November 1, 2019

Mr. Sunny Goyal
AU Energy, LLC
41895 Albrae Street
Fremont, California 94538

Project No. 33119-019052.00

Subject: Limited Subsurface Investigation
16500 Railroad Avenue
Morgan Hill, California

Dear Mr. Goyal:

On behalf of AU Energy LLC, Apex Companies, LLC (Apex - previously the HSE division of Bureau Veritas North America, Inc.) prepared this report documenting the findings of an environmental limited subsurface investigation conducted at the above-referenced property.

We appreciate the opportunity to be of service to you during this project. If you have any questions or comments regarding this report, please do not hesitate to contact me at (925) 260-3102.

Sincerely,

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Enclosures

Limited Subsurface Investigation

16500 Railroad Avenue
Morgan Hill, California

November 1, 2019
33119-019052.00

Prepared for
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1.0 CERTIFIED ANALYTICAL REPORTS INTRODUCTION

On behalf of AU Energy LLC, Apex Companies, LLC (Apex - previously the HSE division of Bureau Veritas North America, Inc.) prepared this report documenting the findings of an environmental limited subsurface investigation (LSI) conducted at the industrial property located at 16500 Railroad Avenue, Morgan Hill, California (the "Site"). This report presents the results of a limited soil and soil vapor sampling to assess the potential for environmental impacts from prior commercial/industrial uses of the Site. The LSI was performed in accordance with Bureau Veritas' Proposal No. 2019-05-13-25005, dated June 20, 2019. The location of the Site is shown in Figure 1.

1.1 BACKGROUND

The purpose of this investigation was to evaluate the subsurface at four locations as a baseline investigation for potential chemicals of concern (PCOCs) which had not previously been investigated. The PCOCs in this investigation include petroleum fuels, oils, related volatile organic compounds (VOCs), and LUFT metals. This work was requested as a due diligence task for a potential property transaction of the Site. The scope of work (SOW) for this proposal is based on findings of a Phase I Environmental Site Assessment (PIESA) dated June 11, 2019, prepared by Bureau Veritas; and a prior PIESA, prepared by Giancola Construction Incorporated (GCI), dated January 4, 2011.

AU Energy provided Apex with a Schematic Design prepared by hpc Architecture, Inc. (file date 6-29-2019) of the proposed future use of the Site as a fuel truck storage and maintenance yard. The Site Plan (Figure 2) depicts redevelopment of the Site with a Light Industrial building (warehouse of 12,500 SF) in the northwest corner of the Site and a central structure with designated uses as an office (3,500 SF), shop (2,800 SF) and shop bays (4,500 SF). The east portion of the Site is to be used for truck parking with an above ground fuel tank in the northeast corner of the lot.

The Site consists of a near rectangular-shaped parcel of land totaling approximately 2.5-acres. The Site is located in an area of use for agricultural, commercial-industrial, and residential land use in the City of Morgan Hill, Santa Clara County, California. In June 2019 the subject property was developed with three single-story buildings used as a residence, garage, and a storage building for Rent-A-Fence. An employee of Rent-A-Fence, Mr. Todd Tobias, occupied a motorhome and had use of the residence. Rent-A-Fence used the property for vehicle and fence equipment storage. The property was used for the storage of various vehicles, trucks and tractors. The property also contained various assorted materials. Several empty shipping containers were located along the southern border of the subject property. An unlined pit located in the southeast portion of the Site was possibly used as a truck loading ramp or possibly for drainage retention. The remainder of the subject property consisted of overgrown grasses, bushes, and trees.

The Phase I ESA (PIESA) reports stated that the Site was developed as agricultural land from at least 1939 until sometime prior to 1971 when two small buildings (residence and storage building) were developed. In 1985, the garage was constructed. The subject property was occupied by 'Roses 4 U

Produce 2' from approximately 1996 to 2000 and by Powell Paving from 2000 to 2011. Rent-A-Fence has occupied the property since 2011.

The adjoining properties were developed as agricultural land by at least 1939, with the exception of the west adjoining property that was developed as Railroad Avenue and a railroad right-of-way since at least 1939. Agricultural activities ceased on the south adjoining property circa 1971 when the existing food distribution building was developed. The north and east adjoining properties were no longer in agricultural use by 1993. At this time, the existing commercial building on the western portion of the north adjoining property was developed. The existing commercial building on the eastern portion of the north adjoining property was developed circa 2005. The east adjoining property was developed with two large apartment buildings by 2018.

Based upon the information gathered from the two PIESA reports the following was noted:

- According to the 2011 PIESA, the subject property was occupied by Powell Paving from at least 2000 to 2011. In the 2011 PIESA, several environmental concerns were noted including vehicle maintenance activities onsite, possible unauthorized wastewater releases to an unlined pit, and improper storage of vehicle fluids/petroleum products. A subsurface investigation was recommended; however, no known environmental investigation had been completed as of the date of this LSI report.

- As part of the 2019 PIESA, a Tier 1 Vapor Encroachment Screen was conducted, in accordance with ASTM Standard E2600-15. Bureau Veritas concluded that a vapor encroachment condition does exist since subsurface investigations had not been completed onsite to address prior commercial usage issues.

- Some light vehicle maintenance has been performed on the property and stains on soil were reported under vehicles. A steam cleaning area used to clean equipment apparently drained onto the ground near the office building. Water was observed with sheen draining into the "drainage area" pit. Therefore, GCI recommended that sampling of shallow soils be conducted at stained areas, the drainage area trench, the steam cleaning area, near suspect stained vegetation and paint spill areas. Shallow soils should be chemically analyzed for petroleum fuels, oils and related volatile compounds and LUFT metals and paints and paint solvents. Since surface water with a light sheen was observed, it was recommended that the drainage pit in the central part of the property area be backfilled or bermed to limit drainage into the area. It was recommended that a preliminary report of findings be provided with the results of the sampling and need for further work and/or site environmental cleanup evaluated.

- One water supply well that was in use in 2011 is located on the property. The well was reported out of service by 2019. The Rent-A-Fence employee, Mr. Tobias stated that the well was previously used as an agriculture supply well and had provided water to the onsite facilities. If new site development is anticipated and the well is not to be used, the well should be properly

destroyed by a licensed water well contractor under permit by the Santa Clara Valley Water District.

- The PIESAs noted that asbestos containing materials and paints containing lead may have been used in their construction. If renovation or demolition of the structures is planned a qualified contractor should be retained to check for these materials and properly manage and dispose of them as needed. During the site visit in June 2019, Apex observed that a tree had fallen onto the garage building resulting in significant building damage that included a sizable hole through the roof that displaced wallboard and insulation materials inside the structure.

The 2011 PIESA noted that numerous containers of oil and related vehicle fluids were observed along with paints and some retail sized containers of cleaners and lubricants. It was recommended that containers of fluids/paints should be properly managed and disposed off-site as either household hazardous waste or through an appropriate oil recycler or regulated waste disposal facility.

Apex observed a small number of paint cans and some containers in the garage area that appeared to be empty but did not observe any containers of waste vehicle fluids or notable surface stains that would indicate improper use or releases of vehicle fluids during the Site visits on June 21, and 26, 2019.

2.0 SCOPE OF WORK

Details of the limited subsurface investigation are summarized as outlined below.

2.1 PRE-FIELD ACTIVITIES

Pre-field activities included, preparing a Site Health and Safety Plan (SHSP), marking the investigation boundaries with white paint and flagging, and notifying Underground Service Alert (USA) at least 48 hours prior to performing drilling activities, as required by law. No drilling permit is required for a site investigation in Santa Clara County that does not result in the installation of permanent wells or drilling less than 45 feet below the ground surface (bgs); therefore, no permit was requested. Apex requested access authorization from the property owner prior to conducting work activities at the Site. Mr. Tobias, an onsite worker escorted the field geologist onto the Site and provided some historical information about the current and former use of the Site, and known subsurface utility information.

2.2 FIELD ACTIVITIES

Apex contracted with a utility locating service to clear the proposed boring locations prior to advancement of the borings. Apex then advanced four (4) soil borings at the locations depicted on Figure 1. The soil borings were advanced using direct push technology to the proposed depth of approximately 10 feet bgs. Standard soil logging and sample handling practices were employed. The field geologist visually screened the retrieved continuous soil cores, logged soils for lithology, and screened soil samples with a photoionization detector (PID). Soil samples were collected at two depths from each of the boreholes and sealed in a plastic bag. The headspace vapor in each bag was allowed to stabilize and the vapor

concentration in the bag headspace was then analyzed in the field using the PID to measure the ionizable vapors in parts per million. The PID readings were recorded on boring logs that are presented in Appendix A. No soil staining was noted during screening of the retrieved soil cores. No saturated soils were encountered in any of the boreholes to the total depth drilled.

Soil samples submitted for laboratory analysis were collected from each borehole at a depth of 0.5 to 1.0 feet and from 10 feet bgs, the total depth of each borehole, resulting in two soil samples from each borehole being submitted for laboratory analysis.

In preparation for soil vapor sampling, each borehole was backfilled with bentonite pellets and hydrated using a tremie pipe from the bottom of the borehole to a depth of 5.5 feet bgs. A semi-permanent soil vapor probe was then constructed by inserting tubing with a filter end attachment that was placed at a depth of approximately 5.0 feet bgs in each borehole. Approximately one foot of clean fine sand was placed in the borehole between 4.5 and 5.5 feet bgs surrounding the filter tip. The remainder of the borehole was then filled to the surface with bentonite pellets, which were hydrated sealing the vapor probe. Each probe was allowed to equilibrate in excess of two hours prior to sampling. Actual equilibration times ranged between 194 and 215 minutes.

Prior to sampling, each probe was purged of approximately 600 to 800 milliliters of vapor. Vapor samples were then collected at each location in 1.4 liter Summa canisters using a flow controller preset at approximately 200 milliliters per minute. The canisters were labeled and transported to a California certified laboratory for analysis. Soil Gas Sampling Forms were completed for each sampling event and are presented in Appendix B. The sampling activities were performed following the guidance, *Advisory Active Soil Gas Investigations*, prepared by the Department of Toxic Substances Control and the Regional Water Quality Control Board, dated April 2012. Per the guidance, no significant rainfall events (> 0.5 inches in 24 hours) had occurred well in excess of five (5) days prior to the scheduled sampling event and the retrieved soils were generally dry to somewhat moist.

Upon completion of sampling, the temporary soil vapor probe tubes were removed, and the bentonite was rehydrated at grade.

2.3 LABORATORY ANALYSES

The samples submitted to the analytical laboratory included eight (8) soil samples and four (4) soil vapor samples. The samples were analyzed by a California state-certified laboratory using standard United States Environmental Protection Agency (USEPA) Methods as follows:

<u>Soil Vapor Analysis</u>

- Volatile organic compounds (VOCs) and by USEPA Method TO-15.

<u>Soil Sample Analysis</u>

- Extractable petroleum hydrocarbons as diesel range organics (DRO) and oil range organics (ORO) by USEPA Method 8015B (8 soil samples collected from 0.5 feet and 10 feet bgs),

- VOCs and oxygenates by USEPA Method 8260B (4 soil samples collected at a depth of 10 feet bgs),
- CAM17 total metals by USEPA Series 6000 and 7000 methods – (up to 4 soil samples from near surface soils – 0.5' to 1.0'),
- Organochlorinated Pesticides (OCPs) by USEPA Method 8081C - (4 soil near samples – 0.5' to 1.0'.)

3.0 FINDINGS AND LABORATORY ANALYTICAL RESULTS

The Site is located in the Llagas groundwater basin in the northwest to southeast trending floor of Coyote Valley between the Santa Cruz Mountains to the west and the Diablo Ranges to the east. Soils encountered in retrieved cores consisted of yellow-brown to orange-brown gravelly sands with some thin beds of gravelly silts to the maximum depth drilled of 10 feet bgs. Apex observed no evidence of contaminated soil (*e.g.*, discoloration, odors) in the borings advanced during this LSI.

3.1 SOIL VAPOR ANALYTICAL RESULTS

The soil vapor analytical results are summarized in Table 1 and the laboratory analytical report is provided in Appendix C. The soil vapor analytical results were compared to applicable California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), January 2019 (Rev. 2) for residential and commercial/industrial human health risk levels (RWQCB, January 2019). The detected VOCs include the following:

- Acetone
- Benzene
- Carbon Disulfide
- Chloroform
- Chloromethane
- Cyclohexane
- Ethanol
- Ethylbenzene
- 4-Ethyltoluene
- Dichlorodifluoromethane
- Heptane
- n-Hexane
- Methylene Chloride
- 2-Butanone (MEK)
- 2-Propanol
- Propene
- Tetrahydrofuran
- Toluene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 2,2,4-Trimethylpentane
- m,p-Xylenes
- o-Xylenes

All detected VOC concentrations were below the respective commercial/industrial ESL for each reported compound where established (see Table 1), except for benzene. Benzene concentrations were reported in all 4 samples and ranged from 2.17 to 33.2 micrograms per cubic meter (µg/m^3). Only sample SB-2V exceeded the ESL of 14 µg/m^3 for a commercial/industrial use property. Sample SB-2V was collected below asphalt pavement adjacent to a concrete slab that was previously used as a repair shop with an adjoining small shop building adjacent to a small office, likely for maintenance of equipment and vehicles.

Three reported chemical detections exceeded the respective residential ESL level for benzene, chloroform, and ethylbenzene. Benzene exceeded the residential ESL of 3.2 µg/m^3 in 3 of the 4 samples, except for SB-4V.

Chloroform at 5.48 µg/m^3 in sample SB-2V slightly exceeded the residential ESL of 4 µg/m^3.

Ethylbenzene at 53.1 µg/m^3 in sample SB-2V exceeded the residential ESL of 37 µg/m^3.

3.2 SOIL ANALYTICAL RESULTS

Soil analytical results are summarized in Table 2 and the laboratory report is provided in Appendix C. Chemical analytical results were compared to California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for commercial/industrial property use. The results are summarized below.

- Extractable petroleum hydrocarbons as DRO were reported in all 8 analyzed samples up to a maximum concentration of 3.07 mg/kg. Hydrocarbons as ORO were detected in 3 of the 8 samples to a maximum of 18.9 mg/kg. The reported DRO and ORO concentrations were several orders of magnitude below the respective industrial ESLs for direct exposure and groundwater protection.
- VOCs in the 4 samples collected at 10 feet bgs included acetone, benzene, chloromethane, toluene, 1,1,1-trichloroethane, tert-butyl alcohol (TBA), 1,2,4-trimethylbenzene, 1,2,3-trihethylbenzene, and xylenes. The reported VOC concentrations were several orders of magnitude below the respective industrial ESLs for direct exposure and groundwater protection.
- Reported detections of OCPs in the 4 shallow soil samples analyzed included: 4,4-DDT, 4,4-DDE, 4,4-DDD, Dieldrin, and Endosulfan II. All detected concentrations were three or more orders of magnitude below the applicable industrial direct exposure ESL levels and below groundwater protection levels.

  The laboratory reported total metal concentrations at or above the method detection limit for 15 of the 17 metal analytes. Metals detected included antimony, arsenic, barium, beryllium, cadmium, chromium as total chromium, cobalt, copper, lead, mercury, nickel, selenium, vanadium, and zinc. The metal concentrations in the 4 near surface samples were generally at similar concentrations in all samples collected across the property indicating that the concentrations represent background or near background concentrations. However, the reported metals concentrations were often the highest in samples SB-1 and SB-2, which indicates that prior activities in the shop and garage areas may have generated some low levels of residual metals. All concentrations were well below the direct exposure ESL levels for a commercial/industrial property, except for arsenic. Arsenic was detected in all 4 samples at concentrations that ranged from 4.27 to 8.31 milligrams per kilogram [mg/kg]; which exceed the direct exposure ESL of 0.31 mg/kg for a commercial/industrial property. However, arsenic is a common metal found in local soils and is considered to be at background levels up to 10 mg/Kg; therefore, arsenic is not considered to be a generated waste and does not require regulatory action.

3.2.1 Quality Assurance/Quality Control

The analytical laboratory data was reviewed by Apex to establish its validity and to ensure the laboratory data was complete and accurate. BVNA verified that holding times for the analytical method were achieved and that the laboratory achieved the specific data quality objectives for the selected analytical method. A review of the data validation process indicates that the laboratory completed QA/QC activities required for the samples such as blanks, lab control samples, matrix spikes, and duplicates. QA/QC issues associated with these analyses are noted in the laboratory analytical reports. The QA/QC parameters for the samples were generally within acceptable limits and suggest that the data is useful for its intended purpose.

Additionally, the detection of 2-Propanol (the leak check chemical used at the Site) in 2 of the 4 vapor samples was reported at relatively low concentrations. It is BVNA's opinion that the very low concentration of 2-Propanol reported in the samples indicates that the sample results are of adequate quality to be representative of the Site soil gas quality and ambient air did not dilute the sample concentrations at a level that would compromise the soil vapor sampling event.

4.0 CONCLUSIONS AND RECOMMENDATION

This report summarizes the findings of Apex's Limited Subsurface Investigation at the 16500 Railroad Avenue Site located in Morgan Hill, California. The investigation was conducted as part of a due diligence assessment. Four soil borings were located in potential areas of concern based on the findings of two PIESA reports. Although Apex did not observe any significant areas of surface staining or other indicators of possible prior mis-use of chemicals at the Site, the Site condition consisted of heavy weed growth, bushes, trees, and considerable material goods storage that obscured much of the Site surface area during the two Site visits.

Soil and soil vapor results for this investigation included petroleum hydrocarbons as DRO, ORO, VOCs, OCPs, and metals. The data was compared to RWQCB environmental screening to assess the potential for future human risk for continued industrial use of the Site. Apex found that benzene was the only analyte of potential concern based on the data generated from the 4 sample locations.

Apex found that benzene concentrations in one soil vapor sample (SB-2V) slightly exceeded the industrial ESL for potential human risk due to vapor intrusion into an occupied space. Therefore, prior to development of occupied worker spaces, Apex recommends that additional sampling be conducted to better characterize the area where workers have the potential for vapor intrusion to assess if a remedial action is warranted and or if engineered protective measures are warranted in the design of the proposed structure with occupied spaces.

The two PIESA reports noted that asbestos containing materials and lead-based paints could potentially exist in the existing structures that also have been damaged. Prior to Site demolition and redevelopment, the existing structures will require an asbestos and lead paint survey to be conducted by qualified professionals.

