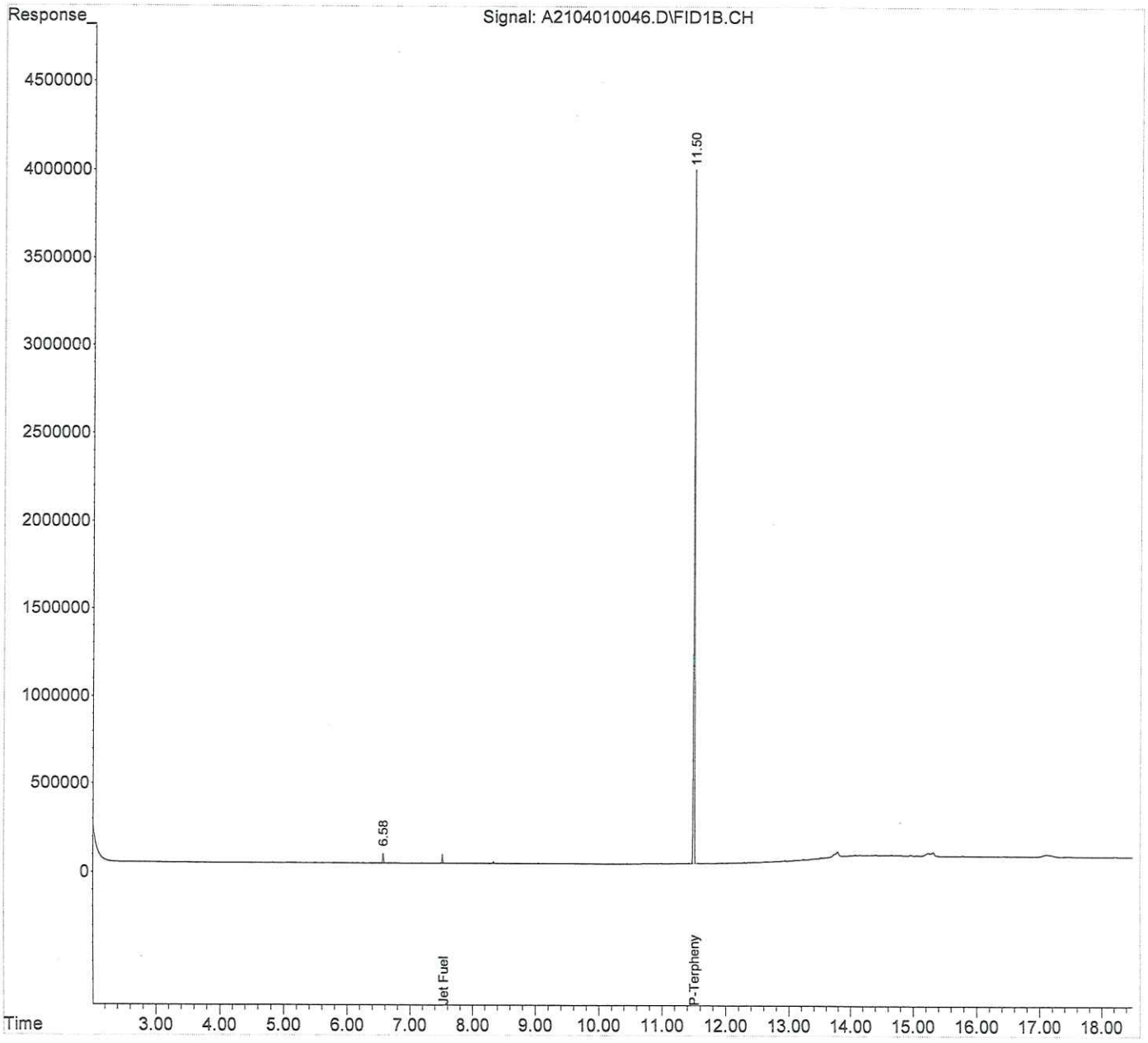


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010046.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 7:56 am
Operator : AC
Sample : 2100732-06
Misc : 1,B1C0495
ALS Vial : 31 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:02:45 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

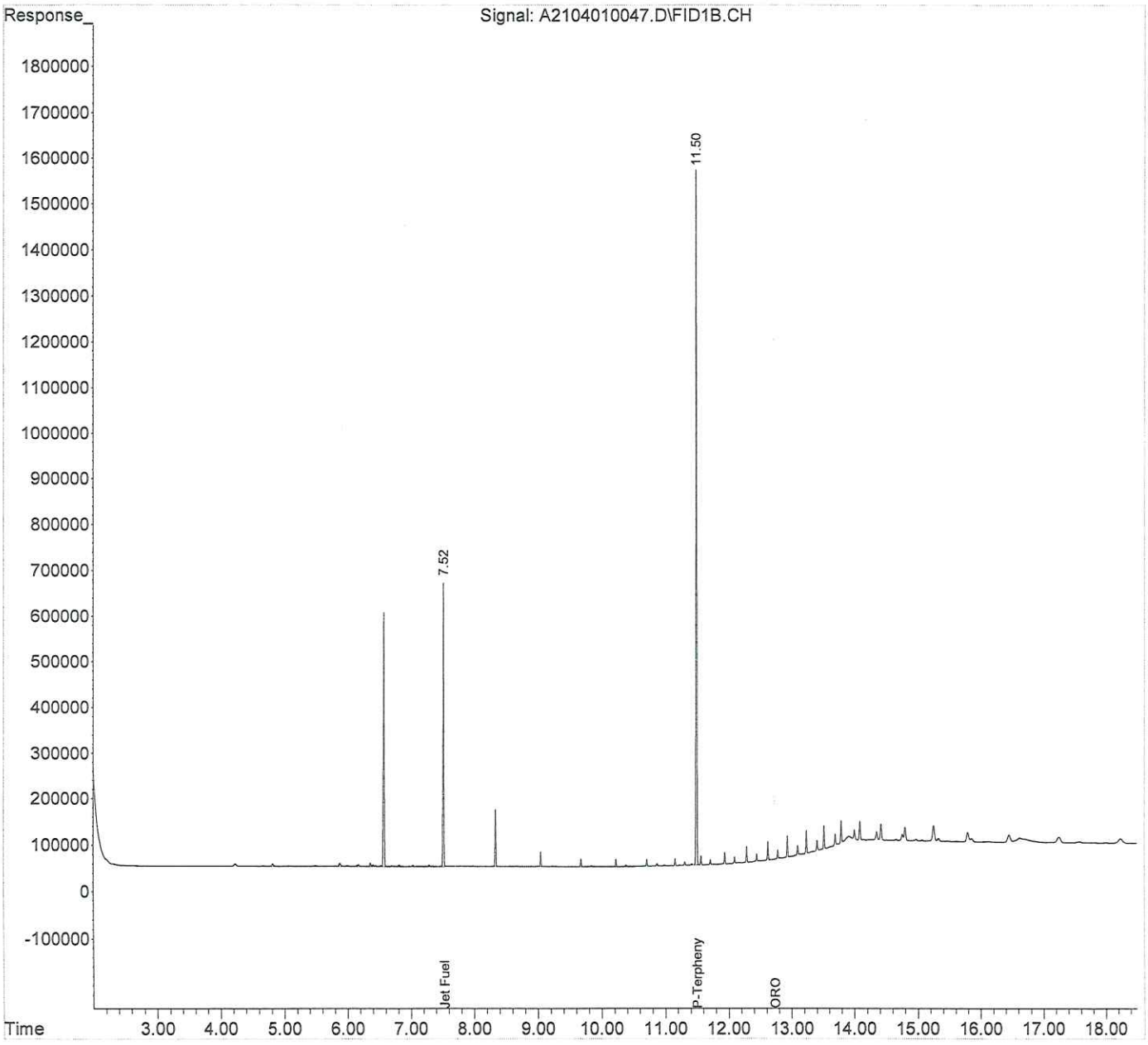


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010047.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 8:22 am
Operator : AC
Sample : 2100732-07
Misc : 5,B1C0495,100/500uL
ALS Vial : 32 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:03:02 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

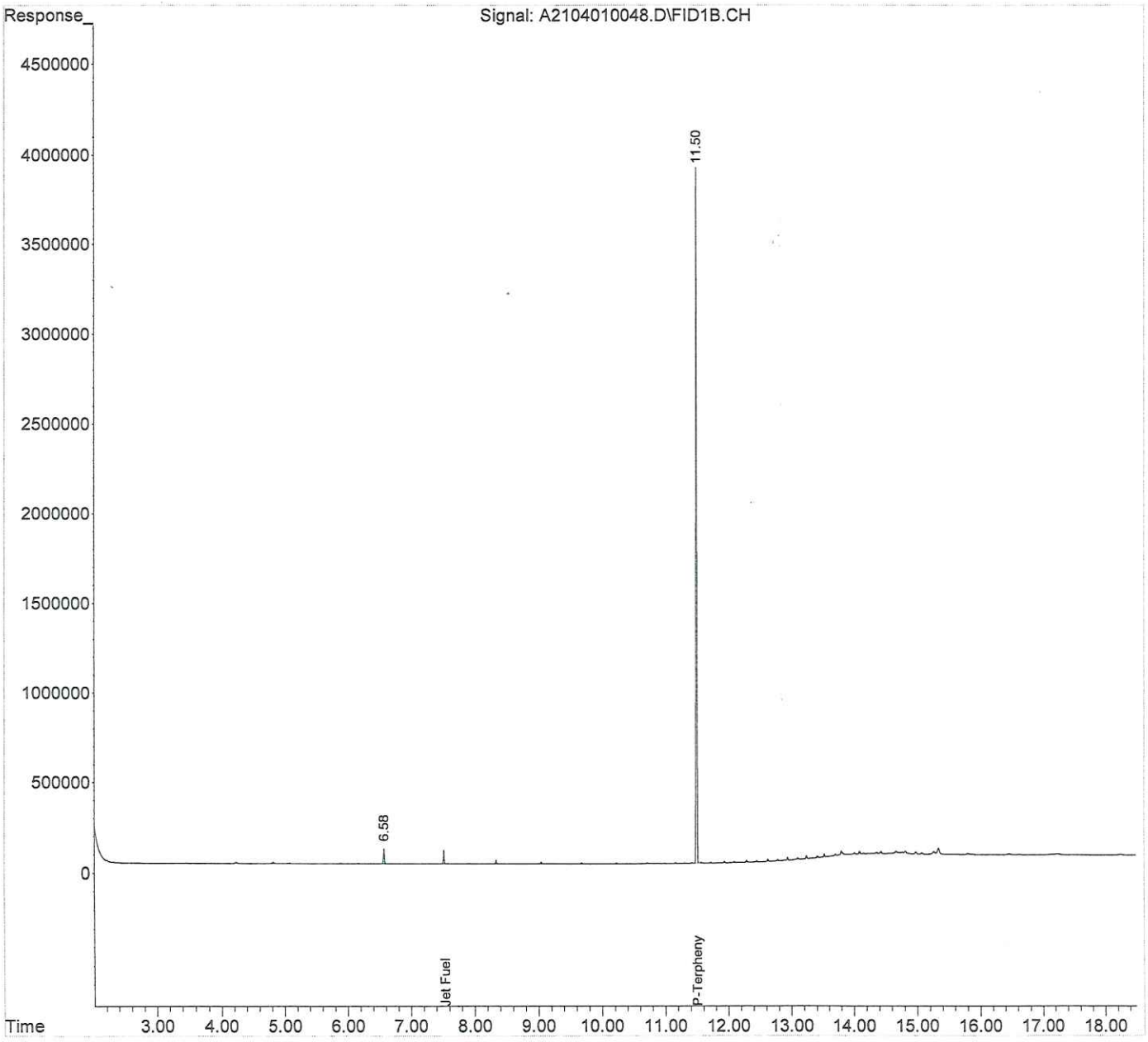


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010048.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 8:47 am
Operator : AC
Sample : 2100732-08
Misc : 1,B1C0495
ALS Vial : 33 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:03:57 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

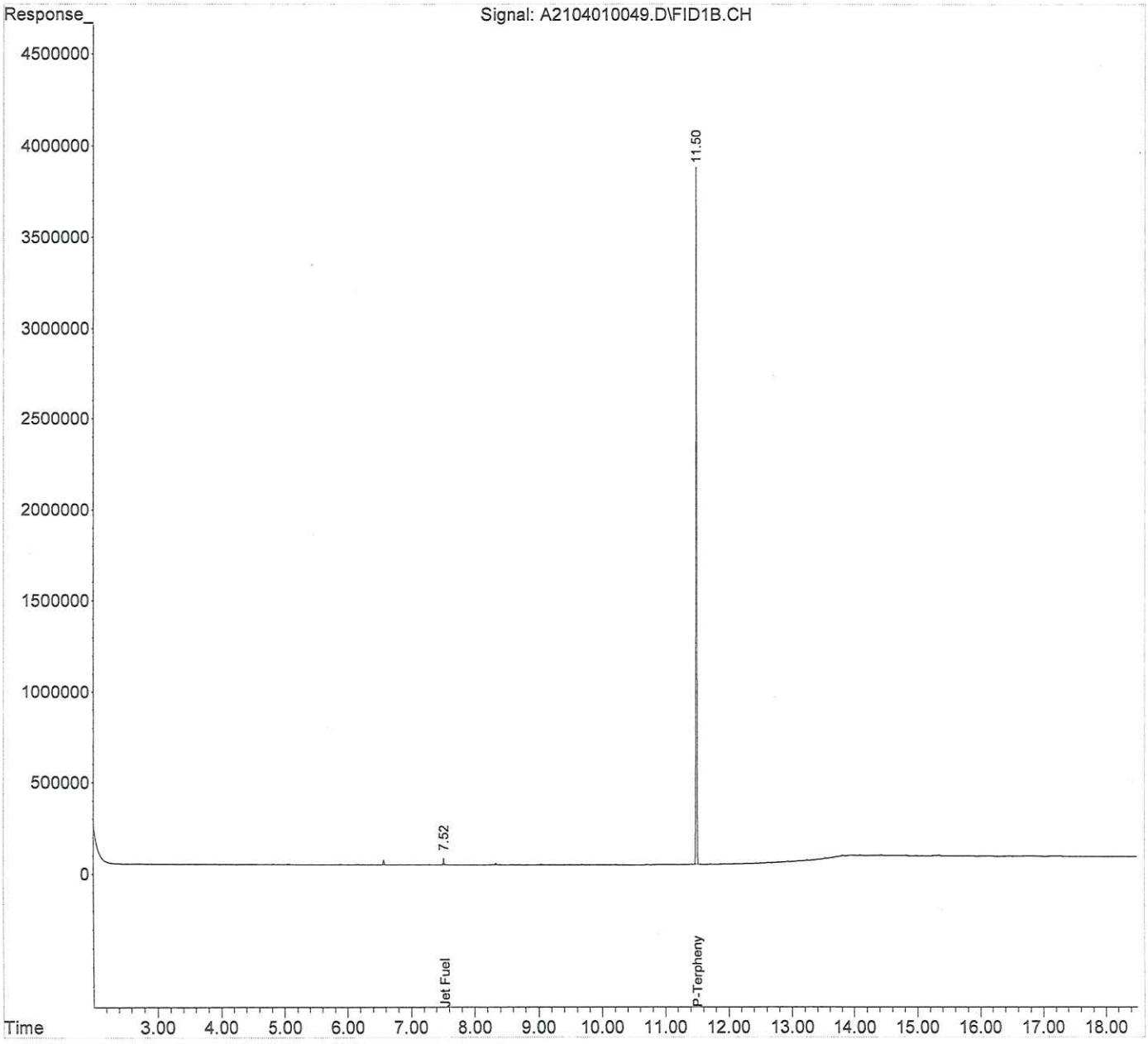


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010049.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 9:13 am
Operator : AC
Sample : 2100732-09
Misc : 1,B1C0495
ALS Vial : 34 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:04:13 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

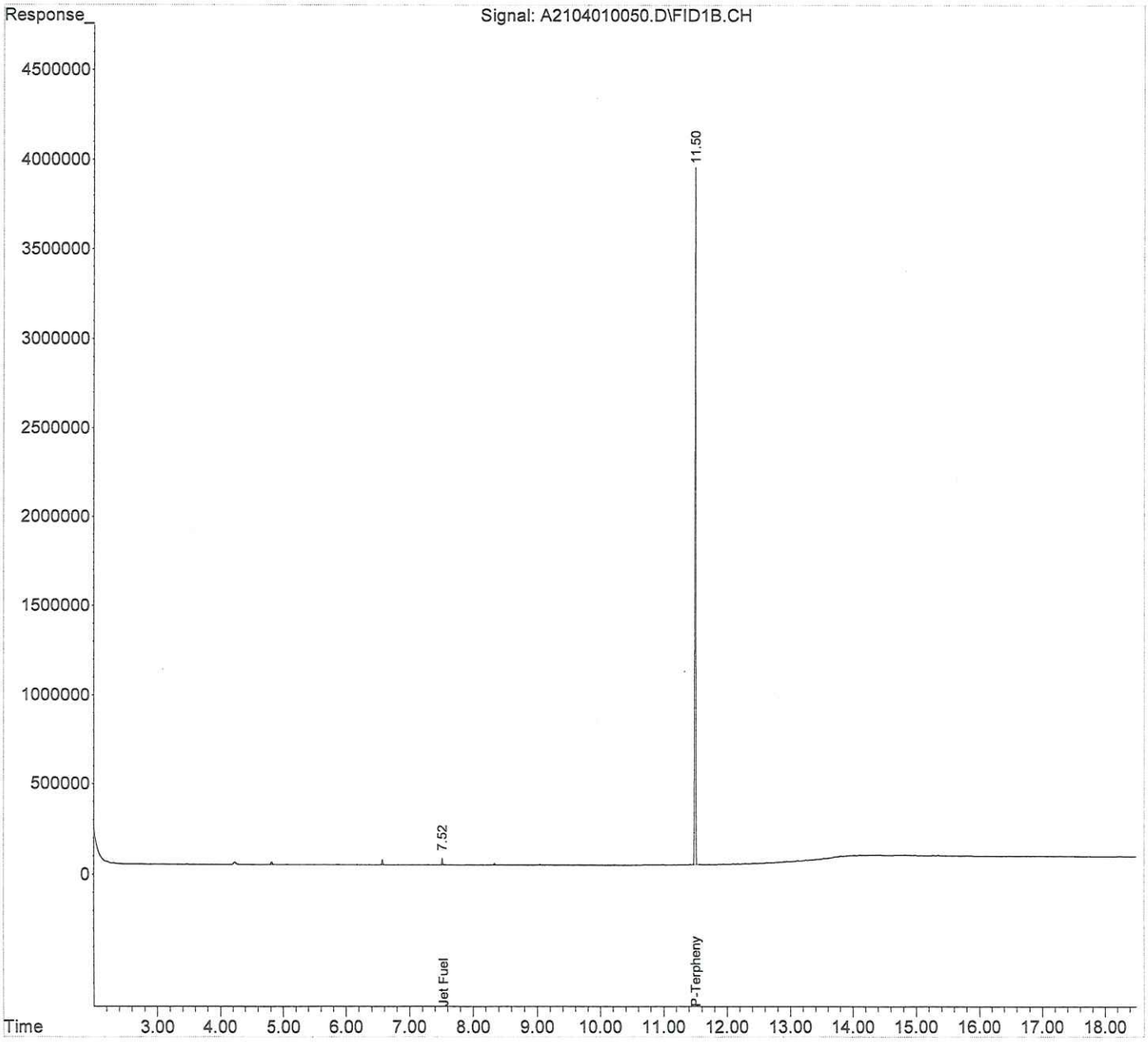
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010050.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 9:39 am
Operator : AC
Sample : 2100732-10
Misc : 1,B1C0495
ALS Vial : 35 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:05:05 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

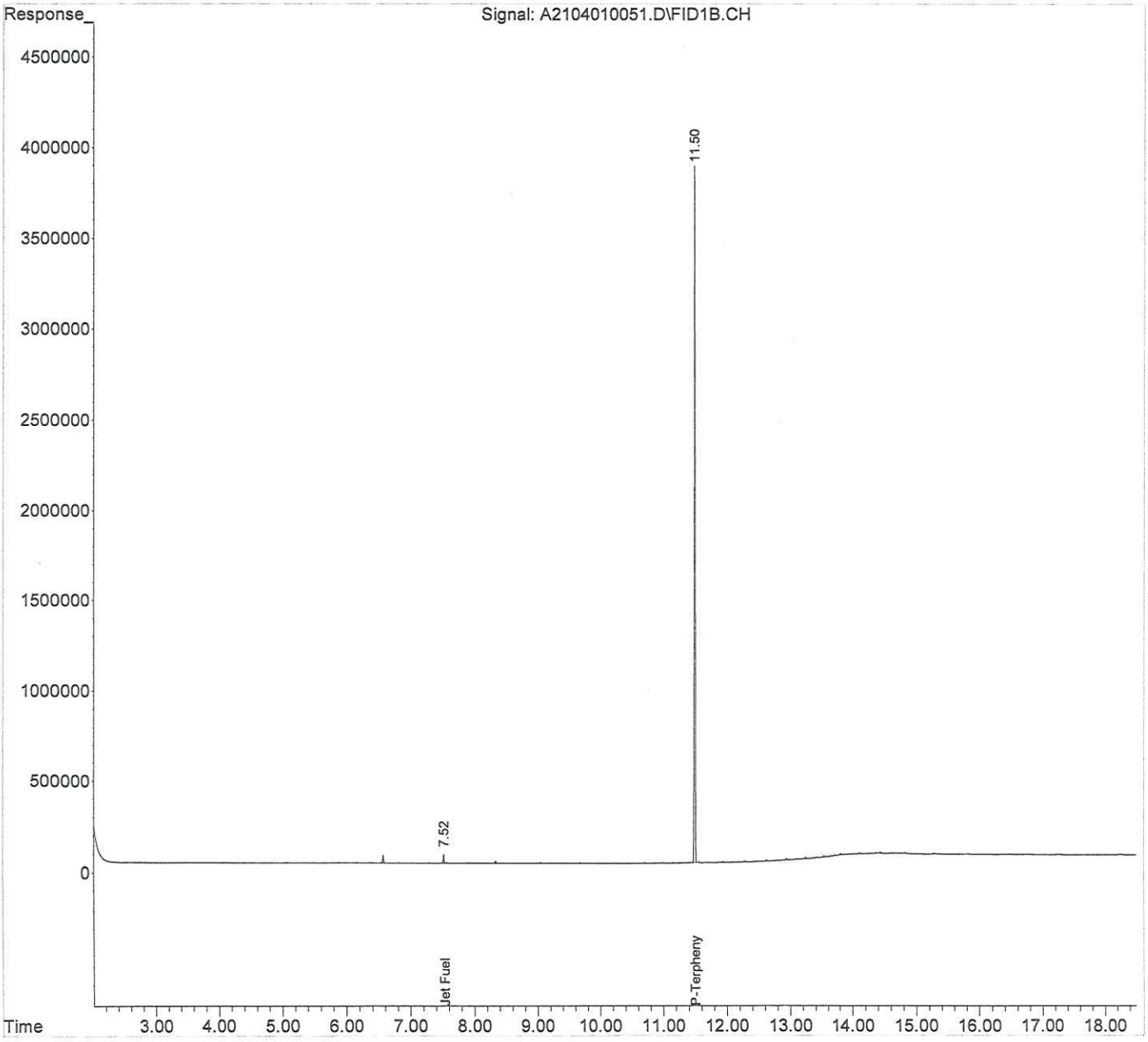


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010051.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 10:06 am
Operator : AC
Sample : 2100732-11
Misc : 1,B1C0495
ALS Vial : 36 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:05:20 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

