ROSSO
ENVIRONMENTAL, INC.

Subsurface Investigation

Portions of Byron Airport
Site 1 and Site 2 Areas
550 Eagle Court
Byron, Contra Costa County, California

Prepared for
Urban Air Mobility, LLC
Walnut Creek, California

August 14, 2020
Project Number 20-0020.02

ASSESSMENT | INVESTIGATION | REMEDIATION | CONSULTING
PHONE: 510.647.8107 | PO Box 1923, Lafayette, CA | 94549-1923

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1.0 INTRODUCTION

Rosso Environmental, Inc. (REI), on behalf of Urban Air Mobility, LLC, (UAM) and in accordance with REI's Proposal Number 2020-0023 dated June 15, 2020 and Change Order No. 1 dated July 2, 2020, conducted a subsurface investigation at portions of Byron Airport, identified as Site 1 and Site 2 Areas, addressed as 550 Eagle Court in Byron, Contra Costa County, California (Site). The purpose of this investigation was to collect subsurface data from the Site prior to planned lease and redevelopment of the Site by UAM for commercial use. Potential environmental concerns at the Site are associated with airport operations, historical agricultural use, and fill spoils. The Site location is shown on Figure 1 and sample locations are shown on Figure 2; UAM provided Figure 3 showing the Site boundaries.

2.0 SCOPE OF WORK

The implemented Scope of Work involved advancing 6 borings at the Site (3 borings [B-1, B-2, B-3] from Site 1 and 3 borings [B-4, B-5, B-6] from Site 2), collecting 6 soil samples (1 from each boring), and 6 soil vapor samples. Groundwater was not encountered in borings advanced to depths up to 37.5 feet below ground surface (bgs); therefore, no groundwater samples were collected, as was initially planned from 4 borings (2 from Site 1 and 2 from Site 2). In addition, REI collected 8 discrete soil samples from an apparent fill soil pile (reportedly Spoils Area #1 generated during airport construction c.1994) located on Site 2 and measuring approximately 200 feet by 100 feet and about 1 to 2 feet in height. REI directed the laboratory to combine the 8 discrete samples into two four-point composite samples (Comp A and Comp B) for most of the laboratory analysis; however, two discrete samples (A2 and B3) were selected and analyzed for volatile organic compounds (VOCs).

3.0 PRE-FIELD ACTIVITIES

REI obtained the required Drilling Permit from Contra Costa Environmental Health Division (CCEHD), Permit No. 0027298, issued on June 29, 2020. A copy of the Drilling Permit is provided in Appendix A.

REI prepared a Site-specific health and safety plan (SHSP), which was kept on-Site and reviewed by on-Site personnel during field activities. The SHSP detailed the work to be performed, safety precautions, emergency response procedures, nearest hospital information, and onsite personnel responsible for managing emergency situations.

REI marked the Site boundaries and investigation locations using white paint and notified Underground Service Alert (USA), as required by law, on June 30, 2020. REI was provided with USA Ticket Numbers W018200399 (Site 1) and W018200408 (Site 2). REI also retained a professional utility location service, A Plus Utility Locating of Red Bluff, California, to clear the investigation areas of readily discoverable underground utilities prior to boring advancement.

4.0 FIELD ACTIVITIES

REI retained a licensed C-57 drilling contractor, Environmental Control Associates (ECA) of Aptos, California, to advance the borings on July 8, 2020 using truck-mounted direct-push drilling equipment. The borings (B-1 through B-6) were advanced to an approximate maximum depth of 5 feet bgs, temporary soil vapor probes were installed in the borings after soil sampling was completed; probes were set at a depth of approximately 4.5 feet bgs for vapor sample collection. Following soil sampling and vapor probe construction, four step-out borings (B-1, B-2, B-4, and B-5) for grab-groundwater sampling were advanced to maximum depths between approximately 7 and 37.5 feet bgs prior to drilling refusal; groundwater was not encountered in any of these borings. After encountering drilling refusal at these borings, REI attempted several additional step-out borings and encountered drilling refusal at similar depths. Sample locations are shown on Figure 2, boring logs are presented in Appendix B, and soil vapor field sampling data sheets (FSDS) are presented in Appendix C.

4.1 SOIL SAMPLING

During drilling, soil cores were obtained using a hollow core barrel sampler containing a plastic liner that retained a relatively undisturbed soil core from which soil samples were collected. Soil samples were collected at depths between approximately 0.5 and 2 feet bgs; soil samples to be analyzed for VOCs were collected and preserved in accordance with USEPA Method 5035 and soil samples to be analyzed for PFAS were collected at depths between 0.5 and 1.0 feet bgs using hand tools. REI examined the soil cores for soil logging and sampling purposes. Recovered soil cores and samples were field screened for indications of potential contamination using visual and olfactory observations as well as a photoionization detector (PID) for the presence of volatile or ionizable compounds. The PID records total ionizable compounds but cannot identify or quantify specific compounds. REI also logged each boring for lithological content using the Unified Soil Classification System as a guide, and for relative moisture content, competency, and other observable characteristics (e.g., color changes, staining, debris, odors).

REI divided the soil spoils area into 8 quadrants, identified as A1 through A4 (east portion) and B1 through B4 (west portion), and collected the 8 discrete samples at a depth of approximately 0.5 feet bgs using hand tools and supplied laboratory containers; hand tooling was decontaminated between A and B quadrant sample collection activities. No obvious evidence of debris (i.e., asphalt, glass, brick, concrete) was observed in the soil spoils at the sampling locations.

Collected soil samples were transferred into appropriate laboratory-supplied containers, labeled with identifying information, stored in a pre-chilled ice-chest awaiting transportation to the laboratory, and recorded on chain-of-custody documentation that accompanied the samples from the point of collection to the laboratory.

4.2 SOIL VAPOR PROBE INSTALLATION AND SAMPLING

Temporary soil vapor probes were installed in each of the borings after soil sampling was completed to a depth of approximately 4.5 feet bgs. The probes were constructed with tubing capped with an airtight cap, vapor filters, sand packs, and seals in general conformance with guidance provided in *Advisory – Active Soil Gas Investigations,* dated July 2015, by California EPA Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Control Board (DTSC, RWQCB 2012), and in *Guidance for the Evaluation and Mitigation of Subsurface Gas Intrusion to Indoor Air* (DTSC, 2011).

The probes were allowed to equilibrate for at least two hours prior to sampling. Certified clean vapor sampling equipment was provided by the laboratory (Pace Analytical). Isopropyl alcohol (IPA or isopropanol or 2-propanol) was used as a leak check compound at each location to confirm that the sampling vapor manifolds were secure and that there was no obvious equipment leakage. In addition, line purging was performed at each location to remove ambient air. After purging, soil vapor samples were collected at a flow rate of approximately 150 cubic centimeters per minute using 1.0-Liter Summa canisters provided by the laboratory. The vacuum gauge was recorded prior to the start of sampling and at the end of sampling to confirm each sample collection. Copies of the soil vapor field sampling data sheets are provided in Appendix C. Collected samples were labeled with identifying information and recorded on chain-of-custody documentation that accompanied the samples from the point of collection to the laboratory.

4.3 DECONTAMINATION, ABANDONMENT, AND INVESTIGATION DERIVED WASTE

Drilling and sampling equipment were steam cleaned or replaced prior to and after advancing each boring. The sampling core barrel was cleaned between sample intervals using a triple rinse method. The initial rinse consisted of an Alconox and water solution, followed by a deionized water rinse (second rinse), and deionized water rinse (final rinse). Following sample collection, each boring was backfilled in accordance with CCEHD Drilling Permit requirements including tremie-method backfill using a neat cement grout to existing grade. REI provided abandonment documentation via email to Mr. Robert Gribben, Environmental Health Specialist II Inspector of CCEHD on July 21, 2020.

5.0 LABORATORY ANALYSES

The collected samples were submitted to Pace Analytical of Mount Juliet, Tennessee, a state-certified laboratory, for the following analyses by United States Environmental Protection Agency (USEPA) Methods:

Soil Borings (6 Discrete Boring Samples, B-1 through B-6)

- Total Petroleum Hydrocarbons (TPH) as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-o) by USEPA Method 8015
- VOCs by USEPA Method 8260 using preparation Method 5035
- Organochlorine Pesticides (OCPs) by USEPA Method 8081
- Title 22 California Assessment Metals (CAM 17) by USEPA Methods 6010/7470/7471
- Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537 Modified; the laboratory was requested to report analytical results using the laboratory analysis method detection limits

Soil Spoils (2 Composite Samples, Comp A and Comp B)

- TPH-g, TPH-d, and TPH-o by USEPA Method 8015
- VOCs by USEPA Method 8260 using preparation Method 5035; 2 discrete samples (A2 and B3) only
- OCPs by USEPA Method 8081
- CAM 17 by USEPA Methods 6010/7470/7471

- Polychlorinated Biphenyls (PCBs) by USEPA Method 8082
- Polynuclear Aromatic Hydrocarbons (PAHs) by USEPA Method 8270 with selective ion monitoring (SIM)
- Asbestos by California Air Resources Board (CARB) Test Method 435

Soil Vapor (B-1-SV through B-6-SV)

- VOCs by USEPA Method TO-15

REI reviewed the analytical laboratory data to ensure validity and completeness, such as verifying achievement of holding times and data quality objectives for each analytical method. Based on that review, the data are considered valid and complete. The certified analytical reports with chain-of-custody documentation are provided in Appendix D.

6.0 FINDINGS

6.1 FIELD OBSERVATIONS

As shown on appended boring logs, the Site appears to be underlain by apparent native soil comprising intermingled sands, silty sands, sandy silts, clayey silt, and silty clay to 37.5 feet bgs, the maximum depth explored; some gravels were observed, most evident in the shallower soils. Soil was generally observed as dry with no apparent observed evidence of fill material containing debris (i.e., asphalt, glass, brick, concrete). Groundwater and obvious evidence of a groundwater zone (i.e., wet to saturated soil) was not encountered in the borings. No indications of obvious and significant contamination, such as staining, odor, or elevated PID measurements were observed.

6.2 SOIL ANALYTICAL RESULTS

The soil analytical results are summarized in Tables 1 A (Site 1) and B (Site 2) through Tables 5 A and B; composite soil sample data from Site 2 are summarized in Tables 6, 7 and 8. The analytical results, discussed below, were compared to the San Francisco Regional Water Quality Control Board (RWQCB) Tier 1 Environmental Screening Levels (Tier 1 ESLs), 2019 (Rev. 2), where established.

PFAS is not a regulated compound in soil and groundwater at this time in California but is under consideration for regulation. Analytical results for soil samples analyzed for PFAS were reported using the laboratory analysis method detection limits and were compared to Interim Final ESLs for PFOS and PFOA reported in the RWQCB's *Transmittal of Interim Final Environmental Screening Levels (ESLs) for Two Per- and Polyfluoroalkyl Substances (PFAS): Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA),* dated May 27, 2020. This interim document notes 1) there may be local background (i.e., ambient) concentrations of PFOS and PFOA above ESLs which is both a reflection of the widespread use, mobility, and persistence of PFAS substances and their toxicity and bioaccumulation potential, 2) in some cases, PFOS and PFOA ESLs may be less than achievable laboratory method reporting limits, and 3) as with all the ESLs, the PFOS and PFOA ESLs are guidance so their use is not mandatory and the ESLs are not default cleanup standards.