This report prepared by:

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Principal Consultant
Health, Safety and Environmental Services

This report reviewed by:

Mark Williams, CAC, PG
Principal Consultant
Health, Safety and Environmental Services

November 1, 2019

Project No. 33119-019052.00

TABLES

TABLE 1
Summary of Soil Vapor Analytical Results
16500 Railroad Avenue,
Morgan Hill, California

Sample ID	SB-1V	SB-2V	SB-3V	SB-4V	RWQCB	RWQCB
Sample Depth (ft.)	5.0	5.0	5.0	5.0	ESLs - Soil Gas	ESLs - Soil Gas
Date	6/26/2019	6/26/2019	6/26/2019	6/26/2019	Residential ESL	(Commercial/Industrial)
Units	µg/M^3					
Acetone	**10.9**	**172**	**48**	**180**	1,100,000 nc	4,500,000 nc
Benzene	**13.6**	**33.2**	**5.66**	**2.17**	3.2	14
Carbon Disulfide	**22.1**	**107**	**27.5**	<1.24	NE	NE
Chloroform	**2.61**	**5.48**	<1.95	<1.95	4.1	18
Chloromethane	<0.826	**1.49**	<0.826	<0.826	3,100 nc	13,000 nc
Cyclohexane	**4.44**	**15.6**	**5.59**	<1.38	NE	NE
Ethanol	**9.24**	**5.57**	**4.98**	**93.9**	NE	NE
Ethylbenzene	**27.4**	**53.1**	**21.7**	<1.73	37	160
4-Ethyltoluene	**4.30**	**7.08**	**4.98**	<1.96	NE	NE
Dichlorodifluoromethane	**3.06**	**2.46**	**2.85**	**2.34**	NE	NE
Heptane	**10.1**	**22.8**	**9.28**	**1.90**	NE	NE
n-Hexane	**15.5**	**33.9**	**15.8**	**1.98**	NE	NE
Methylene Chloride	**2.29**	**2.71**	**2.01**	**1.50**	34	410
2-Butanone (MEK)	<7.37	**43.0**	<7.37	**9.60**	170,000 nc	730,000 nc
2-Propanol	<6.15	**6.90**	<6.15	**27.5**	NE	NE
Propene	**61.6**	**551**	**42.0**	**8.87**	NE	NE
Tetrachloroethylene (PCE)	<2.72	<2.72	<2.72	<2.72	15	67
Tetrahydrofuran	**7.92**	<1.18	<1.18	<1.18	NE	NE
Toluene	**177**	**378**	**97.7**	**6.17**	10,000 nc	44,000 nc
1,1,1-Trichloroethane	<2.18	<2.18	<2.18	<2.18	35,000 nc	150,000 nc
Trichloroethylene	<2.14	<2.14	<2.14	<2.14	16	100
1,2,4-Trimethylbenzene	**10.9**	**20.9**	**16.3**	<1.96	NE	NE
1,3,5-Trimetylbenzene	**3.71**	**6.69**	**4.60**	<1.96	NE	NE
2,2,4-Trimethylpentane	**5.18**	**9.11**	**5.29**	**10.0**	NE	NE
m,p-Xylenes	**115**	**216**	**97.7**	<3.47	3,500 nc	15,000 nc
o-Xylenes	**30.3**	**57.3**	**28.0**	<1.73	3,500 nc	15,000 nc
Other Analyzed VOCs	ND	ND	ND	ND	Varies	Varies

Notes:
ug/M^3 = Sample results reported in micrograms per cubic meter.
Highlighted concentrations exceed an ESL, where established: Gray-Tier 1 & Yellow-commercial/industrial
VOCs = volatile organic compounds
Isopropyl alcohol (2-Propanol) used as leak-check compound
Xylenes = ESL listed is for total xylenes as m,p,o-xylenes. Note: lab analysis speciates
<1.95 = Not detected above analytical laboratory reporting limit (Practical Quantitation Limit)
ND = not detected above analytical laboratory reporting limit for the various analytes (Practical Quantitation Limit)
RWQCB ESL = Regional Water Quality Control Board Environmetal Screening Level, Summary of Vapor ESLs, Subslab/Soil Gas Vapor Intrusion:
Human Health Risk Levels (Table SG-1); January 2019 (Rev. 2) NE = not established nc = non-cancer hazard

Table 2
Summary of Soil Analytical Results
TPH, VOCs, OCPs, Total Metals
16500 Railroad Avenue, Morgan Hill, CA

	Sample ID	SB-1 0.5-1'	SB-1 10'	SB-2 0.5-1'	SB-2 10'	SB-3 0.5-1'	SB-3 10'	SB-4 0.5-1'	SB-4 10'	RWQCB ESL Direct Exposure Commercial-Industrial	RWQCB ESL Groundwater Protection (Tier 1)
	Sample Date	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019		
Petroleum (mg/kg)	DRO (C12-C22)	**1.65 j**	**1.26 j**	**3.07 j**	**1.41 j**	**1.02 j**	**1.09 j**	**2.33 j**	**1.13**	1,200 nc	1,100
	ORO (C22-C32)	**2.59 j**	<1.52	**18.9**	<1.57	<1.56	<1.54	**16.9**	<1.55	180,000 nc	NE
	Extractable HC (C32 C40)	**4.25 j**	**1.59 j**	**25.9**	<1.57	**2.52 j**	<1.54	**30.9**	<1.55	Varies	Varies
VOCs (mg/kg)	Acetone	--	**0.0406 j**	--	**0.0237 j**	--	**0.0167 j**	--	**0.0380 j**	670,000	0.92
	Benzene	--	**0.00146**	--	<0.000319	--	<0.000312	--	<0.000437	1.4	0.025
	Chloromethane	--	**0.00124 j**	--	**0.000791 j**	--	**0.000447 j**	--	<0.000315	470 nc	11
	1,2-Dichoroethane	--	**0.000658 j**	--	**0.000795 j**	--	**0.000397 j**	--	<0.000400	2.1	0.007
	Toluene	--	**0.00233 j**	--	<0.000513	--	<0.000501	--	<0.000506	5,300 nc	3.2
	1,1,1-Trichloroethane	--	<0.000458	--	**0.000356 j**	--	<0.000330	--	<0.000333	7,300 nc	7.0
	tert-Butyl alcohol (TBA)	--	<0.000328	--	**0.00437 j**	--	<0.00231	--	<0.000466	NE	0.075
	1,2,4-Trimethylbenzene	--	**0.000987 j**	--	<0.00025	--	<0.000224	--	<0.000246	NE	NE
	1,2,3-Trimethylbenzene	--	**0.000390 j**	--	<0.000340	--	<0.000331	--	<0.000310	NE	NE
	Xylenes (Total)	--	**0.00157 j**	--	<0.000826	--	<0.000806	--	<0.000813	2,500 nc	2.1
	Other VOCs	--	ND	--	ND	--	ND	--	ND	Varies	Varies
OCPs (mg/kg)	4,4-DDT	<0.000320	--	**0.0388**	--	<0.000311	--	**0.000465 j**	--	8.5	5.6
	4,4-DDE	<0.000199	--	**0.0351**	--	**0.000812 j**	--	**0.00204 j**	--	8.3	29
	4,4-DDD	<0.000198	--	**0.000589 j**	--	<0.000192	--	<0.000192	--	12	65
	Dieldrin	<0.000107	--	**0.00131 j**	--	<0.000104	--	**0.000109 j**	--	0.16	0.00046
	Endosolfan II	<0.000277	--	**0.000370 j**	--	<0.000269	--	<0.000251	--	5,800 nc*	0.0098
	Other Analyzed OCPs	ND	--	ND	--	ND	--	ND	--	Varies	Varies

Table 2
Summary of Soil Analytical Results
TPH, VOCs, OCPs, Total Metals
16500 Railroad Avenue, Morgan Hill, CA

	Sample ID	SB-1 0.5-1'	SB-1 10'	SB-2 0.5-1'	SB-2 10'	SB-3 0.5-1'	SB-3 10'	SB-4 0.5-1'	SB-4 10'	RWQCB ESL Direct Exposure Commercial-Industrial	RWQCB ESL Groundwater Protection (Tier 1)
	Sample Date	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019	6/26/2019		
Metals (mg/kg)	Antimony	**1.24 j**	--	**1.24 j**	--	<0.878	--	<0.878	--	160 nc	NE
	Arsenic	**4.34**	--	**8.31**	--	**4.77**	--	**4.27**	--	0.31	NE
	Barium	**278**	--	**226**	--	**219**	--	**222**	--	220,000 nc	NE
	Beryllium	**0.444**	--	**0.450**	--	**0.495**	--	**0.428**	--	6,900 / 15[DTSC]	NE
	Cadmium	**0.215 j**	--	**0.601 j**	--	**0.240 j**	--	**0.229 j**	--	4,000 / 4.6[DTSC]	NE
	Chromium	**47.7**	--	**63.1**	--	**51.8**	--	**43.6**	--	1,800,000 Cr3 nc	NE
	Cobalt	**11.4**	--	**15.3**	--	**12.7**	--	**11.1**	--	1,900	NE
	Copper	**26.2**	--	**34.8**	--	**25.6**	--	**24.4**	--	47,000 nc	NE
	Lead	**14.5**	--	**62.1**	--	**6.50**	--	**9.14**	--	380	NE
	Mercury	**0.0714**	--	**0.166**	--	**0.0370**	--	**0.0563**	--	190 nc	NE
	Molybdenum	<0.193	--	**0.600 j**	--	**0.314 j**	--	<0.187	--	5,800 nc	NE
	Nickel	**68.7**	--	**95.7**	--	**71.6**	--	**62.6**	--	64,000 nc	NE
	Selenium	**1.23 j**	--	<0.755	--	<0.726	--	**1.23 j**	--	5,800 nc	NE
	Silver	<0.145	--	<0.146	--	<0.140	--	<0.140	--	5,800 nc	NE
	Thallium	<0.783	--	<0.791	--	<0.761	--	<0.761	--	12 nc	NE
	Vanadium	**49.5**	--	**56.6**	--	**52.1**	--	**46.2**	--	5,800 nc	NE
	Zinc	**71.3**	--	**155**	--	**95.5**	--	**65.0**	--	350,000 nc	NE
Soil Properties	Total Solids (%)	**83.0**	**87.3**	**82.1**	**84.5**	**85.4**	**86.6**	**85.4**	**85.8**		

Notes:
Samples reported in milligrams per kilogram (mg/kg), <1.52 = not detected above laboratory reporting limit - detected analyte concentrations in bold for ease of reading
ND = not detected above analytical laboratory reporting limit -- = not analyzed
Petroleum = Total petroleum hydrocarbons; diesel range organics (DRO) and motor oil range organics (ORO) by EPA Method 8015B
OCPs = Organochlorine Pesticides analysed by USEPA 8081A
Metals analyzed by USEPA 6010B/7471A Series
Cr3 = Chromium as trivalent chromium (Cr III); ESL for hexavalent chromium (Cr VI) is 21 mg/kg.
RWQCB ESL = Regional Water Quality Control Board Environmental Screening Level for Industrial Land Use based on Direct Exposure (Table K-1) and Groundwater Protection (Table G) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final (January 2019 (Rev. 2)); [DTSC] = Modified HHRA-HERO Note 3 - 2014.

FIGURES

LEGEND

SUBJECT PROPERTY BOUNDARY

Site Plan - Limited Subsurface Investigation
o = Soil Boring and Sample Location

N

SCALE 1"~= 63 Feet	SITE & VICINITY 16500 RAILROAD AVENUE MORGAN HILL, CALIFORNIA	APEX	FIGURE
Photo Date May 9, 2018			1
PRJ NO. 33119-019052.00			

Figure 2 - Modified for
Apex Project: 33119-019052.00

LOT AREA: 115, 728 SF (2.66 AC)
BLDG AREA: 23, 300 SF
FAR : 20.13 %

Parking Analysis	
Type	Count
Accessible Space - Standard	2
Accessible Space - Van	1
EVCS - Standard	2
EVCS - Van	1
Parking Space	51
57	

hpc architecture, inc.
Steven M. Cox, A.I.A., Architect
2216 The Alameda
Santa Clara, California 95050-6034
408. 297. 5454 / www.hpc-arch.com

16500 Railroad Ave, Morgan Hill

SCHEMATIC DESIGN

Au Energy

APPENDIX A

SOIL BORING LOGS

LOG OF SOIL BORING

APEX

Project No.: 33119-019052.00	BORING NO. SB-1
Project Name: ALL	
Location: 16500 RR AVE, MORGAN HILL	
Logged By: D. A	
Start Date: 6-26-19 Start Time: 0845 Elevation (ft, msl): —	
Finish Date: " Finish Time: 0857 Boring Diameter (in) 2	
Driller: ECA Drill Method: DPT	
~~Hammer Weight:~~ — ~~Drop:~~ —	
Borehole Completion Data: BACKFILL BENTONITE PELLETS - HYDRATE TO 5.5', SAND TO 4.5', BENTONITE TO SURFACE	

Depth To ▽ (ft)		Depth To ▼ (ft)	
Time:		Time:	
Date:		Date:	

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
										~~SM~~	ASPHALT 0-2", SANDY GRAVEL 2"-6"
							1	X			GRAVELLY SAND ORANGE-BROWN
							2				FINES 5-10%, SAND F-C 70-85%
							3				FINE GRAVEL SUBROUND 10-15%
											DRY, NO ODOR, DRY TO MOIST
							4				
	48	0.5'	0.1	0850			5			SW	
							6				
							7				
							8				
							9				@ 9.3' SANDSTONE CLAST TO 2"
	48	10'	0.0	0857			10	X			GR-BRWN TO LTE BRWN
							11				TD: 10' BGS
							12				
							13				
							14				
							15				
							16				
							17				
							18				
							19				

LOG OF SOIL BORING

APEX

Project No.: 33119-019052.00	BORING NO. SB-2
Project Name: AU	
Location: 16500 RAILROAD, MORGAN HILL	
Logged By: D. ASHTON	
Start Date: 6-26-19 Start Time: 0943	Elevation (ft, msl):
Finish Date: / Finish Time: :	Boring Diameter (in)
Driller: ECA	Drill Method: DPT
~~Hammer Weight:~~	~~Drop:~~
Borehole Completion Data: BACKFILL BENTONITE PELLETS-HYDRATE TO 5.5'; SAND TO 4.5'; BENTONITE TO SURFACE	

Depth To ▽ (ft)		Depth To ▼ (ft)	
Time:		Time:	
Date:		Date:	

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
											ASPHALT 0-3"; GRAVELLY SAND BASE 3"-5"
		0.5-1'					1	X		SM	GRAVELLY SILT WITH CLAY, MED. BROWN, MOIST
							2				GRAVELLY SAND, YELLOW-BROWN FINES TO 10%, SAND F-C 65-90% GRAVEL F-C TO 20%, SANDSTONE CLASTS TO 2"+ COMMON, DRY TO MOIST
							3				
							4				
	46		0.2	0946			5			SW	
							6				@ 6' BGS - ORANGE-BROWN
							7				@ 7' BGS - FINE GRAINED XL ROCK FRAGS - DK GRAY ANGULAR
							8				
							9				@ 9.3' SANDSTONE CLASTS TO 2"+
	48	10'	0.1	0956			10	X			
							11				TD: 10' BGS
							12				
							13				
							14				
							15				
							16				
							17				
							18				
							19				

LOG OF SOIL BORING

APEX

Project No.: 33119-019052.00	BORING NO.
Project Name: AU	SB-3
Location: 16500 RAILROAD, MORGAN HILL	
Logged By: D. ASHTON	
Start Date: 6-26-19 Start Time: 1025	Elevation (ft, msl):
Finish Date: / Finish Time: :	Boring Diameter (in) 2
Driller: ECA	Drill Method: DPT
~~Hammer Weight:~~	~~Drop:~~
Borehole Completion Data: BENTONITE PELLETS BACKFILL-HYDRATED TO 5.5'; SAND TO 4.5'; BENTONITE TO SURFACE HYDRATED	

Depth To ▽ (ft)		Depth To ▼ (ft)	
Time:		Time:	
Date:		Date:	

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
										SM	SILTY SAND - SOIL WITH GRASS & ROOTS 0"–6", TRACE GRAVEL DRY
		0.5'					1	X			
							2				GRAVELLY SAND, LT. BROWN to YELLOW BROWN TO REDRISH-BROWN FINES TRACE; SAND F-C 80-95% GRAVEL F-C 5-20%; DRY, LOOSE SANDSTONE CLASTS 2"+ RARE XL FRAGS, ANGULAR, TO 1.5", GRAY
							3				
							4			SW	
	42		0.0	1032			5				
							6				
							7				
							8				
							9				
	48	10'	0.1	1039			10	X			
							11				TD: 10' BGS
							12				
							13				
							14				
							15				
							16				
							17				
							18				
							19				

LOG OF SOIL BORING

APEX

Project No.: 33119-019052.00	BORING NO.
Project Name: AU	SB-4
Location: 16500 RAILROAD, MORGAN HILL	
Logged By: J. ASHTON	
Start Date: 6-26-19 Start Time: 1100	Elevation (ft, msl):
Finish Date: / Finish Time: :	Boring Diameter (in) 2
Driller: ECA	Drill Method: DPT
Hammer ~~Weight:~~	~~Drop:~~
Borehole Completion Data: BACKFILL BENTONITE-HYDRATED TO 5.5' BGS SAND TO 4.5'; BENTONITE TO SURFACE	

Depth To ▽ (ft)		Depth To ▼ (ft)	
Time:		Time:	
Date:		Date:	

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
										SM	SILTY SAND - SOIL WITH GRASS & ROOTS 0-6" DRY
		0.5-1'					1	X			
							2				GRAVELLY SAND, LT. BROWN TO YELLOW-BROWN FINES TRACE, SAND F-C 80-95% GRAVEL F-C 5-20%, DRY LOOSE SANDSTONE CLASTS 2"+
							3				
							4			SW	
	45		0.0	1107			5				
							6				
							7				
							8				
							9				
	48	10'	0.1	1110			10	X			
							11				TD: 10' BGS
							12				
							13				
							14				
							15				
							16				
							17				
							18				
							19				

APPENDIX B

SOIL GAS SAMPLING FORMS

APEX

Soil Gas Sampling Field Form
Page ____ of ____

Date: 6-26-2019
Project # 33119-019052.00
Sample location: WEST OF GARAGE - DRIVEWAY
Sample ID: SB-1V
Site name: AU ENERGY
Canister ID: 6553
Address: 16500 RAILROAD AVE, MORGAN HILL
Time: 1158 - 1203
Field staff: D. ASHTON
Weather-Temp: CLEAR ~ 82°

Sample type: ☐ Indoor ☐ Outdoor ☒ Soil Vapor at Depth: 5'

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour ☒ Other: 8-hour, 1-hour, 150-200 ml/min

Canister type: ☒ 1.0-Liter ☐ 1.4-Liter ☐ Other:

Purge Can - Initial Vacuum: -30"
Purge Can - Final vacuum: -26"
Can ID: 8587
Sample Can - Initial Vacuum: -30"
Sample Can - Final Vacuum: -2.5"
Can ID: 6553
Manifold ID: 007033

Fuel use in building: ☐ Natural gas ☐ Electric ☐ Other: NA

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	1144	-30" Hg	START
	1154	-30"	STOP
Line Purge	1154	-30"	START
	1158	-26"	STOP
Sample	1158	-28"	START SAMPLE (CAN GAUGE DIFF)
	1203	-2.5"	STOP

Location/comments: PROBE INSTALLED - CAPPED @ 0823

Leak Compound Used: IPA
Equilibration Period: 0823 > 1158 = 215 MINS

Initials

APEX

Soil Gas Sampling Field Form
Page ____ of ____

Date: 6-26-2019
Project # 33119-019052.00
Sample location: NORTH SIDE SHOP PAD - PAVEMENT
Sample ID: SB-2V
Site name: AU ENERGY
Canister ID: 05216
Address: 16500 RAILROAD AVE, MORGAN HILL
Time: 12-30 - 1236
Field staff: D. ASHTON
Weather-Temp: CLEAR 82° CALM

Sample type: ☐ Indoor ☐ Outdoor ☒ Soil Vapor at Depth: @ 5'

Duration: ☐ Grab ☐ 8-hour ☐ 24-hour ☒ Other: 8-hour, 1-hour, 150-200 ml/min

Canister type: ☒ 1.0-Liter ☐ 1.4-Liter ☐ Other:

Purge Can - Initial Vacuum: -26"
Purge Can - Final vacuum: -23"
Can ID: 8587
Sample Can - Initial Vacuum: -30"
Sample Can - Final Vacuum: -2.5"
Can ID: 5216
Manifold ID: 0086166

Fuel use in building: ☐ Natural gas ☐ Electric ☐ Other: NA

Indoor Mechanical Ventilation? ☐ Yes ☐ No
Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	1220	-26"	START
	1226	-26"	STOP
Line Purge	1226	-26"	START
	1230	-23"	STOP
Sample	1230	-30"	START SAMPLE
	1236		STOP

Location/comments: PROBE INSTALLED - CAPPED: @ 0906

Leak Compound Used: IPA
Equilibration Period: 0906 - 1230 = 204 MINS
Initials

APEX

Soil Gas Sampling Field Form
Page ____ of ____

Date: 6-26-2019
Project # 33119-019052.00
Sample location: WEST END OF PIT - ADJ PIT
Sample ID: SB-3V
Site name: AU ENERGY
Canister ID: 005593
Address: 16500 RAILROAD AVE, MORGAN HILL
Time: 1300-1306
Field staff: D. ASHTON
Weather-Temp: CLEAR 82° LITE BREEZE

Sample type: ☐ Indoor ☐ Outdoor ☒ Soil Vapor at Depth: 5'

Duration: ☐ Grab ☐ 8-hour ☐ 24-hour ☒ Other: 8-hour, 1-hour, 150-200 ml/min

Canister type: ☒ 1.0-Liter ☐ 1.4-Liter ☐ Other:

Purge Can - Initial Vacuum: -22"
Purge Can - Final vacuum: -19"
Can ID: 8587
Sample Can - Initial Vacuum: -30"
Sample Can - Final Vacuum: -3.0"
Can ID:
Manifold ID: 008613

Fuel use in building: ☐ Natural gas ☐ Electric ☐ Other: NA

Indoor Mechanical Ventilation? ☐ Yes ☐ No
Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	1250	-22" Hg	START
	1255	-22"	STOP
Line Purge	1255	-22"	START
	1300	-19"	STOP
Sample	1300	-30"	START SAMPLE
	1306	-3.0"	STOP

Location/comments: PROBE INSTALLED-CAPPED @ 1046

Leak Compound Used: IPA
Equilibration Period: 1046 - 1300 = 194 MINS
Initials: KM

APEX

Soil Gas Sampling Field Form
Page ____ of _____

Date: 6-26-2019 Project # 33119-019052.00

Sample location: CENTRAL EAST END OF LOT Sample ID: SB-4V

Site name: AU ENERGY Canister ID: 6547

Address: 16500 RAILROAD AVE, MORGAN HILL Time: 1340-1340

Field staff: D. ASHTON Weather-Temp: CLEAR ~82°

Sample type: ☐ Indoor ☐ Outdoor ☒ Soil Vapor at Depth: 5'

Duration: ☐ Grab ☐ 8-hour ☐ 24-hour ☒ Other: 8-hour, 1-hour, 150-200 ml/min

Canister type: ☒ 1.0-Liter ☐ 1.4-Liter ☐ Other:

Purge Can - Initial Vacuum: -19" Purge Can - Final vacuum: -15" Can ID: 8587
Sample Can - Initial Vacuum: -29.5" Sample Can - Final Vacuum: -3.0" Can ID: 006547
Manifold ID:

Fuel use in building: ☐ Natural gas ☐ Electric ☐ Other: NA

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	1320	-19"	START
	1335	-19"	STOP
Line Purge	1335	-19"	START
	1340	-15"	STOP
Sample	1340	-29.5"	START SAMPLE
	1346	-3.0"	STOP

Location/comments: PROBE INSTALLED - CAPPED @ 1012

Leak Compound Used: IPA
Equilibration Period: 1012 - 1340 = 208 MINS Initials DA

APPENDIX C

CERTIFED ANALYTICAL REPORTS

ANALYTICAL REPORT

July 01, 2019

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Bureau Veritas North America, Inc.