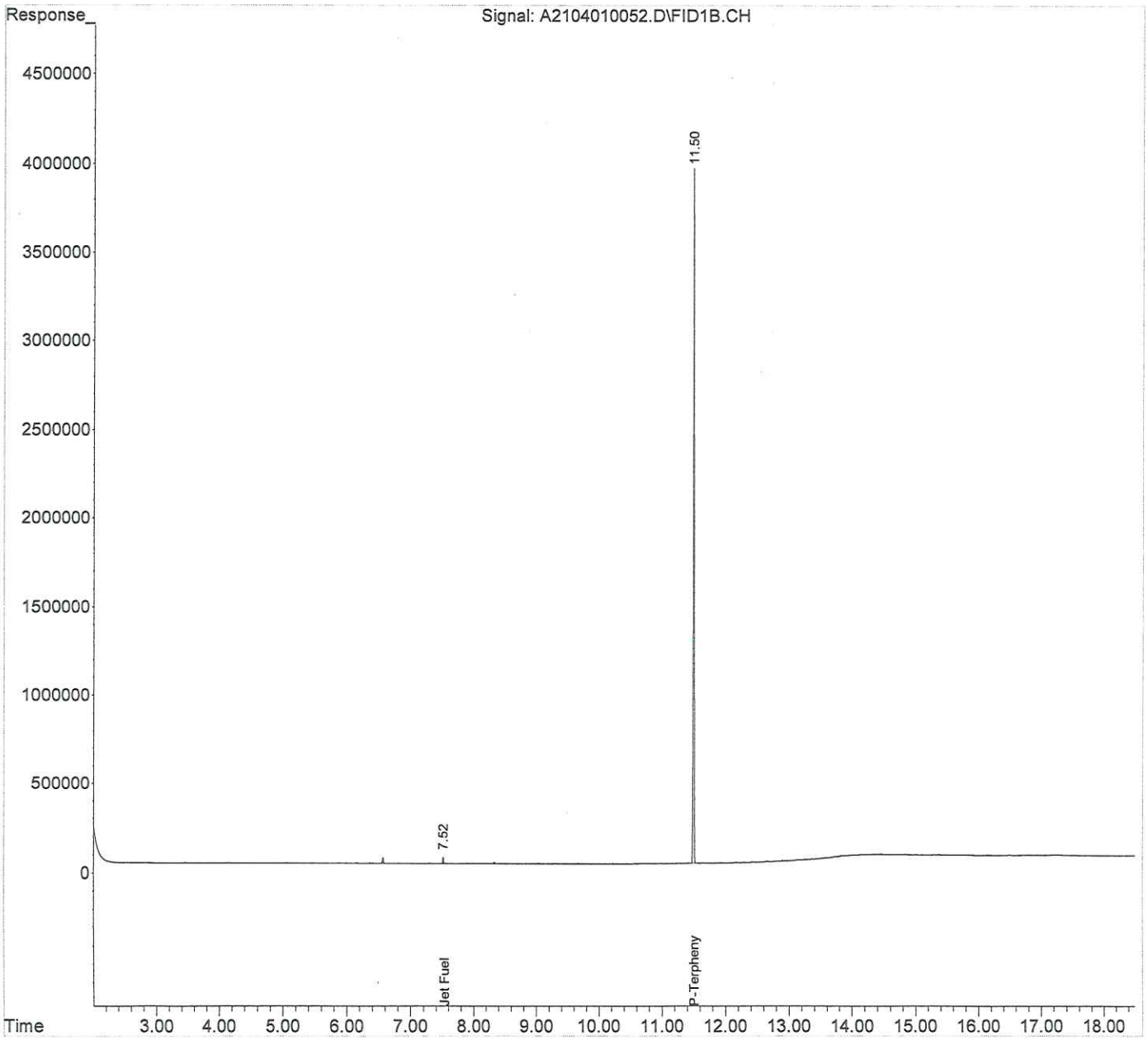
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010052.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 10:32 am
Operator : AC
Sample : 2100732-12
Misc : 1,B1C0495
ALS Vial : 37 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:05:34 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

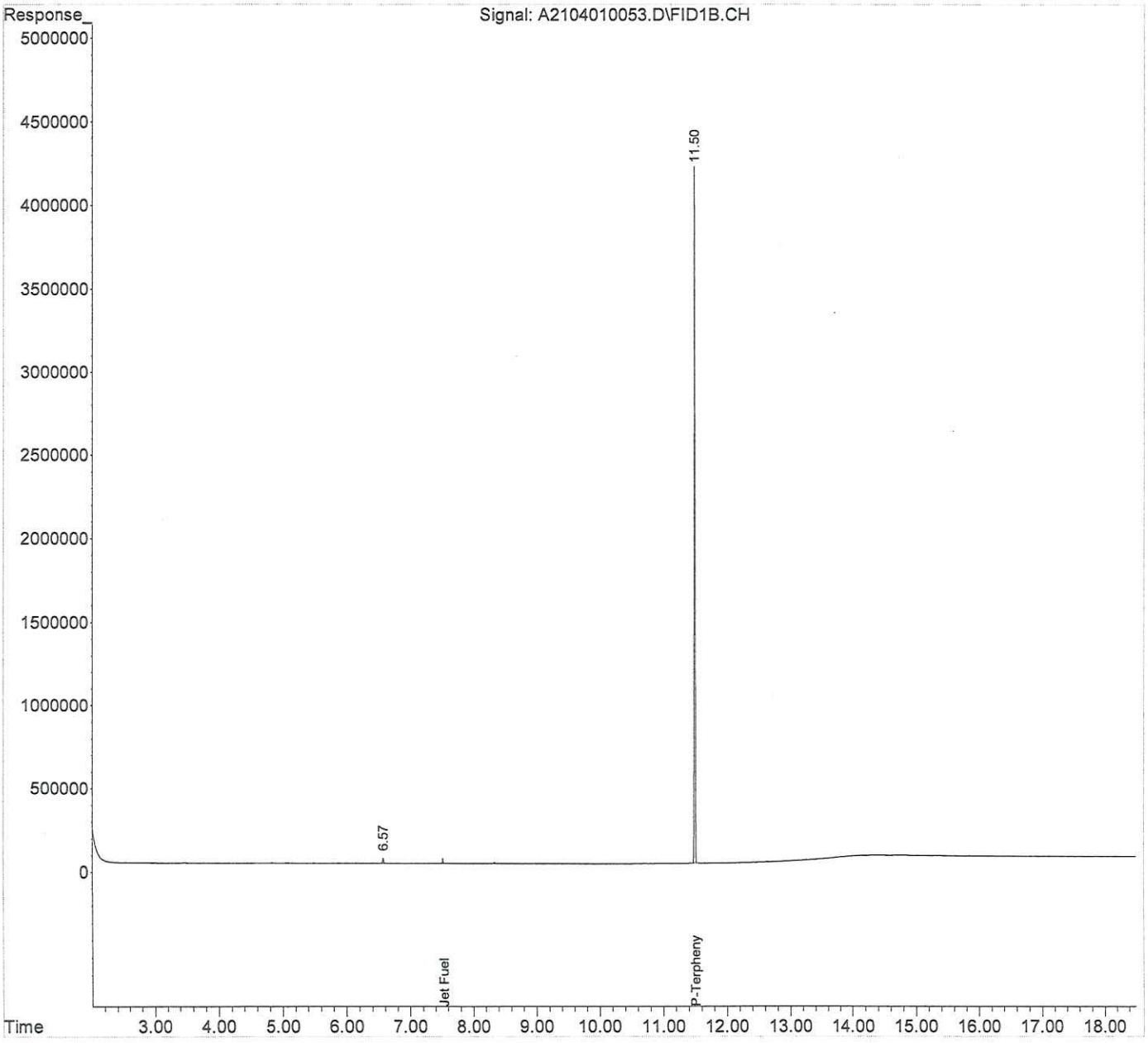


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010053.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 10:58 am
Operator : AC
Sample : 2100732-13
Misc : 1,B1C0495
ALS Vial : 38 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:05:50 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

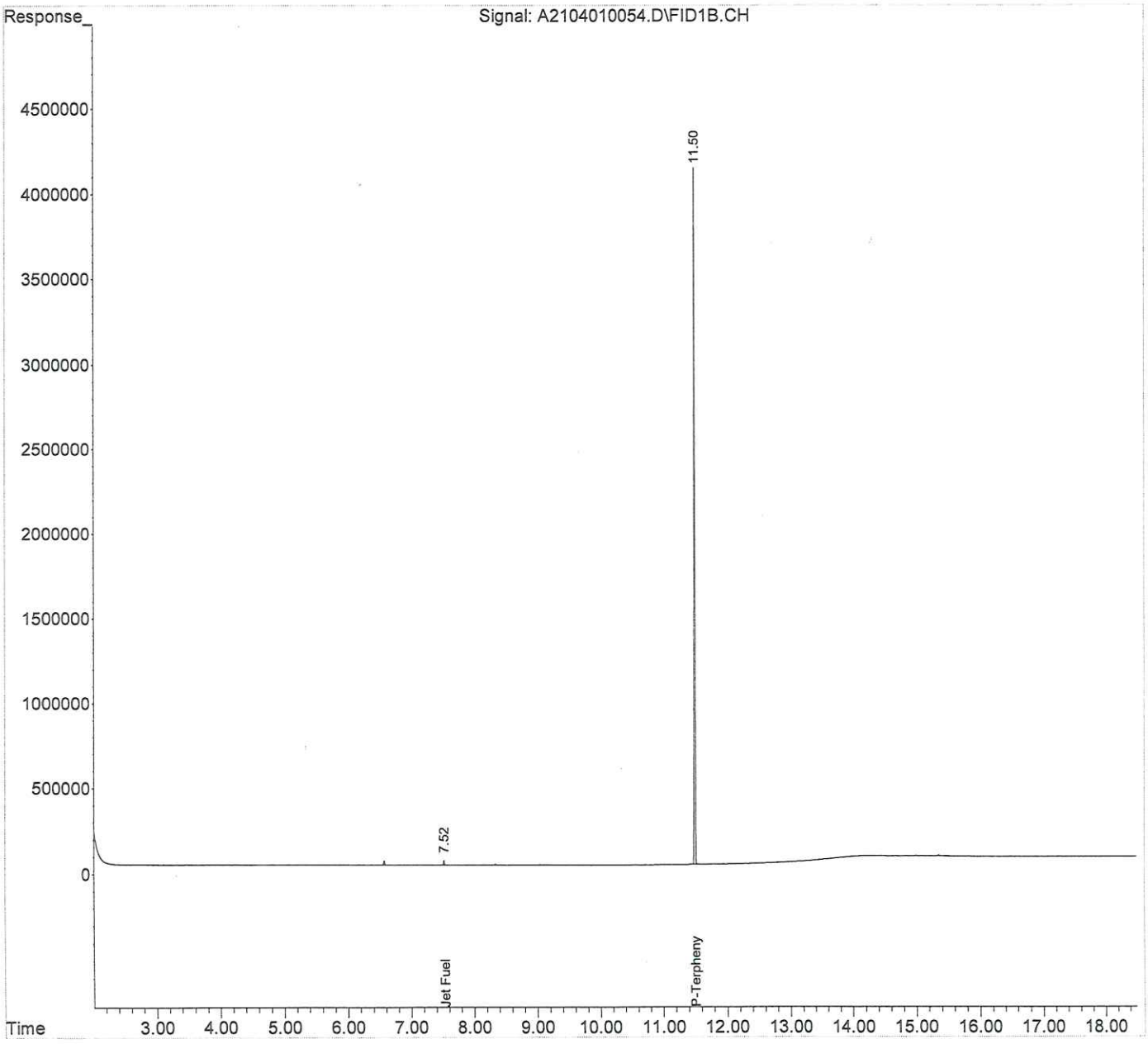
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010054.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 11:50 am
Operator : AC
Sample : 2100732-14
Misc : 1,B1C0495
ALS Vial : 39 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:06:06 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

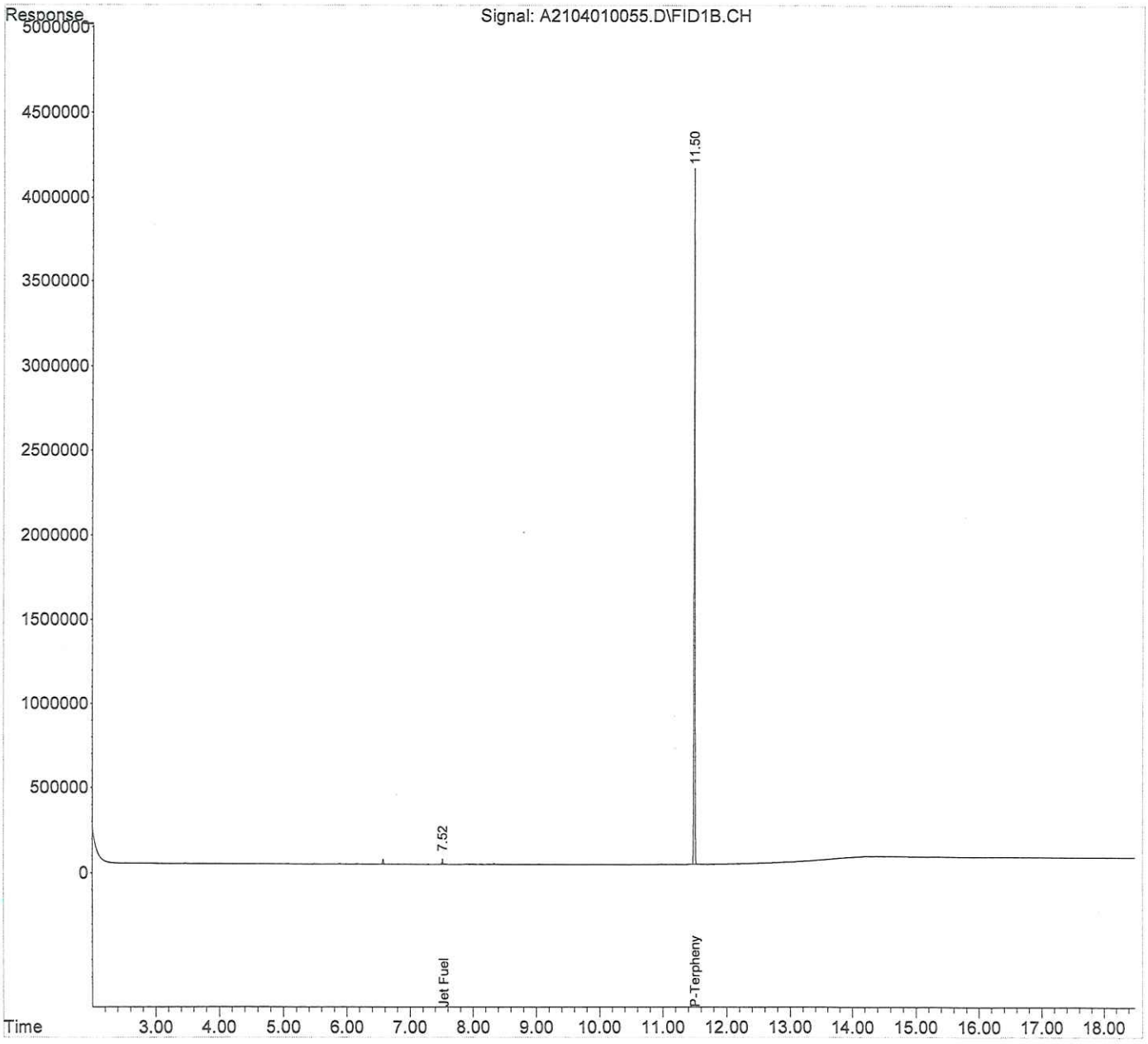


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010055.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 12:17 pm
Operator : AC
Sample : 2100732-15
Misc : 1,B1C0495
ALS Vial : 40 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:06:21 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

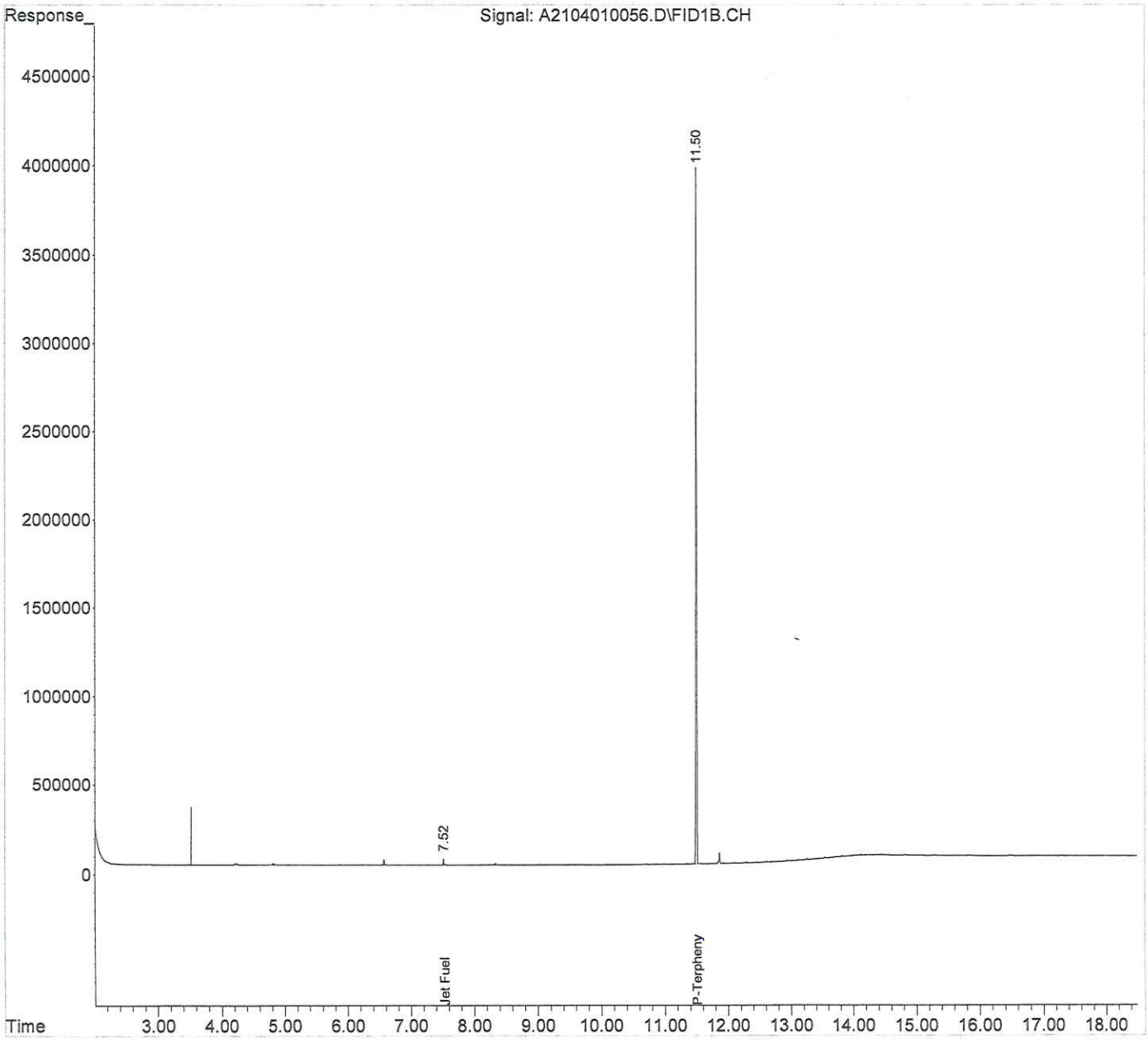
Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



Data Path : D:\Data\040121A\
Data File : A2104010056.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 12:43 pm
Operator : AC
Sample : 2100732-16
Misc : 1,B1C0495
ALS Vial : 41 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:06:35 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

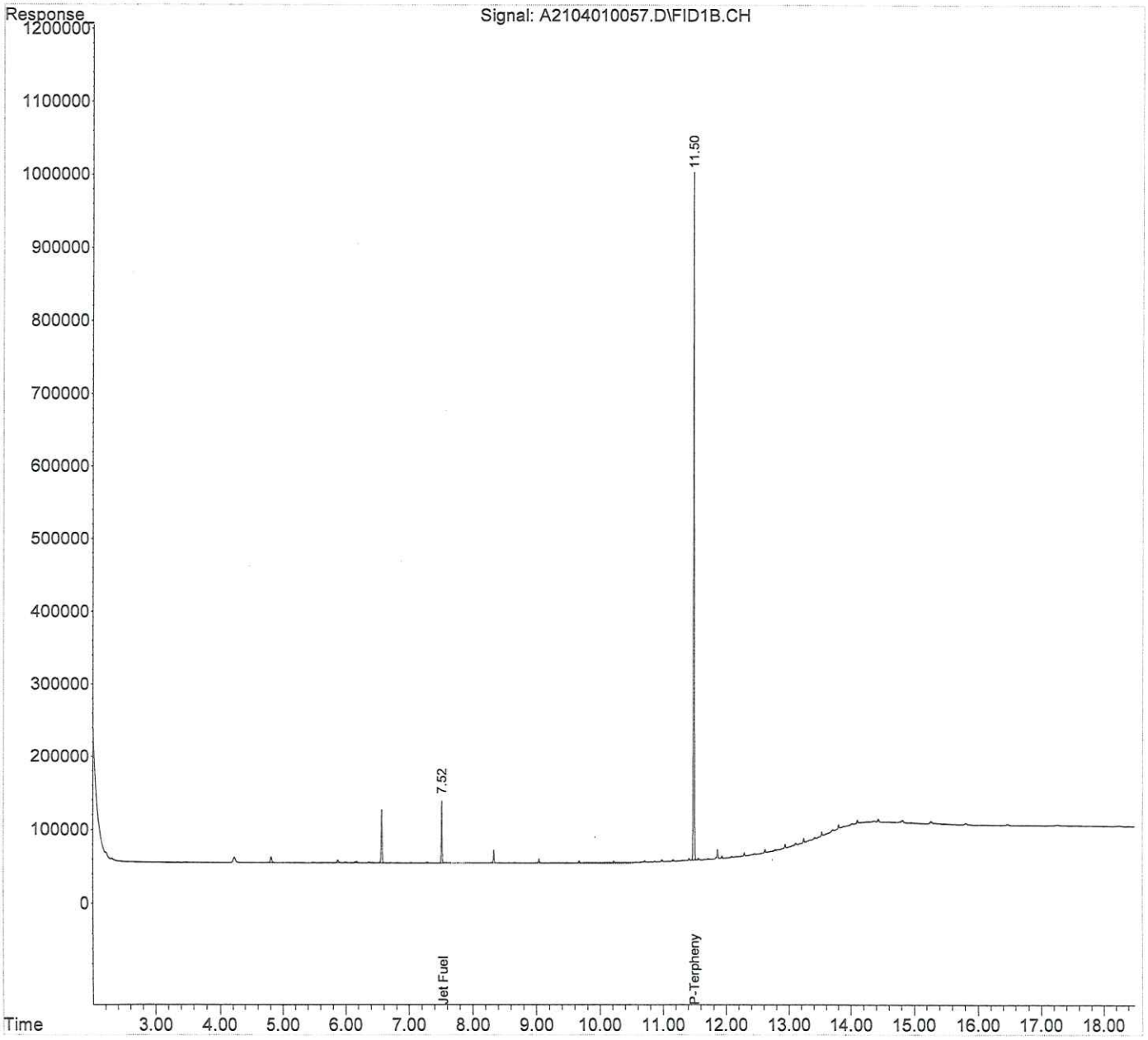


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010057.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 1:09 pm
Operator : AC
Sample : 2100732-17
Misc : 5,B1C0495,100/500uL
ALS Vial : 42 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:09:22 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