6.2.1 Volatile Organic Compounds (VOCs)

Site 1

As shown in Table 1A, low level concentrations of VOCs (2-butanone and/or acetone), up to 0.105 milligrams per kilogram (mg/kg), were detected above respective laboratory reporting limits in 2 of the 3 discrete soil samples. Concentrations of detected VOCs were below applicable Tier 1 ESLs.

Site 2

As shown in Table 1B, low level concentrations of one or more of four VOCs (acetone, 2-butanone, styrene and toluene), up to 0.12 mg/kg, were detected above respective laboratory reporting limits in each of the 3 discrete soil samples and the 2 composite soil samples. Concentrations of detected VOCs were below applicable Tier 1 ESLs.

6.2.2 Total Petroleum Hydrocarbons (TPH)

Site 1

As shown in Table 2A, low level concentrations of TPH, up to 2.78 mg/kg, were detected above respective laboratory reporting limits in each of the 3 discrete soil samples. Concentrations of detectable TPH were below applicable Tier 1 ESLs.

Site 2

As shown in Table 2B, low level concentrations of TPH, up to 5.49 mg/kg, were detected above respective laboratory reporting limits in 2 of the 3 discrete soil samples and the 2 composite soil samples. Concentrations of detectable TPH were below applicable Tier 1 ESLs.

6.2.3 Organochlorine Pesticides (OCPs)

Site 1

As shown in Table 3A, OCPs were not detected above respective laboratory reporting limits.

Site 2

As shown in Table 3B, OCPs were not detected above respective laboratory reporting limits.

6.2.4 California Title 22 Metals (CAM 17)

Site 1

As shown in Table 4A, up to 13 metals were detected above respective laboratory reporting limits in the three discrete soil samples analyzed. Concentrations of detectable metals were below applicable Tier 1 ESLs, except as noted below.

- Arsenic was detected in each of the analyzed samples at concentrations from 7.09 to 11.6 mg/kg which exceed the arsenic Tier 1 ESL established as 0.067 mg/kg.
- Barium was detected in each of the analyzed samples at concentrations from 306 to 1,520 mg/kg; two sample concentrations exceed the barium Tier 1 ESL established as 390 mg/kg.
- Selenium was detected in two discrete samples at concentrations of 2.69 and 2.95 mg/kg which exceed the selenium Tier 1 ESL established as 2.4 mg/kg.
- Vanadium was detected in each of the analyzed samples at concentrations from 44.6 to 56.7 mg/kg which exceed the vanadium Tier 1 ESL established as 18 mg/kg.

Site 2

As shown in Table 4B, up to 15 metals were detected above respective laboratory reporting limits in the three discrete and two composite soil samples analyzed. Concentrations of detectable metals were below applicable Tier 1 ESLs, except as noted below.

- Arsenic was detected in each of the analyzed samples at concentrations from 3.14 to 15.8 mg/kg which exceed the arsenic Tier 1 ESL established as 0.067 mg/kg.
- Barium was detected in each of the analyzed samples at concentrations from 269 to 683 mg/kg; two sample concentrations exceed the barium Tier 1 ESL established as 390 mg/kg.
- Vanadium was detected in each of the analyzed samples at concentrations from 52.1 to 73.8 mg/kg which exceed the vanadium Tier 1 ESL established as 18 mg/kg.

6.2.5 Per- and Polyfluoroalkyl Substances (PFAS)

Site 1

As shown in Table 5A, up to 11 PFAS compounds were detected above respective laboratory method detection limits in 2 of the 3 analyzed samples including PFOA at 1.08 and 0.292 micrograms per kilogram (µg/kg) in samples B-1-1.0' and B-3-1.0', respectively. The detected PFOA concentrations are below the direct exposure human health risk level-resident cancer risk Interim Final ESL of 3.8 µg/kg, PFAS Interim Final ESLs are established only for PFOA and PFOS. However, the two detected PFOA concentrations are above the leaching to groundwater Interim Final ESLs (drinking water and aquatic habitat) established as 0.097 µg/kg and 0.00042 µg/kg, respectively. Currently, commercial laboratory methods cannot achieve the detection limits for analyzed soil samples for comparison to leaching to groundwater Interim Final ESLs (drinking water and aquatic habitat).

Site 2

As shown in Table 5B, one PFAS compound (PFNA) in one sample (B-4-1.0') was detected above the laboratory method detection limit; PFAS Interim Final ESLs are established only for PFOA and PFOS. The laboratory method detection limit for PFAS and PFOA are below the direct exposure human health risk level-resident cancer risk Interim Final ESL of 3.8 µg/kg, The laboratory method detection limits for PFOA and PFOS are above leaching to groundwater Interim Final ESLs (drinking water and aquatic habitat).

6.2.6 Polynuclear Aromatic Hydrocarbons (PAHs)

As shown in Table 6, PAHs were not detected above respective laboratory reporting limits in the two composite samples; discrete samples were not analyzed for PAHs.

6.2.7 Polychlorinated Biphenyls (PCBs)

As shown in Table 7, PCBs were not detected above respective laboratory reporting limits in the two composite samples; discrete samples were not analyzed for PCBs.

6.2.8 Asbestos

As shown in Table 8, asbestos was not detected in the two composite soil samples analyzed; discrete samples were not analyzed for asbestos. There is no established Tier 1 ESL for asbestos.

6.3 SOIL VAPOR ANALYTICAL RESULTS

The soil vapor VOC analytical results are summarized in Tables 9A and 9B. The analytical results, discussed below, were compared to applicable RWQCB Tier 1 ESLs and Commercial/Industrial ESLs (C/I ESLs).

6.3.1 Volatile Organic Compounds (VOCs)

Site 1

As shown in Table 9A, numerous VOCs were detected above respective laboratory reporting limits in each of the three soil vapor samples analyzed. Concentrations of detectable VOCs were below established ESLs, except as noted below.

- Benzene was detected in each of the three samples at concentrations from 5.72 micrograms per cubic meter ($\mu g/m^3$) to 30.3 $\mu g/m^3$ which exceed the Tier 1 ESL established as 3.2 $\mu g/m^3$. Concentrations in two samples also exceeded the C/I ESL for benzene established as 14 $\mu g/m^3$.

Site 2

As shown in Table 9B, numerous VOCs were detected above respective laboratory reporting limits in each of the three soil vapor samples analyzed. Concentrations of detectable VOCs were below established ESLs, except as noted below.

- Benzene was detected in each of the three samples at concentrations from 4.41 $\mu g/m^3$ to 21.7 $\mu g/m^3$ which exceed the Tier 1 ESL established as 3.2 $\mu g/m^3$. Concentrations in two samples also exceeded the C/I ESL for benzene established as 14 $\mu g/m^3$.

7.0 CONCLUSIONS

The Site appears to be underlain by dense to hard native soil with no obvious evidence of fill containing debris observed in investigation boring and sample locations. Depth to groundwater at the time of the investigation was greater than 37.5 feet below the ground surface. Soil was sampled from the near surface materials and analyzed.

7.1 SITE 1

The results of soil analyses identify no OCPs detected at concentrations above laboratory reporting limits. Low level concentrations of VOCs and TPH were detected in soil samples at concentrations below applicable Tier 1 ESLs. Various metals were detected in the analyzed soil samples at concentrations below applicable Tier 1 ESLs, except arsenic, barium, selenium, and vanadium at concentrations exceeding respective Tier 1 ESLs; however, given the lack of obvious contaminant sources, these compounds detected in the samples may be related to background regional conditions.

Up to 11 PFAS compounds were detected above respective laboratory method detection limits in 2 of the 3 analyzed soil samples. Two shallow soil samples did detect a PFAS compound, known as PFOA, at

concentrations below the direct exposure human health risk level-resident cancer risk Interim Final ESL but above the leaching to groundwater Interim Final ESLs (drinking water and aquatic habitat). As previously noted, there may be local background (i.e., ambient) concentrations of PFAS compounds including PFOS and PFOA above Interim Final ESLs. The source and extent of PFAS compounds are unknown but can be related to ambient conditions or to other sources, such as Aqueous Film Forming Foam (AFFF) which has been commonly used for fighting petroleum fires at airports and industrial facilities.

Soil vapor sampled and analyzed was identified with various VOCs at concentrations below applicable Tier 1 ESLs, except benzene which exceeded the Tier 1 ESL (3 samples) and/or the C/I ESL (2 samples). The specific source and extent of these impacts is not known at this time but may be related to historical and current use of the Site or adjoining / nearby properties.

7.2 SITE 2

The results of soil analyses identify no OCPs, PAHS, PCBs and asbestos detected at concentrations above laboratory reporting limits. Low level concentrations of VOCs and TPH were detected in soil samples at concentrations below applicable Tier 1 ESLs. Various metals were detected in the analyzed soil samples at concentrations below applicable Tier 1 ESLs, except arsenic, barium, and vanadium at concentrations exceeding respective Tier 1 ESLs; however, given the lack of obvious contaminant sources, these compounds detected in the samples may be related to background regional conditions.

One PFAS compound (PFNA) in one sample (B-4-1.0') was detected above the laboratory method detection limit. However, the laboratory method detection limits for PFOA and PFOS are above one or more of the leaching to groundwater Interim Final ESLs (drinking water and aquatic habitat). As previously noted, there may be local background (i.e., ambient) concentrations of PFAS compounds including PFOS and PFOA above Interim Final ESLs. The source and extent of PFAS compounds are unknown but can be related to ambient conditions or to other sources, such as Aqueous Film Forming Foam (AFFF) which has been commonly used for fighting petroleum fires at airports and industrial facilities.

Soil vapor sampled and analyzed was identified with various VOCs at concentrations below applicable Tier 1 ESLs, except benzene which exceeded the Tier 1 ESL (3 samples) and/or the C/I ESL (2 samples). The specific source and extent of these impacts is not known at this time but may be related to historical and current use of the Site or adjoining / nearby properties.