Sample Delivery Group:	L1113698
Samples Received:	06/28/2019
Project Number:	33119-019052.00
Description:	16500 Railroad Ave, Morgan Hill, CA
Report To:	Donald A. Ashton 2430 Camino Ramon, Suite 122 San Ramon, CA 94583

Entire Report Reviewed By: Brian Ford

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Cp: Cover Page	1
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Ss: Sample Summary	3
Cn: Case Narrative	4
Ds: Detection Summary	5
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SB-1V L1113698-01	7
SB-2V L1113698-02	9
SB-3V L1113698-03	11
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Qc: Quality Control Summary	15
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Gl: Glossary of Terms	20
Al: Accreditations & Locations	21
Sc: Sample Chain of Custody	22

SB-1V L1113698-01 Air

Collected by: Don Ashton | Collected date/time: 06/26/19 12:03 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1303815	2	06/29/19 12:36	06/29/19 12:36	AMC	Mt. Juliet, TN

SB-2V L1113698-02 Air

Collected by: Don Ashton | Collected date/time: 06/26/19 12:36 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1303815	2	06/29/19 13:13	06/29/19 13:13	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1304533	25	07/01/19 14:56	07/01/19 14:56	MBF	Mt. Juliet, TN

SB-3V L1113698-03 Air

Collected by: Don Ashton | Collected date/time: 06/26/19 13:06 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1303815	2	06/29/19 13:50	06/29/19 13:50	AMC	Mt. Juliet, TN

SB-4V L1113698-04 Air

Collected by: Don Ashton | Collected date/time: 06/26/19 13:46 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1303815	2	06/29/19 14:27	06/29/19 14:27	AMC	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford

Brian Ford
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
SB-1V	L1113698-01	Acetone	67-64-1	58.10	2.50	5.94	4.57	10.9		2	WG1303815
SB-1V	L1113698-01	Benzene	71-43-2	78.10	0.400	1.28	4.25	13.6		2	WG1303815
SB-1V	L1113698-01	Carbon disulfide	75-15-0	76.10	0.400	1.24	7.10	22.1		2	WG1303815
SB-1V	L1113698-01	Chloroform	67-66-3	119	0.400	1.95	0.536	2.61		2	WG1303815
SB-1V	L1113698-01	Cyclohexane	110-82-7	84.20	0.400	1.38	1.29	4.44		2	WG1303815
SB-1V	L1113698-01	Ethanol	64-17-5	46.10	1.26	2.38	4.90	9.24		2	WG1303815
SB-1V	L1113698-01	Ethylbenzene	100-41-4	106	0.400	1.73	6.31	27.4		2	WG1303815
SB-1V	L1113698-01	4-Ethyltoluene	622-96-8	120	0.400	1.96	0.877	4.30		2	WG1303815
SB-1V	L1113698-01	Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.620	3.06		2	WG1303815
SB-1V	L1113698-01	Heptane	142-82-5	100	0.400	1.64	2.48	10.1		2	WG1303815
SB-1V	L1113698-01	n-Hexane	110-54-3	86.20	0.400	1.41	4.41	15.5		2	WG1303815
SB-1V	L1113698-01	Methylene Chloride	75-09-2	84.90	0.400	1.39	0.659	2.29		2	WG1303815
SB-1V	L1113698-01	Propene	115-07-1	42.10	0.800	1.38	35.7	61.6		2	WG1303815
SB-1V	L1113698-01	Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.69	7.92		2	WG1303815
SB-1V	L1113698-01	Toluene	108-88-3	92.10	0.400	1.51	47.0	177		2	WG1303815
SB-1V	L1113698-01	1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.23	10.9		2	WG1303815
SB-1V	L1113698-01	1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.756	3.71		2	WG1303815
SB-1V	L1113698-01	2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.11	5.18		2	WG1303815
SB-1V	L1113698-01	m&p-Xylene	1330-20-7	106	0.800	3.47	26.4	115		2	WG1303815
SB-1V	L1113698-01	o-Xylene	95-47-6	106	0.400	1.73	7.00	30.3		2	WG1303815
SB-2V	L1113698-02	Acetone	67-64-1	58.10	2.50	5.94	72.5	172		2	WG1303815
SB-2V	L1113698-02	Benzene	71-43-2	78.10	0.400	1.28	10.4	33.2		2	WG1303815
SB-2V	L1113698-02	Carbon disulfide	75-15-0	76.10	0.400	1.24	34.5	107		2	WG1303815
SB-2V	L1113698-02	Chloroform	67-66-3	119	0.400	1.95	1.13	5.48		2	WG1303815
SB-2V	L1113698-02	Chloromethane	74-87-3	50.50	0.400	0.826	0.720	1.49		2	WG1303815
SB-2V	L1113698-02	Cyclohexane	110-82-7	84.20	0.400	1.38	4.52	15.6		2	WG1303815
SB-2V	L1113698-02	Ethanol	64-17-5	46.10	1.26	2.38	2.96	5.57		2	WG1303815
SB-2V	L1113698-02	Ethylbenzene	100-41-4	106	0.400	1.73	12.3	53.1		2	WG1303815
SB-2V	L1113698-02	4-Ethyltoluene	622-96-8	120	0.400	1.96	1.44	7.08		2	WG1303815
SB-2V	L1113698-02	Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.497	2.46		2	WG1303815
SB-2V	L1113698-02	Heptane	142-82-5	100	0.400	1.64	5.58	22.8		2	WG1303815
SB-2V	L1113698-02	n-Hexane	110-54-3	86.20	0.400	1.41	9.62	33.9		2	WG1303815
SB-2V	L1113698-02	Methylene Chloride	75-09-2	84.90	0.400	1.39	0.781	2.71		2	WG1303815
SB-2V	L1113698-02	2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	14.6	43.0		2	WG1303815
SB-2V	L1113698-02	2-Propanol	67-63-0	60.10	2.50	6.15	2.81	6.90		2	WG1303815
SB-2V	L1113698-02	Propene	115-07-1	42.10	10.0	17.2	320	551		25	WG1304533
SB-2V	L1113698-02	Toluene	108-88-3	92.10	0.400	1.51	100	378		2	WG1303815
SB-2V	L1113698-02	1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	4.26	20.9		2	WG1303815
SB-2V	L1113698-02	1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	1.36	6.69		2	WG1303815
SB-2V	L1113698-02	2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.95	9.11		2	WG1303815
SB-2V	L1113698-02	m&p-Xylene	1330-20-7	106	0.800	3.47	49.8	216		2	WG1303815
SB-2V	L1113698-02	o-Xylene	95-47-6	106	0.400	1.73	13.2	57.3		2	WG1303815
SB-3V	L1113698-03	Acetone	67-64-1	58.10	2.50	5.94	20.2	48.0		2	WG1303815
SB-3V	L1113698-03	Benzene	71-43-2	78.10	0.400	1.28	1.77	5.66		2	WG1303815
SB-3V	L1113698-03	Carbon disulfide	75-15-0	76.10	0.400	1.24	8.83	27.5		2	WG1303815
SB-3V	L1113698-03	Cyclohexane	110-82-7	84.20	0.400	1.38	1.62	5.59		2	WG1303815
SB-3V	L1113698-03	Ethanol	64-17-5	46.10	1.26	2.38	2.64	4.98		2	WG1303815
SB-3V	L1113698-03	Ethylbenzene	100-41-4	106	0.400	1.73	5.02	21.7		2	WG1303815
SB-3V	L1113698-03	4-Ethyltoluene	622-96-8	120	0.400	1.96	1.01	4.98		2	WG1303815
SB-3V	L1113698-03	Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.576	2.85		2	WG1303815
SB-3V	L1113698-03	Heptane	142-82-5	100	0.400	1.64	2.27	9.28		2	WG1303815
SB-3V	L1113698-03	n-Hexane	110-54-3	86.20	0.400	1.41	4.48	15.8		2	WG1303815
SB-3V	L1113698-03	Methylene Chloride	75-09-2	84.90	0.400	1.39	0.580	2.01		2	WG1303815
SB-3V	L1113698-03	Propene	115-07-1	42.10	0.800	1.38	24.4	42.0		2	WG1303815
SB-3V	L1113698-03	Toluene	108-88-3	92.10	0.400	1.51	25.9	97.7		2	WG1303815
SB-3V	L1113698-03	1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.33	16.3		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Client ID	Lab Sample ID	Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
					ppbv	ug/m3	ppbv	ug/m3			
SB-3V	L1113698-03	Acetone	67-64-1	58.10	2.50	5.94	20.2	48.0		2	WG1303815
SB-3V	L1113698-03	Benzene	71-43-2	78.10	0.400	1.28	1.77	5.66		2	WG1303815
SB-3V	L1113698-03	Carbon disulfide	75-15-0	76.10	0.400	1.24	8.83	27.5		2	WG1303815
SB-3V	L1113698-03	Cyclohexane	110-82-7	84.20	0.400	1.38	1.62	5.59		2	WG1303815
SB-3V	L1113698-03	Ethanol	64-17-5	46.10	1.26	2.38	2.64	4.98		2	WG1303815
SB-3V	L1113698-03	1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.936	4.60		2	WG1303815
SB-3V	L1113698-03	2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.13	5.29		2	WG1303815
SB-3V	L1113698-03	m&p-Xylene	1330-20-7	106	0.800	3.47	22.5	97.7		2	WG1303815
SB-3V	L1113698-03	o-Xylene	95-47-6	106	0.400	1.73	6.45	28.0		2	WG1303815
SB-4V	L1113698-04	Acetone	67-64-1	58.10	2.50	5.94	75.9	180		2	WG1303815
SB-4V	L1113698-04	Benzene	71-43-2	78.10	0.400	1.28	0.679	2.17		2	WG1303815
SB-4V	L1113698-04	Ethanol	64-17-5	46.10	1.26	2.38	49.8	93.9		2	WG1303815
SB-4V	L1113698-04	Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.474	2.34		2	WG1303815
SB-4V	L1113698-04	Heptane	142-82-5	100	0.400	1.64	0.464	1.90		2	WG1303815
SB-4V	L1113698-04	n-Hexane	110-54-3	86.20	0.400	1.41	0.561	1.98		2	WG1303815
SB-4V	L1113698-04	Methylene Chloride	75-09-2	84.90	0.400	1.39	0.432	1.50		2	WG1303815
SB-4V	L1113698-04	2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.26	9.60		2	WG1303815
SB-4V	L1113698-04	2-Propanol	67-63-0	60.10	2.50	6.15	11.2	27.5		2	WG1303815
SB-4V	L1113698-04	Propene	115-07-1	42.10	0.800	1.38	5.15	8.87		2	WG1303815
SB-4V	L1113698-04	Toluene	108-88-3	92.10	0.400	1.51	1.64	6.17		2	WG1303815
SB-4V	L1113698-04	2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	2.14	10.0		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	4.57	10.9		2	WG1303815
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1303815
Benzene	71-43-2	78.10	0.400	1.28	4.25	13.6		2	WG1303815
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1303815
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1303815
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1303815
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1303815
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1303815
Carbon disulfide	75-15-0	76.10	0.400	1.24	7.10	22.1		2	WG1303815
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1303815
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1303815
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1303815
Chloroform	67-66-3	119	0.400	1.95	0.536	2.61		2	WG1303815
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1303815
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1303815
Cyclohexane	110-82-7	84.20	0.400	1.38	1.29	4.44		2	WG1303815
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1303815
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1303815
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1303815
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1303815
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1303815
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1303815
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1303815
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1303815
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1303815
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1303815
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1303815
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1303815
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1303815
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1303815
Ethanol	64-17-5	46.10	1.26	2.38	4.90	9.24		2	WG1303815
Ethylbenzene	100-41-4	106	0.400	1.73	6.31	27.4		2	WG1303815
4-Ethyltoluene	622-96-8	120	0.400	1.96	0.877	4.30		2	WG1303815
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1303815
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.620	3.06		2	WG1303815
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1303815
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1303815
Heptane	142-82-5	100	0.400	1.64	2.48	10.1		2	WG1303815
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1303815
n-Hexane	110-54-3	86.20	0.400	1.41	4.41	15.5		2	WG1303815
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1303815
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.659	2.29		2	WG1303815
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1303815
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1303815
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1303815
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1303815
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1303815
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1303815
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1303815
Propene	115-07-1	42.10	0.800	1.38	35.7	61.6		2	WG1303815
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1303815
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1303815
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1303815
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.69	7.92		2	WG1303815
Toluene	108-88-3	92.10	0.400	1.51	47.0	177		2	WG1303815
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1303815
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1303815
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1303815
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	2.23	10.9		2	WG1303815
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.756	3.71		2	WG1303815
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.11	5.18		2	WG1303815
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1303815
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1303815
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1303815
m&p-Xylene	1330-20-7	106	0.800	3.47	26.4	115		2	WG1303815
o-Xylene	95-47-6	106	0.400	1.73	7.00	30.3		2	WG1303815
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	72.5	172		2	WG1303815
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1303815
Benzene	71-43-2	78.10	0.400	1.28	10.4	33.2		2	WG1303815
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1303815
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1303815
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1303815
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1303815
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1303815
Carbon disulfide	75-15-0	76.10	0.400	1.24	34.5	107		2	WG1303815
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1303815
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1303815
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1303815
Chloroform	67-66-3	119	0.400	1.95	1.13	5.48		2	WG1303815
Chloromethane	74-87-3	50.50	0.400	0.826	0.720	1.49		2	WG1303815
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1303815
Cyclohexane	110-82-7	84.20	0.400	1.38	4.52	15.6		2	WG1303815
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1303815
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1303815
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1303815
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1303815
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1303815
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1303815
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1303815
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1303815
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1303815
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1303815
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1303815
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1303815
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1303815
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1303815
Ethanol	64-17-5	46.10	1.26	2.38	2.96	5.57		2	WG1303815
Ethylbenzene	100-41-4	106	0.400	1.73	12.3	53.1		2	WG1303815
4-Ethyltoluene	622-96-8	120	0.400	1.96	1.44	7.08		2	WG1303815
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1303815
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.497	2.46		2	WG1303815
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1303815
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1303815
Heptane	142-82-5	100	0.400	1.64	5.58	22.8		2	WG1303815
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1303815
n-Hexane	110-54-3	86.20	0.400	1.41	9.62	33.9		2	WG1303815
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1303815
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.781	2.71		2	WG1303815
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1303815
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	14.6	43.0		2	WG1303815
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1303815
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1303815
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1303815
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1303815
2-Propanol	67-63-0	60.10	2.50	6.15	2.81	6.90		2	WG1303815
Propene	115-07-1	42.10	10.0	17.2	320	551		25	WG1304533
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1303815
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1303815
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1303815
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1303815
Toluene	108-88-3	92.10	0.400	1.51	100	378		2	WG1303815
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1303815
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1303815
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1303815
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	4.26	20.9		2	WG1303815
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	1.36	6.69		2	WG1303815
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.95	9.11		2	WG1303815
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1303815
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1303815
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1303815
m&p-Xylene	1330-20-7	106	0.800	3.47	49.8	216		2	WG1303815
o-Xylene	95-47-6	106	0.400	1.73	13.2	57.3		2	WG1303815
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*104*				WG1303815
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*71.2*				WG1304533

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	20.2	48.0		2	WG1303815
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1303815
Benzene	71-43-2	78.10	0.400	1.28	1.77	5.66		2	WG1303815
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1303815
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1303815
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1303815
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1303815
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1303815
Carbon disulfide	75-15-0	76.10	0.400	1.24	8.83	27.5		2	WG1303815
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1303815
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1303815
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1303815
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1303815
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1303815
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1303815
Cyclohexane	110-82-7	84.20	0.400	1.38	1.62	5.59		2	WG1303815
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1303815
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1303815
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1303815
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1303815
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1303815
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1303815
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1303815
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1303815
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1303815
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1303815
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1303815
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1303815
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1303815
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1303815
Ethanol	64-17-5	46.10	1.26	2.38	2.64	4.98		2	WG1303815
Ethylbenzene	100-41-4	106	0.400	1.73	5.02	21.7		2	WG1303815
4-Ethyltoluene	622-96-8	120	0.400	1.96	1.01	4.98		2	WG1303815
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1303815
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.576	2.85		2	WG1303815
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1303815
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1303815
Heptane	142-82-5	100	0.400	1.64	2.27	9.28		2	WG1303815
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1303815
n-Hexane	110-54-3	86.20	0.400	1.41	4.48	15.8		2	WG1303815
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1303815
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.580	2.01		2	WG1303815
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1303815
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1303815
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1303815
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1303815
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1303815
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1303815
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1303815
Propene	115-07-1	42.10	0.800	1.38	24.4	42.0		2	WG1303815
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1303815
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1303815
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1303815
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1303815
Toluene	108-88-3	92.10	0.400	1.51	25.9	97.7		2	WG1303815
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1303815
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1303815
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1303815
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	3.33	16.3		2	WG1303815
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.936	4.60		2	WG1303815
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.13	5.29		2	WG1303815
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1303815
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1303815
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1303815
m&p-Xylene	1330-20-7	106	0.800	3.47	22.5	97.7		2	WG1303815
o-Xylene	95-47-6	106	0.400	1.73	6.45	28.0		2	WG1303815
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	75.9	180		2	WG1303815
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1303815
Benzene	71-43-2	78.10	0.400	1.28	0.679	2.17		2	WG1303815
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1303815
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1303815
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1303815
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1303815
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1303815
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1303815
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1303815
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1303815
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1303815
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1303815
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1303815
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1303815
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1303815
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1303815
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1303815
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1303815
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1303815
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1303815
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1303815
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1303815
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1303815
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1303815
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1303815
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1303815
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1303815
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1303815
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1303815
Ethanol	64-17-5	46.10	1.26	2.38	49.8	93.9		2	WG1303815
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG1303815
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1303815
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1303815
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.474	2.34		2	WG1303815
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1303815
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1303815
Heptane	142-82-5	100	0.400	1.64	0.464	1.90		2	WG1303815
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1303815
n-Hexane	110-54-3	86.20	0.400	1.41	0.561	1.98		2	WG1303815
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1303815
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.432	1.50		2	WG1303815
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1303815
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.26	9.60		2	WG1303815
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1303815
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1303815
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1303815
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1303815
2-Propanol	67-63-0	60.10	2.50	6.15	11.2	27.5		2	WG1303815
Propene	115-07-1	42.10	0.800	1.38	5.15	8.87		2	WG1303815
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1303815
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1303815
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG1303815
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1303815
Toluene	108-88-3	92.10	0.400	1.51	1.64	6.17		2	WG1303815
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1303815