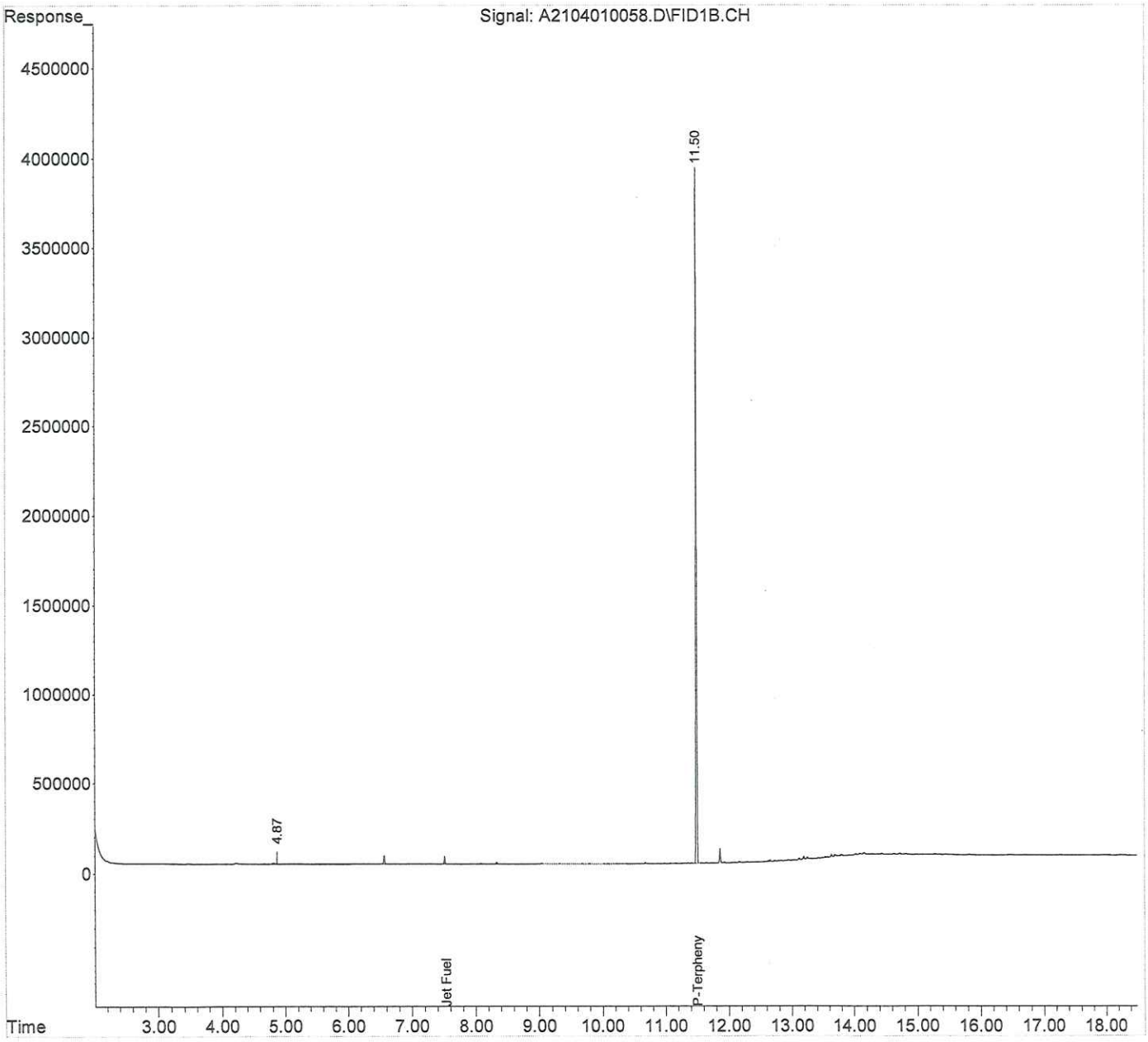


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010058.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 1:36 pm
Operator : AC
Sample : 2100732-18
Misc : 1,B1C0495
ALS Vial : 43 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:10:03 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

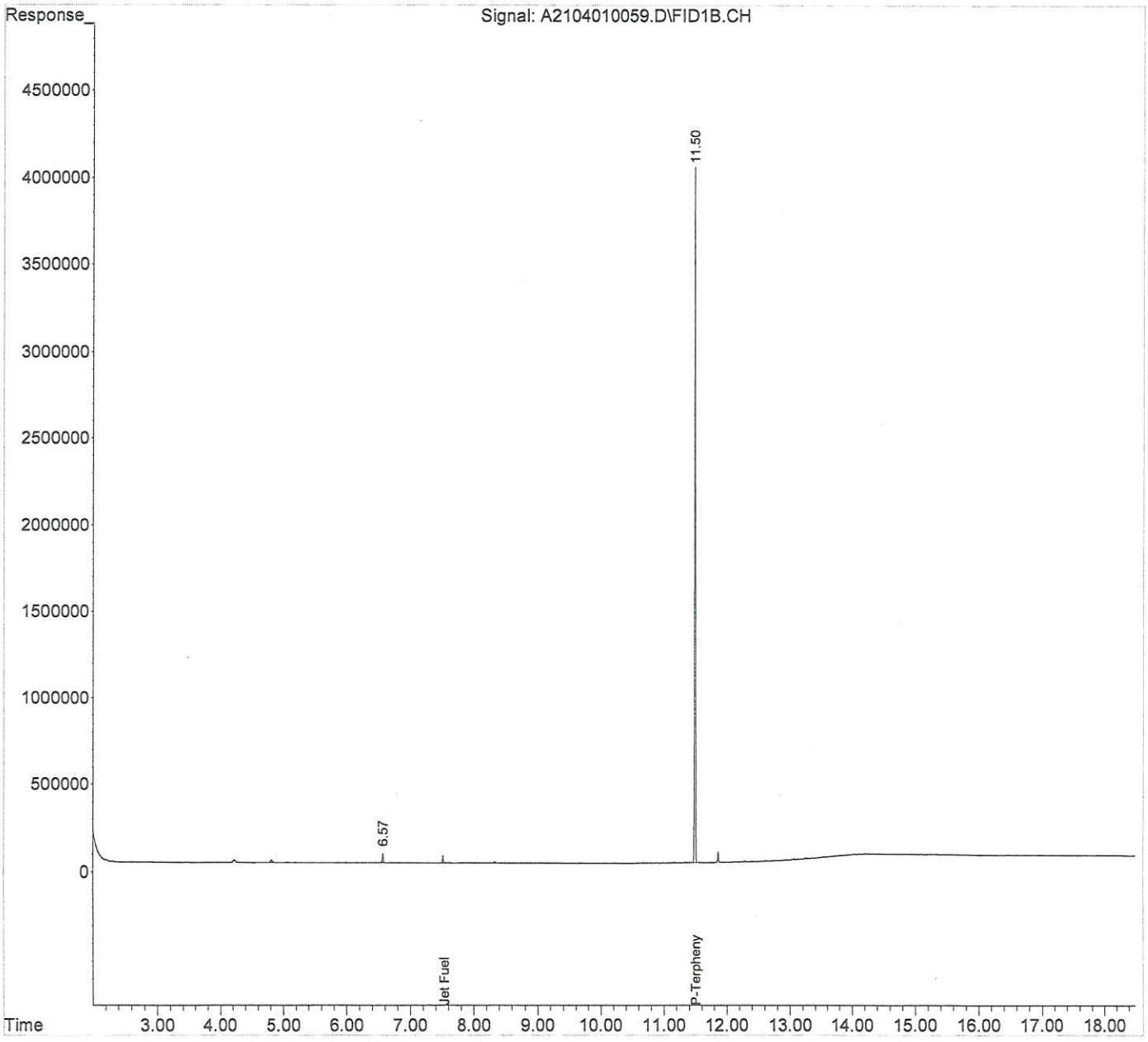


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010059.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 2:02 pm
Operator : AC
Sample : 2100732-19
Misc : 1,B1C0495
ALS Vial : 44 Sample Multiplier: 1
InstName : GC 8

Integration File: autoint1.e
Quant Time: Apr 02 15:10:17 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um

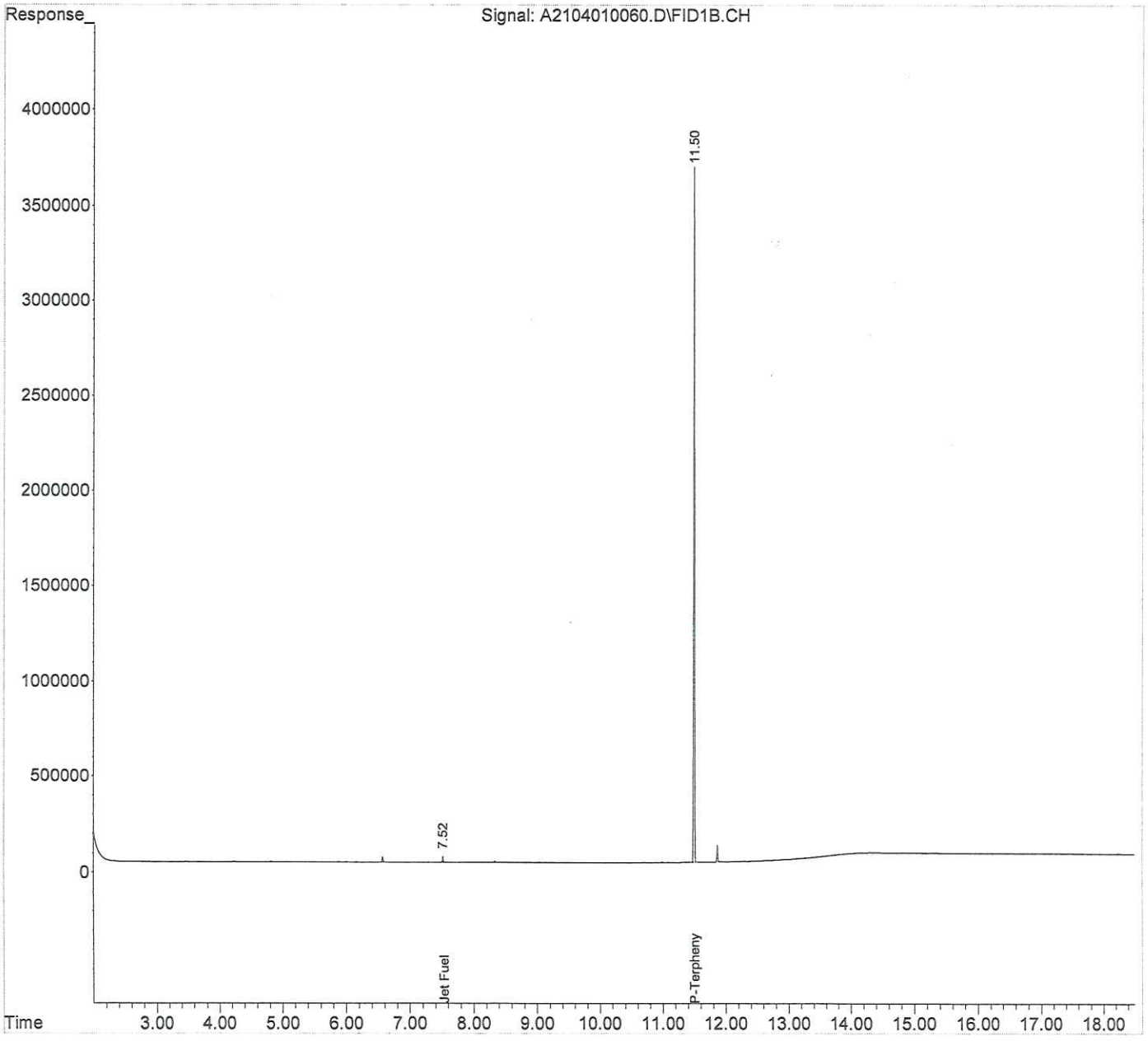


Quantitation Report (Not Reviewed)

Data Path : D:\Data\040121A\
Data File : A2104010060.D
Signal(s) : FID1B.CH
Acq On : 02 Apr 2021 2:29 pm
Operator : AC
Sample : 2100732-22
Misc : 1,B1C0495
ALS Vial : 45 Sample Multiplier: 1
InstName : GC 8

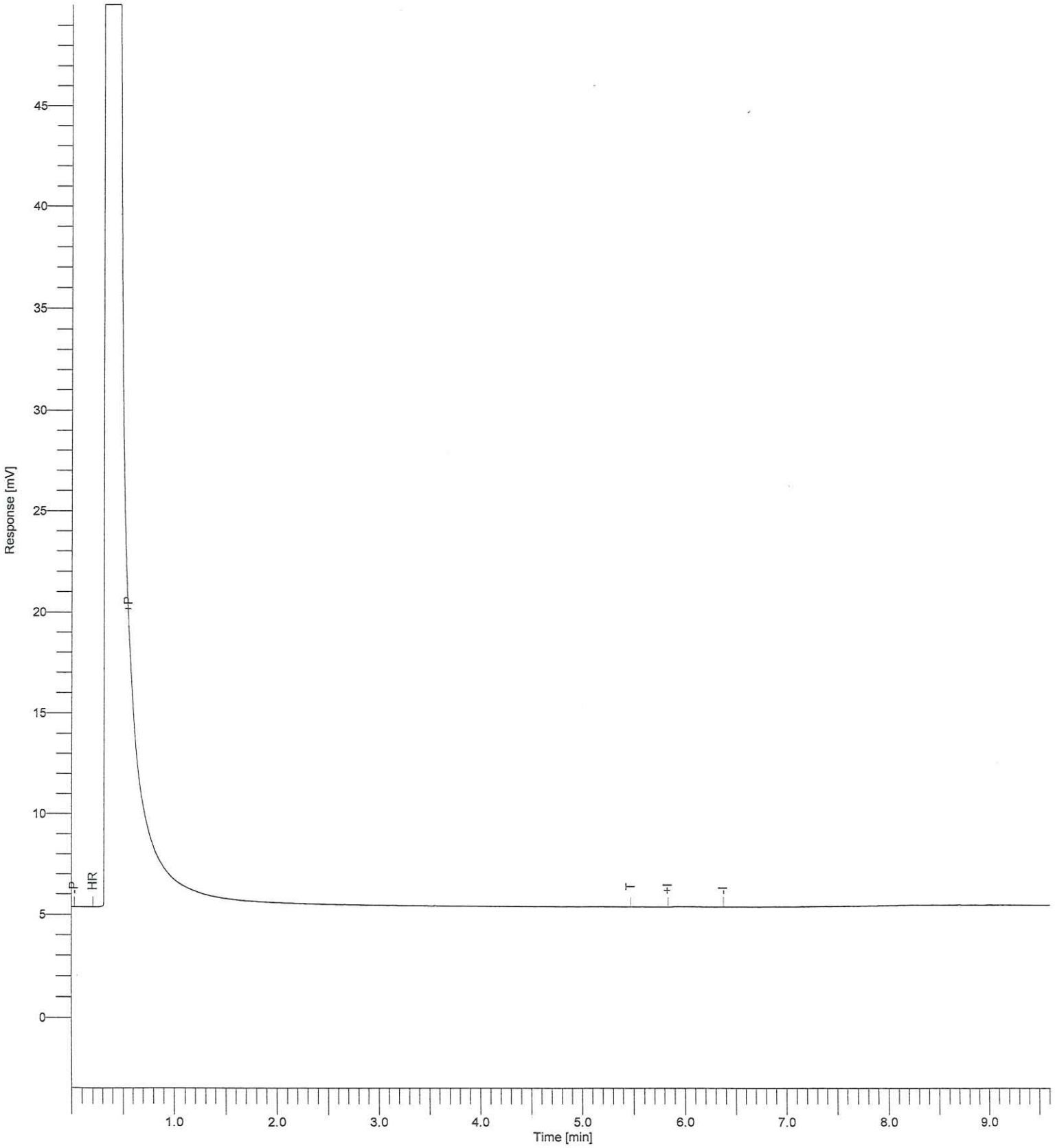
Integration File: autoint1.e
Quant Time: Apr 02 15:10:30 2021
Quant Method : D:\MSDCHEM_FORALCOHOLSGC\1\METHODS\8015-DRO_040121.M
Quant Title : Glycol by GC/FID 100418
QLast Update : Fri Apr 02 11:02:13 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal Phase : Rtx-5
Signal Info : 15m x 320um x 0.25um



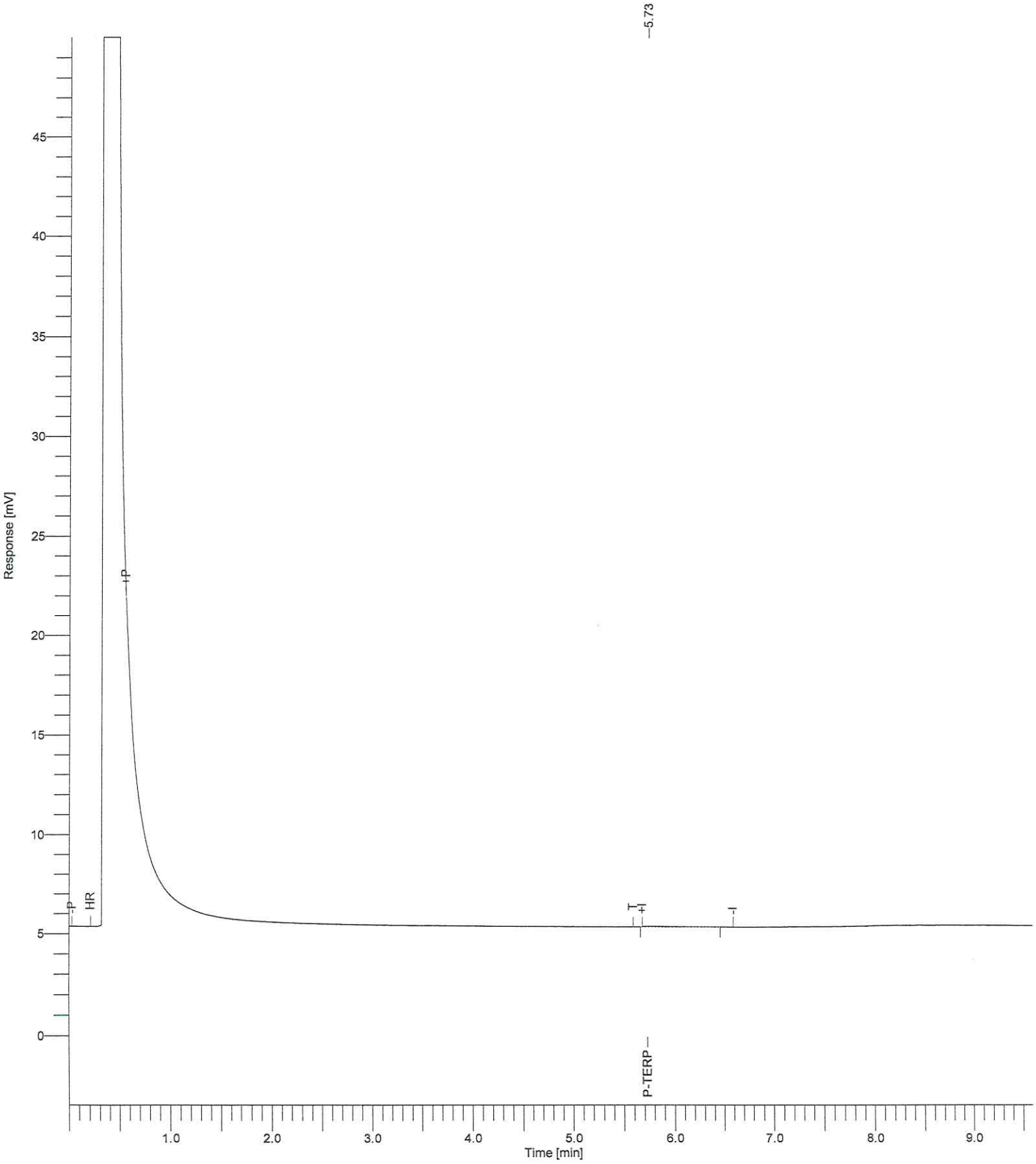
Chromatogram

Sample Name : 2100732-20@100 Sample #: 55 Page 1 of 1
FileName : D:\GC-21\Data\O032921\O0329_062.raw
Date : 4/2/2021 2:17:01 PM
Method : Time of Injection: 3/30/2021 6:17:12 AM
Start Time : 0.00 min End Time : 9.61 min Low Point : 0.00 mV High Point : 50.00 mV
Plot Offset: 0.00 mV Plot Scale: 50.0 mV



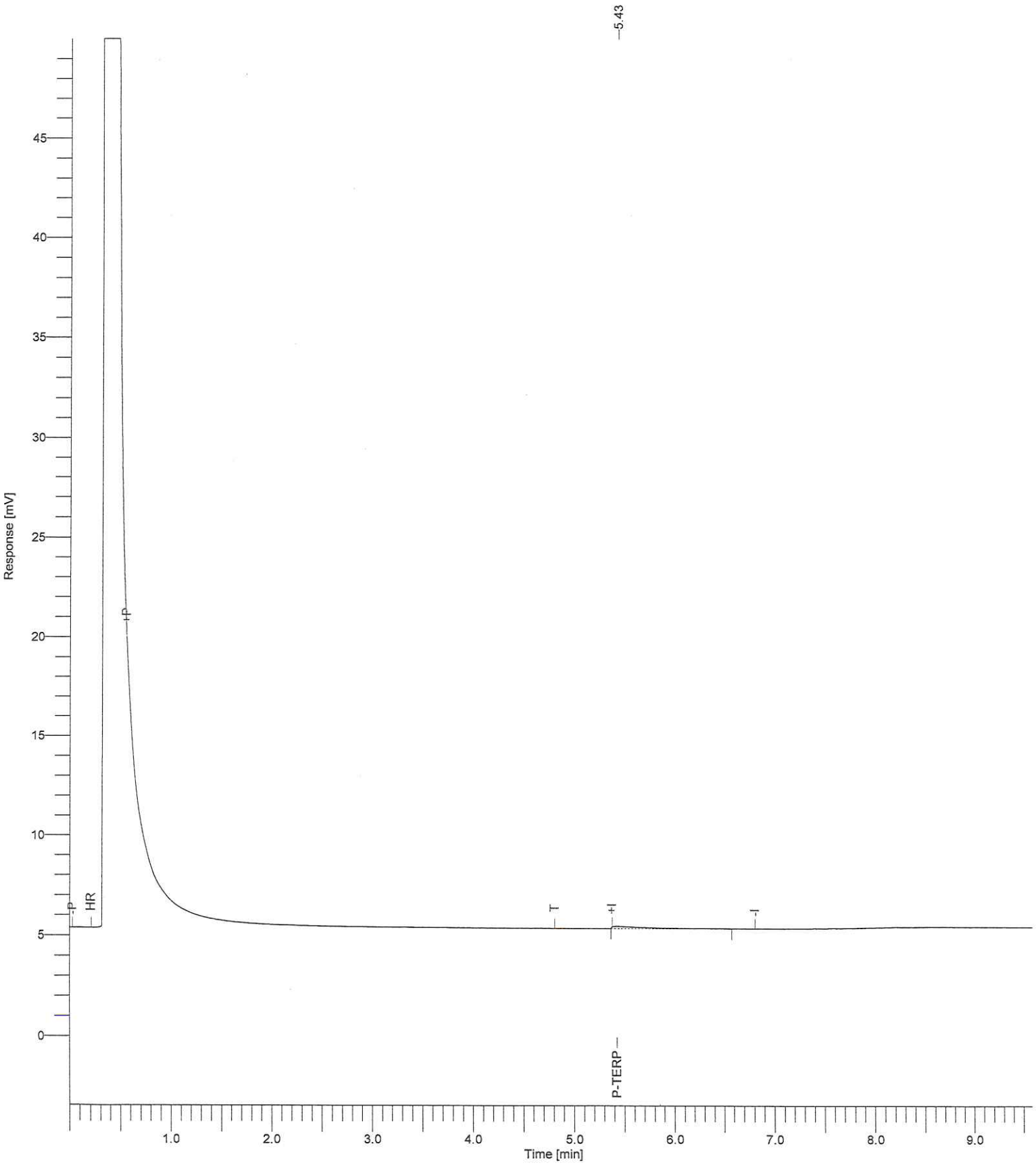
Chromatogram

Sample Name : 2100732-21@20 Sample #: 56 Page 1 of 1
FileName : D:\GC-21\Data\O032921\O0329_063.raw
Date : 4/2/2021 2:20:53 PM
Method : Time of Injection: 3/30/2021 6:34:20 AM
Start Time : 0.00 min End Time : 9.59 min Low Point : 0.00 mV High Point : 50.00 mV
Plot Offset: 0.00 mV Plot Scale: 50.0 mV



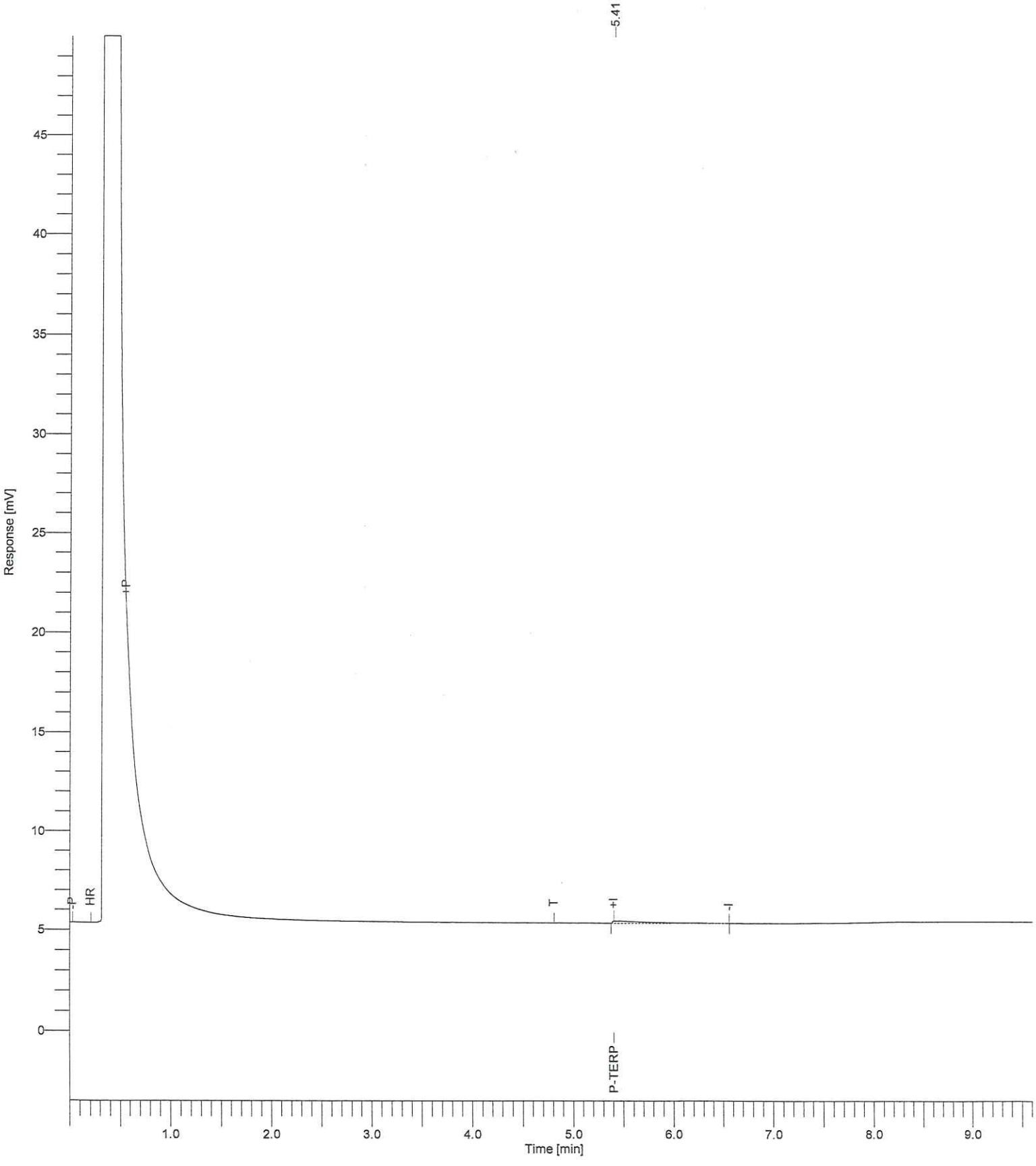
Chromatogram

Sample Name : 2100732-23@5 Sample #: 57 Page 1 of 1
FileName : D:\GC-21\Data\O032921\O0329_064.raw
Date : 4/2/2021 2:23:07 PM
Method : Time of Injection: 3/30/2021 6:51:23 AM
Start Time : 0.00 min End Time : 9.59 min Low Point : 0.00 mV High Point : 50.00 mV
Plot Offset: 0.00 mV Plot Scale: 50.0 mV



Chromatogram

Sample Name : 2100732-24@5 Sample #: 58 Page 1 of 1
FileName : D:\GC-21\Data\O032921\O0329_065.raw
Date : 4/2/2021 2:25:11 PM
Method : Time of Injection: 3/30/2021 7:08:32 AM
Start Time : 0.00 min End Time : 9.61 min Low Point : 0.00 mV High Point : 50.00 mV
Plot Offset: 0.00 mV Plot Scale: 50.0 mV



March 31, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

RE: ATL Work Order Number : 2100733
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March, 24 2021 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 your Project Manager.