8.0 REPRESENTATIONS AND LIMITATIONS

This report is based upon the Site conditions known by REI at the time of REI's field activities, and current laws, policies, and regulations. The information and opinions rendered in this Report are exclusively for use by Urban Air Mobility, LLC. No other party shall rely on the information or opinions presented in this report without consent. REI will not distribute or publish this report without consent except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment with a scope of work and should be considered and implemented only in light of that assignment. Subsurface media at the Site (i.e., soil and vapor) may contain higher concentrations than were detected because soil and vapor sampling is inherently limited. The services provided by REI in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

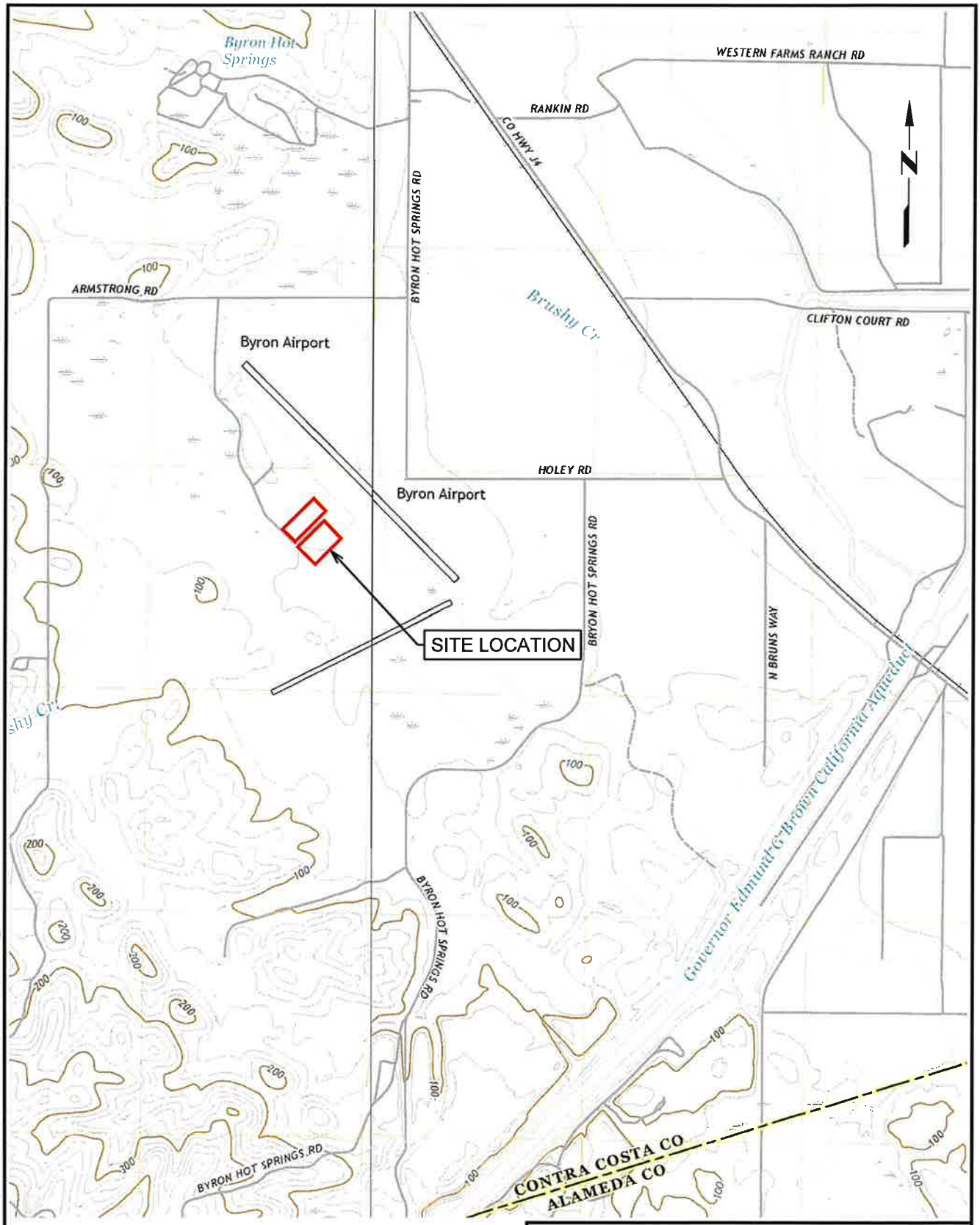
This report prepared by:

Jeremy V. Wilson
Senior Project Manager
Rosso Environmental, Inc.
jwilson@rossoenv.com

This report reviewed by:

Jon A. Rosso, PE
Principal
Rosso Environmental, Inc.
jrosso@rossoenv.com

FIGURES



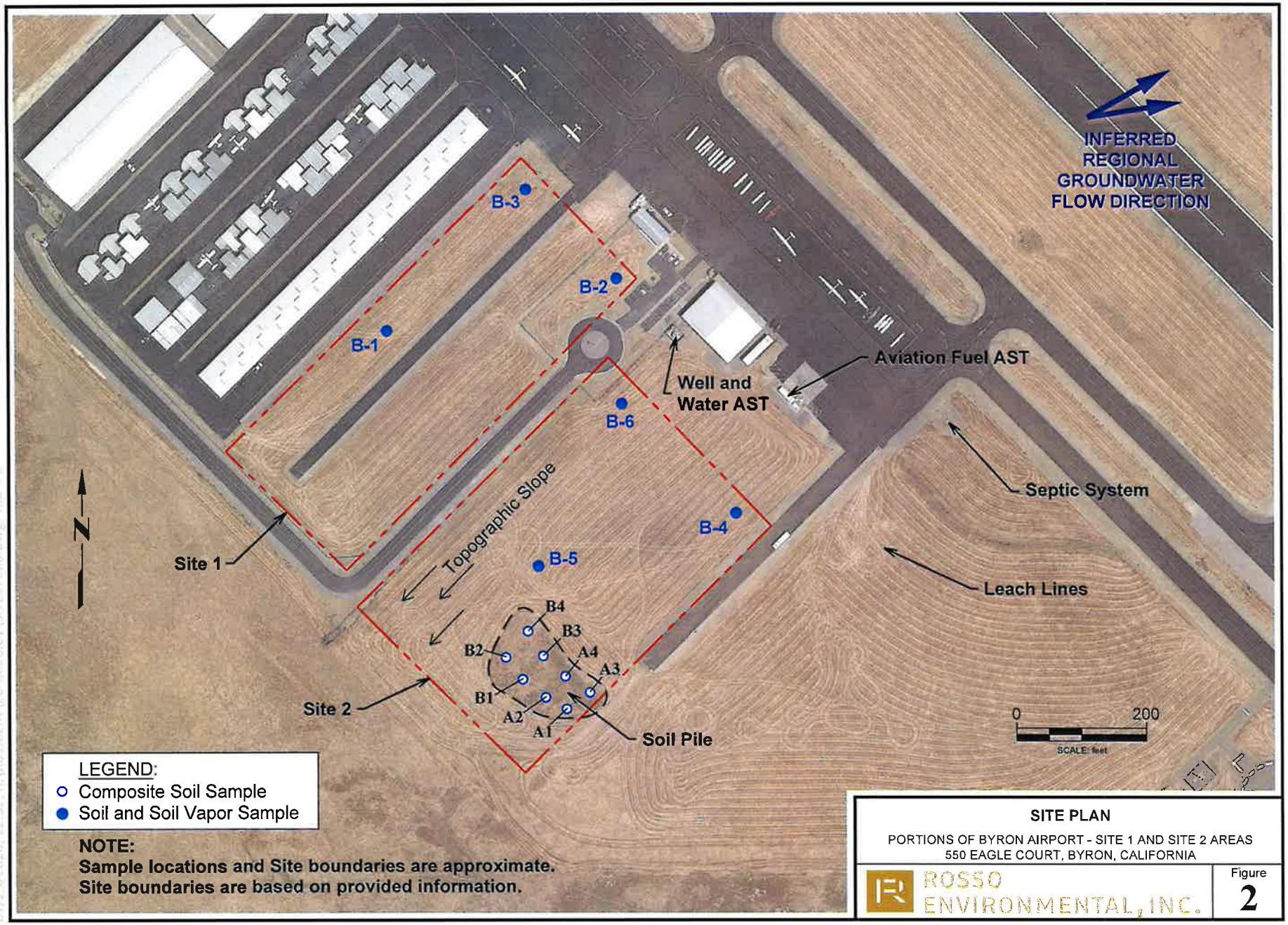
SITE LOCATION MAP

PORTIONS OF BYRON AIRPORT - SITE 1 AND SITE 2 AREAS
550 EAGLE COURT, BYRON, CALIFORNIA

ROSSO ENVIRONMENTAL, INC.

Figure 1

Project No. 20-0020.02



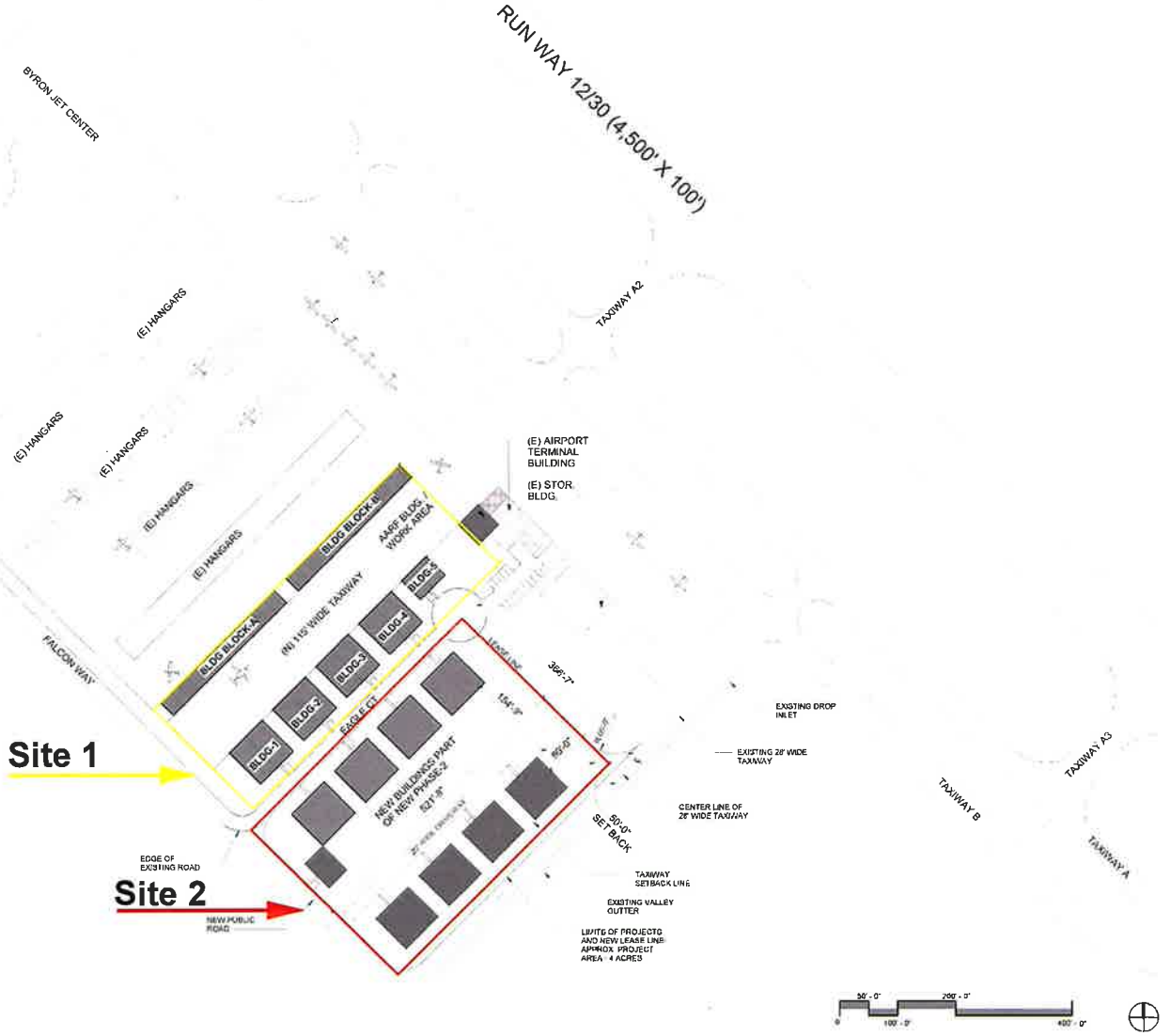
SITE PLAN

PORTIONS OF BYRON AIRPORT - SITE 1 AND SITE 2 AREAS
550 EAGLE COURT, BYRON, CALIFORNIA

ROSSO ENVIRONMENTAL, INC.