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1303815
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1303815
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1303815
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1303815
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1303815
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	2.14	10.0		2	WG1303815
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1303815
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1303815
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1303815
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG1303815
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1303815
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1303815

Method Blank (MB)

(MB) R3426079-3 06/29/19 09:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	0.167	J	0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	0.130	J	0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	0.0901	J	0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3426079-3 06/29/19 09:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	0.0996	J	0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*97.3*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3426079-1 06/29/19 08:15 • (LCSD) R3426079-2 06/29/19 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.77	3.46	101	92.3	55.0-148			8.60	25
Propene	3.75	3.21	3.57	85.7	95.1	64.0-144			10.4	25
Dichlorodifluoromethane	3.75	3.69	4.07	98.5	109	64.0-139			9.67	25
1,2-Dichlorotetrafluoroethane	3.75	3.67	3.91	97.8	104	70.0-130			6.40	25
Chloromethane	3.75	3.56	3.72	95.0	99.3	70.0-130			4.37	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3426079-1 06/29/19 08:15 • (LCSD) R3426079-2 06/29/19 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.40	3.91	90.7	104	70.0-130			13.9	25
1,3-Butadiene	3.75	3.31	3.42	88.4	91.2	70.0-130			3.20	25
Bromomethane	3.75	3.59	3.85	95.6	103	70.0-130			7.23	25
Chloroethane	3.75	3.58	3.72	95.5	99.3	70.0-130			3.82	25
Trichlorofluoromethane	3.75	3.51	3.69	93.6	98.3	70.0-130			4.92	25
1,1,2-Trichlorotrifluoroethane	3.75	3.86	3.93	103	105	70.0-130			1.87	25
1,1-Dichloroethene	3.75	3.76	3.81	100	102	70.0-130			1.27	25
1,1-Dichloroethane	3.75	3.80	3.93	101	105	70.0-130			3.33	25
Acetone	3.75	3.43	3.33	91.5	88.9	70.0-130			2.89	25
2-Propanol	3.75	3.85	3.89	103	104	70.0-139			0.883	25
Carbon disulfide	3.75	3.90	3.92	104	105	70.0-130			0.692	25
Methylene Chloride	3.75	3.49	3.67	93.1	98.0	70.0-130			5.17	25
MTBE	3.75	3.77	3.82	101	102	70.0-130			1.26	25
trans-1,2-Dichloroethene	3.75	3.88	3.83	103	102	70.0-130			1.11	25
n-Hexane	3.75	3.80	3.98	101	106	70.0-130			4.63	25
Vinyl acetate	3.75	3.77	3.79	100	101	70.0-130			0.501	25
Methyl Ethyl Ketone	3.75	4.02	4.08	107	109	70.0-130			1.29	25
cis-1,2-Dichloroethene	3.75	3.87	3.89	103	104	70.0-130			0.540	25
Chloroform	3.75	3.83	3.83	102	102	70.0-130			0.0178	25
Cyclohexane	3.75	3.90	3.96	104	106	70.0-130			1.74	25
1,1,1-Trichloroethane	3.75	3.81	3.88	102	104	70.0-130			1.92	25
Carbon tetrachloride	3.75	3.85	3.86	103	103	70.0-130			0.286	25
Benzene	3.75	3.79	3.91	101	104	70.0-130			3.19	25
1,2-Dichloroethane	3.75	3.78	3.83	101	102	70.0-130			1.18	25
Heptane	3.75	3.79	3.82	101	102	70.0-130			0.819	25
Trichloroethylene	3.75	3.77	3.80	101	101	70.0-130			0.672	25
1,2-Dichloropropane	3.75	3.98	4.07	106	108	70.0-130			2.11	25
1,4-Dioxane	3.75	3.93	4.03	105	107	70.0-140			2.47	25
Bromodichloromethane	3.75	3.81	3.89	102	104	70.0-130			2.08	25
cis-1,3-Dichloropropene	3.75	3.84	3.91	103	104	70.0-130			1.57	25
4-Methyl-2-pentanone (MIBK)	3.75	3.60	3.77	95.9	101	70.0-139			4.68	25
Toluene	3.75	3.71	3.80	98.9	101	70.0-130			2.35	25
trans-1,3-Dichloropropene	3.75	3.86	3.92	103	105	70.0-130			1.63	25
1,1,2-Trichloroethane	3.75	3.74	3.89	99.7	104	70.0-130			3.96	25
Tetrachloroethylene	3.75	3.80	3.88	101	103	70.0-130			2.02	25
Methyl Butyl Ketone	3.75	3.71	3.90	98.9	104	70.0-149			4.92	25
Dibromochloromethane	3.75	3.78	3.90	101	104	70.0-130			3.22	25
1,2-Dibromoethane	3.75	3.83	3.91	102	104	70.0-130			2.25	25
Chlorobenzene	3.75	3.74	3.84	99.8	102	70.0-130			2.70	25
Ethylbenzene	3.75	3.88	3.96	103	106	70.0-130			2.01	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3426079-1 06/29/19 08:15 • (LCSD) R3426079-2 06/29/19 08:52

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	7.71	7.90	103	105	70.0-130			2.47	25
o-Xylene	3.75	3.84	3.92	102	105	70.0-130			2.15	25
Styrene	3.75	3.87	4.00	103	107	70.0-130			3.22	25
Bromoform	3.75	3.97	4.06	106	108	70.0-130			2.19	25
1,1,2,2-Tetrachloroethane	3.75	3.94	3.98	105	106	70.0-130			0.981	25
4-Ethyltoluene	3.75	3.87	4.02	103	107	70.0-130			3.81	25
1,3,5-Trimethylbenzene	3.75	3.84	3.96	102	106	70.0-130			3.00	25
1,2,4-Trimethylbenzene	3.75	3.85	3.98	103	106	70.0-130			3.38	25
1,3-Dichlorobenzene	3.75	3.93	4.04	105	108	70.0-130			2.97	25
1,4-Dichlorobenzene	3.75	3.91	4.07	104	109	70.0-130			4.01	25
Benzyl Chloride	3.75	4.02	4.19	107	112	70.0-152			4.25	25
1,2-Dichlorobenzene	3.75	3.86	3.99	103	106	70.0-130			3.27	25
1,2,4-Trichlorobenzene	3.75	4.00	4.27	107	114	70.0-160			6.70	25
Hexachloro-1,3-butadiene	3.75	3.72	3.94	99.2	105	70.0-151			5.82	25
Naphthalene	3.75	3.96	4.19	105	112	70.0-159			5.87	25
Allyl Chloride	3.75	3.65	3.81	97.2	102	70.0-130			4.39	25
2-Chlorotoluene	3.75	3.82	4.00	102	107	70.0-130			4.45	25
Methyl Methacrylate	3.75	3.81	3.97	102	106	70.0-130			4.19	25
Tetrahydrofuran	3.75	3.69	3.79	98.5	101	70.0-137			2.47	25
2,2,4-Trimethylpentane	3.75	3.91	3.87	104	103	70.0-130			1.16	25
Vinyl Bromide	3.75	3.65	3.84	97.5	102	70.0-130			4.99	25
Isopropylbenzene	3.75	3.88	3.98	104	106	70.0-130			2.40	25
(S) 1,4-Bromofluorobenzene				*99.2*	*102*	*60.0-140*				

Method Blank (MB)

(MB) R3426471-3 07/01/19 10:42

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Propene	U		0.0932	0.400
(S) 1,4-Bromofluorobenzene	*74.5*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3426471-1 07/01/19 09:13 • (LCSD) R3426471-2 07/01/19 09:57

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Propene	3.75	3.67	3.62	97.9	96.5	64.0-144			1.44	25
(S) 1,4-Bromofluorobenzene				*106*	*106*	*60.0-140*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

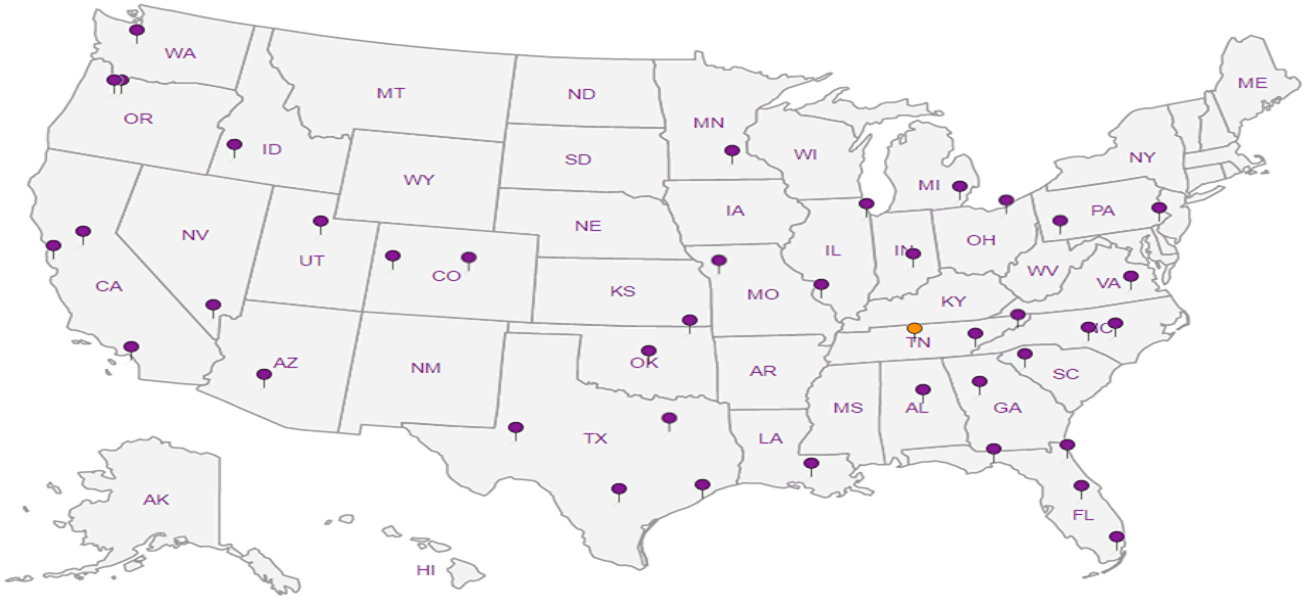
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Bureau Veritas North America, Inc.
2440 155
~~2430~~ Camino Ramon, Suite ~~122~~
San Ramon, CA 94583

Billing Information:
Accounts Payable
2430 Camino Ramon, Suite 122
San Ramon, CA 94583

Report to: Donald A. Ashton CELL 925.260.3102

Email To: don.ashton@us.bureauveritas.com

Project Description: 16500 RAILROAD AVE, MORGAN HILL, CA

City/State Collected: MORGAN HILL

Phone: 925-426-2679
Fax: 925-426-0106

Client Project # 33119-019052.00

Lab Project # BURVERSRCA-ASHTON

Collected by (print): DON ASHTON

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ✓ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
X Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed 6-28-2019 OR 6-29-2019

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1113698

A116

Acctnum: BURVERSRCA
Template: T143336
Prelogin: P716285
TSR: 110 - Brian Ford
PB: DF 6/24/19
Shipped Via: FedEx Standard

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Helium Summa	TO-15 Summa	Remarks	Sample # (lab only)
SB-1 V	↓	Air	5'	6-26-2019	1203	1		X		-01
SB-2 V	↓	Air	5'	↓	1236	1	X	X		-02
SB-3 V	↓	Air	5'	↓	1306	1		X		-03
SB-4 V	↓	Air	5'	↓	1346	1		X		-04

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS ✓ FedEx __ Courier _____

Tracking # 4794 8845 9781

Sample Receipt Checklist
COC Seal Present/Intact: ✓ NP __Y __N
COC Signed/Accurate: ✓ Y __N
Bottles arrive intact: ✓ Y __N
Correct bottles used: ✓ Y __N
Sufficient volume sent: ✓ Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Don Ashton	6-26-2019	1600		Ø
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: Amb 4 air
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6-28-19 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 10, 2019

Bureau Veritas North America, Inc.

Sample Delivery Group:	L1114138
Samples Received:	06/28/2019
Project Number:	33119-019052.00
Description:	16500 Railroad Ave., Morgan Hill, Ca
Report To:	Donald A. Ashton 2430 Camino Ramon, Suite 122 San Ramon, CA 94583

Entire Report Reviewed By: Brian Ford

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SB-1 0.5-1' L1114138-01 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 08:50 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307008	1	07/05/19 16:34	07/05/19 16:41	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1303808	1	06/29/19 09:02	06/30/19 20:06	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1304121	1	06/30/19 18:50	07/02/19 20:11	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 22:07	KME	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1307387	1	07/09/19 06:53	07/09/19 15:33	LEL	Mt. Juliet, TN

SB-1 10' L1114138-02 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 08:57 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307008	1	07/05/19 16:34	07/05/19 16:41	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307514	1	07/05/19 08:18	07/07/19 20:51	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 20:29	KME	Mt. Juliet, TN

SB-2 0.5-1' L1114138-03 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 09:46 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307008	1	07/05/19 16:34	07/05/19 16:41	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1303808	1	06/29/19 09:02	06/30/19 20:08	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1304121	1	06/30/19 18:50	07/02/19 20:14	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	2	07/09/19 12:15	07/09/19 23:03	KME	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1307387	1	07/09/19 06:53	07/09/19 15:45	LEL	Mt. Juliet, TN

SB-2 10' L1114138-04 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 09:56 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307008	1	07/05/19 16:34	07/05/19 16:41	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307514	1	07/05/19 08:18	07/07/19 21:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307694	1	07/05/19 08:18	07/08/19 18:22	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 20:43	KME	Mt. Juliet, TN

SB-3 0.5-1' L1114138-05 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 10:32 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307010	1	07/05/19 17:44	07/05/19 17:55	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1303808	1	06/29/19 09:02	06/30/19 20:11	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1304121	1	06/30/19 18:50	07/02/19 20:17	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 20:57	KME	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1307387	1	07/09/19 06:53	07/09/19 15:58	LEL	Mt. Juliet, TN

SB-3 10' L1114138-06 Solid

Collected by: Don Ashton | Collected date/time: 06/26/19 10:39 | Received date/time: 06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307010	1	07/05/19 17:44	07/05/19 17:55	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307514	1	07/05/19 08:18	07/07/19 21:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307694	1	07/05/19 08:18	07/08/19 18:42	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 21:11	KME	Mt. Juliet, TN

SB-4 0.5-1' L1114138-07 Solid

Collected by	Collected date/time	Received date/time
Don Ashton	06/26/19 11:07	06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307010	1	07/05/19 17:44	07/05/19 17:55	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1303808	1	06/29/19 09:02	06/30/19 20:13	JDG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1304121	1	06/30/19 18:50	07/02/19 20:20	EL	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	2	07/09/19 12:15	07/09/19 22:49	KME	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1307387	1	07/09/19 06:53	07/09/19 16:35	LEL	Mt. Juliet, TN

SB-4 10' L1114138-08 Solid

Collected by	Collected date/time	Received date/time
Don Ashton	06/26/19 11:10	06/28/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1307010	1	07/05/19 17:44	07/05/19 17:55	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1307514	1	07/05/19 08:18	07/07/19 21:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1308159	25	07/05/19 08:18	07/09/19 14:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1307390	1	07/09/19 12:15	07/09/19 21:25	KME	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford

Brian Ford
Project Manager

Mercury by Method 7471A

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-1 0.5-1'	L1114138-01	Mercury	0.0714		0.00337	0.0241	1	06/30/2019 20:06	WG1303808
SB-2 0.5-1'	L1114138-03	Mercury	0.166		0.00341	0.0243	1	06/30/2019 20:08	WG1303808
SB-3 0.5-1'	L1114138-05	Mercury	0.0370		0.00328	0.0234	1	06/30/2019 20:11	WG1303808
SB-4 0.5-1'	L1114138-07	Mercury	0.0563		0.00328	0.0234	1	06/30/2019 20:13	WG1303808

Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-1 0.5-1'	L1114138-01	Antimony	1.24	J	0.903	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Arsenic	4.34		0.554	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Barium	278		0.205	0.602	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Beryllium	0.444		0.0843	0.241	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Cadmium	0.215	J	0.0843	0.602	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Chromium	47.7		0.169	1.20	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Cobalt	11.4		0.277	1.20	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Copper	26.2		0.638	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Lead	14.5		0.229	0.602	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Nickel	68.7		0.590	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Selenium	1.23	J	0.747	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Vanadium	49.5		0.289	2.41	1	07/02/2019 20:11	WG1304121
SB-1 0.5-1'	L1114138-01	Zinc	71.3		0.711	6.02	1	07/02/2019 20:11	WG1304121
SB-2 0.5-1'	L1114138-03	Antimony	1.24	J	0.913	2.43	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Arsenic	8.31		0.560	2.43	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Barium	226		0.207	0.609	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Beryllium	0.450		0.0852	0.243	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Cadmium	0.601	J	0.0852	0.609	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Chromium	63.1		0.170	1.22	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Cobalt	15.3		0.280	1.22	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Copper	34.8		0.645	2.43	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Lead	62.1		0.231	0.609	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Molybdenum	0.600	J	0.195	0.609	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Nickel	95.7		0.597	2.43	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Vanadium	56.6		0.292	2.43	1	07/02/2019 20:14	WG1304121
SB-2 0.5-1'	L1114138-03	Zinc	155		0.718	6.09	1	07/02/2019 20:14	WG1304121
SB-3 0.5-1'	L1114138-05	Arsenic	4.77		0.538	2.34	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Barium	219		0.199	0.585	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Beryllium	0.495		0.0819	0.234	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Cadmium	0.240	J	0.0819	0.585	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Chromium	51.8		0.164	1.17	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Cobalt	12.7		0.269	1.17	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Copper	25.6		0.620	2.34	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Lead	6.50		0.222	0.585	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Molybdenum	0.314	J	0.187	0.585	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Nickel	71.6		0.573	2.34	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Vanadium	52.1		0.281	2.34	1	07/02/2019 20:17	WG1304121
SB-3 0.5-1'	L1114138-05	Zinc	95.5		0.690	5.85	1	07/02/2019 20:17	WG1304121
SB-4 0.5-1'	L1114138-07	Arsenic	4.27		0.539	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Barium	222		0.199	0.585	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Beryllium	0.428		0.0820	0.234	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Cadmium	0.229	J	0.0820	0.585	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Chromium	43.6		0.164	1.17	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Cobalt	11.1		0.269	1.17	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Copper	24.4		0.621	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Lead	9.14		0.222	0.585	1	07/02/2019 20:20	WG1304121

Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-4 0.5-1'	L1114138-07	Arsenic	4.27		0.539	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Barium	222		0.199	0.585	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Beryllium	0.428		0.0820	0.234	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Cadmium	0.229	J	0.0820	0.585	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Chromium	43.6		0.164	1.17	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Nickel	62.6		0.574	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Selenium	1.23	J	0.726	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Vanadium	46.2		0.281	2.34	1	07/02/2019 20:20	WG1304121
SB-4 0.5-1'	L1114138-07	Zinc	65.0		0.691	5.85	1	07/02/2019 20:20	WG1304121

Volatile Organic Compounds (GC/MS) by Method 8260B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-1 10'	L1114138-02	Acetone	0.0406	J	0.0115	0.0573	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	Benzene	0.00146		0.000309	0.00115	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	Chloromethane	0.00124	J	0.000430	0.00286	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	1,2-Dichloroethane	0.000658	J	0.000304	0.00115	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	Toluene	0.00233	J	0.000497	0.00573	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	1,2,4-Trimethylbenzene	0.000987	J	0.000242	0.00115	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	1,2,3-Trimethylbenzene	0.000390	J	0.000329	0.00115	1	07/07/2019 20:51	WG1307514
SB-1 10'	L1114138-02	Xylenes, Total	0.00157	J	0.000800	0.00344	1	07/07/2019 20:51	WG1307514
SB-2 10'	L1114138-04	Acetone	0.0237	J	0.0118	0.0591	1	07/07/2019 21:10	WG1307514
SB-2 10'	L1114138-04	Chloromethane	0.000791	J	0.000444	0.00296	1	07/07/2019 21:10	WG1307514
SB-2 10'	L1114138-04	1,2-Dichloroethane	0.000795	J	0.000313	0.00118	1	07/07/2019 21:10	WG1307514
SB-2 10'	L1114138-04	1,1,1-Trichloroethane	0.000356	J	0.000338	0.00118	1	07/07/2019 21:10	WG1307514
SB-2 10'	L1114138-04	Ethanol	0.101	B J	0.0580	0.118	1	07/08/2019 18:22	WG1307694
SB-2 10'	L1114138-04	tert-Butyl alcohol	0.00437	J	0.00237	0.00591	1	07/07/2019 21:10	WG1307514
SB-3 10'	L1114138-06	Acetone	0.0167	J	0.0115	0.0577	1	07/07/2019 21:30	WG1307514
SB-3 10'	L1114138-06	Chloromethane	0.000447	J	0.000433	0.00289	1	07/07/2019 21:30	WG1307514
SB-3 10'	L1114138-06	1,2-Dichloroethane	0.000397	J	0.000306	0.00115	1	07/07/2019 21:30	WG1307514
SB-3 10'	L1114138-06	Ethanol	0.104	B J	0.0566	0.115	1	07/08/2019 18:42	WG1307694
SB-4 10'	L1114138-08	Acetone	0.0380	J	0.0117	0.0583	1	07/07/2019 21:50	WG1307514
SB-4 10'	L1114138-08	tert-Butyl alcohol	0.00429	J	0.00233	0.00583	1	07/07/2019 21:50	WG1307514

Semi-Volatile Organic Compounds (GC) by Method 8015

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-1 0.5-1'	L1114138-01	C12-C22 Hydrocarbons	1.65	J	0.883	4.82	1	07/09/2019 22:07	WG1307390
SB-1 0.5-1'	L1114138-01	C22-C32 Hydrocarbons	2.59	J	1.60	4.82	1	07/09/2019 22:07	WG1307390
SB-1 0.5-1'	L1114138-01	C32-C40 Hydrocarbons	4.25	J	1.60	4.82	1	07/09/2019 22:07	WG1307390
SB-1 10'	L1114138-02	C12-C22 Hydrocarbons	1.26	J	0.840	4.58	1	07/09/2019 20:29	WG1307390
SB-1 10'	L1114138-02	C32-C40 Hydrocarbons	1.59	J	1.52	4.58	1	07/09/2019 20:29	WG1307390
SB-2 0.5-1'	L1114138-03	C12-C22 Hydrocarbons	3.07	J	1.79	9.74	2	07/09/2019 23:03	WG1307390
SB-2 0.5-1'	L1114138-03	C22-C32 Hydrocarbons	18.9		3.24	9.74	2	07/09/2019 23:03	WG1307390
SB-2 0.5-1'	L1114138-03	C32-C40 Hydrocarbons	25.9		3.24	9.74	2	07/09/2019 23:03	WG1307390
SB-2 10'	L1114138-04	C12-C22 Hydrocarbons	1.41	J	0.867	4.73	1	07/09/2019 20:43	WG1307390
SB-3 0.5-1'	L1114138-05	C12-C22 Hydrocarbons	1.02	J	0.858	4.68	1	07/09/2019 20:57	WG1307390
SB-3 0.5-1'	L1114138-05	C32-C40 Hydrocarbons	2.52	J	1.56	4.68	1	07/09/2019 20:57	WG1307390
SB-3 10'	L1114138-06	C12-C22 Hydrocarbons	1.09	J	0.846	4.62	1	07/09/2019 21:11	WG1307390
SB-4 0.5-1'	L1114138-07	C12-C22 Hydrocarbons	2.33	J	1.72	9.37	2	07/09/2019 22:49	WG1307390
SB-4 0.5-1'	L1114138-07	C22-C32 Hydrocarbons	16.9		3.11	9.37	2	07/09/2019 22:49	WG1307390
SB-4 0.5-1'	L1114138-07	C32-C40 Hydrocarbons	30.9		3.11	9.37	2	07/09/2019 22:49	WG1307390

Semi-Volatile Organic Compounds (GC) by Method 8015

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-4 10'	L1114138-08	C12-C22 Hydrocarbons	1.13	J	0.854	4.66	1	07/09/2019 21:25	WG1307390

Pesticides (GC) by Method 8081

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
SB-2 0.5-1'	L1114138-03	4,4-DDD	0.000589	J	0.000200	0.0243	1	07/09/2019 15:45	WG1307387
SB-2 0.5-1'	L1114138-03	4,4-DDE	0.0351		0.000201	0.0243	1	07/09/2019 15:45	WG1307387
SB-2 0.5-1'	L1114138-03	4,4-DDT	0.0388		0.000324	0.0243	1	07/09/2019 15:45	WG1307387
SB-2 0.5-1'	L1114138-03	Dieldrin	0.00131	J	0.000108	0.00243	1	07/09/2019 15:45	WG1307387
SB-2 0.5-1'	L1114138-03	Endosulfan II	0.000370	J P	0.000280	0.0243	1	07/09/2019 15:45	WG1307387
SB-3 0.5-1'	L1114138-05	4,4-DDE	0.000812	J	0.000193	0.0234	1	07/09/2019 15:58	WG1307387
SB-4 0.5-1'	L1114138-07	4,4-DDE	0.00204	J	0.000193	0.0234	1	07/09/2019 16:35	WG1307387
SB-4 0.5-1'	L1114138-07	4,4-DDT	0.000465	J	0.000311	0.0234	1	07/09/2019 16:35	WG1307387
SB-4 0.5-1'	L1114138-07	Dieldrin	0.000109	J	0.000104	0.00234	1	07/09/2019 16:35	WG1307387

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.0		1	07/05/2019 16:41	WG1307008

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0714		0.00337	0.0241	1	06/30/2019 20:06	WG1303808

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.24	J	0.903	2.41	1	07/02/2019 20:11	WG1304121
Arsenic	4.34		0.554	2.41	1	07/02/2019 20:11	WG1304121
Barium	278		0.205	0.602	1	07/02/2019 20:11	WG1304121
Beryllium	0.444		0.0843	0.241	1	07/02/2019 20:11	WG1304121
Cadmium	0.215	J	0.0843	0.602	1	07/02/2019 20:11	WG1304121
Chromium	47.7		0.169	1.20	1	07/02/2019 20:11	WG1304121
Cobalt	11.4		0.277	1.20	1	07/02/2019 20:11	WG1304121
Copper	26.2		0.638	2.41	1	07/02/2019 20:11	WG1304121
Lead	14.5		0.229	0.602	1	07/02/2019 20:11	WG1304121
Molybdenum	U		0.193	0.602	1	07/02/2019 20:11	WG1304121
Nickel	68.7		0.590	2.41	1	07/02/2019 20:11	WG1304121
Selenium	1.23	J	0.747	2.41	1	07/02/2019 20:11	WG1304121
Silver	U		0.145	1.20	1	07/02/2019 20:11	WG1304121
Thallium	U		0.783	2.41	1	07/02/2019 20:11	WG1304121
Vanadium	49.5		0.289	2.41	1	07/02/2019 20:11	WG1304121
Zinc	71.3		0.711	6.02	1	07/02/2019 20:11	WG1304121

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.65	J	0.883	4.82	1	07/09/2019 22:07	WG1307390
C22-C32 Hydrocarbons	2.59	J	1.60	4.82	1	07/09/2019 22:07	WG1307390
C32-C40 Hydrocarbons	4.25	J	1.60	4.82	1	07/09/2019 22:07	WG1307390
(S) o-Terphenyl	*95.2*			*18.0-148*		*07/09/2019 22:07*	WG1307390

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.000281	0.0241	1	07/09/2019 15:33	WG1307387
Alpha BHC	U		0.000232	0.0241	1	07/09/2019 15:33	WG1307387
Beta BHC	U		0.000365	0.0241	1	07/09/2019 15:33	WG1307387
Delta BHC	U		0.000182	0.0241	1	07/09/2019 15:33	WG1307387
Gamma BHC	U		0.000295	0.0241	1	07/09/2019 15:33	WG1307387
4,4-DDD	U		0.000198	0.0241	1	07/09/2019 15:33	WG1307387
4,4-DDE	U		0.000199	0.0241	1	07/09/2019 15:33	WG1307387
4,4-DDT	U		0.000320	0.0241	1	07/09/2019 15:33	WG1307387
Dieldrin	U		0.000107	0.00241	1	07/09/2019 15:33	WG1307387
Endosulfan I	U		0.000258	0.0241	1	07/09/2019 15:33	WG1307387
Endosulfan II	U		0.000277	0.0241	1	07/09/2019 15:33	WG1307387
Endosulfan sulfate	U		0.000205	0.0241	1	07/09/2019 15:33	WG1307387
Endrin	U		0.000264	0.0241	1	07/09/2019 15:33	WG1307387
Endrin aldehyde	U		0.000291	0.0241	1	07/09/2019 15:33	WG1307387
Endrin ketone	U		0.000191	0.0241	1	07/09/2019 15:33	WG1307387
Heptachlor	U		0.000122	0.0241	1	07/09/2019 15:33	WG1307387

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Heptachlor epoxide	U		0.000455	0.0241	1	07/09/2019 15:33	WG1307387
Hexachlorobenzene	U		0.000270	0.0241	1	07/09/2019 15:33	WG1307387
Methoxychlor	U		0.000319	0.0241	1	07/09/2019 15:33	WG1307387
Chlordane	U		0.0470	0.241	1	07/09/2019 15:33	WG1307387
Toxaphene	U		0.0434	0.482	1	07/09/2019 15:33	WG1307387
(S) Decachlorobiphenyl	*47.6*			*10.0-135*		*07/09/2019 15:33*	WG1307387
(S) Tetrachloro-m-xylene	*45.0*			*10.0-139*		*07/09/2019 15:33*	WG1307387

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.3		1	07/05/2019 16:41	WG1307008

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0406	J	0.0115	0.0573	1	07/07/2019 20:51	WG1307514
Acrylonitrile	U		0.00205	0.0115	1	07/07/2019 20:51	WG1307514
Benzene	0.00146		0.000309	0.00115	1	07/07/2019 20:51	WG1307514
Bromobenzene	U		0.000325	0.00115	1	07/07/2019 20:51	WG1307514
Bromodichloromethane	U		0.000291	0.00115	1	07/07/2019 20:51	WG1307514
Bromoform	U		0.000486	0.00115	1	07/07/2019 20:51	WG1307514
Bromomethane	U		0.00154	0.00573	1	07/07/2019 20:51	WG1307514
n-Butylbenzene	U		0.000296	0.00115	1	07/07/2019 20:51	WG1307514
sec-Butylbenzene	U		0.000230	0.00115	1	07/07/2019 20:51	WG1307514
tert-Butylbenzene	U		0.000236	0.00115	1	07/07/2019 20:51	WG1307514
Carbon tetrachloride	U		0.000376	0.00115	1	07/07/2019 20:51	WG1307514
Chlorobenzene	U		0.000243	0.00115	1	07/07/2019 20:51	WG1307514
Chlorodibromomethane	U		0.000427	0.00115	1	07/07/2019 20:51	WG1307514
Chloroethane	U		0.00108	0.00573	1	07/07/2019 20:51	WG1307514
Chloroform	U		0.000262	0.00573	1	07/07/2019 20:51	WG1307514
Chloromethane	0.00124	J	0.000430	0.00286	1	07/07/2019 20:51	WG1307514
2-Chlorotoluene	U		0.000345	0.00115	1	07/07/2019 20:51	WG1307514
4-Chlorotoluene	U		0.000275	0.00115	1	07/07/2019 20:51	WG1307514
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00573	1	07/07/2019 20:51	WG1307514
1,2-Dibromoethane	U		0.000393	0.00115	1	07/07/2019 20:51	WG1307514
Dibromomethane	U		0.000438	0.00115	1	07/07/2019 20:51	WG1307514
1,2-Dichlorobenzene	U		0.000349	0.00115	1	07/07/2019 20:51	WG1307514
1,3-Dichlorobenzene	U		0.000274	0.00115	1	07/07/2019 20:51	WG1307514
1,4-Dichlorobenzene	U		0.000259	0.00115	1	07/07/2019 20:51	WG1307514
Dichlorodifluoromethane	U		0.000817	0.00573	1	07/07/2019 20:51	WG1307514
1,1-Dichloroethane	U		0.000228	0.00115	1	07/07/2019 20:51	WG1307514
1,2-Dichloroethane	0.000658	J	0.000304	0.00115	1	07/07/2019 20:51	WG1307514
1,1-Dichloroethene	U		0.000347	0.00115	1	07/07/2019 20:51	WG1307514
cis-1,2-Dichloroethene	U		0.000269	0.00115	1	07/07/2019 20:51	WG1307514
trans-1,2-Dichloroethene	U		0.000302	0.00115	1	07/07/2019 20:51	WG1307514
1,2-Dichloropropane	U		0.000410	0.00115	1	07/07/2019 20:51	WG1307514
1,1-Dichloropropene	U		0.000363	0.00115	1	07/07/2019 20:51	WG1307514
1,3-Dichloropropane	U		0.000237	0.00115	1	07/07/2019 20:51	WG1307514
cis-1,3-Dichloropropene	U		0.000300	0.00115	1	07/07/2019 20:51	WG1307514
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	07/07/2019 20:51	WG1307514
2,2-Dichloropropane	U		0.000320	0.00115	1	07/07/2019 20:51	WG1307514
Ethylbenzene	U		0.000340	0.00115	1	07/07/2019 20:51	WG1307514
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	07/07/2019 20:51	WG1307514
Isopropylbenzene	U		0.000278	0.00115	1	07/07/2019 20:51	WG1307514
p-Isopropyltoluene	U		0.000234	0.00115	1	07/07/2019 20:51	WG1307514
2-Butanone (MEK)	U		0.00536	0.0115	1	07/07/2019 20:51	WG1307514
Methylene Chloride	U		0.00115	0.00573	1	07/07/2019 20:51	WG1307514
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0115	1	07/07/2019 20:51	WG1307514
Naphthalene	U		0.00115	0.00573	1	07/07/2019 20:51	WG1307514
n-Propylbenzene	U		0.000236	0.00115	1	07/07/2019 20:51	WG1307514
Styrene	U		0.000268	0.00115	1	07/07/2019 20:51	WG1307514
1,1,1,2-Tetrachloroethane	U		0.000302	0.00115	1	07/07/2019 20:51	WG1307514
1,1,2,2-Tetrachloroethane	U		0.000418	0.00115	1	07/07/2019 20:51	WG1307514
1,1,2-Trichlorotrifluoroethane	U		0.000418	0.00115	1	07/07/2019 20:51	WG1307514
Tetrachloroethene	U		0.000316	0.00115	1	07/07/2019 20:51	WG1307514

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Toluene	0.00233	J	0.000497	0.00573	1	07/07/2019 20:51	WG1307514
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	07/07/2019 20:51	WG1307514
1,2,4-Trichlorobenzene	U		0.000444	0.00115	1	07/07/2019 20:51	WG1307514
1,1,1-Trichloroethane	U		0.000328	0.00115	1	07/07/2019 20:51	WG1307514
1,1,2-Trichloroethane	U		0.000317	0.00115	1	07/07/2019 20:51	WG1307514
Trichloroethene	U		0.000320	0.00115	1	07/07/2019 20:51	WG1307514
Trichlorofluoromethane	U		0.000438	0.00573	1	07/07/2019 20:51	WG1307514
1,2,3-Trichloropropane	U		0.000849	0.00286	1	07/07/2019 20:51	WG1307514
1,2,4-Trimethylbenzene	0.000987	J	0.000242	0.00115	1	07/07/2019 20:51	WG1307514
1,2,3-Trimethylbenzene	0.000390	J	0.000329	0.00115	1	07/07/2019 20:51	WG1307514
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	07/07/2019 20:51	WG1307514
Vinyl chloride	U		0.000333	0.00115	1	07/07/2019 20:51	WG1307514
Xylenes, Total	0.00157	J	0.000800	0.00344	1	07/07/2019 20:51	WG1307514
Di-isopropyl ether	U		0.000284	0.00115	1	07/07/2019 20:51	WG1307514
Ethanol	U		0.0561	0.115	1	07/07/2019 20:51	WG1307514
Ethyl tert-butyl ether	U		0.000458	0.00115	1	07/07/2019 20:51	WG1307514
Methyl tert-butyl ether	U		0.000243	0.00115	1	07/07/2019 20:51	WG1307514
t-Amyl Alcohol	U	J4	0.00481	0.0573	1	07/07/2019 20:51	WG1307514
tert-Butyl alcohol	U		0.00229	0.00573	1	07/07/2019 20:51	WG1307514
tert-Amyl Methyl Ether	U	J4	0.000309	0.00115	1	07/07/2019 20:51	WG1307514
(S) Toluene-d8	*113*			*75.0-131*		*07/07/2019 20:51*	WG1307514
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/07/2019 20:51*	WG1307514
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/07/2019 20:51*	WG1307514

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.26	J	0.840	4.58	1	07/09/2019 20:29	WG1307390
C22-C32 Hydrocarbons	U		1.52	4.58	1	07/09/2019 20:29	WG1307390
C32-C40 Hydrocarbons	1.59	J	1.52	4.58	1	07/09/2019 20:29	WG1307390
(S) o-Terphenyl	*99.4*			*18.0-148*		*07/09/2019 20:29*	WG1307390

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.1		1	07/05/2019 16:41	WG1307008

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.166		0.00341	0.0243	1	06/30/2019 20:08	WG1303808

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Antimony	1.24	J	0.913	2.43	1	07/02/2019 20:14	WG1304121
Arsenic	8.31		0.560	2.43	1	07/02/2019 20:14	WG1304121
Barium	226		0.207	0.609	1	07/02/2019 20:14	WG1304121
Beryllium	0.450		0.0852	0.243	1	07/02/2019 20:14	WG1304121
Cadmium	0.601	J	0.0852	0.609	1	07/02/2019 20:14	WG1304121
Chromium	63.1		0.170	1.22	1	07/02/2019 20:14	WG1304121
Cobalt	15.3		0.280	1.22	1	07/02/2019 20:14	WG1304121
Copper	34.8		0.645	2.43	1	07/02/2019 20:14	WG1304121
Lead	62.1		0.231	0.609	1	07/02/2019 20:14	WG1304121
Molybdenum	0.600	J	0.195	0.609	1	07/02/2019 20:14	WG1304121
Nickel	95.7		0.597	2.43	1	07/02/2019 20:14	WG1304121
Selenium	U		0.755	2.43	1	07/02/2019 20:14	WG1304121
Silver	U		0.146	1.22	1	07/02/2019 20:14	WG1304121
Thallium	U		0.791	2.43	1	07/02/2019 20:14	WG1304121
Vanadium	56.6		0.292	2.43	1	07/02/2019 20:14	WG1304121
Zinc	155		0.718	6.09	1	07/02/2019 20:14	WG1304121