Sincerely,

for
Edgar P. Caballero
Laboratory Director

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	03/31/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-01	2100733-01	Air	3/23/21 7:53	3/24/21 18:30
SV-02	2100733-02	Air	3/23/21 9:27	3/24/21 18:30
SV-03	2100733-03	Air	3/23/21 11:05	3/24/21 18:30
SV-04	2100733-04	Air	3/23/21 13:40	3/24/21 18:30
SV-05	2100733-05	Air	3/23/21 14:22	3/24/21 18:30

CASE NARRATIVE

Samples for Helium analysis were subcontracted to Air Technologies Laboratories.

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-01

Lab ID: 2100733-01

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 22:21	
1,1,1-Trichloroethane	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 22:21	
1,1,2-Trichloroethane	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
1,1-Dichloroethane	ND	8.1	1	B1C0473	03/24/2021	03/24/21 22:21	
1,1-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2,4-Trichlorobenzene	ND	15	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2-Dibromoethane	ND	15	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2-Dichloroethane	ND	8.1	1	B1C0473	03/24/2021	03/24/21 22:21	
1,2-Dichloropropane	ND	9.2	1	B1C0473	03/24/2021	03/24/21 22:21	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
1,3-Butadiene	ND	4.4	1	B1C0473	03/24/2021	03/24/21 22:21	
1,3-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 22:21	
1,4-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 22:21	
1,4-Dioxane	ND	7.2	1	B1C0473	03/24/2021	03/24/21 22:21	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0473	03/24/2021	03/24/21 22:21	
2-Butanone	**6.9**	5.9	1	B1C0473	03/24/2021	03/24/21 22:21	
2-Chlorotoluene	ND	10	1	B1C0473	03/24/2021	03/24/21 22:21	
2-Hexanone	ND	8.2	1	B1C0473	03/24/2021	03/24/21 22:21	
2-Propanol	ND	4.9	1	B1C0473	03/24/2021	03/24/21 22:21	
4-Ethyl Toluene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
4-Methyl-2-pentanone	ND	8.2	1	B1C0473	03/24/2021	03/24/21 22:21	
Acetone	**26**	4.8	1	B1C0473	03/24/2021	03/24/21 22:21	
Acetonitrile	ND	3.4	1	B1C0473	03/24/2021	03/24/21 22:21	
Acrolein	ND	4.6	1	B1C0473	03/24/2021	03/24/21 22:21	
Acrylonitrile	ND	4.3	1	B1C0473	03/24/2021	03/24/21 22:21	
Benzene	ND	6.4	1	B1C0473	03/24/2021	03/24/21 22:21	
Benzyl chloride	ND	10	1	B1C0473	03/24/2021	03/24/21 22:21	
Bromodichloromethane	ND	13	1	B1C0473	03/24/2021	03/24/21 22:21	
Bromoform	ND	21	1	B1C0473	03/24/2021	03/24/21 22:21	
Bromomethane	ND	7.8	1	B1C0473	03/24/2021	03/24/21 22:21	
Carbon disulfide	ND	6.2	1	B1C0473	03/24/2021	03/24/21 22:21	
Carbon tetrachloride	ND	13	1	B1C0473	03/24/2021	03/24/21 22:21	
Chlorobenzene	ND	9.2	1	B1C0473	03/24/2021	03/24/21 22:21	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-01

Lab ID: 2100733-01

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0473	03/24/2021	03/24/21 22:21	
Chloroform	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
Chloromethane	ND	4.1	1	B1C0473	03/24/2021	03/24/21 22:21	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 22:21	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/24/2021	03/24/21 22:21	
Cyclohexane	ND	6.9	1	B1C0473	03/24/2021	03/24/21 22:21	
Dibromochloromethane	ND	17	1	B1C0473	03/24/2021	03/24/21 22:21	
Dichlorodifluoromethane	ND	9.9	1	B1C0473	03/24/2021	03/24/21 22:21	
Dichlorotetrafluoroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 22:21	
Ethanol	**9.6**	3.8	1	B1C0473	03/24/2021	03/24/21 22:21	
Ethylbenzene	ND	8.7	1	B1C0473	03/24/2021	03/24/21 22:21	
Freon-113	ND	15	1	B1C0473	03/24/2021	03/24/21 22:21	
Hexachlorobutadiene	ND	21	1	B1C0473	03/24/2021	03/24/21 22:21	
Isopropylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
m,p-Xylene	ND	35	1	B1C0473	03/24/2021	03/24/21 22:21	
Methylene chloride	ND	6.9	1	B1C0473	03/24/2021	03/24/21 22:21	
MTBE	ND	7.2	1	B1C0473	03/24/2021	03/24/21 22:21	
n-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
n-Propylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 22:21	
Naphthalene	ND	10	1	B1C0473	03/24/2021	03/24/21 22:21	
o-Xylene	ND	8.7	1	B1C0473	03/24/2021	03/24/21 22:21	
sec-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
Styrene	ND	8.5	1	B1C0473	03/24/2021	03/24/21 22:21	
tert-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
Tetrachloroethene	ND	14	1	B1C0473	03/24/2021	03/24/21 22:21	
Toluene	**16**	7.5	1	B1C0473	03/24/2021	03/24/21 22:21	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 22:21	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/24/2021	03/24/21 22:21	
Trichloroethene	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
Trichlorofluoromethane	ND	11	1	B1C0473	03/24/2021	03/24/21 22:21	
Vinyl acetate	ND	7.0	1	B1C0473	03/24/2021	03/24/21 22:21	
Vinyl chloride	ND	5.1	1	B1C0473	03/24/2021	03/24/21 22:21	
Surrogate: 4-Bromofluorobenzene	*104 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 22:21*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-02

Lab ID: 2100733-02

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 23:21	
1,1,1-Trichloroethane	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 23:21	
1,1,2-Trichloroethane	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
1,1-Dichloroethane	ND	8.1	1	B1C0473	03/24/2021	03/24/21 23:21	
1,1-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2,4-Trichlorobenzene	ND	15	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2-Dibromoethane	ND	15	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2-Dichloroethane	ND	8.1	1	B1C0473	03/24/2021	03/24/21 23:21	
1,2-Dichloropropane	ND	9.2	1	B1C0473	03/24/2021	03/24/21 23:21	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
1,3-Butadiene	ND	4.4	1	B1C0473	03/24/2021	03/24/21 23:21	
1,3-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 23:21	
1,4-Dichlorobenzene	ND	12	1	B1C0473	03/24/2021	03/24/21 23:21	
1,4-Dioxane	ND	7.2	1	B1C0473	03/24/2021	03/24/21 23:21	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0473	03/24/2021	03/24/21 23:21	
2-Butanone	**8.5**	5.9	1	B1C0473	03/24/2021	03/24/21 23:21	
2-Chlorotoluene	ND	10	1	B1C0473	03/24/2021	03/24/21 23:21	
2-Hexanone	ND	8.2	1	B1C0473	03/24/2021	03/24/21 23:21	
2-Propanol	**6.1**	4.9	1	B1C0473	03/24/2021	03/24/21 23:21	
4-Ethyl Toluene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
4-Methyl-2-pentanone	ND	8.2	1	B1C0473	03/24/2021	03/24/21 23:21	
Acetone	**32**	4.8	1	B1C0473	03/24/2021	03/24/21 23:21	
Acetonitrile	ND	3.4	1	B1C0473	03/24/2021	03/24/21 23:21	
Acrolein	ND	4.6	1	B1C0473	03/24/2021	03/24/21 23:21	
Acrylonitrile	ND	4.3	1	B1C0473	03/24/2021	03/24/21 23:21	
Benzene	ND	6.4	1	B1C0473	03/24/2021	03/24/21 23:21	
Benzyl chloride	ND	10	1	B1C0473	03/24/2021	03/24/21 23:21	
Bromodichloromethane	ND	13	1	B1C0473	03/24/2021	03/24/21 23:21	
Bromoform	ND	21	1	B1C0473	03/24/2021	03/24/21 23:21	
Bromomethane	ND	7.8	1	B1C0473	03/24/2021	03/24/21 23:21	
Carbon disulfide	ND	6.2	1	B1C0473	03/24/2021	03/24/21 23:21	
Carbon tetrachloride	ND	13	1	B1C0473	03/24/2021	03/24/21 23:21	
Chlorobenzene	ND	9.2	1	B1C0473	03/24/2021	03/24/21 23:21	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-02

Lab ID: 2100733-02

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0473	03/24/2021	03/24/21 23:21	
Chloroform	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
Chloromethane	ND	4.1	1	B1C0473	03/24/2021	03/24/21 23:21	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 23:21	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/24/2021	03/24/21 23:21	
Cyclohexane	ND	6.9	1	B1C0473	03/24/2021	03/24/21 23:21	
Dibromochloromethane	ND	17	1	B1C0473	03/24/2021	03/24/21 23:21	
Dichlorodifluoromethane	ND	9.9	1	B1C0473	03/24/2021	03/24/21 23:21	
Dichlorotetrafluoroethane	ND	14	1	B1C0473	03/24/2021	03/24/21 23:21	
Ethanol	**5.6**	3.8	1	B1C0473	03/24/2021	03/24/21 23:21	
Ethylbenzene	**31**	8.7	1	B1C0473	03/24/2021	03/24/21 23:21	
Freon-113	ND	15	1	B1C0473	03/24/2021	03/24/21 23:21	
Hexachlorobutadiene	ND	21	1	B1C0473	03/24/2021	03/24/21 23:21	
Isopropylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
m,p-Xylene	**150**	35	1	B1C0473	03/24/2021	03/24/21 23:21	
Methylene chloride	ND	6.9	1	B1C0473	03/24/2021	03/24/21 23:21	
MTBE	ND	7.2	1	B1C0473	03/24/2021	03/24/21 23:21	
n-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
n-Propylbenzene	ND	9.8	1	B1C0473	03/24/2021	03/24/21 23:21	
Naphthalene	ND	10	1	B1C0473	03/24/2021	03/24/21 23:21	
o-Xylene	**45**	8.7	1	B1C0473	03/24/2021	03/24/21 23:21	
sec-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
Styrene	ND	8.5	1	B1C0473	03/24/2021	03/24/21 23:21	
tert-Butylbenzene	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
Tetrachloroethene	ND	14	1	B1C0473	03/24/2021	03/24/21 23:21	
Toluene	**14**	7.5	1	B1C0473	03/24/2021	03/24/21 23:21	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/24/2021	03/24/21 23:21	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/24/2021	03/24/21 23:21	
Trichloroethene	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
Trichlorofluoromethane	ND	11	1	B1C0473	03/24/2021	03/24/21 23:21	
Vinyl acetate	ND	7.0	1	B1C0473	03/24/2021	03/24/21 23:21	
Vinyl chloride	ND	5.1	1	B1C0473	03/24/2021	03/24/21 23:21	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 23:21*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-03

Lab ID: 2100733-03

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 00:21	
1,1,1-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 00:21	
1,1,2-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
1,1-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 00:21	
1,1-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2,4-Trichlorobenzene	ND	15	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2-Dibromoethane	ND	15	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 00:21	
1,2-Dichloropropane	ND	9.2	1	B1C0473	03/25/2021	03/25/21 00:21	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
1,3-Butadiene	ND	4.4	1	B1C0473	03/25/2021	03/25/21 00:21	
1,3-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 00:21	
1,4-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 00:21	
1,4-Dioxane	ND	7.2	1	B1C0473	03/25/2021	03/25/21 00:21	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0473	03/25/2021	03/25/21 00:21	
2-Butanone	**7.7**	5.9	1	B1C0473	03/25/2021	03/25/21 00:21	
2-Chlorotoluene	ND	10	1	B1C0473	03/25/2021	03/25/21 00:21	
2-Hexanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 00:21	
2-Propanol	ND	4.9	1	B1C0473	03/25/2021	03/25/21 00:21	
4-Ethyl Toluene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
4-Methyl-2-pentanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 00:21	
Acetone	**130**	48	10	B1C0473	03/24/2021	03/24/21 17:08	
Acetonitrile	ND	3.4	1	B1C0473	03/25/2021	03/25/21 00:21	
Acrolein	ND	4.6	1	B1C0473	03/25/2021	03/25/21 00:21	
Acrylonitrile	ND	4.3	1	B1C0473	03/25/2021	03/25/21 00:21	
Benzene	ND	6.4	1	B1C0473	03/25/2021	03/25/21 00:21	
Benzyl chloride	ND	10	1	B1C0473	03/25/2021	03/25/21 00:21	
Bromodichloromethane	ND	13	1	B1C0473	03/25/2021	03/25/21 00:21	
Bromoform	ND	21	1	B1C0473	03/25/2021	03/25/21 00:21	
Bromomethane	ND	7.8	1	B1C0473	03/25/2021	03/25/21 00:21	
Carbon disulfide	ND	6.2	1	B1C0473	03/25/2021	03/25/21 00:21	
Carbon tetrachloride	ND	13	1	B1C0473	03/25/2021	03/25/21 00:21	
Chlorobenzene	ND	9.2	1	B1C0473	03/25/2021	03/25/21 00:21	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-03

Lab ID: 2100733-03

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0473	03/25/2021	03/25/21 00:21	
Chloroform	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
Chloromethane	ND	4.1	1	B1C0473	03/25/2021	03/25/21 00:21	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 00:21	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 00:21	
Cyclohexane	ND	6.9	1	B1C0473	03/25/2021	03/25/21 00:21	
Dibromochloromethane	ND	17	1	B1C0473	03/25/2021	03/25/21 00:21	
Dichlorodifluoromethane	ND	9.9	1	B1C0473	03/25/2021	03/25/21 00:21	
Dichlorotetrafluoroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 00:21	
Ethanol	**15**	3.8	1	B1C0473	03/25/2021	03/25/21 00:21	
Ethylbenzene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 00:21	
Freon-113	ND	15	1	B1C0473	03/25/2021	03/25/21 00:21	
Hexachlorobutadiene	ND	21	1	B1C0473	03/25/2021	03/25/21 00:21	
Isopropylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
m,p-Xylene	ND	35	1	B1C0473	03/25/2021	03/25/21 00:21	
Methylene chloride	ND	6.9	1	B1C0473	03/25/2021	03/25/21 00:21	
MTBE	ND	7.2	1	B1C0473	03/25/2021	03/25/21 00:21	
n-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
n-Propylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 00:21	
Naphthalene	ND	10	1	B1C0473	03/25/2021	03/25/21 00:21	
o-Xylene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 00:21	
sec-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
Styrene	ND	8.5	1	B1C0473	03/25/2021	03/25/21 00:21	
tert-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
Tetrachloroethene	ND	14	1	B1C0473	03/25/2021	03/25/21 00:21	
Toluene	**9.9**	7.5	1	B1C0473	03/25/2021	03/25/21 00:21	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 00:21	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 00:21	
Trichloroethene	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
Trichlorofluoromethane	ND	11	1	B1C0473	03/25/2021	03/25/21 00:21	
Vinyl acetate	ND	7.0	1	B1C0473	03/25/2021	03/25/21 00:21	
Vinyl chloride	ND	5.1	1	B1C0473	03/25/2021	03/25/21 00:21	
Surrogate: 4-Bromofluorobenzene	*107 %*	*70 - 130*		B1C0473	03/25/2021	*03/25/21 00:21*	
Surrogate: 4-Bromofluorobenzene	*103 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 17:08*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-04

Lab ID: 2100733-04

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 10:36	
1,1,1-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 10:36	
1,1,2-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
1,1-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 10:36	
1,1-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2,4-Trichlorobenzene	ND	15	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2-Dibromoethane	ND	15	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 10:36	
1,2-Dichloropropane	ND	9.2	1	B1C0473	03/25/2021	03/25/21 10:36	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
1,3-Butadiene	ND	4.4	1	B1C0473	03/25/2021	03/25/21 10:36	
1,3-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 10:36	
1,4-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 10:36	
1,4-Dioxane	ND	7.2	1	B1C0473	03/25/2021	03/25/21 10:36	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0473	03/25/2021	03/25/21 10:36	
2-Butanone	**7.9**	5.9	1	B1C0473	03/25/2021	03/25/21 10:36	
2-Chlorotoluene	ND	10	1	B1C0473	03/25/2021	03/25/21 10:36	
2-Hexanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 10:36	
2-Propanol	ND	4.9	1	B1C0473	03/25/2021	03/25/21 10:36	
4-Ethyl Toluene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
4-Methyl-2-pentanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 10:36	
Acetone	**140**	48	10	B1C0473	03/24/2021	03/24/21 17:50	
Acetonitrile	ND	3.4	1	B1C0473	03/25/2021	03/25/21 10:36	
Acrolein	ND	4.6	1	B1C0473	03/25/2021	03/25/21 10:36	
Acrylonitrile	ND	4.3	1	B1C0473	03/25/2021	03/25/21 10:36	
Benzene	ND	6.4	1	B1C0473	03/25/2021	03/25/21 10:36	
Benzyl chloride	ND	10	1	B1C0473	03/25/2021	03/25/21 10:36	
Bromodichloromethane	ND	13	1	B1C0473	03/25/2021	03/25/21 10:36	
Bromoform	ND	21	1	B1C0473	03/25/2021	03/25/21 10:36	
Bromomethane	ND	7.8	1	B1C0473	03/25/2021	03/25/21 10:36	
Carbon disulfide	ND	6.2	1	B1C0473	03/25/2021	03/25/21 10:36	
Carbon tetrachloride	ND	13	1	B1C0473	03/25/2021	03/25/21 10:36	
Chlorobenzene	ND	9.2	1	B1C0473	03/25/2021	03/25/21 10:36	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-04

Lab ID: 2100733-04

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0473	03/25/2021	03/25/21 10:36	
Chloroform	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
Chloromethane	ND	4.1	1	B1C0473	03/25/2021	03/25/21 10:36	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 10:36	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 10:36	
Cyclohexane	ND	6.9	1	B1C0473	03/25/2021	03/25/21 10:36	
Dibromochloromethane	ND	17	1	B1C0473	03/25/2021	03/25/21 10:36	
Dichlorodifluoromethane	ND	9.9	1	B1C0473	03/25/2021	03/25/21 10:36	
Dichlorotetrafluoroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 10:36	
Ethanol	**9.5**	3.8	1	B1C0473	03/25/2021	03/25/21 10:36	
Ethylbenzene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 10:36	
Freon-113	ND	15	1	B1C0473	03/25/2021	03/25/21 10:36	
Hexachlorobutadiene	ND	21	1	B1C0473	03/25/2021	03/25/21 10:36	
Isopropylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
m,p-Xylene	ND	35	1	B1C0473	03/25/2021	03/25/21 10:36	
Methylene chloride	ND	6.9	1	B1C0473	03/25/2021	03/25/21 10:36	
MTBE	ND	7.2	1	B1C0473	03/25/2021	03/25/21 10:36	
n-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
n-Propylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 10:36	
Naphthalene	ND	10	1	B1C0473	03/25/2021	03/25/21 10:36	
o-Xylene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 10:36	
sec-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
Styrene	ND	8.5	1	B1C0473	03/25/2021	03/25/21 10:36	
tert-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
Tetrachloroethene	ND	14	1	B1C0473	03/25/2021	03/25/21 10:36	
Toluene	ND	7.5	1	B1C0473	03/25/2021	03/25/21 10:36	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 10:36	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 10:36	
Trichloroethene	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
Trichlorofluoromethane	ND	11	1	B1C0473	03/25/2021	03/25/21 10:36	
Vinyl acetate	ND	7.0	1	B1C0473	03/25/2021	03/25/21 10:36	
Vinyl chloride	ND	5.1	1	B1C0473	03/25/2021	03/25/21 10:36	
Surrogate: 4-Bromofluorobenzene	*103 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 17:50*	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*		B1C0473	03/25/2021	*03/25/21 10:36*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-05