Figure **2**

Project No. 20-0020.02



SITE BOUNDARIES

PORTIONS OF BYRON AIRPORT - SITE 1 AND SITE 2 AREAS
550 EAGLE COURT, BYRON, CALIFORNIA

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Figure 3

Project No. 20-0020.02

TABLES

Table 1A - Site 1
Soil Data Summary - VOCs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

Detected VOCs		Acetone	2-Butanone (MEK)	Styrene	Toluene	Other Analyzed VOCs
	Tier 1 ESL	0.92	6.1	0.92	3.2	various
Sample Identification and Depth	B-1-2.0'	**0.062 J**	**0.105 J**	<0.0168	<0.00674	nd
	B-2-1.5'	<0.0857	<0.171	<0.0214	<0.00857	nd
	B-3-1.5'	**0.0564 J**	<0.137	<0.0171	<0.00686	nd

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
VOCs = Volatile organic compounds by USEPA Method 8260B using preparation method 5035
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# and nd = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
J = The identification of the analyte is acceptable; the reported value is an estimate
MEK = Methyl ethyl ketone

Table 1B - Site 2
Soil Data Summary - VOCs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Detected VOCs	Acetone	2-Butanone (MEK)	Styrene	Toluene	Other Analyzed VOCs
	Tier 1 ESL	0.92	6.1	0.92	3.2	various
Sample Identification and Depth	B-4-1.0'	**0.0533 J**	<0.132	<0.0165	<0.00661	nd
	B-5-1.0'	**0.0694**	**0.107 J**	<0.0162	<0.00647	nd
	B-6-1.5'	**0.0571**	**0.0751 J**	<0.0135	<0.00541	nd
	A2-0.5'	<0.0567	**0.120**	**0.000398 J**	**0.00168 J**	nd
	B3-0.5'	<0.0515	**0.111**	<0.0129	<0.00515	nd

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
VOCs = Volatile organic compounds by USEPA Method 8260B using preparation method 5035
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# and nd = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
J = The identification of the analyte is acceptable; the reported value is an estimate
MEK = Methyl ethyl ketone

Table 2A - Site 1
Soil Data Summary - TPH
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed TPH	TPH-g (C5-C12)	TPH-d (C12-C22)	TPH-mo (C22-C32)	Hydrocarbons (C32-C40)
	Tier 1 ESLs	100	260	1,600	1,600
Sample Identification and Depth	B-1-2.0'	<0.115	<4.59	<4.59	**2.78 J**
	B-2-1.5'	<0.132	<5.27	<5.27	**1.94 J**
	B-3-1.5'	<0.116	<4.66	<4.66	**2.06 J**

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
TPH = total petroleum hyrdrocarbons, quantified as gasoline (TPH-g), diesel (TPH-d), motor oil (TPH-mo), and hydrocarbons (C32-C40), analyzed by USEPA Method 8015M
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
J = The identification of the analyte is acceptable; the reported value is an estimate

Table 2B - Site 2
Soil Data Summary - TPH
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed TPH	TPH-g (C5-C12)	TPH-d (C12-C22)	TPH-mo (C22-C32)	Hydrocarbons (C32-C40)
	Tier 1 ESLs	100	260	1,600	1,600
Sample Identification and Depth	B-4-1.0'	<0.114	**0.921 J**	**4.07 J**	**4.39 J**
	B-5-1.0'	<0.113	**1.26 J**	<4.51	<4.51
	B-6-1.5'	<0.108	<4.33	<4.33	<4.33
	Comp A-0.5'	<0.103	<4.10	<4.10	**3.86 J**
	Comp B-0.5'	<0.104	<4.15	**1.98 J**	**5.49**

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
TPH = total petroleum hyrdrocarbons, quantified as gasoline (TPH-g), diesel (TPH-d), motor oil (TPH-mo), and hydrocarbons (C32-C40), analyzed by USEPA Method 8015M
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
J = The identification of the analyte is acceptable; the reported value is an estimate
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4

Table 3A - Site 1
Soil Data Summary - OCPs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed OCPs	Aldrin	Alpha BHC	Beta BHC	Delta BHC	Gamma BHC	4,4-DDD	4,4-DDE	4,4-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Hexachloro-benzene	Methoxychlor	Chlordane	Toxaphene
	Tier 1 ESLs	0.0024	0.0074	0.0074	0.0074	0.0074	2.7	0.33	0.0011	0.00046	0.0098	0.0098	0.0098	0.0011	0.0011	0.0011	0.12	0.00018	0.0008	0.013	0.0085	0.51
Sample Identification and Depth	B-1-2.0'	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.0230	<0.344	<0.459
	B-2-1.5'	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.0263	<0.395	<0.527
	B-3-1.5'	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.349	<0.466

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Samples anayized by EPA Method 8081 for Organochlorine Pesticides (OCPs)
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Tier 1 ESL for Lindane utilized for alpha-BHC, beta-BHC, gamma-BHC, and delta-BHC
Tier 1 ESL for Endosulfan utilized for Endosulfan I, Endosulfan II and Endosulfan Sulfate
Tier 1 ESL for Endrin utilized for Endrin Aldehyde and Endrin Ketone

Table 3B - Site 2
Soil Data Summary - OCPs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed OCPs	Aldrin	Alpha BHC	Beta BHC	Delta BHC	Gamma BHC	4,4-DDD	4,4-DDE	4,4-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Hexachloro-benzene	Methoxychlor	Chlordane	Toxaphene
	Tier 1 ESLs	0.0024	0.0074	0.0074	0.0074	0.0074	2.7	0.33	0.0011	0.00046	0.0098	0.0098	0.0098	0.0011	0.0011	0.0011	0.12	0.00018	0.0008	0.013	0.0085	0.51
Sample Identification and Depth	B-4-1.0'	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.343	<0.458
	B-5-1.0'	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.338	<0.451
	B-6-1.5'	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.325	<0.433
	Comp A-0.5'	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.308	<0.410
	Comp B-0.5'	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.311	<0.415

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Samples anaylzed by EPA Method 8081 for Organochlorine Pesticides (OCPs)
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Tier 1 ESL for Lindane utilized for alpha-BHC, beta-BHC, gamma-BHC, and delta-BHC
Tier 1 ESL for Endosulfan utilized for Endosulfan I, Endosulfan II and Endosulfan Sulfate
Tier 1 ESL for Endrin utilized for Endrin Aldehyde and Endrin Ketone
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4

Table 4A - Site 1
Soil Data Summary - Metals
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

Sample Identification and Depth	Analyzed Metals	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	Tier 1 ESLs	11	0.067	390	5.0	1.9	160	23	180	32	13	6.9	86	2.4	25	0.78	18	340
	B-1-2.0'	<2.30	**7.09**	**763**	**0.454**	**0.185 J**	**20.4**	**9.30**	**18.9**	**6.43**	<0.0459	**0.757**	**24.8**	<2.30	<1.15	<2.30	**44.6**	**43.1**
	B-2-1.5'	<2.63	**11.3**	**1,520**	**0.604**	**0.124 J**	**27.9**	**12.8**	**28.3**	**10.1**	<0.0527	**1.29**	**35.0**	**2.69**	<1.32	<2.63	**56.7**	**65.6**
	B-3-1.5'	<2.33 J6	**11.6**	**306 J5 O1**	**0.518**	<0.582	**24.9 O1**	**7.23**	**38.6 O1**	**10.7**	<0.0466	**1.17**	**20.6**	**2.95**	<1.16	<2.33	**47.3 O1**	**63.9 O1**

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
Metals = California Title 22 Metals (CAM 17), reported as total concentrations, analyzed by EPA Method 6010B/7471A
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
Yellow Shading = Concentration exceeds the established Tier 1 ESL
J = The identification of the analyte is acceptable; the reported value is an estimate
J5 = The sample matrix interfered with the ability to make any accurate determination; spike value is high
O1 = The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Table 4B - Site 2
Soil Data Summary - Metals
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed Metals	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	Tier 1 ESLs	11	0.067	390	5.0	1.9	160	23	180	32	13	6.9	86	2.4	25	0.78	18	340
Sample Identification and Depth	B-4-1.0'	<2.29	**9.99**	**680**	**0.899**	**0.121 J**	**29.7**	**9.72**	**22.0**	**9.29**	**0.0221 J**	**0.790**	**34.8**	<2.29	<1.14	<2.29	**63.9**	**56.5**
	B-5-1.0'	<2.25	**15.8**	**269**	**0.751**	**0.0986 J**	**33.1**	**9.22**	**34.6**	**14.6**	**0.0248 J**	**0.896**	**40.1**	<2.25	<1.13	<2.25	**73.8**	**110**
	B-6-1.5'	**0.746 J**	**3.14**	**683**	**0.379**	<0.541	**22.0**	**18.3**	**20.2**	**8.41**	<0.0433	**0.415 J**	**35.4**	<2.16	<1.08	<2.16	**52.1**	**49.1**
	Comp A-0.5'	<2.05	**6.32**	**314**	**0.428**	**0.149 J**	**36.4**	**14.4**	**27.4**	**8.59**	**0.0361 J**	**0.719**	**44.5**	<2.05	<1.03	<2.05	**67.2**	**56.9**
	Comp B-0.5'	<2.07	**7.34**	**297**	**0.459**	**0.155 J**	**34.1**	**12.1**	**26.1**	**9.94**	<0.0415	**0.536**	**37.9**	**1.95**	<1.04	<2.07	**63.3**	**58.2**

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
Metals = California Title 22 Metals (CAM 17), reported as total concentrations, analyzed by EPA Method 6010B/7471A
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Bold = analyte detected above laboratory reporting limit
Yellow Shading = Concentration exceeds the established Tier 1 ESL
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4
J = The identification of the analyte is acceptable; the reported value is an estimate
J5 = The sample matrix interfered with the ability to make any accurate determination; spike value is high
O1 = The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.