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	3.07	J	1.79	9.74	2	07/09/2019 23:03	WG1307390
C22-C32 Hydrocarbons	18.9		3.24	9.74	2	07/09/2019 23:03	WG1307390
C32-C40 Hydrocarbons	25.9		3.24	9.74	2	07/09/2019 23:03	WG1307390
(S) o-Terphenyl	*75.4*			*18.0-148*		*07/09/2019 23:03*	WG1307390

Sample Narrative:

L1114138-03 WG1307390: Dilution due to matrix impact during extract concentration procedure

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.000284	0.0243	1	07/09/2019 15:45	WG1307387
Alpha BHC	U		0.000235	0.0243	1	07/09/2019 15:45	WG1307387
Beta BHC	U		0.000369	0.0243	1	07/09/2019 15:45	WG1307387
Delta BHC	U		0.000184	0.0243	1	07/09/2019 15:45	WG1307387
Gamma BHC	U		0.000298	0.0243	1	07/09/2019 15:45	WG1307387
4,4-DDD	0.000589	J	0.000200	0.0243	1	07/09/2019 15:45	WG1307387
4,4-DDE	0.0351		0.000201	0.0243	1	07/09/2019 15:45	WG1307387
4,4-DDT	0.0388		0.000324	0.0243	1	07/09/2019 15:45	WG1307387
Dieldrin	0.00131	J	0.000108	0.00243	1	07/09/2019 15:45	WG1307387
Endosulfan I	U		0.000261	0.0243	1	07/09/2019 15:45	WG1307387
Endosulfan II	0.000370	J P	0.000280	0.0243	1	07/09/2019 15:45	WG1307387
Endosulfan sulfate	U		0.000207	0.0243	1	07/09/2019 15:45	WG1307387
Endrin	U		0.000267	0.0243	1	07/09/2019 15:45	WG1307387

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Endrin aldehyde	U		0.000295	0.0243	1	07/09/2019 15:45	WG1307387
Endrin ketone	U		0.000194	0.0243	1	07/09/2019 15:45	WG1307387
Heptachlor	U		0.000123	0.0243	1	07/09/2019 15:45	WG1307387
Heptachlor epoxide	U		0.000460	0.0243	1	07/09/2019 15:45	WG1307387
Hexachlorobenzene	U		0.000273	0.0243	1	07/09/2019 15:45	WG1307387
Methoxychlor	U		0.000323	0.0243	1	07/09/2019 15:45	WG1307387
Chlordane	U		0.0475	0.243	1	07/09/2019 15:45	WG1307387
Toxaphene	U		0.0438	0.487	1	07/09/2019 15:45	WG1307387
(S) Decachlorobiphenyl	*66.4*			*10.0-135*		*07/09/2019 15:45*	WG1307387
(S) Tetrachloro-m-xylene	*63.1*			*10.0-139*		*07/09/2019 15:45*	WG1307387

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.5		1	07/05/2019 16:41	WG1307008

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0237	J	0.0118	0.0591	1	07/07/2019 21:10	WG1307514
Acrylonitrile	U		0.00212	0.0118	1	07/07/2019 21:10	WG1307514
Benzene	U		0.000319	0.00118	1	07/07/2019 21:10	WG1307514
Bromobenzene	U		0.000336	0.00118	1	07/07/2019 21:10	WG1307514
Bromodichloromethane	U		0.000300	0.00118	1	07/07/2019 21:10	WG1307514
Bromoform	U		0.000502	0.00118	1	07/07/2019 21:10	WG1307514
Bromomethane	U		0.00159	0.00591	1	07/07/2019 21:10	WG1307514
n-Butylbenzene	U		0.000305	0.00118	1	07/07/2019 21:10	WG1307514
sec-Butylbenzene	U		0.000238	0.00118	1	07/07/2019 21:10	WG1307514
tert-Butylbenzene	U		0.000244	0.00118	1	07/07/2019 21:10	WG1307514
Carbon tetrachloride	U		0.000388	0.00118	1	07/07/2019 21:10	WG1307514
Chlorobenzene	U		0.000251	0.00118	1	07/07/2019 21:10	WG1307514
Chlorodibromomethane	U		0.000441	0.00118	1	07/07/2019 21:10	WG1307514
Chloroethane	U		0.00112	0.00591	1	07/07/2019 21:10	WG1307514
Chloroform	U		0.000271	0.00591	1	07/07/2019 21:10	WG1307514
Chloromethane	0.000791	J	0.000444	0.00296	1	07/07/2019 21:10	WG1307514
2-Chlorotoluene	U		0.000356	0.00118	1	07/07/2019 21:10	WG1307514
4-Chlorotoluene	U		0.000284	0.00118	1	07/07/2019 21:10	WG1307514
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00591	1	07/07/2019 21:10	WG1307514
1,2-Dibromoethane	U		0.000406	0.00118	1	07/07/2019 21:10	WG1307514
Dibromomethane	U		0.000452	0.00118	1	07/07/2019 21:10	WG1307514
1,2-Dichlorobenzene	U		0.000361	0.00118	1	07/07/2019 21:10	WG1307514
1,3-Dichlorobenzene	U		0.000283	0.00118	1	07/07/2019 21:10	WG1307514
1,4-Dichlorobenzene	U		0.000267	0.00118	1	07/07/2019 21:10	WG1307514
Dichlorodifluoromethane	U		0.000843	0.00591	1	07/07/2019 21:10	WG1307514
1,1-Dichloroethane	U		0.000235	0.00118	1	07/07/2019 21:10	WG1307514
1,2-Dichloroethane	0.000795	J	0.000313	0.00118	1	07/07/2019 21:10	WG1307514
1,1-Dichloroethene	U		0.000358	0.00118	1	07/07/2019 21:10	WG1307514
cis-1,2-Dichloroethene	U		0.000278	0.00118	1	07/07/2019 21:10	WG1307514
trans-1,2-Dichloroethene	U		0.000312	0.00118	1	07/07/2019 21:10	WG1307514
1,2-Dichloropropane	U		0.000424	0.00118	1	07/07/2019 21:10	WG1307514
1,1-Dichloropropene	U		0.000375	0.00118	1	07/07/2019 21:10	WG1307514
1,3-Dichloropropane	U		0.000245	0.00118	1	07/07/2019 21:10	WG1307514
cis-1,3-Dichloropropene	U		0.000310	0.00118	1	07/07/2019 21:10	WG1307514
trans-1,3-Dichloropropene	U		0.000316	0.00118	1	07/07/2019 21:10	WG1307514
2,2-Dichloropropane	U		0.000330	0.00118	1	07/07/2019 21:10	WG1307514
Ethylbenzene	U		0.000351	0.00118	1	07/07/2019 21:10	WG1307514
Hexachloro-1,3-butadiene	U		0.000405	0.00118	1	07/07/2019 21:10	WG1307514
Isopropylbenzene	U		0.000287	0.00118	1	07/07/2019 21:10	WG1307514
p-Isopropyltoluene	U		0.000241	0.00118	1	07/07/2019 21:10	WG1307514
2-Butanone (MEK)	U		0.00554	0.0118	1	07/07/2019 21:10	WG1307514
Methylene Chloride	U		0.00118	0.00591	1	07/07/2019 21:10	WG1307514
4-Methyl-2-pentanone (MIBK)	U		0.00222	0.0118	1	07/07/2019 21:10	WG1307514
Naphthalene	U		0.00118	0.00591	1	07/07/2019 21:10	WG1307514
n-Propylbenzene	U		0.000244	0.00118	1	07/07/2019 21:10	WG1307514
Styrene	U		0.000277	0.00118	1	07/07/2019 21:10	WG1307514
1,1,1,2-Tetrachloroethane	U		0.000312	0.00118	1	07/07/2019 21:10	WG1307514
1,1,2,2-Tetrachloroethane	U		0.000432	0.00118	1	07/07/2019 21:10	WG1307514
1,1,2-Trichlorotrifluoroethane	U		0.000432	0.00118	1	07/07/2019 21:10	WG1307514
Tetrachloroethene	U		0.000327	0.00118	1	07/07/2019 21:10	WG1307514

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Toluene	U		0.000513	0.00591	1	07/07/2019 21:10	WG1307514
1,2,3-Trichlorobenzene	U		0.000362	0.00118	1	07/07/2019 21:10	WG1307514
1,2,4-Trichlorobenzene	U		0.000459	0.00118	1	07/07/2019 21:10	WG1307514
1,1,1-Trichloroethane	0.000356	J	0.000338	0.00118	1	07/07/2019 21:10	WG1307514
1,1,2-Trichloroethane	U		0.000328	0.00118	1	07/07/2019 21:10	WG1307514
Trichloroethene	U		0.000330	0.00118	1	07/07/2019 21:10	WG1307514
Trichlorofluoromethane	U		0.000452	0.00591	1	07/07/2019 21:10	WG1307514
1,2,3-Trichloropropane	U		0.000877	0.00296	1	07/07/2019 21:10	WG1307514
1,2,4-Trimethylbenzene	U		0.000250	0.00118	1	07/07/2019 21:10	WG1307514
1,2,3-Trimethylbenzene	U		0.000340	0.00118	1	07/07/2019 21:10	WG1307514
1,3,5-Trimethylbenzene	U		0.000315	0.00118	1	07/07/2019 21:10	WG1307514
Vinyl chloride	U		0.000344	0.00118	1	07/07/2019 21:10	WG1307514
Xylenes, Total	U		0.000826	0.00355	1	07/07/2019 21:10	WG1307514
Di-isopropyl ether	U		0.000293	0.00118	1	07/07/2019 21:10	WG1307514
Ethanol	0.101	B J	0.0580	0.118	1	07/08/2019 18:22	WG1307694
Ethyl tert-butyl ether	U		0.000473	0.00118	1	07/07/2019 21:10	WG1307514
Methyl tert-butyl ether	U		0.000251	0.00118	1	07/07/2019 21:10	WG1307514
t-Amyl Alcohol	U	J4	0.00497	0.0591	1	07/07/2019 21:10	WG1307514
tert-Butyl alcohol	0.00437	J	0.00237	0.00591	1	07/07/2019 21:10	WG1307514
tert-Amyl Methyl Ether	U	J4	0.000319	0.00118	1	07/07/2019 21:10	WG1307514
(S) Toluene-d8	*111*			*75.0-131*		*07/07/2019 21:10*	WG1307514
(S) Toluene-d8	*114*			*75.0-131*		*07/08/2019 18:22*	WG1307694
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/07/2019 21:10*	WG1307514
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/08/2019 18:22*	WG1307694
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/07/2019 21:10*	WG1307514
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*07/08/2019 18:22*	WG1307694

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.41	J	0.867	4.73	1	07/09/2019 20:43	WG1307390
C22-C32 Hydrocarbons	U		1.57	4.73	1	07/09/2019 20:43	WG1307390
C32-C40 Hydrocarbons	U		1.57	4.73	1	07/09/2019 20:43	WG1307390
(S) o-Terphenyl	*100*			*18.0-148*		*07/09/2019 20:43*	WG1307390

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.4		1	07/05/2019 17:55	WG1307010

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0370		0.00328	0.0234	1	06/30/2019 20:11	WG1303808

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.878	2.34	1	07/02/2019 20:17	WG1304121
Arsenic	4.77		0.538	2.34	1	07/02/2019 20:17	WG1304121
Barium	219		0.199	0.585	1	07/02/2019 20:17	WG1304121
Beryllium	0.495		0.0819	0.234	1	07/02/2019 20:17	WG1304121
Cadmium	0.240	J	0.0819	0.585	1	07/02/2019 20:17	WG1304121
Chromium	51.8		0.164	1.17	1	07/02/2019 20:17	WG1304121
Cobalt	12.7		0.269	1.17	1	07/02/2019 20:17	WG1304121
Copper	25.6		0.620	2.34	1	07/02/2019 20:17	WG1304121
Lead	6.50		0.222	0.585	1	07/02/2019 20:17	WG1304121
Molybdenum	0.314	J	0.187	0.585	1	07/02/2019 20:17	WG1304121
Nickel	71.6		0.573	2.34	1	07/02/2019 20:17	WG1304121
Selenium	U		0.726	2.34	1	07/02/2019 20:17	WG1304121
Silver	U		0.140	1.17	1	07/02/2019 20:17	WG1304121
Thallium	U		0.761	2.34	1	07/02/2019 20:17	WG1304121
Vanadium	52.1		0.281	2.34	1	07/02/2019 20:17	WG1304121
Zinc	95.5		0.690	5.85	1	07/02/2019 20:17	WG1304121

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.02	J	0.858	4.68	1	07/09/2019 20:57	WG1307390
C22-C32 Hydrocarbons	U		1.56	4.68	1	07/09/2019 20:57	WG1307390
C32-C40 Hydrocarbons	2.52	J	1.56	4.68	1	07/09/2019 20:57	WG1307390
(S) o-Terphenyl	*101*			*18.0-148*		*07/09/2019 20:57*	WG1307390

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.000273	0.0234	1	07/09/2019 15:58	WG1307387
Alpha BHC	U		0.000226	0.0234	1	07/09/2019 15:58	WG1307387
Beta BHC	U		0.000355	0.0234	1	07/09/2019 15:58	WG1307387
Delta BHC	U		0.000177	0.0234	1	07/09/2019 15:58	WG1307387
Gamma BHC	U		0.000287	0.0234	1	07/09/2019 15:58	WG1307387
4,4-DDD	U		0.000192	0.0234	1	07/09/2019 15:58	WG1307387
4,4-DDE	0.000812	J	0.000193	0.0234	1	07/09/2019 15:58	WG1307387
4,4-DDT	U		0.000311	0.0234	1	07/09/2019 15:58	WG1307387
Dieldrin	U		0.000104	0.00234	1	07/09/2019 15:58	WG1307387
Endosulfan I	U		0.000250	0.0234	1	07/09/2019 15:58	WG1307387
Endosulfan II	U		0.000269	0.0234	1	07/09/2019 15:58	WG1307387
Endosulfan sulfate	U		0.000199	0.0234	1	07/09/2019 15:58	WG1307387
Endrin	U		0.000256	0.0234	1	07/09/2019 15:58	WG1307387
Endrin aldehyde	U		0.000283	0.0234	1	07/09/2019 15:58	WG1307387
Endrin ketone	U		0.000186	0.0234	1	07/09/2019 15:58	WG1307387
Heptachlor	U		0.000118	0.0234	1	07/09/2019 15:58	WG1307387

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Heptachlor epoxide	U		0.000442	0.0234	1	07/09/2019 15:58	WG1307387
Hexachlorobenzene	U		0.000262	0.0234	1	07/09/2019 15:58	WG1307387
Methoxychlor	U		0.000310	0.0234	1	07/09/2019 15:58	WG1307387
Chlordane	U		0.0456	0.234	1	07/09/2019 15:58	WG1307387
Toxaphene	U		0.0421	0.468	1	07/09/2019 15:58	WG1307387
(S) Decachlorobiphenyl	*99.2*			*10.0-135*		*07/09/2019 15:58*	WG1307387
(S) Tetrachloro-m-xylene	*94.0*			*10.0-139*		*07/09/2019 15:58*	WG1307387

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.6		1	07/05/2019 17:55	WG1307010

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0167	J	0.0115	0.0577	1	07/07/2019 21:30	WG1307514
Acrylonitrile	U		0.00207	0.0115	1	07/07/2019 21:30	WG1307514
Benzene	U		0.000312	0.00115	1	07/07/2019 21:30	WG1307514
Bromobenzene	U		0.000328	0.00115	1	07/07/2019 21:30	WG1307514
Bromodichloromethane	U		0.000293	0.00115	1	07/07/2019 21:30	WG1307514
Bromoform	U		0.000489	0.00115	1	07/07/2019 21:30	WG1307514
Bromomethane	U		0.00155	0.00577	1	07/07/2019 21:30	WG1307514
n-Butylbenzene	U		0.000298	0.00115	1	07/07/2019 21:30	WG1307514
sec-Butylbenzene	U		0.000232	0.00115	1	07/07/2019 21:30	WG1307514
tert-Butylbenzene	U		0.000238	0.00115	1	07/07/2019 21:30	WG1307514
Carbon tetrachloride	U		0.000379	0.00115	1	07/07/2019 21:30	WG1307514
Chlorobenzene	U		0.000245	0.00115	1	07/07/2019 21:30	WG1307514
Chlorodibromomethane	U		0.000431	0.00115	1	07/07/2019 21:30	WG1307514
Chloroethane	U		0.00109	0.00577	1	07/07/2019 21:30	WG1307514
Chloroform	U		0.000264	0.00577	1	07/07/2019 21:30	WG1307514
Chloromethane	0.000447	J	0.000433	0.00289	1	07/07/2019 21:30	WG1307514
2-Chlorotoluene	U		0.000347	0.00115	1	07/07/2019 21:30	WG1307514
4-Chlorotoluene	U		0.000277	0.00115	1	07/07/2019 21:30	WG1307514
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00577	1	07/07/2019 21:30	WG1307514
1,2-Dibromoethane	U		0.000396	0.00115	1	07/07/2019 21:30	WG1307514
Dibromomethane	U		0.000441	0.00115	1	07/07/2019 21:30	WG1307514
1,2-Dichlorobenzene	U		0.000352	0.00115	1	07/07/2019 21:30	WG1307514
1,3-Dichlorobenzene	U		0.000276	0.00115	1	07/07/2019 21:30	WG1307514
1,4-Dichlorobenzene	U		0.000261	0.00115	1	07/07/2019 21:30	WG1307514
Dichlorodifluoromethane	U		0.000823	0.00577	1	07/07/2019 21:30	WG1307514
1,1-Dichloroethane	U		0.000230	0.00115	1	07/07/2019 21:30	WG1307514
1,2-Dichloroethane	0.000397	J	0.000306	0.00115	1	07/07/2019 21:30	WG1307514
1,1-Dichloroethene	U		0.000350	0.00115	1	07/07/2019 21:30	WG1307514
cis-1,2-Dichloroethene	U		0.000271	0.00115	1	07/07/2019 21:30	WG1307514
trans-1,2-Dichloroethene	U		0.000305	0.00115	1	07/07/2019 21:30	WG1307514
1,2-Dichloropropane	U		0.000413	0.00115	1	07/07/2019 21:30	WG1307514
1,1-Dichloropropene	U		0.000366	0.00115	1	07/07/2019 21:30	WG1307514
1,3-Dichloropropane	U		0.000239	0.00115	1	07/07/2019 21:30	WG1307514
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	07/07/2019 21:30	WG1307514
trans-1,3-Dichloropropene	U		0.000308	0.00115	1	07/07/2019 21:30	WG1307514
2,2-Dichloropropane	U		0.000322	0.00115	1	07/07/2019 21:30	WG1307514
Ethylbenzene	U		0.000343	0.00115	1	07/07/2019 21:30	WG1307514
Hexachloro-1,3-butadiene	U		0.000395	0.00115	1	07/07/2019 21:30	WG1307514
Isopropylbenzene	U		0.000281	0.00115	1	07/07/2019 21:30	WG1307514
p-Isopropyltoluene	U		0.000236	0.00115	1	07/07/2019 21:30	WG1307514
2-Butanone (MEK)	U		0.00540	0.0115	1	07/07/2019 21:30	WG1307514
Methylene Chloride	U		0.00115	0.00577	1	07/07/2019 21:30	WG1307514
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0115	1	07/07/2019 21:30	WG1307514
Naphthalene	U		0.00115	0.00577	1	07/07/2019 21:30	WG1307514
n-Propylbenzene	U		0.000238	0.00115	1	07/07/2019 21:30	WG1307514
Styrene	U		0.000270	0.00115	1	07/07/2019 21:30	WG1307514
1,1,1,2-Tetrachloroethane	U		0.000305	0.00115	1	07/07/2019 21:30	WG1307514
1,1,2,2-Tetrachloroethane	U		0.000421	0.00115	1	07/07/2019 21:30	WG1307514
1,1,2-Trichlorotrifluoroethane	U		0.000421	0.00115	1	07/07/2019 21:30	WG1307514
Tetrachloroethene	U		0.000319	0.00115	1	07/07/2019 21:30	WG1307514