Lab ID: 2100733-05

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 11:33	
1,1,1-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 11:33	
1,1,2-Trichloroethane	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
1,1-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 11:33	
1,1-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2,4-Trichlorobenzene	ND	15	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2-Dibromoethane	ND	15	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2-Dichloroethane	ND	8.1	1	B1C0473	03/25/2021	03/25/21 11:33	
1,2-Dichloropropane	ND	9.2	1	B1C0473	03/25/2021	03/25/21 11:33	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
1,3-Butadiene	ND	4.4	1	B1C0473	03/25/2021	03/25/21 11:33	
1,3-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 11:33	
1,4-Dichlorobenzene	ND	12	1	B1C0473	03/25/2021	03/25/21 11:33	
1,4-Dioxane	ND	7.2	1	B1C0473	03/25/2021	03/25/21 11:33	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0473	03/25/2021	03/25/21 11:33	
2-Butanone	ND	5.9	1	B1C0473	03/25/2021	03/25/21 11:33	
2-Chlorotoluene	ND	10	1	B1C0473	03/25/2021	03/25/21 11:33	
2-Hexanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 11:33	
2-Propanol	ND	4.9	1	B1C0473	03/25/2021	03/25/21 11:33	
4-Ethyl Toluene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
4-Methyl-2-pentanone	ND	8.2	1	B1C0473	03/25/2021	03/25/21 11:33	
Acetone	**48**	48	10	B1C0473	03/24/2021	03/24/21 18:31	
Acetonitrile	ND	3.4	1	B1C0473	03/25/2021	03/25/21 11:33	
Acrolein	ND	4.6	1	B1C0473	03/25/2021	03/25/21 11:33	
Acrylonitrile	ND	4.3	1	B1C0473	03/25/2021	03/25/21 11:33	
Benzene	ND	6.4	1	B1C0473	03/25/2021	03/25/21 11:33	
Benzyl chloride	ND	10	1	B1C0473	03/25/2021	03/25/21 11:33	
Bromodichloromethane	ND	13	1	B1C0473	03/25/2021	03/25/21 11:33	
Bromoform	ND	21	1	B1C0473	03/25/2021	03/25/21 11:33	
Bromomethane	ND	7.8	1	B1C0473	03/25/2021	03/25/21 11:33	
Carbon disulfide	ND	6.2	1	B1C0473	03/25/2021	03/25/21 11:33	
Carbon tetrachloride	ND	13	1	B1C0473	03/25/2021	03/25/21 11:33	
Chlorobenzene	ND	9.2	1	B1C0473	03/25/2021	03/25/21 11:33	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-05

Lab ID: 2100733-05

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0473	03/25/2021	03/25/21 11:33	
Chloroform	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
Chloromethane	ND	4.1	1	B1C0473	03/25/2021	03/25/21 11:33	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 11:33	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 11:33	
Cyclohexane	ND	6.9	1	B1C0473	03/25/2021	03/25/21 11:33	
Dibromochloromethane	ND	17	1	B1C0473	03/25/2021	03/25/21 11:33	
Dichlorodifluoromethane	ND	9.9	1	B1C0473	03/25/2021	03/25/21 11:33	
Dichlorotetrafluoroethane	ND	14	1	B1C0473	03/25/2021	03/25/21 11:33	
Ethanol	**7.3**	3.8	1	B1C0473	03/25/2021	03/25/21 11:33	
Ethylbenzene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 11:33	
Freon-113	ND	15	1	B1C0473	03/25/2021	03/25/21 11:33	
Hexachlorobutadiene	ND	21	1	B1C0473	03/25/2021	03/25/21 11:33	
Isopropylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
m,p-Xylene	ND	35	1	B1C0473	03/25/2021	03/25/21 11:33	
Methylene chloride	ND	6.9	1	B1C0473	03/25/2021	03/25/21 11:33	
MTBE	ND	7.2	1	B1C0473	03/25/2021	03/25/21 11:33	
n-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
n-Propylbenzene	ND	9.8	1	B1C0473	03/25/2021	03/25/21 11:33	
Naphthalene	ND	10	1	B1C0473	03/25/2021	03/25/21 11:33	
o-Xylene	ND	8.7	1	B1C0473	03/25/2021	03/25/21 11:33	
sec-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
Styrene	ND	8.5	1	B1C0473	03/25/2021	03/25/21 11:33	
tert-Butylbenzene	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
Tetrachloroethene	ND	14	1	B1C0473	03/25/2021	03/25/21 11:33	
Toluene	ND	7.5	1	B1C0473	03/25/2021	03/25/21 11:33	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0473	03/25/2021	03/25/21 11:33	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0473	03/25/2021	03/25/21 11:33	
Trichloroethene	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
Trichlorofluoromethane	ND	11	1	B1C0473	03/25/2021	03/25/21 11:33	
Vinyl acetate	ND	7.0	1	B1C0473	03/25/2021	03/25/21 11:33	
Vinyl chloride	ND	5.1	1	B1C0473	03/25/2021	03/25/21 11:33	
Surrogate: 4-Bromofluorobenzene	*105 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 18:31*	
Surrogate: 4-Bromofluorobenzene	*108 %*	*70 - 130*		B1C0473	03/25/2021	*03/25/21 11:33*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

QUALITY CONTROL SECTION

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air										
Blank (B1C0473-BLK1)					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,1,1,2-Tetrachloroethane	ND	14	2.1							
1,1,1-Trichloroethane	ND	11	0.98							
1,1,2,2-Tetrachloroethane	ND	14	1.9							
1,1,2-Trichloroethane	ND	11	0.87							
1,1-Dichloroethane	ND	8.1	0.36							
1,1-Dichloroethene	ND	7.9	1.4							
1,2,4-Trichlorobenzene	ND	15	2.4							
1,2,4-Trimethylbenzene	ND	9.8	1.3							
1,2-Dibromoethane	ND	15	1.3							
1,2-Dichlorobenzene	ND	12	2.0							
1,2-Dichloroethane	ND	8.1	1.4							
1,2-Dichloropropane	ND	9.2	0.97							
1,3,5-Trimethylbenzene	ND	9.8	1.4							
1,3-Butadiene	ND	4.4	1.0							
1,3-Dichlorobenzene	ND	12	1.9							
1,4-Dichlorobenzene	ND	12	2.0							
1,4-Dioxane	ND	7.2	0.86							
2,2,4-Trimethylpentane	ND	9.3	0.65							
2-Butanone	ND	5.9	0.47							
2-Chlorotoluene	ND	10	1.1							
2-Hexanone	ND	8.2	0.90							
2-Propanol	ND	4.9	0.61							
4-Ethyl Toluene	ND	9.8	1.2							
4-Methyl-2-pentanone	ND	8.2	1.1							
Acetone	ND	4.8	0.48							
Acetonitrile	ND	3.4	0.44							
Acrolein	ND	4.6	0.83							
Acrylonitrile	ND	4.3	0.56							
Benzene	ND	6.4	0.45							
Benzyl chloride	ND	10	1.5							
Bromodichloromethane	ND	13	2.0							
Bromoform	ND	21	3.4							
Bromomethane	ND	7.8	0.66							
Carbon disulfide	ND	6.2	1.1							
Carbon tetrachloride	ND	13	2.1							
Chlorobenzene	ND	9.2	0.83							
Chloroethane	ND	5.3	0.58							
Chloroform	ND	9.8	0.78							

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
Blank (B1C0473-BLK1) - Continued						Prepared: 3/24/2021 Analyzed: 3/24/2021				
Chloromethane	ND	4.1	0.14							
cis-1,2-Dichloroethene	ND	7.9	0.71							
cis-1,3-Dichloropropene	ND	9.1	0.68							
Cyclohexane	ND	6.9	0.55							
Dibromochloromethane	ND	17	3.0							
Dichlorodifluoromethane	ND	9.9	0.99							
Dichlorotetrafluoroethane	ND	14	1.0							
Ethanol	ND	3.8	0.66							
Ethylbenzene	ND	8.7	0.78							
Freon-113	ND	15	1.5							
Hexachlorobutadiene	ND	21	3.9							
Isopropylbenzene	ND	9.8	1.0							
m,p-Xylene	ND	35	3.6							
Methylene chloride	ND	6.9	0.52							
MTBE	ND	7.2	0.58							
n-Butylbenzene	ND	11	2.3							
n-Propylbenzene	ND	9.8	1.8							
Naphthalene	ND	10	2.4							
o-Xylene	ND	8.7	1.4							
sec-Butylbenzene	ND	11	1.9							
Styrene	ND	8.5	0.98							
tert-Butylbenzene	ND	11	1.6							
Tetrachloroethene	ND	14	1.8							
Toluene	ND	7.5	0.45							
trans-1,2-Dichloroethene	ND	7.9	0.40							
trans-1,3-Dichloropropene	ND	9.1	0.68							
Trichloroethene	ND	11	0.70							
Trichlorofluoromethane	ND	11	1.2							
Vinyl acetate	ND	7.0	1.6							
Vinyl chloride	ND	5.1	0.43							
Surrogate: 4-Bromofluorobenzene	*37.65*			*35.7869*		*105*	*70 - 130*			
LCS (B1C0473-BS1)						Prepared: 3/24/2021 Analyzed: 3/24/2021				
1,1,1,2-Tetrachloroethane	33.9815	14	2.1	34.3247		99.0	70 - 130			
1,1,1-Trichloroethane	26.6260	11	0.98	27.2808		97.6	70 - 130			
1,1,2,2-Tetrachloroethane	37.8259	14	1.9	34.3247		110	70 - 130			
1,1,2-Trichloroethane	27.3353	11	0.87	27.2808		100	70 - 130			
1,1-Dichloroethane	19.4680	8.1	0.36	20.2370		96.2	70 - 130			
1,1-Dichloroethene	20.3402	7.9	1.4	19.8247		103	70 - 130			
1,2,4-Trichlorobenzene	35.6213	15	2.4	37.1055		96.0	70 - 130			

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Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS (B1C0473-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,2,4-Trimethylbenzene	28.0202	9.8	1.3	24.5791		114	70 - 130			
1,2-Dibromoethane	39.7236	15	1.3	38.4174		103	70 - 130			
1,2-Dichlorobenzene	31.5646	12	2.0	30.0616		105	70 - 130			
1,2-Dichloroethane	19.7513	8.1	1.4	20.2370		97.6	70 - 130			
1,2-Dichloropropane	22.6894	9.2	0.97	23.1053		98.2	70 - 130			
1,3,5-Trimethylbenzene	29.4950	9.8	1.4	24.5791		120	70 - 130			
1,3-Butadiene	11.7029	4.4	1.0	11.0614		106	70 - 130			
1,3-Dichlorobenzene	31.6849	12	1.9	30.0616		105	70 - 130			
1,4-Dichlorobenzene	30.8432	12	2.0	30.0616		103	70 - 130			
1,4-Dioxane	22.7740	7.2	0.86	18.0174		126	70 - 130			
2,2,4-Trimethylpentane	24.0605	9.3	0.65	23.3597		103	70 - 130			
2-Butanone	16.5446	5.9	0.47	14.7456		112	70 - 130			
2-Chlorotoluene	30.7009	10	1.1	25.8861		119	70 - 130			
2-Hexanone	25.3163	8.2	0.90	20.4824		124	70 - 130			
2-Propanol	15.2867	4.9	0.61	12.2883		124	70 - 130			
4-Ethyl Toluene	29.9374	9.8	1.2	24.5791		122	70 - 130			
4-Methyl-2-pentanone	25.5620	8.2	1.1	20.4824		125	70 - 130			
Acetone	12.0671	4.8	0.48	11.8771		102	70 - 130			
Acetonitrile	8.16003	3.4	0.44	8.39509		97.2	70 - 130			
Acrolein	14.3769	4.6	0.83	11.4648		125	70 - 130			
Acrylonitrile	11.4373	4.3	0.56	10.8513		105	70 - 130			
Benzene	15.7182	6.4	0.45	15.9738		98.4	70 - 130			
Benzyl chloride	31.5293	10	1.5	25.8861		122	70 - 130			
Bromodichloromethane	34.2397	13	2.0	33.5027		102	70 - 130			
Bromoform	56.6448	21	3.4	51.6832		110	70 - 130			
Bromomethane	18.7936	7.8	0.66	19.4149		96.8	70 - 130			
Carbon disulfide	15.3532	6.2	1.1	15.5712		98.6	70 - 130			
Carbon tetrachloride	29.7578	13	2.1	31.4564		94.6	70 - 130			
Chloroethane	13.8527	5.3	0.58	13.1930		105	70 - 130			
Chloroform	23.9242	9.8	0.78	24.4125		98.0	70 - 130			
Chloromethane	10.1387	4.1	0.14	10.3245		98.2	70 - 130			
cis-1,2-Dichloroethene	20.0230	7.9	0.71	19.8247		101	70 - 130			
cis-1,3-Dichloropropene	24.1001	9.1	0.68	22.6931		106	70 - 130			
Cyclohexane	14.8700	6.9	0.55	17.2106		86.4	70 - 130			
Dibromochloromethane	44.6373	17	3.0	42.5928		105	70 - 130			
Dichlorodifluoromethane	23.4408	9.9	0.99	24.7266		94.8	70 - 130			
Dichlorotetrafluoroethane	33.5548	14	1.0	34.9530		96.0	70 - 130			
Ethanol	10.2687	3.8	0.66	9.42086		109	70 - 130			
Ethylbenzene	24.7935	8.7	0.78	21.7106		114	70 - 130			
Freon-113	36.9386	15	1.5	38.3180		96.4	70 - 130			

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS (B1C0473-BS1) - Continued						Prepared: 3/24/2021 Analyzed: 3/24/2021				
Hexachlorobutadiene	50.0188	21	3.9	53.3250		93.8	70 - 130			
Isopropylbenzene	28.4626	9.8	1.0	24.5791		116	70 - 130			
m,p-Xylene	49.4134	35	3.6	43.4213		114	70 - 130			
Methylene chloride	16.9517	6.9	0.52	17.3685		97.6	70 - 130			
MTBE	18.8914	7.2	0.58	18.0262		105	70 - 130			
n-Butylbenzene	30.5216	11	2.3	27.4474		111	70 - 130			
n-Propylbenzene	26.3980	9.8	1.8	24.5791		107	70 - 130			
Naphthalene	25.7390	10	2.4	26.2108		98.2	70 - 130			
o-Xylene	25.9659	8.7	1.4	21.7106		120	70 - 130			
sec-Butylbenzene	32.3331	11	1.9	27.4474		118	70 - 130			
Styrene	27.0915	8.5	0.98	21.2984		127	70 - 130			
tert-Butylbenzene	30.5216	11	1.6	27.4474		111	70 - 130			
Tetrachloroethene	34.7942	14	1.8	33.9125		103	70 - 130			
Toluene	19.5582	7.5	0.45	18.8422		104	70 - 130			
trans-1,2-Dichloroethene	20.0626	7.9	0.40	19.8247		101	70 - 130			
trans-1,3-Dichloropropene	23.8277	9.1	0.68	22.6930		105	70 - 130			
Trichloroethene	26.2774	11	0.70	26.8685		97.8	70 - 130			
Trichlorofluoromethane	26.9678	11	1.2	28.0914		96.0	70 - 130			
Vinyl acetate	14.8939	7.0	1.6	17.6051		84.6	70 - 130			
Vinyl chloride	12.9342	5.1	0.43	12.7808		101	70 - 130			
Surrogate: 4-Bromofluorobenzene	*36.65*			*35.7869*		*102*	*70 - 130*			
LCS Dup (B1C0473-BSD1)						Prepared: 3/24/2021 Analyzed: 3/24/2021				
1,1,1,2-Tetrachloroethane	32.6085	14	2.1	34.3247		95.0	70 - 130	4.12	20	
1,1,1-Trichloroethane	26.6260	11	0.98	27.2808		97.6	70 - 130	0.00	20	
1,1,2,2-Tetrachloroethane	36.6588	14	1.9	34.3247		107	70 - 130	3.13	20	
1,1,2-Trichloroethane	27.3899	11	0.87	27.2808		100	70 - 130	0.199	20	
1,1-Dichloroethane	19.5085	8.1	0.36	20.2370		96.4	70 - 130	0.208	20	
1,1-Dichloroethene	20.4988	7.9	1.4	19.8247		103	70 - 130	0.777	20	
1,2,4-Trichlorobenzene	37.3282	15	2.4	37.1055		101	70 - 130	4.68	20	
1,2,4-Trimethylbenzene	27.8236	9.8	1.3	24.5791		113	70 - 130	0.704	20	
1,2-Dibromoethane	39.2626	15	1.3	38.4174		102	70 - 130	1.17	20	
1,2-Dichlorobenzene	31.5646	12	2.0	30.0616		105	70 - 130	0.00	20	
1,2-Dichloroethane	19.1847	8.1	1.4	20.2370		94.8	70 - 130	2.91	20	
1,2-Dichloropropane	22.4122	9.2	0.97	23.1053		97.0	70 - 130	1.23	20	
1,3,5-Trimethylbenzene	28.8068	9.8	1.4	24.5791		117	70 - 130	2.36	20	
1,3-Butadiene	11.7250	4.4	1.0	11.0614		106	70 - 130	0.189	20	
1,3-Dichlorobenzene	31.4444	12	1.9	30.0616		105	70 - 130	0.762	20	
1,4-Dichlorobenzene	30.6027	12	2.0	30.0616		102	70 - 130	0.783	20	
1,4-Dioxane	22.1614	7.2	0.86	18.0174		123	70 - 130	2.73	20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS Dup (B1C0473-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
2,2,4-Trimethylpentane	23.3130	9.3	0.65	23.3597		99.8	70 - 130	3.16	20	
2-Butanone	16.7805	5.9	0.47	14.7456		114	70 - 130	1.42	20	
2-Chlorotoluene	33.1342	10	1.1	25.8861		128	70 - 130	7.62	20	
2-Hexanone	25.8898	8.2	0.90	20.4824		126	70 - 130	2.24	20	
2-Propanol	15.2621	4.9	0.61	12.2883		124	70 - 130	0.161	20	
4-Ethyl Toluene	29.2000	9.8	1.2	24.5791		119	70 - 130	2.49	20	
4-Methyl-2-pentanone	25.2753	8.2	1.1	20.4824		123	70 - 130	1.13	20	
Acetone	12.4710	4.8	0.48	11.8771		105	70 - 130	3.29	20	
Acetonitrile	8.39509	3.4	0.44	8.39509		100	70 - 130	2.84	20	
Acrolein	14.2393	4.6	0.83	11.4648		124	70 - 130	0.962	20	
Acrylonitrile	11.7845	4.3	0.56	10.8513		109	70 - 130	2.99	20	
Benzene	15.4627	6.4	0.45	15.9738		96.8	70 - 130	1.64	20	
Benzyl chloride	31.3739	10	1.5	25.8861		121	70 - 130	0.494	20	
Bromodichloromethane	33.5697	13	2.0	33.5027		100	70 - 130	1.98	20	
Bromoform	54.8876	21	3.4	51.6832		106	70 - 130	3.15	20	
Bromomethane	19.0266	7.8	0.66	19.4149		98.0	70 - 130	1.23	20	
Carbon disulfide	15.2909	6.2	1.1	15.5712		98.2	70 - 130	0.407	20	
Carbon tetrachloride	29.0028	13	2.1	31.4564		92.2	70 - 130	2.57	20	
Chloroethane	13.7735	5.3	0.58	13.1930		104	70 - 130	0.573	20	
Chloroform	23.7778	9.8	0.78	24.4125		97.4	70 - 130	0.614	20	
Chloromethane	10.0148	4.1	0.14	10.3245		97.0	70 - 130	1.23	20	
cis-1,2-Dichloroethene	20.1419	7.9	0.71	19.8247		102	70 - 130	0.592	20	
cis-1,3-Dichloropropene	23.6916	9.1	0.68	22.6931		104	70 - 130	1.71	20	
Cyclohexane	14.4225	6.9	0.55	17.2106		83.8	70 - 130	3.06	20	
Dibromochloromethane	42.5928	17	3.0	42.5928		100	70 - 130	4.69	20	
Dichlorodifluoromethane	23.0452	9.9	0.99	24.7266		93.2	70 - 130	1.70	20	
Dichlorotetrafluoroethane	33.6248	14	1.0	34.9530		96.2	70 - 130	0.208	20	
Ethanol	10.9659	3.8	0.66	9.42086		116	70 - 130	6.57	20	
Ethylbenzene	24.0988	8.7	0.78	21.7106		111	70 - 130	2.84	20	
Freon-113	36.7086	15	1.5	38.3180		95.8	70 - 130	0.624	20	
Hexachlorobutadiene	48.7390	21	3.9	53.3250		91.4	70 - 130	2.59	20	
Isopropylbenzene	27.6270	9.8	1.0	24.5791		112	70 - 130	2.98	20	
m,p-Xylene	48.5016	35	3.6	43.4213		112	70 - 130	1.86	20	
Methylene chloride	16.7780	6.9	0.52	17.3685		96.6	70 - 130	1.03	20	
MTBE	18.9996	7.2	0.58	18.0262		105	70 - 130	0.571	20	
n-Butylbenzene	30.5216	11	2.3	27.4474		111	70 - 130	0.00	20	
n-Propylbenzene	26.1030	9.8	1.8	24.5791		106	70 - 130	1.12	20	
Naphthalene	27.2593	10	2.4	26.2108		104	70 - 130	5.74	20	
o-Xylene	25.1409	8.7	1.4	21.7106		116	70 - 130	3.23	20	
sec-Butylbenzene	31.5646	11	1.9	27.4474		115	70 - 130	2.41	20	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS Dup (B1C0473-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
Styrene	27.0489	8.5	0.98	21.2984		127	70 - 130	0.157	20	
tert-Butylbenzene	29.4786	11	1.6	27.4474		107	70 - 130	3.48	20	
Tetrachloroethene	33.8446	14	1.8	33.9125		99.8	70 - 130	2.77	20	
Toluene	19.2190	7.5	0.45	18.8422		102	70 - 130	1.75	20	
trans-1,2-Dichloroethene	20.4195	7.9	0.40	19.8247		103	70 - 130	1.76	20	
trans-1,3-Dichloropropene	23.9639	9.1	0.68	22.6930		106	70 - 130	0.570	20	
Trichloroethene	25.9012	11	0.70	26.8685		96.4	70 - 130	1.44	20	
Trichlorofluoromethane	26.7430	11	1.2	28.0914		95.2	70 - 130	0.837	20	
Vinyl acetate	13.8024	7.0	1.6	17.6051		78.4	70 - 130	7.61	20	
Vinyl chloride	13.2920	5.1	0.43	12.7808		104	70 - 130	2.73	20	
Surrogate: 4-Bromofluorobenzene	*36.43*			*35.7869*		*102*	*70 - 130*			

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	03/31/2021

Notes and Definitions

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.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

AIR CHAIN OF CUSTODY RECORD

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21 00733

FOR LABORATORY USE ONLY — ATLCOC Ver:20210112

Method of Transport: ☐ Client ☑ ATL ☐ FedEx ☐ OnTrac ☐ GSO ☐ Other:

Sample Conditions Upon Receipt:

Condition	Y	Y	N	Condition	Y	N
1. CHILLED				5. # OF SAMPLES MATCH COC		
2. HEADSPACE (VOA)				6. PRESERVED		
3. CONTAINER INTACT				7.' Cooler Temp (°C)		
4. SEALED						

Company: Langan

SEND REPORT TO:
Attn: Shari Schwartzer Email: sschwartzer@langan.com
Company: Langan
Address: 515 S Flower St Suite 2860
City: Los Angeles State: CA Zip: 90071

SEND INVOICE TO: ☐ same as SEND REPORT TO
Address:
City: State: Zip:
Tel:
Fax:
Attn: Email:
Company: Email:
Address:
City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐

Project Name: Project Loki / SBD4
Project No.: 700089101
Sampler: Shari Schwartzer / Megan Ritsema
Quote #:
PO #:
Special Instructions:
Units:

Requested Analysis: VOCs (TO-15), Helium

ITEM	Lab ID (For Lab Use Only)	Sample ID	Field ID / Location	Date	Time	Canister ID	Manifold ID	1L	6L	Vacuum Initial	Vacuum Final	VOCs (TO-15)	Helium	Air Type: (I) Indoor, (SV) Soil Vapor, (A) Ambient	Turnaround Time (TAT)	Remarks
1	01	SV-01	SV-01	3/23/21	0753	00293	00403	X		-30	-12	X	X	SV	7	
2	02	SV-02	SV-02	↓	0927	00309	00404	↓		-26	-5	↓	↓	↓	↓	
3	03	SV-03	SV-03	↓	1105	00239	00388	↓		-25	-5	↓	↓	↓	↓	
4	04	SV-04	SV-04	↓	1340	00102	00578	↓		-24	-7	↓	↓	↓	↓	
5	05	SV-05	SV-05	↓	1422	00240	00406	↓		-25	-5.5	↓	↓	↓	↓	
6																
7																
8																
9																
10																

(Comments, Notes, etc.)

By relinquishing samples to ATL, I hereby agree that I have read and accept ATL's Terms and Conditions, as listed in www.atlglobal.com/terms-and-conditions.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Ritsema	3/23/21	1645	Max Rothrock	3/23/21	16 45
Max Rothrock	3/23/21	18 30	[signature]	3/23/21	18:30

ADVANCED TECHNOLOGY LABORATORIES

April 05, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

Re: ATL Work Order Number : 2100733
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March 24, 2021 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 your Project Manager.