Table 5A - Site 1
Soil Data Summary - PFAS
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed PFAS	PFOS	PFOA	6:2 FTS	8:2 FTS	PFBA	PFDA	PFDoA	PFHpA	PFHxA	PFNA	PFPeA	PFUdA	Other Analyzed PFAS
Interim Final ESLs	Direct Exposure Human Health Risk Levels- Resident Cancer Risk	12	3.8	--	--	--	--	--	--	--	--	--	--	--
	Leaching to Groundwater Levels: Drinking Water	0.4	0.097	--	--	--	--	--	--	--	--	--	--	--
	Leaching to Groundwater Levels: Aquatic Habitat	0.00029	0.00042	--	--	--	--	--	--	--	--	--	--	--
Sample Identification and Depth	B-1-1.0'	<0.187	**1.08**	**1.02 J**	**0.339 J**	**0.338 J**	**0.292 J**	**0.214 J**	**0.407 J**	**0.497 J**	**0.780 J**	**0.757 J**	**0.174 J**	nd
	B-2-1.0'	<0.183	<0.153	<0.173	<0.265	<0.132	<0.122	<0.204	<0.132	<0.153	<0.092	<0.153	<0.142	nd
	B-3-1.0'	<0.178	**0.292 J**	<0.168	<0.258	<0.129	**0.172 J**	<0.198	<0.129	<0.149	**0.215 J**	<0.149	<0.139	nd

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
PFAS = Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537 Modified for up to 23 PFAS compounds
Results and Tier 1 ESLs reported in micrograms per kilogram (µg/kg)
<# and nd = Analyzed compound concentrations not detected above indicated laboratory detection limit
Interim Final ESLs = San Francisco Bay Regional Water Quality Control Board, Transmittal of Interim Final Environmental Screening Levels (ESLs) for Two Per- and Polyfluoroalkyl Substances (PFAS): Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA), May 27, 2020
-- = Interim Final ESL not established
Bold = analyte detected above laboratory detection limit
Yellow Shading = Concentration exceeds the leaching to groundwater interim ESLs
J = Indicates the result is between the method detection limit and the limit of quantitation
PFOS = Perfluorooctanesulfonic acid
PFOA = Perfluorooctanoic acid
6:2 FTS = 6:2 Fluorotelomer sulfonate
8:2 FTS = 8:2 Fluorotelomer sulfonate
PFBA = Perfluorobutanoic acid
PFDA = Perfluorodecanoic acid
PFDoA = Perfluorododecanoic acid
PFHpA = Perfluoroheptanoic acid
PFHxA = Perfluorohexanoic acid
PFNA = Perfluorononanoic acid
PFPeA = Perfluoropentanoic acid
PFUdA = Perfluoroundecanoic acid

Table 5B - Site 2
Soil Data Summary - PFAS
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed PFAS	PFOS	PFOA	6:2 FTS	8:2 FTS	PFBA	PFDA	PFDoA	PFHpA	PFHxA	PFNA	PFPeA	PFUdA	Other Analyzed PFAS
Interim Final ESLs	Direct Exposure Human Health Risk Levels- Resident Cancer Risk	12	3.8	--	--	--	--	--	--	--	--	--	--	--
	Leaching to Groundwater Levels: Drinking Water	0.4	0.097	--	--	--	--	--	--	--	--	--	--	--
	Leaching to Groundwater Levels: Aquatic Habitat	0.00029	0.00042	--	--	--	--	--	--	--	--	--	--	--
Sample Identification and Depth	B-4-1.0'	<0.193	<0.161	<0.182	<0.279	<0.139	<0.129	<0.214	<0.139	<0.161	**0.112 J**	<0.161	<0.150	nd
	B-5-1.0'	<0.185	<0.154	<0.174	<0.267	<0.133	<0.123	<0.205	<0.133	<0.154	<0.092	<0.154	<0.144	nd
	B-6-1.0'	<0.183	<0.153	<0.173	<0.265	<0.132	<0.122	<0.204	<0.132	<0.153	<0.092	<0.153	<0.143	nd

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
PFAS = Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537 Modified for up to 23 PFAS compounds
Results and Tier 1 ESLs reported in micrograms per kilogram (µg/kg)
<# and nd = Analyzed compound concentrations not detected above indicated laboratory detection limit
Interim Final ESLs = San Francisco Bay Regional Water Quality Control Board, Transmittal of Interim Final Environmental Screening Levels (ESLs) for Two Per- and Polyfluoroalkyl Substances (PFAS): Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoate (PFOA), May 27, 2020
-- = Interim Final ESL not established
Bold = analyte detected above laboratory detection limit
Yellow Shading = Concentration exceeds the leaching to groundwater Interim ESLs
J = Indicates the result is between the method detection limit and the limit of quantitation
PFOS = Perfluorooctanesulfonic acid
PFOA = Perfluorooctanoic acid
6:2 FTS = 6:2 Fluorotelomer sulfonate
8:2 FTS = 8:2 Fluorotelomer sulfonate
PFBA = Perfluorobutanoic acid
PFDA = Perfluorodecanoic acid
PFDoA = Perfluorododecanoic acid
PFHpA = Perfluoroheptanoic acid
PFHxA = Perfluorohexanoic acid
PFNA = Perfluorononanoic acid
PFPeA = Perfluoropentanoic acid
PFUdA = Perfluoroundecanoic acid

Table 6 - Site 2
Soil Data Summary - PAHs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed PAHs	Anthracene	Acenaphthene	Acenaphthylene	Benzo(A)-Anthracene	Benzo(A)-Pyrene	Benzo(B)-Fluoranthene	Benzo(G,H,I)-Perylene	Benzo(K)-Fluoranthene	Chrysene	Dibenz(A,H)-Anthracene	Fluoranthene	Fluorene	Indeno-(1,2,3-DC)-Pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methyl-Naphthalene	2-Methyl-Naphthalene	2-Chloro-Naphthalene
	Tier 1 ESLs	1.9	12	6	0.63	0.11	1.1	2.5	2.8	2.2	0.11	0.69	6.0	0.48	0.042	7.8	45	0.88	0.88	--
Composite Sample Identification and Depth	COMP A-0.5'	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.00616	<0.0205	<0.00616	<0.00616	<0.0205	<0.0205	<0.0205
	COMP B-0.5'	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.00622	<0.0207	<0.00622	<0.00622	<0.0207	<0.0207	<0.0207

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
PAHs = Polynuclear Aromatic Hydrocarbons, analyzed by USEPA Method 8270C-SIM
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4
Tier 1 ESL for 2-Methylnaphthalene utilized for 1-Methylnaphthalene
-- = Tier 1 ESL not established for this compound

Table 7 - Site 2
Soil Data Summary - PCBs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

	Analyzed PCBs	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
	Tier 1 ESLs	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Composite Sample Identification and Depth	COMP A-0.5'	<0.0349	<0.0349	<0.0349	<0.0349	<0.0174	<0.0174	<0.0174
	COMP B-0.5'	<0.0353	<0.0353	<0.0353	<0.0353	<0.0176	<0.0176	<0.0176

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
Samples anaylzed by EPA Method 8082 for Polychlorinated Biphenyls (PCBs)
Results and Tier 1 ESLs reported in milligrams per kilogram (mg/kg)
<# = Analyzed compound concentrations not detected above indicated laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Tier 1, 2019 (Rev. 2)
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4

Table 8 - Site 2
Soil Data Summary - Asbestos
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

Bulk Asbestos Analysis		Asbestos / Total Points	Sensitivy (%)	Presence of Asbestos
Composite Soil Sample Identification and Depth	COMP A-0.5'	0 / 400	<0.25%	No Asbestos Detected
	COMP B-0.5'	0 / 400	<0.25%	No Asbestos Detected

Notes:
Samples collected on July 8, 2020 at approximate sample depths indicated
Sample depths in feet below ground surface estimated by observed soil recovery
Samples analyzed by CARB 435 (400 Points); using polarized light microscopy (PLM), Micro Analytical SOP PLM-101, Rev. 1/4/2014 for building materials (based on EPA-600/R93-116 (1993), and California ARB 435 (1991)
Comp A = Composite soil sample from samples A1, A2, A3, and A4
Comp B = Composite soil sample from samples B1, B2, B3, and B4

Table 9A - Site 1
Soil Vapor Data Summary - VOCs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

Analyzed VOCs	Sample Identification B-1-SV	B-2-SV	B-3-SV	Tier 1 ESL	C/I ESL
Acetone	**176**	**211**	**238**	1,000,000	4,500,000
Benzene	**28.1**	**5.72**	**30.3**	3.2	14
1,3-Butadiene	**78.6**	<4.43	**6.86**	--	--
Carbon Disulfide	**11.3**	<0.622	**7.84**	--	--
Carbon Tetrachloride	<1.26	<1.26	**1.39**	16	68
Chloromethane	<0.413	**0.663**	**1.22**	3,100	13,000
Cyclohexane	**49.6**	**3.65**	**37.2**	--	--
Ethanol	**31.1**	**21.1**	**30.2**	--	--
Ethylbenzene	**35.3**	**3.49**	**10.1**	37	160
4-Ethyltoluene	**14.5**	**3.12**	**9.03**	--	--
Trichlorofluoromethane	**1.96**	**1.37**	**2.24**	--	--
Dichlorodifluoromethane	**2.72**	**2.35**	**2.43**	--	--
Heptane	**47.9**	**7.24**	**47.9**	--	--
N-Hexane	**287**	**7.54**	**169**	--	--
Isopropylbenzene	<0.983	<0.983	**2.29**	--	--
Methylene Chloride	<0.694	<0.694	**1.19**	34	410
Methyl Butyl Ketone	**38.5**	<5.11	<5.11	--	--
2-Butanone (Mek)	**113**	**63.1**	**64.6**	170,000	730,000
4-Methyl-2-Pentanone (Mibk)	**16.7**	<5.12	<5.12	14,000	440,000
Naphthalene	<3.30	<3.30	<3.30	2.8	12
2-Propanol	<3.07	**16.8**	**14.1**	--	--
Propene	**2,150**	<0.689	**164**	--	--
Styrene	<0.851	**1.36**	<0.851	31,000	130,000
Tetrachloroethene	<1.36	<1.36	<1.36	15	67
Toluene	**784**	**1,130**	**441**	10,000	44,000
Trichloroethene	<1.07	**1.73**	**1.59**	16	100
1,2,4-Trimethylbenzene	**13.4**	**3.95**	**10.3**	--	--
1,3,5-Trimethylbenzene	**5.30**	**1.16**	**2.99**	--	--
2,2,4-Trimethylpentane	**54.7**	**5.33**	**20.4**	--	--
Vinyl Chloride	<0.511	<0.511	<0.511	0.32	5.2
M&P-Xylene	**98.0**	**9.54**	**26.1**	3,500	15,000
O-Xylene	**33.1**	**2.87**	**9.45**	3,500	15,000
Other Analyzed VOCs	nd	nd	nd	various	various