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Toluene	U		0.000501	0.00577	1	07/07/2019 21:30	WG1307514
1,2,3-Trichlorobenzene	U		0.000353	0.00115	1	07/07/2019 21:30	WG1307514
1,2,4-Trichlorobenzene	U		0.000448	0.00115	1	07/07/2019 21:30	WG1307514
1,1,1-Trichloroethane	U		0.000330	0.00115	1	07/07/2019 21:30	WG1307514
1,1,2-Trichloroethane	U		0.000320	0.00115	1	07/07/2019 21:30	WG1307514
Trichloroethene	U		0.000322	0.00115	1	07/07/2019 21:30	WG1307514
Trichlorofluoromethane	U		0.000441	0.00577	1	07/07/2019 21:30	WG1307514
1,2,3-Trichloropropane	U		0.000855	0.00289	1	07/07/2019 21:30	WG1307514
1,2,4-Trimethylbenzene	U		0.000244	0.00115	1	07/07/2019 21:30	WG1307514
1,2,3-Trimethylbenzene	U		0.000331	0.00115	1	07/07/2019 21:30	WG1307514
1,3,5-Trimethylbenzene	U		0.000307	0.00115	1	07/07/2019 21:30	WG1307514
Vinyl chloride	U		0.000336	0.00115	1	07/07/2019 21:30	WG1307514
Xylenes, Total	U		0.000806	0.00346	1	07/07/2019 21:30	WG1307514
Di-isopropyl ether	U		0.000286	0.00115	1	07/07/2019 21:30	WG1307514
Ethanol	0.104	B J	0.0566	0.115	1	07/08/2019 18:42	WG1307694
Ethyl tert-butyl ether	U		0.000462	0.00115	1	07/07/2019 21:30	WG1307514
Methyl tert-butyl ether	U		0.000245	0.00115	1	07/07/2019 21:30	WG1307514
t-Amyl Alcohol	U	J4	0.00485	0.0577	1	07/07/2019 21:30	WG1307514
tert-Butyl alcohol	U		0.00231	0.00577	1	07/07/2019 21:30	WG1307514
tert-Amyl Methyl Ether	U	J4	0.000312	0.00115	1	07/07/2019 21:30	WG1307514
(S) Toluene-d8	*111*			*75.0-131*		*07/07/2019 21:30*	WG1307514
(S) Toluene-d8	*111*			*75.0-131*		*07/08/2019 18:42*	WG1307694
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*07/07/2019 21:30*	WG1307514
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*07/08/2019 18:42*	WG1307694
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*07/07/2019 21:30*	WG1307514
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/08/2019 18:42*	WG1307694

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.09	J	0.846	4.62	1	07/09/2019 21:11	WG1307390
C22-C32 Hydrocarbons	U		1.54	4.62	1	07/09/2019 21:11	WG1307390
C32-C40 Hydrocarbons	U		1.54	4.62	1	07/09/2019 21:11	WG1307390
(S) o-Terphenyl	*96.4*			*18.0-148*		*07/09/2019 21:11*	WG1307390

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.4		1	07/05/2019 17:55	WG1307010

Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0563		0.00328	0.0234	1	06/30/2019 20:13	WG1303808

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Antimony	U		0.878	2.34	1	07/02/2019 20:20	WG1304121
Arsenic	4.27		0.539	2.34	1	07/02/2019 20:20	WG1304121
Barium	222		0.199	0.585	1	07/02/2019 20:20	WG1304121
Beryllium	0.428		0.0820	0.234	1	07/02/2019 20:20	WG1304121
Cadmium	0.229	J	0.0820	0.585	1	07/02/2019 20:20	WG1304121
Chromium	43.6		0.164	1.17	1	07/02/2019 20:20	WG1304121
Cobalt	11.1		0.269	1.17	1	07/02/2019 20:20	WG1304121
Copper	24.4		0.621	2.34	1	07/02/2019 20:20	WG1304121
Lead	9.14		0.222	0.585	1	07/02/2019 20:20	WG1304121
Molybdenum	U		0.187	0.585	1	07/02/2019 20:20	WG1304121
Nickel	62.6		0.574	2.34	1	07/02/2019 20:20	WG1304121
Selenium	1.23	J	0.726	2.34	1	07/02/2019 20:20	WG1304121
Silver	U		0.140	1.17	1	07/02/2019 20:20	WG1304121
Thallium	U		0.761	2.34	1	07/02/2019 20:20	WG1304121
Vanadium	46.2		0.281	2.34	1	07/02/2019 20:20	WG1304121
Zinc	65.0		0.691	5.85	1	07/02/2019 20:20	WG1304121

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	2.33	J	1.72	9.37	2	07/09/2019 22:49	WG1307390
C22-C32 Hydrocarbons	16.9		3.11	9.37	2	07/09/2019 22:49	WG1307390
C32-C40 Hydrocarbons	30.9		3.11	9.37	2	07/09/2019 22:49	WG1307390
(S) o-Terphenyl	*110*			*18.0-148*		*07/09/2019 22:49*	WG1307390

Sample Narrative:

L1114138-07 WG1307390: Dilution due to matrix impact during extract concentration procedure

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.000273	0.0234	1	07/09/2019 16:35	WG1307387
Alpha BHC	U		0.000226	0.0234	1	07/09/2019 16:35	WG1307387
Beta BHC	U		0.000355	0.0234	1	07/09/2019 16:35	WG1307387
Delta BHC	U		0.000177	0.0234	1	07/09/2019 16:35	WG1307387
Gamma BHC	U		0.000287	0.0234	1	07/09/2019 16:35	WG1307387
4,4-DDD	U		0.000192	0.0234	1	07/09/2019 16:35	WG1307387
4,4-DDE	0.00204	J	0.000193	0.0234	1	07/09/2019 16:35	WG1307387
4,4-DDT	0.000465	J	0.000311	0.0234	1	07/09/2019 16:35	WG1307387
Dieldrin	0.000109	J	0.000104	0.00234	1	07/09/2019 16:35	WG1307387
Endosulfan I	U		0.000251	0.0234	1	07/09/2019 16:35	WG1307387
Endosulfan II	U		0.000269	0.0234	1	07/09/2019 16:35	WG1307387
Endosulfan sulfate	U		0.000199	0.0234	1	07/09/2019 16:35	WG1307387
Endrin	U		0.000256	0.0234	1	07/09/2019 16:35	WG1307387

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Endrin aldehyde	U		0.000283	0.0234	1	07/09/2019 16:35	WG1307387
Endrin ketone	U		0.000186	0.0234	1	07/09/2019 16:35	WG1307387
Heptachlor	U		0.000118	0.0234	1	07/09/2019 16:35	WG1307387
Heptachlor epoxide	U		0.000443	0.0234	1	07/09/2019 16:35	WG1307387
Hexachlorobenzene	U		0.000262	0.0234	1	07/09/2019 16:35	WG1307387
Methoxychlor	U		0.000310	0.0234	1	07/09/2019 16:35	WG1307387
Chlordane	U		0.0457	0.234	1	07/09/2019 16:35	WG1307387
Toxaphene	U		0.0421	0.468	1	07/09/2019 16:35	WG1307387
(S) Decachlorobiphenyl	*73.6*			*10.0-135*		*07/09/2019 16:35*	WG1307387
(S) Tetrachloro-m-xylene	*69.0*			*10.0-139*		*07/09/2019 16:35*	WG1307387

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	07/05/2019 17:55	WG1307010

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0380	J	0.0117	0.0583	1	07/07/2019 21:50	WG1307514
Acrylonitrile	U		0.00209	0.0117	1	07/07/2019 21:50	WG1307514
Benzene	U		0.000315	0.00117	1	07/07/2019 21:50	WG1307514
Bromobenzene	U		0.000331	0.00117	1	07/07/2019 21:50	WG1307514
Bromodichloromethane	U		0.000296	0.00117	1	07/07/2019 21:50	WG1307514
Bromoform	U		0.000494	0.00117	1	07/07/2019 21:50	WG1307514
Bromomethane	U		0.00156	0.00583	1	07/07/2019 21:50	WG1307514
n-Butylbenzene	U		0.000301	0.00117	1	07/07/2019 21:50	WG1307514
sec-Butylbenzene	U		0.000234	0.00117	1	07/07/2019 21:50	WG1307514
tert-Butylbenzene	U		0.000240	0.00117	1	07/07/2019 21:50	WG1307514
Carbon tetrachloride	U		0.000382	0.00117	1	07/07/2019 21:50	WG1307514
Chlorobenzene	U		0.000247	0.00117	1	07/07/2019 21:50	WG1307514
Chlorodibromomethane	U		0.000435	0.00117	1	07/07/2019 21:50	WG1307514
Chloroethane	U		0.00110	0.00583	1	07/07/2019 21:50	WG1307514
Chloroform	U		0.000267	0.00583	1	07/07/2019 21:50	WG1307514
Chloromethane	U		0.000437	0.00291	1	07/07/2019 21:50	WG1307514
2-Chlorotoluene	U		0.000351	0.00117	1	07/07/2019 21:50	WG1307514
4-Chlorotoluene	U		0.000280	0.00117	1	07/07/2019 21:50	WG1307514
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00583	1	07/07/2019 21:50	WG1307514
1,2-Dibromoethane	U		0.000400	0.00117	1	07/07/2019 21:50	WG1307514
Dibromomethane	U		0.000445	0.00117	1	07/07/2019 21:50	WG1307514
1,2-Dichlorobenzene	U		0.000355	0.00117	1	07/07/2019 21:50	WG1307514
1,3-Dichlorobenzene	U		0.000279	0.00117	1	07/07/2019 21:50	WG1307514
1,4-Dichlorobenzene	U		0.000263	0.00117	1	07/07/2019 21:50	WG1307514
Dichlorodifluoromethane	U		0.000831	0.00583	1	07/07/2019 21:50	WG1307514
1,1-Dichloroethane	U		0.000232	0.00117	1	07/07/2019 21:50	WG1307514
1,2-Dichloroethane	U		0.000309	0.00117	1	07/07/2019 21:50	WG1307514
1,1-Dichloroethene	U		0.000353	0.00117	1	07/07/2019 21:50	WG1307514
cis-1,2-Dichloroethene	U		0.000274	0.00117	1	07/07/2019 21:50	WG1307514
trans-1,2-Dichloroethene	U		0.000308	0.00117	1	07/07/2019 21:50	WG1307514
1,2-Dichloropropane	U		0.000417	0.00117	1	07/07/2019 21:50	WG1307514
1,1-Dichloropropene	U		0.000369	0.00117	1	07/07/2019 21:50	WG1307514
1,3-Dichloropropane	U		0.000241	0.00117	1	07/07/2019 21:50	WG1307514
cis-1,3-Dichloropropene	U		0.000305	0.00117	1	07/07/2019 21:50	WG1307514
trans-1,3-Dichloropropene	U		0.000311	0.00117	1	07/07/2019 21:50	WG1307514
2,2-Dichloropropane	U		0.000325	0.00117	1	07/07/2019 21:50	WG1307514
Ethylbenzene	U		0.000346	0.00117	1	07/07/2019 21:50	WG1307514
Hexachloro-1,3-butadiene	U		0.000399	0.00117	1	07/07/2019 21:50	WG1307514
Isopropylbenzene	U		0.000283	0.00117	1	07/07/2019 21:50	WG1307514
p-Isopropyltoluene	U		0.000238	0.00117	1	07/07/2019 21:50	WG1307514
2-Butanone (MEK)	U		0.00545	0.0117	1	07/07/2019 21:50	WG1307514
Methylene Chloride	U		0.00117	0.00583	1	07/07/2019 21:50	WG1307514
4-Methyl-2-pentanone (MIBK)	U		0.00219	0.0117	1	07/07/2019 21:50	WG1307514
Naphthalene	U		0.00117	0.00583	1	07/07/2019 21:50	WG1307514
n-Propylbenzene	U		0.000240	0.00117	1	07/07/2019 21:50	WG1307514
Styrene	U		0.000273	0.00117	1	07/07/2019 21:50	WG1307514
1,1,1,2-Tetrachloroethane	U		0.000308	0.00117	1	07/07/2019 21:50	WG1307514
1,1,2,2-Tetrachloroethane	U		0.000425	0.00117	1	07/07/2019 21:50	WG1307514
1,1,2-Trichlorotrifluoroethane	U		0.000425	0.00117	1	07/07/2019 21:50	WG1307514
Tetrachloroethene	U		0.000322	0.00117	1	07/07/2019 21:50	WG1307514

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Toluene	U		0.000506	0.00583	1	07/07/2019 21:50	WG1307514
1,2,3-Trichlorobenzene	U		0.000357	0.00117	1	07/07/2019 21:50	WG1307514
1,2,4-Trichlorobenzene	U		0.000452	0.00117	1	07/07/2019 21:50	WG1307514
1,1,1-Trichloroethane	U		0.000333	0.00117	1	07/07/2019 21:50	WG1307514
1,1,2-Trichloroethane	U		0.000323	0.00117	1	07/07/2019 21:50	WG1307514
Trichloroethene	U		0.000325	0.00117	1	07/07/2019 21:50	WG1307514
Trichlorofluoromethane	U		0.000445	0.00583	1	07/07/2019 21:50	WG1307514
1,2,3-Trichloropropane	U		0.000864	0.00291	1	07/07/2019 21:50	WG1307514
1,2,4-Trimethylbenzene	U		0.000246	0.00117	1	07/07/2019 21:50	WG1307514
1,2,3-Trimethylbenzene	U		0.000334	0.00117	1	07/07/2019 21:50	WG1307514
1,3,5-Trimethylbenzene	U		0.000310	0.00117	1	07/07/2019 21:50	WG1307514
Vinyl chloride	U		0.000339	0.00117	1	07/07/2019 21:50	WG1307514
Xylenes, Total	U		0.000813	0.00350	1	07/07/2019 21:50	WG1307514
Di-isopropyl ether	U		0.000289	0.00117	1	07/07/2019 21:50	WG1307514
Ethanol	U		1.42	2.91	25	07/09/2019 14:49	WG1308159
Ethyl tert-butyl ether	U		0.000466	0.00117	1	07/07/2019 21:50	WG1307514
Methyl tert-butyl ether	U		0.000247	0.00117	1	07/07/2019 21:50	WG1307514
t-Amyl Alcohol	U	J4	0.00489	0.0583	1	07/07/2019 21:50	WG1307514
tert-Butyl alcohol	0.00429	J	0.00233	0.00583	1	07/07/2019 21:50	WG1307514
tert-Amyl Methyl Ether	U	J4	0.000315	0.00117	1	07/07/2019 21:50	WG1307514
(S) Toluene-d8	*109*			*75.0-131*		*07/07/2019 21:50*	WG1307514
(S) Toluene-d8	*106*			*75.0-131*		*07/09/2019 14:49*	WG1308159
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/07/2019 21:50*	WG1307514
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*		*07/09/2019 14:49*	WG1308159
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*07/07/2019 21:50*	WG1307514
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*07/09/2019 14:49*	WG1308159

Sample Narrative:

L1114138-08 WG1308159: Ethanol not reportable at lower dilution.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.13	J	0.854	4.66	1	07/09/2019 21:25	WG1307390
C22-C32 Hydrocarbons	U		1.55	4.66	1	07/09/2019 21:25	WG1307390
C32-C40 Hydrocarbons	U		1.55	4.66	1	07/09/2019 21:25	WG1307390
(S) o-Terphenyl	*102*			*18.0-148*		*07/09/2019 21:25*	WG1307390

Method Blank (MB)

(MB) R3428036-1 07/05/19 16:41

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1114138-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1114138-01 07/05/19 16:41 • (DUP) R3428036-3 07/05/19 16:41

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.0	81.5	1	1.87		10

Laboratory Control Sample (LCS)

(LCS) R3428036-2 07/05/19 16:41

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3428071-1 07/05/19 17:55

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1114140-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1114140-02 07/05/19 17:55 • (DUP) R3428071-3 07/05/19 17:55

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.1	95.6	1	0.502		10

Laboratory Control Sample (LCS)

(LCS) R3428071-2 07/05/19 17:55

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3426220-1 06/30/19 19:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.00280	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3426220-2 06/30/19 19:10 • (LCSD) R3426220-3 06/30/19 19:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.500	0.441	0.440	88.3	88.0	80.0-120			0.255	20

L1113901-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1113901-05 06/30/19 19:15 • (MS) R3426220-4 06/30/19 19:17 • (MSD) R3426220-5 06/30/19 19:20

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.500	0.00635	0.437	0.413	86.2	81.2	1	75.0-125			5.80	20

Method Blank (MB)

(MB) R3427059-1 07/02/19 18:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.750	2.00
Arsenic	U		0.460	2.00
Barium	U		0.170	0.500
Beryllium	U		0.0700	0.200
Cadmium	U		0.0700	0.500
Chromium	U		0.140	1.00
Cobalt	U		0.230	1.00
Copper	U		0.530	2.00
Lead	U		0.190	0.500
Molybdenum	U		0.160	0.500
Nickel	U		0.490	2.00
Selenium	U		0.620	2.00
Silver	U		0.120	1.00
Thallium	U		0.650	2.00
Vanadium	U		0.240	2.00
Zinc	U		0.590	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3427059-2 07/02/19 18:59 • (LCSD) R3427059-3 07/02/19 19:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	100	104	98.1	104	98.1	80.0-120			5.59	20
Arsenic	100	101	96.0	101	96.0	80.0-120			4.66	20
Barium	100	111	105	111	105	80.0-120			5.38	20
Beryllium	100	108	103	108	103	80.0-120			5.18	20
Cadmium	100	105	99.4	105	99.4	80.0-120			5.57	20
Chromium	100	96.9	92.9	96.9	92.9	80.0-120			4.28	20
Cobalt	100	106	101	106	101	80.0-120			5.66	20
Copper	100	94.8	90.5	94.8	90.5	80.0-120			4.64	20
Lead	100	102	96.8	102	96.8	80.0-120			5.40	20
Molybdenum	100	106	100	106	100	80.0-120			5.05	20
Nickel	100	106	100	106	100	80.0-120			5.40	20
Selenium	100	101	96.4	101	96.4	80.0-120			4.57	20
Silver	20.0	19.7	18.8	98.7	94.1	80.0-120			4.73	20
Thallium	100	104	103	104	103	80.0-120			0.496	20
Vanadium	100	108	104	108	104	80.0-120			4.66	20
Zinc	100	100	94.8	100	94.8	80.0-120			5.32	20

L1113085-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1113085-09 07/02/19 19:04 • (MS) R3427059-6 07/02/19 19:12 • (MSD) R3427059-7 07/02/19 19:15

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	100	ND	54.5	52.8	54.5	52.8	1	75.0-125	J6	J6	3.26	20
Arsenic	100	ND	92.0	90.9	90.6	89.4	1	75.0-125			1.29	20
Barium	100	34.7	135	133	100	98.4	1	75.0-125			1.45	20
Beryllium	100	0.446	101	98.7	100	98.2	1	75.0-125			2.22	20
Cadmium	100	ND	96.4	95.4	96.3	95.3	1	75.0-125			1.07	20
Chromium	100	11.7	103	102	91.0	90.2	1	75.0-125			0.830	20
Cobalt	100	2.45	102	101	99.7	98.5	1	75.0-125			1.25	20
Copper	100	2.32	92.5	91.9	90.1	89.6	1	75.0-125			0.625	20
Lead	100	3.61	98.6	97.4	94.9	93.8	1	75.0-125			1.22	20
Molybdenum	100	ND	92.1	90.8	91.9	90.6	1	75.0-125			1.43	20
Nickel	100	4.07	103	102	99.0	97.9	1	75.0-125			1.02	20
Selenium	100	ND	91.8	90.8	91.8	90.8	1	75.0-125			1.05	20
Silver	20.0	ND	18.4	18.2	91.8	90.9	1	75.0-125			0.972	20
Thallium	100	ND	98.7	95.3	98.7	95.3	1	75.0-125			3.46	20
Vanadium	100	15.8	117	114	101	98.6	1	75.0-125			1.96	20
Zinc	100	20.2	109	107	88.9	87.3	1	75.0-125			1.46	20