Sincerely,

for

Edgar P. Caballero
Laboratory Director

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/05/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-01	2100733-01	Air	3/23/21 7:53	3/24/21 18:30
SV-02	2100733-02	Air	3/23/21 9:27	3/24/21 18:30
SV-03	2100733-03	Air	3/23/21 11:05	3/24/21 18:30
SV-04	2100733-04	Air	3/23/21 13:40	3/24/21 18:30
SV-05	2100733-05	Air	3/23/21 14:22	3/24/21 18:30

CASE NARRATIVE

Samples for Helium analysis were subcontracted to Air Technologies Laboratories.

ADVANCED TECHNOLOGY LABORATORIES

3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

AIR CHAIN OF CUSTODY RECORD

Page 1 of 1

2100733

FOR LABORATORY USE ONLY					ATLCOC Ver:20210112
Method of Transport		Sample Conditions Upon Receipt			
☐ Client ☑ ATL		Condition	Y	N	Condition Y N
☐ FedEx ☐ OnTrac		1. CHILLED			5. # OF SAMPLES MATCH COC
☐ GSO		2. HEADSPACE (VOA)			6. PRESERVED
☐ Other:		3. CONTAINER INTACT			7.' Cooler Temp (°C)
		4. SEALED			

Company: Langan	Address:		Tel:
SEND REPORT TO:	City:	State: Zip:	Fax:
Attn: Shari Schwartzer Email: sschwartzer@langan.com	SEND INVOICE TO: ☐ same as SEND REPORT TO		EDD: ☐ Excel ☐ EDF ☐ Equis ☐
Company: Langan	Attn: Email:		QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB Level IV ☐
Address: 515 S Flower St Suite 2800	Company: Email:		
City: Los Angeles State: CA Zip: 90071	Address:		
	City: State: Zip:		

Project Name: Project Loki / SBD4
Project No.: 700089101
Sampler: Shari Schwartzer / Megan Ritsema
Quote #:
PO #:
Special Instructions:

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Field ID / Location	Date	Time	Container Information: Canister ID	Manifold ID	Canister Size: 1L	6L	Vacuum: Initial	Final	Requested Analysis: VOCs (TO-15)	Helium										Air Type: (I) Indoor, (SV) Soil Vapor, (A) Ambient	Turnaround Time (TAT)	Units: / Remarks
1	01	SV-01	SV-01	3/23/21	0753	00293	00403	X		-30	-12	X	X										SV	7	
2	02	SV-02	SV-02	↓	0927	00309	00404	↓		-26	-5	↓	↓										↓	↓	
3	03	SV-03	SV-03		1105	00239	00388			-25	-5														
4	04	SV-04	SV-04		1340	00102	00578			-24	-7														
5	05	SV-05	SV-05	↓	1422	00240	00406	↓		-25	-5.5	↓	↓										↓	↓	
6																									
7																									
8																									
9																									
10																									

(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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Ritsema	3/23/21	1645	Max Rothrock	3/23/21	16 45
Max Rothrock	3/23/21	1830	[signature]	3/23/21	18:30
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

AirTECHNOLOGY
Laboratories, Inc.

April 2, 2021

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

Advanced Technology Laboratories
ATTN: Erick Ovalle
3275 Walnut Ave.
Signal Hill, CA 90755

LABORATORY TEST RESULTS

Project Reference: 2100733
Lab Number: M032604-01/05

Enclosed are results for sample(s) received 3/26/21 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

ADVANCED TECHNOLOGY LABORATORIES

M032604-01/05

SUBCONTRACT ORDER

Work Order: 2100733

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle
(Erick.Ovalle@atlglobal.com)
Sampler: SS / MR

RECEIVING LABORATORY:

Air Technology Laboratories, Inc.
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax: (626) 964-5832
PO#: SC15126 - 5-day TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

QC Requirements:

- [x] Routine
- [ ] Caltrans
- [ ] Legal
- [ ] RWQCB
- [ ] Level IV*
- [ ] Other: _____

* All Level IV sample containers (including empty ones) must be returned to ATL 30 days after receipt.

EDD Requirements:

- [x] Standard Excel
- [ ] Geotracker EDF
- [x] Other:

Analysis		Due	Expires	Sampled	Comments
ATL Lab#: 2100733-01	**/ SV-01**		**Air**	**03/23/21 07:53**	**Provide Langan Equis EDD**
D1946_C_SUB		**04/02/21 17:00**	04/22/21 07:53		Helium @ 3129121 per E.O.
[Fixed Gases - ~~Oxygen~~ Helium]					
1.4L Canister					
ATL Lab#: 2100733-02	**/ SV-02**		**Air**	**03/23/21 09:27**	
D1946_C_SUB		**04/02/21 17:00**	04/22/21 09:27		
[Fixed Gases - Oxygen]					
1.4L Canister					
ATL Lab#: 2100733-03	**/ SV-03**		**Air**	**03/23/21 11:05**	
D1946_C_SUB		**04/02/21 17:00**	04/22/21 11:05		
[Fixed Gases - Oxygen]					
1.4L Canister					

Approved by:

3/26/21
ATL Project Manager — Date

3/26/21 14:18
Released By ATL Sample Control — Date — Time

3-26-21 14:18
Received By Courier — Date — Time

3-26-21 13:36
Released By Courier — Date — Time

3/26/21 1535
Received By Subcontract Laboratory — Date — Time

Released By — Date — Time

Received By — Date — Time

C:\PROGRAM FILES (X86)\PROMIUM\ELEMENT\PRINT\SCO_ATL(A.6).RPT

M032604-01/04

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 2100733

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 2100733-04 / SV-04		**Air**	**03/23/21 13:40**	
D1946_C_SUB [Fixed Gases - Oxygen] 1.4L Canister	**04/02/21 17:00**	04/22/21 13:40		
ATL Lab#: 2100733-05 / SV-05		**Air**	**03/23/21 14:22**	
D1946_C_SUB [Fixed Gases - Oxygen] 1.4L Canister	**04/02/21 17:00**	04/22/21 14:22		

Approved by:

3/26/21
ATL Project Manager — Date

3/26/21 16:18
Released By ATL Sample Control — Date — Time

3-26-21 14:18
Received By Courier — Date — Time

3-26-21 15:35
Released By Courier — Date — Time

3/26/21 1535
Received By Subcontract Laboratory — Date — Time

Released By — Date — Time

Received By — Date — Time

Client: Advanced Technology Laboratories
Attn: Erick Ovalle
Project Name: NA
Project No.: 2100733
Date Received: 03/26/21
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	M032604-01		M032604-02		M032604-03		M032604-04	
Client Sample I.D.:	2100733-01/SV-01		2100733-02/SV-02		2100733-03/SV-03		2100733-04/SV-04	
Date/Time Sampled:	3/23/21 7:53		3/23/21 9:27		3/23/21 11:05		3/23/21 13:40	
Date/Time Analyzed:	4/1/21 9:24		4/1/21 9:29		4/1/21 9:34		4/1/21 9:39	
QC Batch No.:	210401GC8A1		210401GC8A1		210401GC8A1		210401GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.9		2.7		2.8		2.9	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Helium	ND	0.29	ND	0.27	ND	0.28	ND	0.29

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4-2-21
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: Advanced Technology Laboratories
Attn: Erick Ovalle
Project Name: NA
Project No.: 2100733
Date Received: 03/26/21
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	**M032604-05**							
Client Sample I.D.:	**2100733-05/SV-05**							
Date/Time Sampled:	**3/23/21 14:22**							
Date/Time Analyzed:	**4/1/21 9:44**							
QC Batch No.:	**210401GC8A1**							
Analyst Initials:	**CM**							
Dilution Factor:	**2.8**							
ANALYTE	**Result % v/v**	**RL % v/v**						
Helium	ND	0.28						

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4-2-21

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No: 210401GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946 Helium
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	4/1/21 9:20			4/1/21 9:10		4/1/21 9:15					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0			Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Helium	ND	0.10	1.0	0.993	99	0.985	99	0.8	70	130	30

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 1-2-21
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

March 31, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

RE: ATL Work Order Number : 2100741
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March, 24 2021 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 your Project Manager.

Sincerely,

for
Edgar P. Caballero
Laboratory Director

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	03/31/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-06	2100741-01	Soil Vapor	3/23/21 15:29	3/24/21 11:10
SV-07	2100741-02	Soil Vapor	3/23/21 16:22	3/24/21 11:10
SV-08	2100741-03	Soil Vapor	3/23/21 17:06	3/24/21 11:10
SV-09	2100741-04	Soil Vapor	3/23/21 17:44	3/24/21 11:10

CASE NARRATIVE

Samples for Helium analysis were subcontracted to Air Technologies Laboratories.

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-06

Lab ID: 2100741-01

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 19:52	
1,1,1-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 19:52	
1,1,2-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
1,1-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 19:52	
1,1-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2,4-Trichlorobenzene	ND	15	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2-Dibromoethane	ND	15	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 19:52	
1,2-Dichloropropane	ND	9.2	1	B1C0526	03/29/2021	03/29/21 19:52	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
1,3-Butadiene	ND	4.4	1	B1C0526	03/29/2021	03/29/21 19:52	
1,3-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 19:52	
1,4-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 19:52	
1,4-Dioxane	ND	7.2	1	B1C0526	03/29/2021	03/29/21 19:52	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0526	03/29/2021	03/29/21 19:52	
2-Butanone	**6.1**	5.9	1	B1C0526	03/29/2021	03/29/21 19:52	
2-Chlorotoluene	ND	10	1	B1C0526	03/29/2021	03/29/21 19:52	
2-Hexanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 19:52	
2-Propanol	ND	4.9	1	B1C0526	03/29/2021	03/29/21 19:52	
4-Ethyl Toluene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
4-Methyl-2-pentanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 19:52	
Acetone	**160**	48	10	B1C0473	03/24/2021	03/24/21 19:13	
Acetonitrile	ND	3.4	1	B1C0526	03/29/2021	03/29/21 19:52	
Acrolein	ND	4.6	1	B1C0526	03/29/2021	03/29/21 19:52	
Acrylonitrile	ND	4.3	1	B1C0526	03/29/2021	03/29/21 19:52	
Benzene	ND	6.4	1	B1C0526	03/29/2021	03/29/21 19:52	
Benzyl chloride	ND	10	1	B1C0526	03/29/2021	03/29/21 19:52	
Bromodichloromethane	ND	13	1	B1C0526	03/29/2021	03/29/21 19:52	
Bromoform	ND	21	1	B1C0526	03/29/2021	03/29/21 19:52	
Bromomethane	ND	7.8	1	B1C0526	03/29/2021	03/29/21 19:52	
Carbon disulfide	ND	6.2	1	B1C0526	03/29/2021	03/29/21 19:52	
Carbon tetrachloride	ND	13	1	B1C0526	03/29/2021	03/29/21 19:52	
Chlorobenzene	ND	9.2	1	B1C0526	03/29/2021	03/29/21 19:52	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-06

Lab ID: 2100741-01

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0526	03/29/2021	03/29/21 19:52	
Chloroform	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
Chloromethane	ND	4.1	1	B1C0526	03/29/2021	03/29/21 19:52	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 19:52	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 19:52	
Cyclohexane	ND	6.9	1	B1C0526	03/29/2021	03/29/21 19:52	
Dibromochloromethane	ND	17	1	B1C0526	03/29/2021	03/29/21 19:52	
Dichlorodifluoromethane	ND	9.9	1	B1C0526	03/29/2021	03/29/21 19:52	
Dichlorotetrafluoroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 19:52	
Ethanol	**9.6**	3.8	1	B1C0526	03/29/2021	03/29/21 19:52	
Ethylbenzene	ND	8.7	1	B1C0526	03/29/2021	03/29/21 19:52	
Freon-113	ND	15	1	B1C0526	03/29/2021	03/29/21 19:52	
Hexachlorobutadiene	ND	21	1	B1C0526	03/29/2021	03/29/21 19:52	
Isopropylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
m,p-Xylene	ND	35	1	B1C0526	03/29/2021	03/29/21 19:52	
Methylene chloride	ND	6.9	1	B1C0526	03/29/2021	03/29/21 19:52	
MTBE	ND	7.2	1	B1C0526	03/29/2021	03/29/21 19:52	
n-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
n-Propylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 19:52	
Naphthalene	ND	10	1	B1C0526	03/29/2021	03/29/21 19:52	
o-Xylene	ND	8.7	1	B1C0526	03/29/2021	03/29/21 19:52	
sec-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
Styrene	ND	8.5	1	B1C0526	03/29/2021	03/29/21 19:52	
tert-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
Tetrachloroethene	ND	14	1	B1C0526	03/29/2021	03/29/21 19:52	
Toluene	ND	7.5	1	B1C0526	03/29/2021	03/29/21 19:52	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 19:52	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 19:52	
Trichloroethene	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
Trichlorofluoromethane	ND	11	1	B1C0526	03/29/2021	03/29/21 19:52	
Vinyl acetate	ND	7.0	1	B1C0526	03/29/2021	03/29/21 19:52	
Vinyl chloride	ND	5.1	1	B1C0526	03/29/2021	03/29/21 19:52	
Surrogate: 4-Bromofluorobenzene	*105 %*	*70 - 130*		B1C0473	03/24/2021	*03/24/21 19:13*	
Surrogate: 4-Bromofluorobenzene	*110 %*	*70 - 130*		B1C0526	03/29/2021	*03/29/21 19:52*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-07

Lab ID: 2100741-02

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 16:53	
1,1,1-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 16:53	
1,1,2-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
1,1-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 16:53	
1,1-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2,4-Trichlorobenzene	ND	15	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2-Dibromoethane	ND	15	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 16:53	
1,2-Dichloropropane	ND	9.2	1	B1C0526	03/29/2021	03/29/21 16:53	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
1,3-Butadiene	ND	4.4	1	B1C0526	03/29/2021	03/29/21 16:53	
1,3-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 16:53	
1,4-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 16:53	
1,4-Dioxane	ND	7.2	1	B1C0526	03/29/2021	03/29/21 16:53	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0526	03/29/2021	03/29/21 16:53	
2-Butanone	ND	5.9	1	B1C0526	03/29/2021	03/29/21 16:53	
2-Chlorotoluene	ND	10	1	B1C0526	03/29/2021	03/29/21 16:53	
2-Hexanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 16:53	
2-Propanol	ND	4.9	1	B1C0526	03/29/2021	03/29/21 16:53	
4-Ethyl Toluene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
4-Methyl-2-pentanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 16:53	
Acetone	**27**	4.8	1	B1C0526	03/29/2021	03/29/21 16:53	
Acetonitrile	ND	3.4	1	B1C0526	03/29/2021	03/29/21 16:53	
Acrolein	ND	4.6	1	B1C0526	03/29/2021	03/29/21 16:53	
Acrylonitrile	ND	4.3	1	B1C0526	03/29/2021	03/29/21 16:53	
Benzene	ND	6.4	1	B1C0526	03/29/2021	03/29/21 16:53	
Benzyl chloride	ND	10	1	B1C0526	03/29/2021	03/29/21 16:53	
Bromodichloromethane	ND	13	1	B1C0526	03/29/2021	03/29/21 16:53	
Bromoform	ND	21	1	B1C0526	03/29/2021	03/29/21 16:53	
Bromomethane	ND	7.8	1	B1C0526	03/29/2021	03/29/21 16:53	
Carbon disulfide	ND	6.2	1	B1C0526	03/29/2021	03/29/21 16:53	
Carbon tetrachloride	ND	13	1	B1C0526	03/29/2021	03/29/21 16:53	
Chlorobenzene	ND	9.2	1	B1C0526	03/29/2021	03/29/21 16:53	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-07

Lab ID: 2100741-02

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0526	03/29/2021	03/29/21 16:53	
Chloroform	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
Chloromethane	ND	4.1	1	B1C0526	03/29/2021	03/29/21 16:53	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 16:53	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 16:53	
Cyclohexane	ND	6.9	1	B1C0526	03/29/2021	03/29/21 16:53	
Dibromochloromethane	ND	17	1	B1C0526	03/29/2021	03/29/21 16:53	
Dichlorodifluoromethane	ND	9.9	1	B1C0526	03/29/2021	03/29/21 16:53	
Dichlorotetrafluoroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 16:53	
Ethanol	ND	3.8	1	B1C0526	03/29/2021	03/29/21 16:53	
Ethylbenzene	**41**	8.7	1	B1C0526	03/29/2021	03/29/21 16:53	
Freon-113	ND	15	1	B1C0526	03/29/2021	03/29/21 16:53	
Hexachlorobutadiene	ND	21	1	B1C0526	03/29/2021	03/29/21 16:53	
Isopropylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
m,p-Xylene	**170**	35	1	B1C0526	03/29/2021	03/29/21 16:53	
Methylene chloride	ND	6.9	1	B1C0526	03/29/2021	03/29/21 16:53	
MTBE	ND	7.2	1	B1C0526	03/29/2021	03/29/21 16:53	
n-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
n-Propylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 16:53	
Naphthalene	ND	10	1	B1C0526	03/29/2021	03/29/21 16:53	
o-Xylene	**48**	8.7	1	B1C0526	03/29/2021	03/29/21 16:53	
sec-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
Styrene	ND	8.5	1	B1C0526	03/29/2021	03/29/21 16:53	
tert-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
Tetrachloroethene	ND	14	1	B1C0526	03/29/2021	03/29/21 16:53	
Toluene	ND	7.5	1	B1C0526	03/29/2021	03/29/21 16:53	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 16:53	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 16:53	
Trichloroethene	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
Trichlorofluoromethane	ND	11	1	B1C0526	03/29/2021	03/29/21 16:53	
Vinyl acetate	ND	7.0	1	B1C0526	03/29/2021	03/29/21 16:53	
Vinyl chloride	ND	5.1	1	B1C0526	03/29/2021	03/29/21 16:53	
Surrogate: 4-Bromofluorobenzene	*114 %*	*70 - 130*		B1C0526	03/29/2021	*03/29/21 16:53*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-08

Lab ID: 2100741-03

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 17:54	
1,1,1-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 17:54	
1,1,2-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
1,1-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 17:54	
1,1-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2,4-Trichlorobenzene	ND	15	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2-Dibromoethane	ND	15	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 17:54	
1,2-Dichloropropane	ND	9.2	1	B1C0526	03/29/2021	03/29/21 17:54	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
1,3-Butadiene	ND	4.4	1	B1C0526	03/29/2021	03/29/21 17:54	
1,3-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 17:54	
1,4-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 17:54	
1,4-Dioxane	ND	7.2	1	B1C0526	03/29/2021	03/29/21 17:54	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0526	03/29/2021	03/29/21 17:54	
2-Butanone	ND	5.9	1	B1C0526	03/29/2021	03/29/21 17:54	
2-Chlorotoluene	ND	10	1	B1C0526	03/29/2021	03/29/21 17:54	
2-Hexanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 17:54	
2-Propanol	ND	4.9	1	B1C0526	03/29/2021	03/29/21 17:54	
4-Ethyl Toluene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
4-Methyl-2-pentanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 17:54	
Acetone	**28**	4.8	1	B1C0526	03/29/2021	03/29/21 17:54	
Acetonitrile	ND	3.4	1	B1C0526	03/29/2021	03/29/21 17:54	
Acrolein	ND	4.6	1	B1C0526	03/29/2021	03/29/21 17:54	
Acrylonitrile	ND	4.3	1	B1C0526	03/29/2021	03/29/21 17:54	
Benzene	ND	6.4	1	B1C0526	03/29/2021	03/29/21 17:54	
Benzyl chloride	ND	10	1	B1C0526	03/29/2021	03/29/21 17:54	
Bromodichloromethane	ND	13	1	B1C0526	03/29/2021	03/29/21 17:54	
Bromoform	ND	21	1	B1C0526	03/29/2021	03/29/21 17:54	
Bromomethane	ND	7.8	1	B1C0526	03/29/2021	03/29/21 17:54	
Carbon disulfide	ND	6.2	1	B1C0526	03/29/2021	03/29/21 17:54	
Carbon tetrachloride	ND	13	1	B1C0526	03/29/2021	03/29/21 17:54	
Chlorobenzene	ND	9.2	1	B1C0526	03/29/2021	03/29/21 17:54	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-08

Lab ID: 2100741-03

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0526	03/29/2021	03/29/21 17:54	
Chloroform	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
Chloromethane	ND	4.1	1	B1C0526	03/29/2021	03/29/21 17:54	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 17:54	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 17:54	
Cyclohexane	ND	6.9	1	B1C0526	03/29/2021	03/29/21 17:54	
Dibromochloromethane	ND	17	1	B1C0526	03/29/2021	03/29/21 17:54	
Dichlorodifluoromethane	ND	9.9	1	B1C0526	03/29/2021	03/29/21 17:54	
Dichlorotetrafluoroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 17:54	
Ethanol	**4.6**	3.8	1	B1C0526	03/29/2021	03/29/21 17:54	
Ethylbenzene	ND	8.7	1	B1C0526	03/29/2021	03/29/21 17:54	
Freon-113	ND	15	1	B1C0526	03/29/2021	03/29/21 17:54	
Hexachlorobutadiene	ND	21	1	B1C0526	03/29/2021	03/29/21 17:54	
Isopropylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
m,p-Xylene	ND	35	1	B1C0526	03/29/2021	03/29/21 17:54	
Methylene chloride	ND	6.9	1	B1C0526	03/29/2021	03/29/21 17:54	
MTBE	ND	7.2	1	B1C0526	03/29/2021	03/29/21 17:54	
n-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
n-Propylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 17:54	
Naphthalene	ND	10	1	B1C0526	03/29/2021	03/29/21 17:54	
o-Xylene	ND	8.7	1	B1C0526	03/29/2021	03/29/21 17:54	
sec-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
Styrene	ND	8.5	1	B1C0526	03/29/2021	03/29/21 17:54	
tert-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
Tetrachloroethene	ND	14	1	B1C0526	03/29/2021	03/29/21 17:54	
Toluene	ND	7.5	1	B1C0526	03/29/2021	03/29/21 17:54	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 17:54	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 17:54	
Trichloroethene	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
Trichlorofluoromethane	ND	11	1	B1C0526	03/29/2021	03/29/21 17:54	
Vinyl acetate	ND	7.0	1	B1C0526	03/29/2021	03/29/21 17:54	
Vinyl chloride	ND	5.1	1	B1C0526	03/29/2021	03/29/21 17:54	
Surrogate: 4-Bromofluorobenzene	*107 %*	*70 - 130*		B1C0526	03/29/2021	*03/29/21 17:54*	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-09

Lab ID: 2100741-04

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 18:53	
1,1,1-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
1,1,2,2-Tetrachloroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 18:53	
1,1,2-Trichloroethane	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
1,1-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 18:53	
1,1-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2,4-Trichlorobenzene	ND	15	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2,4-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2-Dibromoethane	ND	15	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2-Dichloroethane	ND	8.1	1	B1C0526	03/29/2021	03/29/21 18:53	
1,2-Dichloropropane	ND	9.2	1	B1C0526	03/29/2021	03/29/21 18:53	
1,3,5-Trimethylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
1,3-Butadiene	ND	4.4	1	B1C0526	03/29/2021	03/29/21 18:53	
1,3-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 18:53	
1,4-Dichlorobenzene	ND	12	1	B1C0526	03/29/2021	03/29/21 18:53	
1,4-Dioxane	ND	7.2	1	B1C0526	03/29/2021	03/29/21 18:53	
2,2,4-Trimethylpentane	ND	9.3	1	B1C0526	03/29/2021	03/29/21 18:53	
2-Butanone	ND	5.9	1	B1C0526	03/29/2021	03/29/21 18:53	
2-Chlorotoluene	ND	10	1	B1C0526	03/29/2021	03/29/21 18:53	
2-Hexanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 18:53	
2-Propanol	ND	4.9	1	B1C0526	03/29/2021	03/29/21 18:53	
4-Ethyl Toluene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
4-Methyl-2-pentanone	ND	8.2	1	B1C0526	03/29/2021	03/29/21 18:53	
Acetone	**21**	4.8	1	B1C0526	03/29/2021	03/29/21 18:53	
Acetonitrile	ND	3.4	1	B1C0526	03/29/2021	03/29/21 18:53	
Acrolein	ND	4.6	1	B1C0526	03/29/2021	03/29/21 18:53	
Acrylonitrile	ND	4.3	1	B1C0526	03/29/2021	03/29/21 18:53	
Benzene	ND	6.4	1	B1C0526	03/29/2021	03/29/21 18:53	
Benzyl chloride	ND	10	1	B1C0526	03/29/2021	03/29/21 18:53	
Bromodichloromethane	ND	13	1	B1C0526	03/29/2021	03/29/21 18:53	
Bromoform	ND	21	1	B1C0526	03/29/2021	03/29/21 18:53	
Bromomethane	ND	7.8	1	B1C0526	03/29/2021	03/29/21 18:53	
Carbon disulfide	ND	6.2	1	B1C0526	03/29/2021	03/29/21 18:53	
Carbon tetrachloride	ND	13	1	B1C0526	03/29/2021	03/29/21 18:53	
Chlorobenzene	ND	9.2	1	B1C0526	03/29/2021	03/29/21 18:53	