Notes:
Samples collected on July 8, 2020 and anaylzed for volatile organic compounds (VOCs) by USEPA Method TO-15
Results reported in micrograms per cubic meter ($\mu g/m^3$)
<# = not detected above the indicated laboratory reporting limit
nd = not detected above the laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB), Tier 1 Environmental Screening Levels (ESLs), 2019 (Rev. 2)
C/I ESL = RWQCB, Summary of Vapor ESLs, Table SG-1, Commercial/Industrial, 2019 (Rev. 2)
Yellow = Concentration exceeds established Tier 1 ESL
Blue = Concentration exceeds established C/I ESL
-- = ESL not established
Bold = Concentration above laboratory reporting limit
2-Propanol (isopropyl alcohol [IPA]) utilized as a leak check compound during sample collection

Table 9B - Site 2
Soil Vapor Data Summary - VOCs
Byron Airport
550 Eagle Court, Byron, California
Project Number 20-0020.02

Analyzed VOCs	Sample Identification B-4-SV	B-5-SV	B-6-SV	Tier 1 ESL	C/I ESL
Acetone	**182**	**128**	**78.7**	1,000,000	4,500,000
Benzene	**21.7**	**20.7**	**4.41**	3.2	14
1,3-Butadiene	**27.9**	<4.43	<4.43	--	--
Carbon Disulfide	**10.6**	<0.622	<0.622	--	--
Carbon Tetrachloride	<1.26	<1.26	<1.26	16	68
Chloromethane	**2.48**	**1.30**	**0.715**	3,100	13,000
Cyclohexane	**34.8**	**6.44**	**2.00**	--	--
Ethanol	**41.1**	**16.6**	**38.3**	--	--
Ethylbenzene	**27.8**	**21.3**	**7.33**	37	160
4-Ethyltoluene	**7.85**	**5.79**	**2.93**	--	--
Trichlorofluoromethane	**1.78**	**1.48**	**1.34**	--	--
Dichlorodifluoromethane	**2.82**	**2.67**	**2.49**	--	--
Heptane	**70.3**	**55.6**	**15.1**	--	--
N-Hexane	**337**	**27.4**	**6.84**	--	--
Isopropylbenzene	<0.983	<0.983	<0.983	--	--
Methylene Chloride	<0.694	**2.32**	**3.65**	34	410
Methyl Butyl Ketone	<5.11	<5.11	<5.11	--	--
2-Butanone (Mek)	**56.6**	**47.8**	**18.0**	170,000	730,000
4-Methyl-2-Pentanone (Mibk)	<5.12	<5.12	<5.12	14,000	440,000
Naphthalene	<3.30	<3.30	<3.30	2.8	12
2-Propanol	<3.07	**28.5**	**22.3**	--	--
Propene	**704**	<0.689	<0.689	--	--
Styrene	<0.851	<0.851	<0.851	31,000	130,000
Tetrachloroethene	**2.48**	<1.36	<1.36	15	67
Toluene	**5,950**	**6,400**	**3,380**	10,000	44,000
Trichloroethene	<1.07	<1.07	<1.07	16	100
1,2,4-Trimethylbenzene	**7.17**	**4.81**	**3.26**	--	--
1,3,5-Trimethylbenzene	**2.74**	**2.07**	**1.09**	--	--
2,2,4-Trimethylpentane	**57.9**	**171**	**37.9**	--	--
Vinyl Chloride	<0.511	<0.511	<0.511	0.32	5.2
M&P-Xylene	**78.0**	**57.2**	**20.9**	3,500	15,000
O-Xylene	**19.9**	**12.5**	**5.29**	3,500	15,000
Other Analyzed VOCs	nd	nd	nd	various	various

Notes:
Samples collected on July 8, 2020 and anaylzed for volatile organic compounds (VOCs) by USEPA Method TO-15
Results reported in micrograms per cubic meter ($\mu g/m^3$)
<# = not detected above the indicated laboratory reporting limit
nd = not detected above the laboratory reporting limit
Tier 1 ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB), Tier 1 Environmental Screening Levels (ESLs), 2019 (Rev. 2)
C/I ESL = RWQCB, Summary of Vapor ESLs, Table SG-1, Commercial/Industrial, 2019 (Rev. 2)
Yellow = Concentration exceeds established Tier 1 ESL
Blue = Concentration exceeds established C/I ESL
-- = ESL not established
Bold = Concentration above laboratory reporting limit
2-Propanol (isopropyl alcohol [IPA]) utilized as a leak check compound during sample collection

APPENDIX A

CONTRA COSTA ENVIRONMENTAL HEALTH DIVISION DRILLING PERMIT

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION

2120 DIAMOND BLVD. SUITE 100. CONCORD. CA 94520-5704
(925) 608-5500 FAX (925) 608-5502 www.cchealth.org/eh/

Soil Boring Permit

Permit Number: 0027298 PE Number: 4301

Date Received: June 24, 2020 WP Number: WP0027298

Issued By: ROBERT GRIBBEN Date Issued: 29-Jun-2020 Date Expires: 30-Dec-2020

Intended Use: SOIL BORING # of Borings or Well ID: 6 BORINGS

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

Project Site Information

Site Address: BYRON AIRPORT, 6901 ARMSTRONG RD, BYRON
APN: 001 011 037 Lot/Parcel #:
Subdivisioin #: Minor Subdivision #:

Driller/Consultant Information

Driller: ENVIRONMENTAL CONTROL ASSOCIATES Contact Person: TIM TYLER
Phone #: 831-662-8178 E-Mail or Fax#: tbtyler@sbcglobal.net
Consultant: ROSSO ENVIRONMENTAL, INC. Contact Person: JEREMY WILSON
Phone #: 415-583-9067 E-Mail or Fax#: jwilson@rossoenv.com

Legal Owner Information

Property Owner: CONTRA COSTA COUNTY Responsible Party: NEARON ENTERPRISES, LLC
Owner Address: 550 SALLY RIDE DR Address: 101 YGNACIO VALLEY RD., STE. 450
City/State/Zip: CONCORD, CA 94520 City/State/Zip: WALNUT CREEK, CA 94596
Phone #: 925-646-5722 Phone #: Not Specified

Prior to any drilling construction or destruction of a well, requests for inspection appointment must be received 48 hours in advance (excluding weekends, holidays, and Mandatory County Furlough Days) by faxing your written request to (925) 608-5502 or e-mail to ehlu@.cchealth.org. Voice mail messages are not acceptable.

Well drillers must possess a valid C-57 license and must have on file a performance bond of $5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

Soil Boring Permit Conditions:

1. Soil Boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
2. _____
3. _____

Final Approval by: R. Gribben Date: 7-22-2020

7/24/2020

APPENDIX B

BORING LOGS

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-1

Start Date:	7/8/20	Start Time:	0840	Elevation (ft, msl):	n/a
Finish Date:	7/8/20	Finish Time:	1315	Boring Diameter (in)	2

Driller:	ECA	Drill Method:	Direct Push
Hammer Weight:	n/a	Drop:	n/a

Borehole Completion Data: Neat Cement Grout to Grade.

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

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

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
				0840				SM	SILTY SAND with GRAVEL; Tan, fine to medium grained, medium dense, dry, no odor.
		1.0		0900	1	■			
			0.0						
		2.0		0841	2	■			
	36			0842	3				
								SP	SAND; Tan, fine grained, medium dense, dry, no odor.
			0.0		4				
	24			0845				SM	SILTY SAND with Trace CLAY and GRAVEL; Brown, dense, dry, no odor.
				1245	5				
					6			ML	SANDY SILT; Tan-brown, fine grained, some gravel and trace clay, stiff, dry, no odor.
	36		0.0	1250	7				
					8				Trace GRAVEL.
					9				
					10				
	36		0.0	1255	11				
					12				
					13				
	36		0.0	1300	14				
					15				
					16			SM	SILTY SAND; Tan, fine to medium grained, dense, dry, no odor.
	36		0.0	1305				ML	SANDY SILT; Brown-tan, fine grained, trace gravel, stiff, dry, no odor.
					17				
					18				3" layer of SAND; Tan, fine grained, some fine gravel, dense, dry, no odor.
					19				
	36		0.0	1310					

LOG OF SOIL BORING

Project No.: 20-0020.02
Project Name: Byron Airport
Location: Site 1 and Site 2
Logged By: J. Wilson

BORING NO. B-1

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
					21			ML	Some CLAY.
					22				Hard.
	36		0.0	1315	23				Refusal
									EOB at 23' bgs.
					24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-2

Start Date:	7/8/20	Start Time:	1035	Elevation (ft, msl):	n/a
Finish Date:	7/8/20	Finish Time:	1230	Boring Diameter (in)	2

Driller:	ECA	Drill Method:	Direct Push
Hammer Weight:	n/a	Drop:	n/a

Borehole Completion Data: Neat Cement Grout to Grade.

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

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	USCS	DESCRIPTION
				1035	0	SM	SILTY SAND with GRAVEL; Tan, fine to medium grained, medium dense, dry, no odor.
		1.0		0800	1		
		1.5	0.0	1036			
					2		
	36		0.0	1037	3	ML	CLAYEY SILT; Brown, trace fine sand and gravel, medium stiff, dry, no odor.
					4	SM	SILTY SAND; Brown, fine to coarse grained, some gravel, dense, dry, no odor.
	24		0.0	1040	5		
					6		
					7		Tan, fine to medium grained.
	36		0.0	1045	8		
					9		
					10		
	36		0.0	1050	11	ML	SANDY SILT; White-tan-gray, fine grained, trace gravel, stiff, dry to damp, no odor.
					12		Trace CLAY.
					13		
	36		0.0	1055	14		Fine to medium grained.
					15		
					16		Damp, fine to coarse grained, some fine GRAVEL.
	36		0.0	1100	17		
					18		
					19		
	36		0.0	1110			SANDY SILT; Gray-white, stiff, dry to damp, no odor.

LOG OF SOIL BORING

Project No.: 20-0020.02
Project Name: Byron Airport
Location: Site 1 and Site 2
Logged By: J. Wilson

BORING NO. B-2

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
					21			ML	SANDY SILT; Gray, trace clay, stiff, dry, no odor.
					22				
	36		0.0	1115	23			SM	SILTY SAND; Brown, fine grained, dense, dry to damp, no odor.
								ML	CLAYEY SILT; Gray, stiff, dry to damp, no odor.
					24				
					25			CL	SILTY CLAY; Gray, stiff, dry to damp, no odor.
	36		0.0	1125	26				Dry.
					27				
					28				Gray-brown-tan, hard, dry.
					29				SILTY CLAY; Hard, dry, no odor. Brown-black.
	48		0.0	1140	30				
					31				
					32				SILTY CLAY; Brown-black, hard, dry, no odor.
	36		0.0	1205	33				
					34			ML	CLAYEY SILT; Brown, hard, dry to damp, no odor.
					35				
	36		0.0	1220	36				
					37				
	18		0.0	1230					Refusal.
					38				EOB at 37.5' bgs.
					39				
					40				
					41				
					42				
					43				
					44				

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-3

Start Date:	7/8/20	Start Time:	0815	Elevation (ft, msl):	n/a
Finish Date:	7/8/20	Finish Time:	0820	Boring Diameter (in)	2
Driller:	ECA	Drill Method:	Direct Push		
Hammer Weight:	n/a	Drop:	n/a		

Borehole Completion Data: Neat Cement Grout to Grade.