Method Blank (MB)

(MB) R3428297-2 07/07/19 14:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethanol	0.102		0.0490	0.100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100

Method Blank (MB)

(MB) R3428297-2 07/07/19 14:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	0.00138	J	0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
tert-Amyl Methyl Ether	U		0.000270	0.00100
Ethyl tert-butyl ether	U		0.000400	0.00100
tert-Butyl alcohol	U		0.00200	0.00500
t-Amyl Alcohol	U		0.00420	0.0500
(S) Toluene-d8	*109*			*75.0-131*
(S) 4-Bromofluorobenzene	*106*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3428297-3 07/07/19 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.125	0.152	122	10.0-160	
Acrylonitrile	0.125	0.158	126	45.0-153	
Benzene	0.0250	0.0218	87.3	70.0-123	
Bromobenzene	0.0250	0.0243	97.2	73.0-121	
Bromodichloromethane	0.0250	0.0253	101	73.0-121	
Bromoform	0.0250	0.0320	128	64.0-132	
Bromomethane	0.0250	0.0210	84.1	56.0-147	
n-Butylbenzene	0.0250	0.0224	89.8	68.0-135	
sec-Butylbenzene	0.0250	0.0214	85.8	74.0-130	
tert-Butylbenzene	0.0250	0.0221	88.5	75.0-127	
Carbon tetrachloride	0.0250	0.0198	79.4	66.0-128	
Chlorobenzene	0.0250	0.0250	100	76.0-128	
Chlorodibromomethane	0.0250	0.0299	119	74.0-127	
Chloroethane	0.0250	0.0219	87.6	61.0-134	
Chloroform	0.0250	0.0240	96.0	72.0-123	
Chloromethane	0.0250	0.0219	87.4	51.0-138	
2-Chlorotoluene	0.0250	0.0227	90.8	75.0-124	
4-Chlorotoluene	0.0250	0.0239	95.7	75.0-124	
1,2-Dibromo-3-Chloropropane	0.0250	0.0296	118	59.0-130	
1,2-Dibromoethane	0.0250	0.0315	126	74.0-128	
Dibromomethane	0.0250	0.0276	110	75.0-122	
1,2-Dichlorobenzene	0.0250	0.0255	102	76.0-124	
1,3-Dichlorobenzene	0.0250	0.0257	103	76.0-125	
1,4-Dichlorobenzene	0.0250	0.0259	103	77.0-121	
Dichlorodifluoromethane	0.0250	0.0346	139	43.0-156	
1,1-Dichloroethane	0.0250	0.0226	90.6	70.0-127	
1,2-Dichloroethane	0.0250	0.0252	101	65.0-131	
1,1-Dichloroethene	0.0250	0.0204	81.7	65.0-131	
cis-1,2-Dichloroethene	0.0250	0.0237	94.9	73.0-125	
trans-1,2-Dichloroethene	0.0250	0.0208	83.3	71.0-125	
1,2-Dichloropropane	0.0250	0.0240	96.1	74.0-125	
1,1-Dichloropropene	0.0250	0.0198	79.3	73.0-125	
1,3-Dichloropropane	0.0250	0.0287	115	80.0-125	
cis-1,3-Dichloropropene	0.0250	0.0247	99.0	76.0-127	
trans-1,3-Dichloropropene	0.0250	0.0294	118	73.0-127	
2,2-Dichloropropane	0.0250	0.0183	73.2	59.0-135	
Di-isopropyl ether	0.0250	0.0240	95.9	60.0-136	
Ethylbenzene	0.0250	0.0224	89.8	74.0-126	
Hexachloro-1,3-butadiene	0.0250	0.0218	87.3	57.0-150	
Isopropylbenzene	0.0250	0.0225	90.2	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3428297-3 07/07/19 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	0.0250	0.0223	89.3	72.0-133	
2-Butanone (MEK)	0.125	0.169	135	30.0-160	
Methylene Chloride	0.0250	0.0239	95.5	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.125	0.161	129	56.0-143	
Methyl tert-butyl ether	0.0250	0.0295	118	66.0-132	
Naphthalene	0.0250	0.0279	111	59.0-130	
n-Propylbenzene	0.0250	0.0220	88.1	74.0-126	
Styrene	0.0250	0.0256	102	72.0-127	
1,1,1,2-Tetrachloroethane	0.0250	0.0251	101	74.0-129	
1,1,2,2-Tetrachloroethane	0.0250	0.0292	117	68.0-128	
Tetrachloroethene	0.0250	0.0220	88.1	70.0-136	
Toluene	0.0250	0.0207	82.9	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0216	86.6	61.0-139	
1,2,3-Trichlorobenzene	0.0250	0.0270	108	59.0-139	
1,2,4-Trichlorobenzene	0.0250	0.0266	106	62.0-137	
1,1,1-Trichloroethane	0.0250	0.0218	87.4	69.0-126	
1,1,2-Trichloroethane	0.0250	0.0305	122	78.0-123	
Trichloroethene	0.0250	0.0211	84.3	76.0-126	
Trichlorofluoromethane	0.0250	0.0231	92.5	61.0-142	
1,2,3-Trichloropropane	0.0250	0.0306	122	67.0-129	
1,2,3-Trimethylbenzene	0.0250	0.0230	91.8	74.0-124	
1,2,4-Trimethylbenzene	0.0250	0.0221	88.5	70.0-126	
1,3,5-Trimethylbenzene	0.0250	0.0221	88.3	73.0-127	
Vinyl chloride	0.0250	0.0226	90.3	63.0-134	
Xylenes, Total	0.0750	0.0684	91.2	72.0-127	
t-Amyl Alcohol	0.125	0.234	187	26.0-160	J4
tert-Amyl Methyl Ether	0.0250	0.0392	157	66.0-135	J4
Ethyl tert-butyl ether	0.0250	0.0342	137	68.0-140	
ethanol	1.25	1.19	95.5	10.0-160	
tert-Butyl alcohol	0.125	0.180	144	15.0-160	
(S) Toluene-d8			*110*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*120*	*70.0-130*	

Method Blank (MB)

(MB) R3428724-3 07/08/19 17:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethanol	0.0690	J	0.0490	0.100
(S) Toluene-d8	*109*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3428724-1 07/08/19 16:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
ethanol	1.25	1.33	106	10.0-160	
(S) Toluene-d8			*110*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*114*	*70.0-130*	

Method Blank (MB)

(MB) R3429006-4 07/09/19 13:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethanol	U		0.0490	0.100
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*108*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3429006-1 07/09/19 12:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
ethanol	1.25	1.52	121	10.0-160	
(S) Toluene-d8			*101*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*112*	*70.0-130*	

Method Blank (MB)

(MB) R3429150-1 07/09/19 20:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C12-C22 Hydrocarbons	U		0.733	4.00
C22-C32 Hydrocarbons	U		1.33	4.00
C32-C40 Hydrocarbons	U		1.33	4.00
(S) o-Terphenyl	*108*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3429150-2 07/09/19 20:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C22-C32 Hydrocarbons	25.0	26.6	106	50.0-150	
C12-C22 Hydrocarbons	25.0	23.6	94.4	50.0-150	
(S) o-Terphenyl			*115*	*18.0-148*	

Method Blank (MB)

(MB) R3429362-2 07/09/19 15:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.000233	0.0200
Alpha BHC	U		0.000193	0.0200
Beta BHC	U		0.000303	0.0200
Delta BHC	U		0.000151	0.0200
Gamma BHC	U		0.000245	0.0200
4,4-DDD	U		0.000164	0.0200
4,4-DDE	U		0.000165	0.0200
4,4-DDT	U		0.000266	0.0200
Dieldrin	U		0.0000890	0.00200
Endosulfan I	U		0.000214	0.0200
Endosulfan II	U		0.000230	0.0200
Endosulfan sulfate	U		0.000170	0.0200
Endrin	U		0.000219	0.0200
Endrin aldehyde	U		0.000242	0.0200
Endrin ketone	U		0.000159	0.0200
Heptachlor	U		0.000101	0.0200
Heptachlor epoxide	U		0.000378	0.0200
Hexachlorobenzene	U		0.000224	0.0200
Methoxychlor	U		0.000265	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*74.8*			*10.0-135*
(S) Tetrachloro-m-xylene	*69.5*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3429362-1 07/09/19 15:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0488	73.3	34.0-136	
Alpha BHC	0.0666	0.0499	74.9	34.0-139	
Beta BHC	0.0666	0.0463	69.5	34.0-133	
Delta BHC	0.0666	0.0508	76.3	34.0-135	
Gamma BHC	0.0666	0.0501	75.2	34.0-136	
4,4-DDD	0.0666	0.0506	76.0	33.0-141	
4,4-DDE	0.0666	0.0509	76.4	34.0-134	
4,4-DDT	0.0666	0.0518	77.8	30.0-143	
Dieldrin	0.0666	0.0506	76.0	35.0-137	
Endosulfan I	0.0666	0.0501	75.2	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3429362-1 07/09/19 15:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0491	73.7	35.0-132	
Endosulfan sulfate	0.0666	0.0488	73.3	35.0-132	
Endrin	0.0666	0.0504	75.7	34.0-137	
Endrin aldehyde	0.0666	0.0491	73.7	23.0-121	
Endrin ketone	0.0666	0.0566	85.0	35.0-144	
Heptachlor	0.0666	0.0502	75.4	36.0-141	
Heptachlor epoxide	0.0666	0.0499	74.9	36.0-134	
Hexachlorobenzene	0.0666	0.0467	70.1	33.0-129	
Methoxychlor	0.0666	0.0512	76.9	28.0-150	
(S) Decachlorobiphenyl			*83.3*	*10.0-135*	
(S) Tetrachloro-m-xylene			*77.9*	*10.0-139*	

L1114138-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1114138-05 07/09/19 15:58 • (MS) R3429362-3 07/09/19 16:10 • (MSD) R3429362-4 07/09/19 16:23

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0779	U	0.0501	0.0507	64.3	65.0	1	20.0-135			1.16	37
Alpha BHC	0.0779	U	0.0530	0.0551	68.0	70.7	1	27.0-140			3.90	35
Beta BHC	0.0779	U	0.0492	0.0504	63.1	64.7	1	23.0-141			2.59	37
Delta BHC	0.0779	U	0.0538	0.0559	69.1	71.8	1	21.0-138			3.84	35
Gamma BHC	0.0779	U	0.0523	0.0543	67.1	69.7	1	27.0-137			3.73	36
4,4-DDD	0.0779	U	0.0521	0.0527	66.8	67.6	1	15.0-152			1.12	39
4,4-DDE	0.0779	0.000812	0.0532	0.0539	68.3	69.2	1	10.0-152			1.31	40
4,4-DDT	0.0779	U	0.0525	0.0532	67.4	68.3	1	10.0-151			1.33	40
Dieldrin	0.0779	U	0.0523	0.0531	67.1	68.2	1	17.0-145			1.55	37
Endosulfan I	0.0779	U	0.0508	0.0524	65.2	67.3	1	20.0-137			3.17	36
Endosulfan II	0.0779	U	0.0506	0.0516	64.9	66.2	1	15.0-141			2.06	37
Endosulfan sulfate	0.0779	U	0.0500	0.0511	64.1	65.6	1	15.0-143			2.31	38
Endrin	0.0779	U	0.0515	0.0532	66.1	68.3	1	19.0-143			3.35	37
Endrin aldehyde	0.0779	U	0.0501	0.0524	64.3	67.3	1	10.0-139			4.57	40
Endrin ketone	0.0779	U	0.0576	0.0598	73.9	76.7	1	17.0-149			3.79	38
Heptachlor	0.0779	U	0.0520	0.0530	66.7	68.0	1	22.0-138			2.01	37
Heptachlor epoxide	0.0779	U	0.0516	0.0524	66.2	67.3	1	22.0-138			1.57	36
Hexachlorobenzene	0.0779	U	0.0492	0.0499	63.1	64.0	1	25.0-126			1.42	35
Methoxychlor	0.0779	U	0.0524	0.0530	67.3	68.0	1	10.0-159			1.11	40
(S) Decachlorobiphenyl					*70.4*	*75.8*		*10.0-135*				
(S) Tetrachloro-m-xylene					*66.2*	*70.6*		*10.0-139*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Ds
6 Sr
7 Qc
8 Gl
9 Al
10 Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P	RPD between the primary and confirmatory analysis exceeded 40%.

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

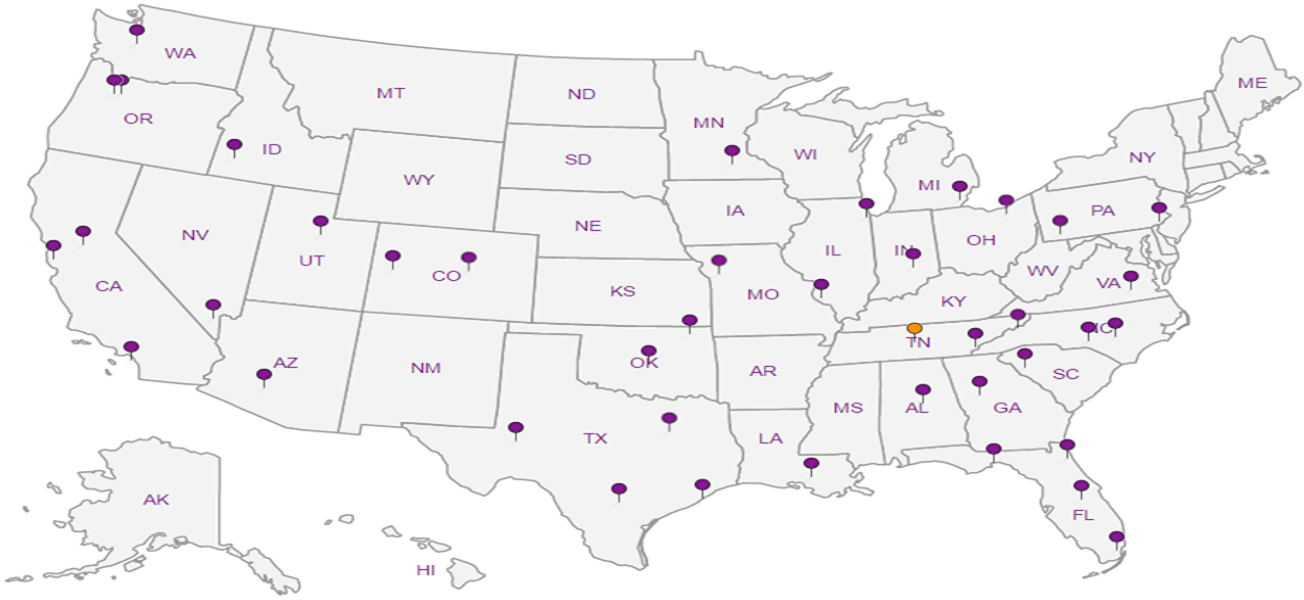
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Bureau Veritas North America, Inc.

2430 Camino Ramon, Suite 122
San Ramon, CA 94583

Billing Information:
Accounts Payable
2430 Camino Ramon, Suite 122
San Ramon, CA 94583

Pres Chk

Report to: Donald A. Ashton

Email To: don.ashton@us.bureauveritas.com

Project Description: 16500 RAILROAD AVE., MORGAN HILL, CA

City/State Collected:

Phone: 925-426-2679
Fax: 925-426-0106
C: 925-260-3102

Client Project # 33119-019052.00

Lab Project # BURVERSRCA-ASHTON

Collected by (print): DON ASHTON

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ✓ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1114138

G124

Acctnum: BURVERSRCA
Template: T143336
Prelogin: P716285
TSR: 110 - Brian Ford
PB: BF 6/24/19
Shipped Via: FedEX Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	~~Helium Summa~~	~~TO-15 Summa~~	EXTRACTABLE HYDROCARBONS 8015B DRO & ORO	VOCs & OXYGENATES 8260B	SVOCs & PAHs 8270	CAM 17 METALS	ORGANOCHLORINATED PESTICIDES				Remarks	Sample # (lab only)
SB-1 0.5-1'	GRAB	SS ~~Air~~	0.5-1	6-26-2019	0850	1			X		X	X	X					-01
SB-1 10'		SS ~~Air~~	10		0857	4			X	X								02
SB-2 0.5-1'		SS ~~Air~~	0.5-1		0946	1			X		X	X	X					03
SB-2 10'		SS ~~Air~~	10		0956	4			X	X								04
SB-3 0.5-1'		SS	0.5-1		1032	1			X		X	X	X					05
SB-3 10'		SS	10		1039	4			X	X								06
SB-4 0.5-1'		SS	0.5-1		1107	1			X		X	X	X					07
SB-4 10'		SS	10		1110	4			X	X								08

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks: FOR VOCs - DISREGARD SOIL SYRINGES USE SLEEVED SOIL

pH ___ Temp ___
Flow ___ Other ___

Samples returned via: __ UPS ✓ FedEx __ Courier __

Tracking # 4510 1662 4050

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

RAD SCREEN: <0.5 mR/hr

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR	If preservation required by Login: Date/Time
[signature]	6-27-19	0740	[signature] PACE NAT		
Relinquished by: (Signature) [signature] PACE NAT	Date: 6/27/19	Time: 1630	Received by: (Signature) FedEx	Temp: °C 3.9 to 3.4 AS SR Bottles Received: 20	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 6/28/19 Time: 0845	Hold: Condition: NCF / OK

Bureau Veritas North America, Inc.

2430 Camino Ramon, Suite 122
San Ramon, CA 94583

Billing Information:
Accounts Payable
2430 Camino Ramon, Suite 122
San Ramon, CA 94583

Pres Chk

Report to: Donald A. Ashton

Email To: don.ashton@us.bureauveritas.com

Project Description: 16500 RAILROAD AVE., MORGAN HILL, CA

City/State Collected:

Phone: 925-426-2679
Fax: 925-426-0106
C: 925-260-3102

Client Project # 33119-019052.00

Lab Project # BURVERSRCA-ASHTON

Collected by (print): DON ASHTON

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Rush? (Lab MUST Be Notified)
___ Same Day ✓ Five Day
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Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Analysis / Container / Preservative

Hold, D.A. 7-1-2019

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SB-2 10'		SS ~~Air~~	10		0956	4			X	X								04
SB-3 0.5-1'		SS	0.5-1		1032	1			X		X	X	X					05
SB-3 10'		SS	10		1039	4			X	X								06
SB-4 0.5-1'		SS	0.5-1		1107	1			X		X	X	X					07
SB-4 10'		SS	10		1110	4			X	X								08

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* Matrix:
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DW - Drinking Water
OT - Other _____

Remarks: FOR VOCs - DISREGARD SOIL SYRINGES USE SLEEVED SOIL

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS ✓ FedEx __ Courier __ _____

Tracking # 4150 1662 4050

Sample Receipt Checklist
COC Seal Present/Intact: NP ___Y ___N
COC Signed/Accurate: ___Y ___N
Bottles arrive intact: ✓Y ___N
Correct bottles used: ✓Y ___N
Sufficient volume sent: ✓Y ___N
If Applicable
VOA Zero Headspace: ___Y ___N
Preservation Correct/Checked: ___Y ___N

RAD SCREEN: <0.5 mR/hr

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
[signature]	6-27-19	0740	By PACE NAT		
By PACE NAT	6/27/19	1630	FedEx	Temp: 3.9 to 3.4 °C Bottles Received: AS SR 20	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/28/19 Time: 0845	Hold: Condition: NCF / OK