Certificate of Analysis

Langan Engineering & Environmental Services	Project Number : Project Loki / SBD4
515 South Flower Street Suite 2860	Report To : Shari Schwartzer
Los Angeles , CA 900071	Reported : 03/31/2021

Client Sample ID SV-09

Lab ID: 2100741-04

Volatile Organic Compounds in AIR by TO-15 (ug/m3) **Analyst: ZNZ**

Analyte	Result (ug/m³)	PQL (ug/m³)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	5.3	1	B1C0526	03/29/2021	03/29/21 18:53	
Chloroform	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
Chloromethane	ND	4.1	1	B1C0526	03/29/2021	03/29/21 18:53	
cis-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 18:53	
cis-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 18:53	
Cyclohexane	ND	6.9	1	B1C0526	03/29/2021	03/29/21 18:53	
Dibromochloromethane	ND	17	1	B1C0526	03/29/2021	03/29/21 18:53	
Dichlorodifluoromethane	ND	9.9	1	B1C0526	03/29/2021	03/29/21 18:53	
Dichlorotetrafluoroethane	ND	14	1	B1C0526	03/29/2021	03/29/21 18:53	
Ethanol	**4.9**	3.8	1	B1C0526	03/29/2021	03/29/21 18:53	
Ethylbenzene	**21**	8.7	1	B1C0526	03/29/2021	03/29/21 18:53	
Freon-113	ND	15	1	B1C0526	03/29/2021	03/29/21 18:53	
Hexachlorobutadiene	ND	21	1	B1C0526	03/29/2021	03/29/21 18:53	
Isopropylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
m,p-Xylene	**100**	35	1	B1C0526	03/29/2021	03/29/21 18:53	
Methylene chloride	ND	6.9	1	B1C0526	03/29/2021	03/29/21 18:53	
MTBE	ND	7.2	1	B1C0526	03/29/2021	03/29/21 18:53	
n-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
n-Propylbenzene	ND	9.8	1	B1C0526	03/29/2021	03/29/21 18:53	
Naphthalene	ND	10	1	B1C0526	03/29/2021	03/29/21 18:53	
o-Xylene	**28**	8.7	1	B1C0526	03/29/2021	03/29/21 18:53	
sec-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
Styrene	ND	8.5	1	B1C0526	03/29/2021	03/29/21 18:53	
tert-Butylbenzene	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
Tetrachloroethene	ND	14	1	B1C0526	03/29/2021	03/29/21 18:53	
Toluene	ND	7.5	1	B1C0526	03/29/2021	03/29/21 18:53	
trans-1,2-Dichloroethene	ND	7.9	1	B1C0526	03/29/2021	03/29/21 18:53	
trans-1,3-Dichloropropene	ND	9.1	1	B1C0526	03/29/2021	03/29/21 18:53	
Trichloroethene	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
Trichlorofluoromethane	ND	11	1	B1C0526	03/29/2021	03/29/21 18:53	
Vinyl acetate	ND	7.0	1	B1C0526	03/29/2021	03/29/21 18:53	
Vinyl chloride	ND	5.1	1	B1C0526	03/29/2021	03/29/21 18:53	
Surrogate: 4-Bromofluorobenzene	*110 %*	*70 - 130*		B1C0526	03/29/2021	*03/29/21 18:53*	

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QUALITY CONTROL SECTION

Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air										
Blank (B1C0473-BLK1)					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,1,1,2-Tetrachloroethane	ND	14	2.1							
1,1,1-Trichloroethane	ND	11	0.98							
1,1,2,2-Tetrachloroethane	ND	14	1.9							
1,1,2-Trichloroethane	ND	11	0.87							
1,1-Dichloroethane	ND	8.1	0.36							
1,1-Dichloroethene	ND	7.9	1.4							
1,2,4-Trichlorobenzene	ND	15	2.4							
1,2,4-Trimethylbenzene	ND	9.8	1.3							
1,2-Dibromoethane	ND	15	1.3							
1,2-Dichlorobenzene	ND	12	2.0							
1,2-Dichloroethane	ND	8.1	1.4							
1,2-Dichloropropane	ND	9.2	0.97							
1,3,5-Trimethylbenzene	ND	9.8	1.4							
1,3-Butadiene	ND	4.4	1.0							
1,3-Dichlorobenzene	ND	12	1.9							
1,4-Dichlorobenzene	ND	12	2.0							
1,4-Dioxane	ND	7.2	0.86							
2,2,4-Trimethylpentane	ND	9.3	0.65							
2-Butanone	ND	5.9	0.47							
2-Chlorotoluene	ND	10	1.1							
2-Hexanone	ND	8.2	0.90							
2-Propanol	ND	4.9	0.61							
4-Ethyl Toluene	ND	9.8	1.2							
4-Methyl-2-pentanone	ND	8.2	1.1							
Acetone	ND	4.8	0.48							
Acetonitrile	ND	3.4	0.44							
Acrolein	ND	4.6	0.83							
Acrylonitrile	ND	4.3	0.56							
Benzene	ND	6.4	0.45							
Benzyl chloride	ND	10	1.5							
Bromodichloromethane	ND	13	2.0							
Bromoform	ND	21	3.4							
Bromomethane	ND	7.8	0.66							
Carbon disulfide	ND	6.2	1.1							
Carbon tetrachloride	ND	13	2.1							
Chlorobenzene	ND	9.2	0.83							
Chloroethane	ND	5.3	0.58							
Chloroform	ND	9.8	0.78							

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
Blank (B1C0473-BLK1) - Continued						Prepared: 3/24/2021 Analyzed: 3/24/2021				
Chloromethane	ND	4.1	0.14							
cis-1,2-Dichloroethene	ND	7.9	0.71							
cis-1,3-Dichloropropene	ND	9.1	0.68							
Cyclohexane	ND	6.9	0.55							
Dibromochloromethane	ND	17	3.0							
Dichlorodifluoromethane	ND	9.9	0.99							
Dichlorotetrafluoroethane	ND	14	1.0							
Ethanol	ND	3.8	0.66							
Ethylbenzene	ND	8.7	0.78							
Freon-113	ND	15	1.5							
Hexachlorobutadiene	ND	21	3.9							
Isopropylbenzene	ND	9.8	1.0							
m,p-Xylene	ND	35	3.6							
Methylene chloride	ND	6.9	0.52							
MTBE	ND	7.2	0.58							
n-Butylbenzene	ND	11	2.3							
n-Propylbenzene	ND	9.8	1.8							
Naphthalene	ND	10	2.4							
o-Xylene	ND	8.7	1.4							
sec-Butylbenzene	ND	11	1.9							
Styrene	ND	8.5	0.98							
tert-Butylbenzene	ND	11	1.6							
Tetrachloroethene	ND	14	1.8							
Toluene	ND	7.5	0.45							
trans-1,2-Dichloroethene	ND	7.9	0.40							
trans-1,3-Dichloropropene	ND	9.1	0.68							
Trichloroethene	ND	11	0.70							
Trichlorofluoromethane	ND	11	1.2							
Vinyl acetate	ND	7.0	1.6							
Vinyl chloride	ND	5.1	0.43							
Surrogate: 4-Bromofluorobenzene	*37.65*			*35.7869*		*105*	*70 - 130*			
LCS (B1C0473-BS1)						Prepared: 3/24/2021 Analyzed: 3/24/2021				
1,1,1,2-Tetrachloroethane	33.9815	14	2.1	34.3247		99.0	70 - 130			
1,1,1-Trichloroethane	26.6260	11	0.98	27.2808		97.6	70 - 130			
1,1,2,2-Tetrachloroethane	37.8259	14	1.9	34.3247		110	70 - 130			
1,1,2-Trichloroethane	27.3353	11	0.87	27.2808		100	70 - 130			
1,1-Dichloroethane	19.4680	8.1	0.36	20.2370		96.2	70 - 130			
1,1-Dichloroethene	20.3402	7.9	1.4	19.8247		103	70 - 130			
1,2,4-Trichlorobenzene	35.6213	15	2.4	37.1055		96.0	70 - 130			

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS (B1C0473-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,2,4-Trimethylbenzene	28.0202	9.8	1.3	24.5791		114	70 - 130			
1,2-Dibromoethane	39.7236	15	1.3	38.4174		103	70 - 130			
1,2-Dichlorobenzene	31.5646	12	2.0	30.0616		105	70 - 130			
1,2-Dichloroethane	19.7513	8.1	1.4	20.2370		97.6	70 - 130			
1,2-Dichloropropane	22.6894	9.2	0.97	23.1053		98.2	70 - 130			
1,3,5-Trimethylbenzene	29.4950	9.8	1.4	24.5791		120	70 - 130			
1,3-Butadiene	11.7029	4.4	1.0	11.0614		106	70 - 130			
1,3-Dichlorobenzene	31.6849	12	1.9	30.0616		105	70 - 130			
1,4-Dichlorobenzene	30.8432	12	2.0	30.0616		103	70 - 130			
1,4-Dioxane	22.7740	7.2	0.86	18.0174		126	70 - 130			
2,2,4-Trimethylpentane	24.0605	9.3	0.65	23.3597		103	70 - 130			
2-Butanone	16.5446	5.9	0.47	14.7456		112	70 - 130			
2-Chlorotoluene	30.7009	10	1.1	25.8861		119	70 - 130			
2-Hexanone	25.3163	8.2	0.90	20.4824		124	70 - 130			
2-Propanol	15.2867	4.9	0.61	12.2883		124	70 - 130			
4-Ethyl Toluene	29.9374	9.8	1.2	24.5791		122	70 - 130			
4-Methyl-2-pentanone	25.5620	8.2	1.1	20.4824		125	70 - 130			
Acetone	12.0671	4.8	0.48	11.8771		102	70 - 130			
Acetonitrile	8.16003	3.4	0.44	8.39509		97.2	70 - 130			
Acrolein	14.3769	4.6	0.83	11.4648		125	70 - 130			
Acrylonitrile	11.4373	4.3	0.56	10.8513		105	70 - 130			
Benzene	15.7182	6.4	0.45	15.9738		98.4	70 - 130			
Benzyl chloride	31.5293	10	1.5	25.8861		122	70 - 130			
Bromodichloromethane	34.2397	13	2.0	33.5027		102	70 - 130			
Bromoform	56.6448	21	3.4	51.6832		110	70 - 130			
Bromomethane	18.7936	7.8	0.66	19.4149		96.8	70 - 130			
Carbon disulfide	15.3532	6.2	1.1	15.5712		98.6	70 - 130			
Carbon tetrachloride	29.7578	13	2.1	31.4564		94.6	70 - 130			
Chloroethane	13.8527	5.3	0.58	13.1930		105	70 - 130			
Chloroform	23.9242	9.8	0.78	24.4125		98.0	70 - 130			
Chloromethane	10.1387	4.1	0.14	10.3245		98.2	70 - 130			
cis-1,2-Dichloroethene	20.0230	7.9	0.71	19.8247		101	70 - 130			
cis-1,3-Dichloropropene	24.1001	9.1	0.68	22.6931		106	70 - 130			
Cyclohexane	14.8700	6.9	0.55	17.2106		86.4	70 - 130			
Dibromochloromethane	44.6373	17	3.0	42.5928		105	70 - 130			
Dichlorodifluoromethane	23.4408	9.9	0.99	24.7266		94.8	70 - 130			
Dichlorotetrafluoroethane	33.5548	14	1.0	34.9530		96.0	70 - 130			
Ethanol	10.2687	3.8	0.66	9.42086		109	70 - 130			
Ethylbenzene	24.7935	8.7	0.78	21.7106		114	70 - 130			
Freon-113	36.9386	15	1.5	38.3180		96.4	70 - 130			

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS (B1C0473-BS1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
Hexachlorobutadiene	50.0188	21	3.9	53.3250		93.8	70 - 130			
Isopropylbenzene	28.4626	9.8	1.0	24.5791		116	70 - 130			
m,p-Xylene	49.4134	35	3.6	43.4213		114	70 - 130			
Methylene chloride	16.9517	6.9	0.52	17.3685		97.6	70 - 130			
MTBE	18.8914	7.2	0.58	18.0262		105	70 - 130			
n-Butylbenzene	30.5216	11	2.3	27.4474		111	70 - 130			
n-Propylbenzene	26.3980	9.8	1.8	24.5791		107	70 - 130			
Naphthalene	25.7390	10	2.4	26.2108		98.2	70 - 130			
o-Xylene	25.9659	8.7	1.4	21.7106		120	70 - 130			
sec-Butylbenzene	32.3331	11	1.9	27.4474		118	70 - 130			
Styrene	27.0915	8.5	0.98	21.2984		127	70 - 130			
tert-Butylbenzene	30.5216	11	1.6	27.4474		111	70 - 130			
Tetrachloroethene	34.7942	14	1.8	33.9125		103	70 - 130			
Toluene	19.5582	7.5	0.45	18.8422		104	70 - 130			
trans-1,2-Dichloroethene	20.0626	7.9	0.40	19.8247		101	70 - 130			
trans-1,3-Dichloropropene	23.8277	9.1	0.68	22.6930		105	70 - 130			
Trichloroethene	26.2774	11	0.70	26.8685		97.8	70 - 130			
Trichlorofluoromethane	26.9678	11	1.2	28.0914		96.0	70 - 130			
Vinyl acetate	14.8939	7.0	1.6	17.6051		84.6	70 - 130			
Vinyl chloride	12.9342	5.1	0.43	12.7808		101	70 - 130			
Surrogate: 4-Bromofluorobenzene	*36.65*			*35.7869*		*102*	*70 - 130*			
LCS Dup (B1C0473-BSD1)					Prepared: 3/24/2021 Analyzed: 3/24/2021					
1,1,1,2-Tetrachloroethane	32.6085	14	2.1	34.3247		95.0	70 - 130	4.12	20	
1,1,1-Trichloroethane	26.6260	11	0.98	27.2808		97.6	70 - 130	0.00	20	
1,1,2,2-Tetrachloroethane	36.6588	14	1.9	34.3247		107	70 - 130	3.13	20	
1,1,2-Trichloroethane	27.3899	11	0.87	27.2808		100	70 - 130	0.199	20	
1,1-Dichloroethane	19.5085	8.1	0.36	20.2370		96.4	70 - 130	0.208	20	
1,1-Dichloroethene	20.4988	7.9	1.4	19.8247		103	70 - 130	0.777	20	
1,2,4-Trichlorobenzene	37.3282	15	2.4	37.1055		101	70 - 130	4.68	20	
1,2,4-Trimethylbenzene	27.8236	9.8	1.3	24.5791		113	70 - 130	0.704	20	
1,2-Dibromoethane	39.2626	15	1.3	38.4174		102	70 - 130	1.17	20	
1,2-Dichlorobenzene	31.5646	12	2.0	30.0616		105	70 - 130	0.00	20	
1,2-Dichloroethane	19.1847	8.1	1.4	20.2370		94.8	70 - 130	2.91	20	
1,2-Dichloropropane	22.4122	9.2	0.97	23.1053		97.0	70 - 130	1.23	20	
1,3,5-Trimethylbenzene	28.8068	9.8	1.4	24.5791		117	70 - 130	2.36	20	
1,3-Butadiene	11.7250	4.4	1.0	11.0614		106	70 - 130	0.189	20	
1,3-Dichlorobenzene	31.4444	12	1.9	30.0616		105	70 - 130	0.762	20	
1,4-Dichlorobenzene	30.6027	12	2.0	30.0616		102	70 - 130	0.783	20	
1,4-Dioxane	22.1614	7.2	0.86	18.0174		123	70 - 130	2.73	20	

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS Dup (B1C0473-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
2,2,4-Trimethylpentane	23.3130	9.3	0.65	23.3597		99.8	70 - 130	3.16	20	
2-Butanone	16.7805	5.9	0.47	14.7456		114	70 - 130	1.42	20	
2-Chlorotoluene	33.1342	10	1.1	25.8861		128	70 - 130	7.62	20	
2-Hexanone	25.8898	8.2	0.90	20.4824		126	70 - 130	2.24	20	
2-Propanol	15.2621	4.9	0.61	12.2883		124	70 - 130	0.161	20	
4-Ethyl Toluene	29.2000	9.8	1.2	24.5791		119	70 - 130	2.49	20	
4-Methyl-2-pentanone	25.2753	8.2	1.1	20.4824		123	70 - 130	1.13	20	
Acetone	12.4710	4.8	0.48	11.8771		105	70 - 130	3.29	20	
Acetonitrile	8.39509	3.4	0.44	8.39509		100	70 - 130	2.84	20	
Acrolein	14.2393	4.6	0.83	11.4648		124	70 - 130	0.962	20	
Acrylonitrile	11.7845	4.3	0.56	10.8513		109	70 - 130	2.99	20	
Benzene	15.4627	6.4	0.45	15.9738		96.8	70 - 130	1.64	20	
Benzyl chloride	31.3739	10	1.5	25.8861		121	70 - 130	0.494	20	
Bromodichloromethane	33.5697	13	2.0	33.5027		100	70 - 130	1.98	20	
Bromoform	54.8876	21	3.4	51.6832		106	70 - 130	3.15	20	
Bromomethane	19.0266	7.8	0.66	19.4149		98.0	70 - 130	1.23	20	
Carbon disulfide	15.2909	6.2	1.1	15.5712		98.2	70 - 130	0.407	20	
Carbon tetrachloride	29.0028	13	2.1	31.4564		92.2	70 - 130	2.57	20	
Chloroethane	13.7735	5.3	0.58	13.1930		104	70 - 130	0.573	20	
Chloroform	23.7778	9.8	0.78	24.4125		97.4	70 - 130	0.614	20	
Chloromethane	10.0148	4.1	0.14	10.3245		97.0	70 - 130	1.23	20	
cis-1,2-Dichloroethene	20.1419	7.9	0.71	19.8247		102	70 - 130	0.592	20	
cis-1,3-Dichloropropene	23.6916	9.1	0.68	22.6931		104	70 - 130	1.71	20	
Cyclohexane	14.4225	6.9	0.55	17.2106		83.8	70 - 130	3.06	20	
Dibromochloromethane	42.5928	17	3.0	42.5928		100	70 - 130	4.69	20	
Dichlorodifluoromethane	23.0452	9.9	0.99	24.7266		93.2	70 - 130	1.70	20	
Dichlorotetrafluoroethane	33.6248	14	1.0	34.9530		96.2	70 - 130	0.208	20	
Ethanol	10.9659	3.8	0.66	9.42086		116	70 - 130	6.57	20	
Ethylbenzene	24.0988	8.7	0.78	21.7106		111	70 - 130	2.84	20	
Freon-113	36.7086	15	1.5	38.3180		95.8	70 - 130	0.624	20	
Hexachlorobutadiene	48.7390	21	3.9	53.3250		91.4	70 - 130	2.59	20	
Isopropylbenzene	27.6270	9.8	1.0	24.5791		112	70 - 130	2.98	20	
m,p-Xylene	48.5016	35	3.6	43.4213		112	70 - 130	1.86	20	
Methylene chloride	16.7780	6.9	0.52	17.3685		96.6	70 - 130	1.03	20	
MTBE	18.9996	7.2	0.58	18.0262		105	70 - 130	0.571	20	
n-Butylbenzene	30.5216	11	2.3	27.4474		111	70 - 130	0.00	20	
n-Propylbenzene	26.1030	9.8	1.8	24.5791		106	70 - 130	1.12	20	
Naphthalene	27.2593	10	2.4	26.2108		104	70 - 130	5.74	20	
o-Xylene	25.1409	8.7	1.4	21.7106		116	70 - 130	3.23	20	
sec-Butylbenzene	31.5646	11	1.9	27.4474		115	70 - 130	2.41	20	

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0473 - No_Prep_Air (continued)										
LCS Dup (B1C0473-BSD1) - Continued					Prepared: 3/24/2021 Analyzed: 3/24/2021					
Styrene	27.0489	8.5	0.98	21.2984		127	70 - 130	0.157	20	
tert-Butylbenzene	29.4786	11	1.6	27.4474		107	70 - 130	3.48	20	
Tetrachloroethene	33.8446	14	1.8	33.9125		99.8	70 - 130	2.77	20	
Toluene	19.2190	7.5	0.45	18.8422		102	70 - 130	1.75	20	
trans-1,2-Dichloroethene	20.4195	7.9	0.40	19.8247		103	70 - 130	1.76	20	
trans-1,3-Dichloropropene	23.9639	9.1	0.68	22.6930		106	70 - 130	0.570	20	
Trichloroethene	25.9012	11	0.70	26.8685		96.4	70 - 130	1.44	20	
Trichlorofluoromethane	26.7430	11	1.2	28.0914		95.2	70 - 130	0.837	20	
Vinyl acetate	13.8024	7.0	1.6	17.6051		78.4	70 - 130	7.61	20	
Vinyl chloride	13.2920	5.1	0.43	12.7808		104	70 - 130	2.73	20	
Surrogate: 4-Bromofluorobenzene	*36.43*			*35.7869*		*102*	*70 - 130*			

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air										
Blank (B1C0526-BLK1)							Prepared: 3/29/2021 Analyzed: 3/29/2021			
1,1,1,2-Tetrachloroethane	ND	14	2.1							
1,1,1-Trichloroethane	ND	11	0.98							
1,1,2,2-Tetrachloroethane	ND	14	1.9							
1,1,2-Trichloroethane	ND	11	0.87							
1,1-Dichloroethane	ND	8.1	0.36							
1,1-Dichloroethene	ND	7.9	1.4							
1,2,4-Trichlorobenzene	ND	15	2.4							
1,2,4-Trimethylbenzene	ND	9.8	1.3							
1,2-Dibromoethane	ND	15	1.3							
1,2-Dichlorobenzene	ND	12	2.0							
1,2-Dichloroethane	ND	8.1	1.4							
1,2-Dichloropropane	ND	9.2	0.97							
1,3,5-Trimethylbenzene	ND	9.8	1.4							
1,3-Butadiene	ND	4.4	1.0							
1,3-Dichlorobenzene	ND	12	1.9							
1,4-Dichlorobenzene	ND	12	2.0							
1,4-Dioxane	ND	7.2	0.86							
2,2,4-Trimethylpentane	ND	9.3	0.65							
2-Butanone	ND	5.9	0.47							
2-Chlorotoluene	ND	10	1.1							
2-Hexanone	ND	8.2	0.90							
2-Propanol	ND	4.9	0.61							
4-Ethyl Toluene	ND	9.8	1.2							
4-Methyl-2-pentanone	ND	8.2	1.1							
Acetone	ND	4.8	0.48							
Acetonitrile	ND	3.4	0.44							
Acrolein	ND	4.6	0.83							
Acrylonitrile	ND	4.3	0.56							
Benzene	ND	6.4	0.45							
Benzyl chloride	ND	10	1.5							
Bromodichloromethane	ND	13	2.0							
Bromoform	ND	21	3.4							
Bromomethane	ND	7.8	0.66							
Carbon disulfide	ND	6.2	1.1							
Carbon tetrachloride	ND	13	2.1							
Chlorobenzene	ND	9.2	0.83							
Chloroethane	ND	5.3	0.58							
Chloroform	ND	9.8	0.78							
Chloromethane	ND	4.1	0.14							
cis-1,2-Dichloroethene	ND	7.9	0.71							