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

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
				0815	0			SM	SILTY SAND with GRAVEL; Tan, fine to medium grained, medium dense, dry, no odor.
		1.0		0835	1	■			
		1.5	0.0	0817	2				
	36				3			ML	CLAYEY SILT; Brown, trace fine sand, trace gravel, medium stiff, dry to damp, no odor.
			0.0		4				
	24			0820	5				EOB at 5 ft bgs.
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-4

Start Date:	7/8/20	Start Time:	0910	Elevation (ft, msl):	n/a
Finish Date:	7/8/20	Finish Time:	1650	Boring Diameter (in)	2

Driller:	ECA	Drill Method:	Direct Push
Hammer Weight:	n/a	Drop:	n/a

Borehole Completion Data: Neat Cement Grout to Grade.

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

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
				0910						SM	SILTY SAND with GRAVEL; Tan, fine to medium grained, medium dense, dry, no odor.
		1.0	0.0	0911	0930		1	■			
							2				
	36		0.0	0913			3			ML	SANDY SILT; Brown, trace clay and gravel, medium stiff, dry, no odor.
											SANDY SILT; Brown, trace clay, trace gravel, dense, dry, no odor.
			0.0				4				
	24			0915			5			SP	SAND; Light brown, fine grained, hard, dry, no odor.
				1635							
							6				
	24		0.0	1650			7				Refusal.
											EOB at 7 ft bgs.
							8				
							9				
							10				
							11				
							12				
							13				
							14				
							15				
							16				
							17				
							18				
							19				

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-5

Start Date:	7/8/20	Start Time:	1000	Elevation (ft, msl):	n/a
Finish Date:	7/8/20	Finish Time:	1630	Boring Diameter (in)	2
Driller:	ECA			Drill Method:	Direct Push
Hammer Weight:	n/a			Drop:	n/a

Borehole Completion Data: Neat Cement Grout to Grade.

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

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME			DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
				1000						SM	SILTY SAND with GRAVEL; Tan, fine to medium grained, medium dense, dry, no odor.
		1.0	0.0	1001/1020			1	■			
							2				
	36			1003			3			ML	SANDY SILT; Brown, some gravel, medium stiff, dry, no odor.
							4				
	24		0.0	1005			5				CLAYEY SILT; Brown, some gravel, trace sand, fine to medium grained, stiff, dry to damp, no odor.
				1550			6				
	24		0.0	1555			7				SANDY SILT; Tan-brown, fine grained, stiff, dry, no odor.
							8				
							9				
	36		0.0	1600			10				
							11				
							12				
	36		0.0	1605			13				SANDY SILT; Tan-brown, trace clay and gravel, stiff, dry to damp, no odor.
							14				
							15				
	36		0.0	1610			16				Dry.
							17				
							18				
	36		0.0	1615			19				

LOG OF SOIL BORING

Project No.: 20-0020.02
Project Name: Byron Airport
Location: Site 1 and Site 2
Logged By: J. Wilson

BORING NO. B-5

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
					21			ML	Hard, dry, dark brown-black.
	36		0.0	1630	22				Refusal.
									EOB at 22' bgs.
					23				
					24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

ROSSO ENVIRONMENTAL, INC.

LOG OF SOIL BORING

Project No.:	20-0020.02
Project Name:	Byron Airport
Location:	Site 1 and Site 2
Logged By:	J. Wilson

BORING NO. B-6

Start Date:	7/8/20	Start Time: 0935	Elevation (ft, msl): n/a
Finish Date:	7/8/20	Finish Time: 0940	Boring Diameter (in) 2
Driller:	ECA	Drill Method:	Direct Push
Hammer Weight:	n/a	Drop:	n/a

Borehole Completion Data: Neat Cement Grout to Grade.

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

▽ Encountered Groundwater Depth
▼ Static Groundwater Depth
☒ Sample Collected
■ Sample Analyzed
NE Groundwater Not Encountered

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE	GRAPHIC LOG	USCS	DESCRIPTION
☒				0935	1	■		SM	SILTY SAND; Tan, fine to medium grained, with gravel, medium dense, dry, no odor.
☒		1.0		0950					
☒		1.5	0.0	0936	2				
☒	36		0.0	0937	3				SILTY SAND; Tan, fine grained, trace gravel, medium dense, dry, no odor.
☒					4			SP	SAND; Red/brown, fine to medium grained, trace gravel, dense, dry, no odor.
☒	24		0.0	0940	5				EOB at 5 ft bgs.
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				

APPENDIX C

FIELD SAMPLING DATA SHEETS

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-1 Sample ID: B-1-SV

Site name: Byron Airport Canister ID: 5584

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1320

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1310	-30"+ Hg	Begin Purge Summa ID: 10760
	1312	-30" Hg	End
Sample	1312	-30"+ Hg	Begin
	1314	-20" Hg	Okay
	1316	-10" Hg	Okay
	1320	-1" Hg	End

Location/comments: Site 1
Manifold ID: 8742

Leak Compound Used: Isopropyl Alcohol (IPA)

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-2 Sample ID: B-2-SV

Site name: Byron Airport Canister ID: 11191

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1453

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1444	-25.5" Hg	Begin Purge Summa ID: 10760
	1446	-25" Hg	End
Sample	1446	-30"+ Hg	Begin
	1448	-20" Hg	Okay
	1450	-10" Hg	Okay
	1453	-1" Hg	End

Location/comments: Site 1
Manifold ID: 11765

Leak Compound Used: Isopropyl Alcohol (IPA)

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-3 Sample ID: B-3-SV

Site name: Byron Airport Canister ID: 8512

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1300

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1252	-30" Hg	Begin Purge Summa ID: 10760
	1254	-29.5" Hg	End
Sample	1254	-29.5" Hg	Begin
	1256	-20" Hg	Okay
	1258	-10" Hg	Okay
	1300	-1" Hg	End

Location/comments: Site 1
Manifold ID: 6036

Leak Compound Used: Isopropyl Alcohol (IPA)

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-4 Sample ID: B-4-SV

Site name: Byron Airport Canister ID: 8800

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1423

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1415	-26" Hg	Begin Purge Summa ID: 10760
	1417	-25" Hg	End
Sample	1417	-29" Hg	Begin
	1419	-20" Hg	Okay
	1421	-10" Hg	Okay
	1423	-1" Hg	End

Location/comments: Site 2
Manifold ID: 9188

Leak Compound Used: Isopropyl Alcohol (IPA)

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-5 Sample ID: B-5-SV

Site name: Byron Airport Canister ID: 6261

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1402

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1354	-28" Hg	Begin Purge Summa ID: 10760
	1356	-27" Hg	End
Sample	1356	-30" Hg	Begin
	1358	-20" Hg	Okay
	1400	-10" Hg	Okay
	1402	-1" Hg	End

Location/comments: Site 2
Manifold ID: 9328

Leak Compound Used: Isopropyl Alcohol (IPA)

Date: 7-8-2020 Project # 20-0020.02

Sample location: B-6 Sample ID: B-6-SV

Site name: Byron Airport Canister ID: 5514

Address: 550 Eagle Ct, Byron, CA 94514 Time: 1346

Field staff: J. Wilson Weather-Temp: Clear, 70's - 90's

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

Duration: ☒ Grab ☐ 8-hour ☐ 24-hour Flow rate: ~150 milliliters per minute

Canister type: ☒ 1.0-Liter ☐ 6-Liter ☐ Other:

Fuel use in building: ☐ Natural gas ☐ Electric ☒ Other: Outdoor Soil Vapor

Indoor Mechanical Ventilation? ☐ Yes ☐ No Notes: Not Applicable

	Time	Canister Vacuum	Notes
Line Purge	1337	-29" Hg	Begin Purge Summa ID: 10760
	1339	-28" Hg	End
Sample	1339	-30"+ Hg	Begin
	1341	-20" Hg	Okay
	1343	-10" Hg	Okay
	1346	-1" Hg	End

Location/comments: Site 2
Manifold ID: 8637

Leak Compound Used: Isopropyl Alcohol (IPA)

APPENDIX D

CERTIFIED LABORATORY ANALYTICAL REPORTS

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 20, 2020

Rosso Environmental, Inc. - Berkeley, CA

Sample Delivery Group:	L1238537
Samples Received:	07/10/2020
Project Number:	20-0020.02
Description:	Bryan Airport

Report To: Jeremy Wilson
1400 Shattuck Avenue
Berkeley, CA 94709

Entire Report Reviewed By:

Jared Starkey
Project Manager

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ONE LAB. NATIONWIDE.

B-1-2.0' L1238537-01 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 08:41 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508927	1	07/15/20 23:07	07/15/20 23:17	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:02	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 18:49	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 08:41	07/14/20 14:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 08:41	07/13/20 11:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1506713	1	07/14/20 08:24	07/15/20 04:25	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 22:30	LEL	Mt. Juliet, TN

B-2-1.5' L1238537-02 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 10:36 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508927	1	07/15/20 23:07	07/15/20 23:17	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:16	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 18:52	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 10:36	07/14/20 15:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 10:36	07/13/20 11:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1506713	1	07/14/20 08:24	07/15/20 04:38	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 22:44	LEL	Mt. Juliet, TN

B-3-1.5' L1238537-03 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 08:17 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508928	1	07/15/20 22:54	07/15/20 23:03	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:18	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 18:35	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 08:17	07/14/20 15:36	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 08:17	07/13/20 11:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1506713	1	07/14/20 08:24	07/15/20 04:51	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 22:57	LEL	Mt. Juliet, TN

B-4-1.0' L1238537-04 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 09:11 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508928	1	07/15/20 22:54	07/15/20 23:03	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:20	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 18:55	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 09:11	07/14/20 15:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 09:11	07/13/20 12:18	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1506713	1	07/14/20 08:24	07/15/20 05:04	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 23:10	LEL	Mt. Juliet, TN

B-5-1.0' L1238537-05 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 10:01 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508928	1	07/15/20 22:54	07/15/20 23:03	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:23	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 19:03	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 10:01	07/14/20 16:18	ADM	Mt. Juliet, TN

SAMPLE SUMMARY

B-5-1.0' L1238537-05 Solid

Collected by: Jeremy Wilson
Collected date/time: 07/08/20 10:01
Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 10:01	07/13/20 12:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1508649	1	07/14/20 10:30	07/14/20 21:53	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 23:24	LEL	Mt. Juliet, TN

B-6-1.5' L1238537-06 Solid

Collected by: Jeremy Wilson
Collected date/time: 07/08/20 09:36
Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508928	1	07/15/20 22:54	07/15/20 23:03	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 16:45	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507676	1	07/13/20 05:59	07/13/20 19:06	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/08/20 09:36	07/14/20 16:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508015	1	07/08/20 09:36	07/13/20 12:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1508886	1	07/14/20 15:31	07/15/20 08:34	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1508889	1	07/14/20 15:46	07/14/20 23:37	LEL	Mt. Juliet, TN

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.