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air (continued)										
Blank (B1C0526-BLK1) - Continued						Prepared: 3/29/2021 Analyzed: 3/29/2021				
cis-1,3-Dichloropropene	ND	9.1	0.68							
Cyclohexane	ND	6.9	0.55							
Dibromochloromethane	ND	17	3.0							
Dichlorodifluoromethane	ND	9.9	0.99							
Dichlorotetrafluoroethane	ND	14	1.0							
Ethanol	ND	3.8	0.66							
Ethylbenzene	ND	8.7	0.78							
Freon-113	ND	15	1.5							
Hexachlorobutadiene	ND	21	3.9							
Isopropylbenzene	ND	9.8	1.0							
m,p-Xylene	ND	35	3.6							
Methylene chloride	ND	6.9	0.52							
MTBE	ND	7.2	0.58							
n-Butylbenzene	ND	11	2.3							
n-Propylbenzene	ND	9.8	1.8							
Naphthalene	ND	10	2.4							
o-Xylene	ND	8.7	1.4							
sec-Butylbenzene	ND	11	1.9							
Styrene	ND	8.5	0.98							
tert-Butylbenzene	ND	11	1.6							
Tetrachloroethene	ND	14	1.8							
Toluene	ND	7.5	0.45							
trans-1,2-Dichloroethene	ND	7.9	0.40							
trans-1,3-Dichloropropene	ND	9.1	0.68							
Trichloroethene	ND	11	0.70							
Trichlorofluoromethane	ND	11	1.2							
Vinyl acetate	ND	7.0	1.6							
Vinyl chloride	ND	5.1	0.43							
Surrogate: 4-Bromofluorobenzene	*38.22*			*35.7869*		*107*	*70 - 130*			
LCS (B1C0526-BS1)						Prepared: 3/29/2021 Analyzed: 3/29/2021				
1,1,1,2-Tetrachloroethane	31.2355	14	2.1	34.3247		91.0	70 - 130			
1,1,1-Trichloroethane	25.1529	11	0.98	27.2808		92.2	70 - 130			
1,1,2,2-Tetrachloroethane	35.5604	14	1.9	34.3247		104	70 - 130			
1,1,2-Trichloroethane	26.2441	11	0.87	27.2808		96.2	70 - 130			
1,1-Dichloroethane	19.1847	8.1	0.36	20.2370		94.8	70 - 130			
1,1-Dichloroethene	19.6662	7.9	1.4	19.8247		99.2	70 - 130			
1,2,4-Trichlorobenzene	38.6640	15	2.4	37.1055		104	70 - 130			
1,2,4-Trimethylbenzene	26.7913	9.8	1.3	24.5791		109	70 - 130			
1,2-Dibromoethane	37.4185	15	1.3	38.4174		97.4	70 - 130			

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air (continued)										
LCS (B1C0526-BS1) - Continued					Prepared: 3/29/2021 Analyzed: 3/29/2021					
1,2-Dichlorobenzene	30.4824	12	2.0	30.0616		101	70 - 130			
1,2-Dichloroethane	18.0109	8.1	1.4	20.2370		89.0	70 - 130			
1,2-Dichloropropane	21.6266	9.2	0.97	23.1053		93.6	70 - 130			
1,3,5-Trimethylbenzene	27.8728	9.8	1.4	24.5791		113	70 - 130			
1,3-Butadiene	11.4596	4.4	1.0	11.0614		104	70 - 130			
1,3-Dichlorobenzene	30.0014	12	1.9	30.0616		99.8	70 - 130			
1,4-Dichlorobenzene	29.5806	12	2.0	30.0616		98.4	70 - 130			
1,4-Dioxane	22.2695	7.2	0.86	18.0174		124	70 - 130			
2,2,4-Trimethylpentane	22.8458	9.3	0.65	23.3597		97.8	70 - 130			
2-Butanone	17.1049	5.9	0.47	14.7456		116	70 - 130			
2-Chlorotoluene	30.3385	10	1.1	25.8861		117	70 - 130			
2-Hexanone	25.4801	8.2	0.90	20.4824		124	70 - 130			
2-Propanol	15.8028	4.9	0.61	12.2883		129	70 - 130			
4-Ethyl Toluene	28.0694	9.8	1.2	24.5791		114	70 - 130			
4-Methyl-2-pentanone	24.5379	8.2	1.1	20.4824		120	70 - 130			
Acetone	12.5897	4.8	0.48	11.8771		106	70 - 130			
Acetonitrile	8.93238	3.4	0.44	8.39509		106	70 - 130			
Acrolein	13.2992	4.6	0.83	11.4648		116	70 - 130			
Acrylonitrile	11.8496	4.3	0.56	10.8513		109	70 - 130			
Benzene	15.3349	6.4	0.45	15.9738		96.0	70 - 130			
Benzyl chloride	29.0442	10	1.5	25.8861		112	70 - 130			
Bromodichloromethane	31.4255	13	2.0	33.5027		93.8	70 - 130			
Bromoform	52.3034	21	3.4	51.6832		101	70 - 130			
Bromomethane	19.2208	7.8	0.66	19.4149		99.0	70 - 130			
Carbon disulfide	16.4743	6.2	1.1	15.5712		106	70 - 130			
Carbon tetrachloride	26.1088	13	2.1	31.4564		83.0	70 - 130			
Chloroethane	13.8791	5.3	0.58	13.1930		105	70 - 130			
Chloroform	22.6060	9.8	0.78	24.4125		92.6	70 - 130			
Chloromethane	10.2006	4.1	0.14	10.3245		98.8	70 - 130			
cis-1,2-Dichloroethene	19.7058	7.9	0.71	19.8247		99.4	70 - 130			
cis-1,3-Dichloropropene	23.2377	9.1	0.68	22.6931		102	70 - 130			
Cyclohexane	14.1816	6.9	0.55	17.2106		82.4	70 - 130			
Dibromochloromethane	41.0595	17	3.0	42.5928		96.4	70 - 130			
Dichlorodifluoromethane	22.2045	9.9	0.99	24.7266		89.8	70 - 130			
Dichlorotetrafluoroethane	31.9470	14	1.0	34.9530		91.4	70 - 130			
Ethanol	11.5688	3.8	0.66	9.42086		123	70 - 130			
Ethylbenzene	24.0120	8.7	0.78	21.7106		111	70 - 130			
Freon-113	35.4825	15	1.5	38.3180		92.6	70 - 130			
Hexachlorobutadiene	46.7127	21	3.9	53.3250		87.6	70 - 130			
Isopropylbenzene	27.0370	9.8	1.0	24.5791		110	70 - 130			

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air (continued)										
LCS (B1C0526-BS1) - Continued					Prepared: 3/29/2021 Analyzed: 3/29/2021					
m,p-Xylene	46.8950	35	3.6	43.4213		108	70 - 130			
Methylene chloride	16.7085	6.9	0.52	17.3685		96.2	70 - 130			
MTBE	19.1438	7.2	0.58	18.0262		106	70 - 130			
n-Butylbenzene	29.8628	11	2.3	27.4474		109	70 - 130			
n-Propylbenzene	24.4317	9.8	1.8	24.5791		99.4	70 - 130			
Naphthalene	27.8359	10	2.4	26.2108		106	70 - 130			
o-Xylene	23.9685	8.7	1.4	21.7106		110	70 - 130			
sec-Butylbenzene	30.0275	11	1.9	27.4474		109	70 - 130			
Styrene	27.3471	8.5	0.98	21.2984		128	70 - 130			
tert-Butylbenzene	28.4356	11	1.6	27.4474		104	70 - 130			
Tetrachloroethene	32.6916	14	1.8	33.9125		96.4	70 - 130			
Toluene	18.9553	7.5	0.45	18.8422		101	70 - 130			
trans-1,2-Dichloroethene	20.1023	7.9	0.40	19.8247		101	70 - 130			
trans-1,3-Dichloropropene	22.6023	9.1	0.68	22.6930		99.6	70 - 130			
Trichloroethene	24.4503	11	0.70	26.8685		91.0	70 - 130			
Trichlorofluoromethane	25.1699	11	1.2	28.0914		89.6	70 - 130			
Vinyl acetate	13.3447	7.0	1.6	17.6051		75.8	70 - 130			
Vinyl chloride	13.2153	5.1	0.43	12.7808		103	70 - 130			
Surrogate: 4-Bromofluorobenzene	*36.86*			*35.7869*		*103*	*70 - 130*			
LCS Dup (B1C0526-BSD1)					Prepared: 3/29/2021 Analyzed: 3/29/2021					
1,1,1,2-Tetrachloroethane	31.7847	14	2.1	34.3247		92.6	70 - 130	1.74	20	
1,1,1-Trichloroethane	25.5348	11	0.98	27.2808		93.6	70 - 130	1.51	20	
1,1,2,2-Tetrachloroethane	36.3842	14	1.9	34.3247		106	70 - 130	2.29	20	
1,1,2-Trichloroethane	26.8988	11	0.87	27.2808		98.6	70 - 130	2.46	20	
1,1-Dichloroethane	19.8323	8.1	0.36	20.2370		98.0	70 - 130	3.32	20	
1,1-Dichloroethene	20.5781	7.9	1.4	19.8247		104	70 - 130	4.53	20	
1,2,4-Trichlorobenzene	38.8124	15	2.4	37.1055		105	70 - 130	0.383	20	
1,2,4-Trimethylbenzene	27.3320	9.8	1.3	24.5791		111	70 - 130	2.00	20	
1,2-Dibromoethane	38.9552	15	1.3	38.4174		101	70 - 130	4.02	20	
1,2-Dichlorobenzene	31.0235	12	2.0	30.0616		103	70 - 130	1.76	20	
1,2-Dichloroethane	18.2133	8.1	1.4	20.2370		90.0	70 - 130	1.12	20	
1,2-Dichloropropane	22.2735	9.2	0.97	23.1053		96.4	70 - 130	2.95	20	
1,3,5-Trimethylbenzene	28.4135	9.8	1.4	24.5791		116	70 - 130	1.92	20	
1,3-Butadiene	12.0790	4.4	1.0	11.0614		109	70 - 130	5.26	20	
1,3-Dichlorobenzene	30.3622	12	1.9	30.0616		101	70 - 130	1.20	20	
1,4-Dichlorobenzene	30.0616	12	2.0	30.0616		100	70 - 130	1.61	20	
1,4-Dioxane	22.7019	7.2	0.86	18.0174		126	70 - 130	1.92	20	
2,2,4-Trimethylpentane	23.1728	9.3	0.65	23.3597		99.2	70 - 130	1.42	20	
2-Butanone	17.7537	5.9	0.47	14.7456		120	70 - 130	3.72	20	

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air (continued)										
LCS Dup (B1C0526-BSD1) - Continued					Prepared: 3/29/2021 Analyzed: 3/29/2021					
2-Chlorotoluene	31.5293	10	1.1	25.8861		122	70 - 130	3.85	20	
2-Hexanone	25.8488	8.2	0.90	20.4824		126	70 - 130	1.44	20	
2-Propanol	15.9011	4.9	0.61	12.2883		129	70 - 130	0.620	20	
4-Ethyl Toluene	29.2000	9.8	1.2	24.5791		119	70 - 130	3.95	20	
4-Methyl-2-pentanone	25.4801	8.2	1.1	20.4824		124	70 - 130	3.77	20	
Acetone	12.0196	4.8	0.48	11.8771		101	70 - 130	4.63	20	
Acetonitrile	8.93238	3.4	0.44	8.39509		106	70 - 130	0.00	20	
Acrolein	14.6750	4.6	0.83	11.4648		128	70 - 130	9.84	20	
Acrylonitrile	12.3054	4.3	0.56	10.8513		113	70 - 130	3.77	20	
Benzene	15.6544	6.4	0.45	15.9738		98.0	70 - 130	2.06	20	
Benzyl chloride	29.7172	10	1.5	25.8861		115	70 - 130	2.29	20	
Bromodichloromethane	32.4306	13	2.0	33.5027		96.8	70 - 130	3.15	20	
Bromoform	53.7506	21	3.4	51.6832		104	70 - 130	2.73	20	
Bromomethane	19.4926	7.8	0.66	19.4149		100	70 - 130	1.40	20	
Carbon disulfide	16.8169	6.2	1.1	15.5712		108	70 - 130	2.06	20	
Carbon tetrachloride	26.8009	13	2.1	31.4564		85.2	70 - 130	2.62	20	
Chloroethane	14.0374	5.3	0.58	13.1930		106	70 - 130	1.13	20	
Chloroform	23.1918	9.8	0.78	24.4125		95.0	70 - 130	2.56	20	
Chloromethane	10.6136	4.1	0.14	10.3245		103	70 - 130	3.97	20	
cis-1,2-Dichloroethene	20.2609	7.9	0.71	19.8247		102	70 - 130	2.78	20	
cis-1,3-Dichloropropene	23.6916	9.1	0.68	22.6931		104	70 - 130	1.93	20	
Cyclohexane	14.5946	6.9	0.55	17.2106		84.8	70 - 130	2.87	20	
Dibromochloromethane	42.2521	17	3.0	42.5928		99.2	70 - 130	2.86	20	
Dichlorodifluoromethane	22.5012	9.9	0.99	24.7266		91.0	70 - 130	1.33	20	
Dichlorotetrafluoroethane	33.5548	14	1.0	34.9530		96.0	70 - 130	4.91	20	
Ethanol	11.5311	3.8	0.66	9.42086		122	70 - 130	0.326	20	
Ethylbenzene	24.3593	8.7	0.78	21.7106		112	70 - 130	1.44	20	
Freon-113	36.4021	15	1.5	38.3180		95.0	70 - 130	2.56	20	
Hexachlorobutadiene	46.9260	21	3.9	53.3250		88.0	70 - 130	0.456	20	
Isopropylbenzene	27.7253	9.8	1.0	24.5791		113	70 - 130	2.51	20	
m,p-Xylene	49.2397	35	3.6	43.4213		113	70 - 130	4.88	20	
Methylene chloride	17.4727	6.9	0.52	17.3685		101	70 - 130	4.47	20	
MTBE	19.6846	7.2	0.58	18.0262		109	70 - 130	2.79	20	
n-Butylbenzene	30.1373	11	2.3	27.4474		110	70 - 130	0.915	20	
n-Propylbenzene	24.7266	9.8	1.8	24.5791		101	70 - 130	1.20	20	
Naphthalene	28.4650	10	2.4	26.2108		109	70 - 130	2.23	20	
o-Xylene	24.6633	8.7	1.4	21.7106		114	70 - 130	2.86	20	
sec-Butylbenzene	31.1254	11	1.9	27.4474		113	70 - 130	3.59	20	
Styrene	27.6027	8.5	0.98	21.2984		130	70 - 130	0.930	20	
tert-Butylbenzene	29.1492	11	1.6	27.4474		106	70 - 130	2.48	20	

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Volatile Organic Compounds in AIR by TO-15 (ug/m3) - Quality Control (cont'd)

Analyte	Result (ug/m³)	PQL (ug/m³)	MDL (ug/m³)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1C0526 - No_Prep_Air (continued)										
LCS Dup (B1C0526-BSD1) - Continued						Prepared: 3/29/2021 Analyzed: 3/29/2021				
Tetrachloroethene	33.1664	14	1.8	33.9125		97.8	70 - 130	1.44	20	
Toluene	19.5582	7.5	0.45	18.8422		104	70 - 130	3.13	20	
trans-1,2-Dichloroethene	20.8556	7.9	0.40	19.8247		105	70 - 130	3.68	20	
trans-1,3-Dichloropropene	23.3284	9.1	0.68	22.6930		103	70 - 130	3.16	20	
Trichloroethene	24.9877	11	0.70	26.8685		93.0	70 - 130	2.17	20	
Trichlorofluoromethane	26.0126	11	1.2	28.0914		92.6	70 - 130	3.29	20	
Vinyl acetate	13.8728	7.0	1.6	17.6051		78.8	70 - 130	3.88	20	
Vinyl chloride	13.4454	5.1	0.43	12.7808		105	70 - 130	1.73	20	
Surrogate: 4-Bromofluorobenzene	*37.36*			*35.7869*		*104*	*70 - 130*			

Certificate of Analysis

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	03/31/2021

Notes and Definitions

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.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

2100741

For Laboratory Use Only ATLCOC Ver:20210101

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

Page 24 of 24

CUSTOMER

Company: Langan

Address: Tel:

City: State: Zip: Fax:

SEND REPORT TO:
Attn: Shari Schwartzer Email: sschwartzer@langan.com
Company: Langan
Address: 515 S Flower St Suite 2860
City: Los Angeles State: CA Zip: 90071

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: Project Loki / SBD4
Project No.: 700089101
Sampler: Shari Schwartzer
Quote #:
PO #:

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Location	Date	Time	Requested Analysis: VOCs (TO-15)	Requested Analysis: Helium	Turnaround Time (TAT)	Container: Quantity	Container: Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7=Canister	Container: Material: 1=Glass; 2=Plastic; 3=Metal	Container: Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=ZnAc2; 6=NaOH; 7=NA2S2O3	Remarks
1	2100741	SV-06	SV-06	3/23/21	1529	X	X	7	1	3			Soil vapor
2		SV-07	SV-07		1622								
3		SV-08	SV-08		1706								
4		SV-09	SV-09		1744								
5													
6													
7													
8													
9													
10													

Sample Matrix

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Kitsemo	3/24/21	1110		3/24/21	11:10
Relinquished 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:

ADVANCED TECHNOLOGY LABORATORIES

April 06, 2021

Shari Schwartzer
Langan Engineering & Environmental Services
515 South Flower Street Suite 2860
Los Angeles, CA 900071
Tel: (702) 373-9083
Fax:

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

Re: ATL Work Order Number : 2100741
Client Reference : Project Loki / SBD4

Enclosed are the results for sample(s) received on March 24, 2021 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 your Project Manager.

Sincerely,

for

Edgar P. Caballero
Laboratory Director

Langan Engineering & Environmental Services		Project Number :	Project Loki / SBD4
515 South Flower Street Suite 2860		Report To :	Shari Schwartzer
Los Angeles , CA 900071		Reported :	04/06/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-06	2100741-01	Soil Vapor	3/23/21 15:29	3/24/21 11:10
SV-07	2100741-02	Soil Vapor	3/23/21 16:22	3/24/21 11:10
SV-08	2100741-03	Soil Vapor	3/23/21 17:06	3/24/21 11:10
SV-09	2100741-04	Soil Vapor	3/23/21 17:44	3/24/21 11:10

CASE NARRATIVE

Samples for Helium analysis were subcontracted to Air Technologies Laboratories.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

2100741

For Laboratory Use Only ATLCOC Ver:20210101

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

Page 3 of 8

CUSTOMER

Company: Langan
Address: Tel:
City: State: Zip: Fax:

SEND REPORT TO:
Attn: Shari Schwartzer Email: sschwartzer@langan.com
Company: Langan
Address: 515 S Flower St Suite 2860
City: Los Angeles State: CA Zip: 90071

SEND INVOICE TO: ☐ same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

EDD: ☐ Excel ☐ EDF ☐ Equis ☐ _____
QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV ☐ _____

PROJECT SAMPLES

Project Name: Project Loki / SBD4
Project No.: 700089101
Sampler: Shari Schwartzer
Quote #:
PO #:

ITEM	Lab ID (For Lab Use Only)	Sample Description: Sample ID	Location	Date	Time	Requested Analysis: VOCs (TO-15)	Requested Analysis: Helium	Turnaround Time (TAT)	Container: Quantity	Container: Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7=Canister	Container: Material: 1=Glass; 2=Plastic; 3=Metal	Container: Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=ZnAc2; 6=NaOH; 7=NA2S2O3	Remarks
1	2100741	SV-06	SV-06	3/23/21	1529	X	X	7	1	3			Soil vapor
2		SV-07	SV-07		1622								
3		SV-08	SV-08		1706								
4		SV-09	SV-09		1744								
5													
6													
7													
8													
9													
10													

MISC

(Special Instructions, Comments, Notes, etc.)

CUSTODY

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.

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Megan Kitsemo	3/24/21	1110		3/24/21	11:10
Relinquished 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:

Air TECHNOLOGY
Laboratories, Inc.

April 6, 2021

LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C, RSK-175
TX Cert T104704450-14-6
EPA Methods TO14A, TO15
UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

Advanced Technology Laboratories
ATTN: Erick Ovalle
3275 Walnut Ave.
Signal Hill, CA 90755

LABORATORY TEST RESULTS

Project Reference: 21007741
Lab Number: M033004-01/04

Enclosed are results for sample(s) received 3/30/21 by Air Technology Laboratories. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

ADVANCED TECHNOLOGY LABORATORIES

M033004-01/04

SUBCONTRACT ORDER

Work Order: 2100741

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Erick Ovalle
(Erick.Ovalle@atlglobal.com)
Sampler: shari Schwartzer

RECEIVING LABORATORY:

Air Technology Laboratories, Inc.
18501 E. Gale Ave, Suite 130
City of Industry, CA 91748
Phone :(626) 964-4032
Fax: (626) 964-5832
PO#: SC 15130 - 5-day TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

QC Requirements:

- [X] Routine
- [ ] Caltrans
- [ ] Legal
- [ ] RWQCB
- [ ] Level IV*
- [ ] Other: _____

* All Level IV sample containers (including empty ones) must be returned to ATL 30 days after receipt.

EDD Requirements:

- [X] Standard Excel
- [ ] Geotracker EDF
- [X] Other:

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 2100741-01 / SV-06		**Soil Vapor**	**03/23/21 15:29**	**Report Helium only. Provide Langan Equis file**
01 D1946_C_SUB [Fixed Gases] 1.4L canister	**04/06/21 17:00**	04/22/21 15:29		
ATL Lab#: 2100741-02 / SV-07		**Soil Vapor**	**03/23/21 16:22**	
02 D1946_C_SUB [Fixed Gases]	**04/06/21 17:00**	04/22/21 16:22		
ATL Lab#: 2100741-03 / SV-08		**Soil Vapor**	**03/23/21 17:06**	
03 D1946_C_SUB [Fixed Gases]	**04/06/21 17:00**	04/22/21 17:06		

Approved by:

3/30/21
ATL Project Manager — Date

3/30/21 13:40
Released By ATL Sample Control — Date — Time

Mike Rattan 3/30/21 1426
Released By Courier — Date — Time

Released By — Date — Time

Mike Rattan 3/30/21 13 40
Received By Courier — Date — Time

3/30/21 1426
Received By Subcontract Laboratory — Date — Time

Received By — Date — Time

C:\PROGRAM FILES (X86)\PROMIUM\ELEMENT\PRINT\SCO_ATL(A.6).RPT

M033004-01/04

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 2100741

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 2100741-04 / SV-09		**Soil Vapor**	**03/23/21 17:44**	
14 D1946_C_SUB [Fixed Gases]	**04/06/21 17:00**	04/22/21 17:44		

Approved by:

3/30/21
ATL Project Manager — Date

3/30/21 13:40
Released By ATL Sample Control — Date — Time

Max Rottman 3/30/21 1426
Released By Courier — Date — Time

Released By — Date — Time

Max Rottman 3/30/21 1340
Received By Courier — Date — Time

3/30/21 1426
Received By Subcontract Laboratory — Date — Time

Received By — Date — Time

Client: Advanced Technology Laboratories
Attn: Erick Ovalle
Project Name: NA
Project No.: 2100741
Date Received: 03/30/21
Matrix: Air
Reporting Units: % v/v

ASTM D1946

Lab No.:	M033004-01		M033004-02		M033004-03		M033004-04	
Client Sample I.D.:	2100741-01/SV-06		2100741-02/SV-07		2100741-03/SV-08		2100741-04/SV-09	
Date/Time Sampled:	3/23/21 15:29		3/23/21 16:22		3/23/21 17:06		3/23/21 17:44	
Date/Time Analyzed:	4/1/21 9:54		4/1/21 9:59		4/1/21 10:04		4/1/21 10:09	
QC Batch No.:	210401GC8A1		210401GC8A1		210401GC8A1		210401GC8A1	
Analyst Initials:	CM		CM		CM		CM	
Dilution Factor:	2.7		2.4		2.8		2.7	
ANALYTE	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v	Result % v/v	RL % v/v
Helium	ND	0.27	ND	0.24	ND	0.28	ND	0.27

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/6/21
Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report

QC Batch No: 210401GC8A1
Matrix: Air
Reporting Units: % v/v

ASTM D1946 Helium
LABORATORY CONTROL SAMPLE SUMMARY

Lab No.:	METHOD BLANK			LCS		LCSD					
Date Analyzed:	4/1/21 9:20			4/1/21 9:10		4/1/21 9:15					
Analyst Initials:	CM			CM		CM					
Dilution Factor:	1.0			1.0		1.0			Limits		
ANALYTE	Result % v/v	RL % v/v	SPIKE AMT. % v/v	Result % v/v	% Rec.	Result % v/v	% Rec.	RPD %	Low %Rec	High %Rec	Max. RPD
Helium	ND	0.10	1.0	0.993	99	0.985	99	0.8	70	130	30

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: _____ Date 4/6/21

Mark Johnson
Operations Manager

The cover letter is an integral part of this analytical report