Jared Starkey
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	87.1		1	07/15/2020 23:17	WG1508927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Mercury	U		0.0207	0.0459	1	07/13/2020 17:02	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Antimony	U		0.574	2.30	1	07/13/2020 18:49	WG1507676
Arsenic	7.09		0.528	2.30	1	07/13/2020 18:49	WG1507676
Barium	763		0.276	0.574	1	07/13/2020 18:49	WG1507676
Beryllium	0.454		0.0918	0.230	1	07/13/2020 18:49	WG1507676
Cadmium	0.185	J	0.0930	0.574	1	07/13/2020 18:49	WG1507676
Chromium	20.4		0.287	1.15	1	07/13/2020 18:49	WG1507676
Cobalt	9.30		0.264	1.15	1	07/13/2020 18:49	WG1507676
Copper	18.9		0.581	2.30	1	07/13/2020 18:49	WG1507676
Lead	6.43		0.239	0.574	1	07/13/2020 18:49	WG1507676
Molybdenum	0.757		0.230	0.574	1	07/13/2020 18:49	WG1507676
Nickel	24.8		0.563	2.30	1	07/13/2020 18:49	WG1507676
Selenium	U		0.708	2.30	1	07/13/2020 18:49	WG1507676
Silver	U		0.262	1.15	1	07/13/2020 18:49	WG1507676
Thallium	U		0.406	2.30	1	07/13/2020 18:49	WG1507676
Vanadium	44.6		0.789	2.30	1	07/13/2020 18:49	WG1507676
Zinc	43.1		1.08	5.74	1	07/13/2020 18:49	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPHG C5 - C12	U		0.0381	0.115	1	07/14/2020 14:55	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*106*			*59.0-128*		*07/14/2020 14:55*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Acetone	0.0620	J	0.0492	0.0674	1	07/13/2020 11:17	WG1508015
Acrylonitrile	U		0.00486	0.0168	1	07/13/2020 11:17	WG1508015
Benzene	U		0.000629	0.00135	1	07/13/2020 11:17	WG1508015
Bromobenzene	U		0.00121	0.0168	1	07/13/2020 11:17	WG1508015
Bromodichloromethane	U		0.000977	0.00337	1	07/13/2020 11:17	WG1508015
Bromoform	U		0.00158	0.0337	1	07/13/2020 11:17	WG1508015
Bromomethane	U		0.00265	0.0168	1	07/13/2020 11:17	WG1508015
n-Butylbenzene	U		0.00707	0.0168	1	07/13/2020 11:17	WG1508015
sec-Butylbenzene	U		0.00388	0.0168	1	07/13/2020 11:17	WG1508015
tert-Butylbenzene	U		0.00263	0.00674	1	07/13/2020 11:17	WG1508015
Carbon tetrachloride	U		0.00121	0.00674	1	07/13/2020 11:17	WG1508015
Chlorobenzene	U		0.000283	0.00337	1	07/13/2020 11:17	WG1508015
Chlorodibromomethane	U		0.000824	0.00337	1	07/13/2020 11:17	WG1508015
Chloroethane	U		0.00229	0.00674	1	07/13/2020 11:17	WG1508015
Chloroform	U		0.00139	0.00337	1	07/13/2020 11:17	WG1508015
Chloromethane	U		0.00586	0.0168	1	07/13/2020 11:17	WG1508015
2-Chlorotoluene	U		0.00117	0.00337	1	07/13/2020 11:17	WG1508015
4-Chlorotoluene	U		0.000606	0.00674	1	07/13/2020 11:17	WG1508015

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
1,2-Dibromo-3-Chloropropane	U		0.00525	0.0337	1	07/13/2020 11:17	WG1508015
1,2-Dibromoethane	U		0.000873	0.00337	1	07/13/2020 11:17	WG1508015
Dibromomethane	U		0.00101	0.00674	1	07/13/2020 11:17	WG1508015
1,2-Dichlorobenzene	U		0.000573	0.00674	1	07/13/2020 11:17	WG1508015
1,3-Dichlorobenzene	U		0.000808	0.00674	1	07/13/2020 11:17	WG1508015
1,4-Dichlorobenzene	U		0.000943	0.00674	1	07/13/2020 11:17	WG1508015
Dichlorodifluoromethane	U		0.00217	0.00337	1	07/13/2020 11:17	WG1508015
1,1-Dichloroethane	U		0.000661	0.00337	1	07/13/2020 11:17	WG1508015
1,2-Dichloroethane	U		0.000874	0.00337	1	07/13/2020 11:17	WG1508015
1,1-Dichloroethene	U		0.000816	0.00337	1	07/13/2020 11:17	WG1508015
cis-1,2-Dichloroethene	U		0.000989	0.00337	1	07/13/2020 11:17	WG1508015
trans-1,2-Dichloroethene	U		0.00140	0.00674	1	07/13/2020 11:17	WG1508015
1,2-Dichloropropane	U		0.00191	0.00674	1	07/13/2020 11:17	WG1508015
1,1-Dichloropropene	U		0.00109	0.00337	1	07/13/2020 11:17	WG1508015
1,3-Dichloropropane	U		0.000675	0.00674	1	07/13/2020 11:17	WG1508015
cis-1,3-Dichloropropene	U		0.00102	0.00337	1	07/13/2020 11:17	WG1508015
trans-1,3-Dichloropropene	U		0.00154	0.00674	1	07/13/2020 11:17	WG1508015
2,2-Dichloropropane	U		0.00186	0.00337	1	07/13/2020 11:17	WG1508015
Di-isopropyl ether	U		0.000552	0.00135	1	07/13/2020 11:17	WG1508015
Ethylbenzene	U		0.000993	0.00337	1	07/13/2020 11:17	WG1508015
Hexachloro-1,3-butadiene	U		0.00808	0.0337	1	07/13/2020 11:17	WG1508015
Isopropylbenzene	U		0.000573	0.00337	1	07/13/2020 11:17	WG1508015
p-Isopropyltoluene	U		0.00344	0.00674	1	07/13/2020 11:17	WG1508015
2-Butanone (MEK)	0.105	J	0.0855	0.135	1	07/13/2020 11:17	WG1508015
Methylene Chloride	U		0.00894	0.0337	1	07/13/2020 11:17	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00307	0.0337	1	07/13/2020 11:17	WG1508015
Methyl tert-butyl ether	U		0.000471	0.00135	1	07/13/2020 11:17	WG1508015
Naphthalene	U		0.00657	0.0168	1	07/13/2020 11:17	WG1508015
n-Propylbenzene	U		0.00128	0.00674	1	07/13/2020 11:17	WG1508015
Styrene	U		0.000308	0.0168	1	07/13/2020 11:17	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00128	0.00337	1	07/13/2020 11:17	WG1508015
1,1,2,2-Tetrachloroethane	U		0.000936	0.00337	1	07/13/2020 11:17	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.00102	0.00337	1	07/13/2020 11:17	WG1508015
Tetrachloroethene	U		0.00121	0.00337	1	07/13/2020 11:17	WG1508015
Toluene	U		0.00175	0.00674	1	07/13/2020 11:17	WG1508015
1,2,3-Trichlorobenzene	U		0.00987	0.0168	1	07/13/2020 11:17	WG1508015
1,2,4-Trichlorobenzene	U		0.00593	0.0168	1	07/13/2020 11:17	WG1508015
1,1,1-Trichloroethane	U		0.00124	0.00337	1	07/13/2020 11:17	WG1508015
1,1,2-Trichloroethane	U		0.000804	0.00337	1	07/13/2020 11:17	WG1508015
Trichloroethene	U		0.000787	0.00135	1	07/13/2020 11:17	WG1508015
Trichlorofluoromethane	U		0.00111	0.00337	1	07/13/2020 11:17	WG1508015
1,2,3-Trichloropropane	U		0.00218	0.0168	1	07/13/2020 11:17	WG1508015
1,2,4-Trimethylbenzene	U		0.00213	0.00674	1	07/13/2020 11:17	WG1508015
1,2,3-Trimethylbenzene	U		0.00213	0.00674	1	07/13/2020 11:17	WG1508015
1,3,5-Trimethylbenzene	U		0.00269	0.00674	1	07/13/2020 11:17	WG1508015
Vinyl chloride	U		0.00156	0.00337	1	07/13/2020 11:17	WG1508015
Xylenes, Total	U		0.00119	0.00876	1	07/13/2020 11:17	WG1508015
(S) Toluene-d8	*100*			*75.0-131*		*07/13/2020 11:17*	WG1508015
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/13/2020 11:17*	WG1508015
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*07/13/2020 11:17*	WG1508015

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	U		0.842	4.59	1	07/15/2020 04:25	WG1506713
C22-C32 Hydrocarbons	U		1.53	4.59	1	07/15/2020 04:25	WG1506713
C32-C40 Hydrocarbons	2.78	J	1.53	4.59	1	07/15/2020 04:25	WG1506713
(S) o-Terphenyl	*89.1*			*18.0-148*		*07/15/2020 04:25*	WG1506713

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		0.00432	0.0230	1	07/14/2020 22:30	WG1508889
Alpha BHC	U		0.00422	0.0230	1	07/14/2020 22:30	WG1508889
Beta BHC	U		0.00435	0.0230	1	07/14/2020 22:30	WG1508889
Delta BHC	U		0.00397	0.0230	1	07/14/2020 22:30	WG1508889
Gamma BHC	U		0.00395	0.0230	1	07/14/2020 22:30	WG1508889
4,4-DDD	U		0.00425	0.0230	1	07/14/2020 22:30	WG1508889
4,4-DDE	U		0.00420	0.0230	1	07/14/2020 22:30	WG1508889
4,4-DDT	U		0.00720	0.0230	1	07/14/2020 22:30	WG1508889
Dieldrin	U		0.00395	0.0230	1	07/14/2020 22:30	WG1508889
Endosulfan I	U		0.00417	0.0230	1	07/14/2020 22:30	WG1508889
Endosulfan II	U		0.00385	0.0230	1	07/14/2020 22:30	WG1508889
Endosulfan sulfate	U		0.00418	0.0230	1	07/14/2020 22:30	WG1508889
Endrin	U		0.00402	0.0230	1	07/14/2020 22:30	WG1508889
Endrin aldehyde	U		0.00389	0.0230	1	07/14/2020 22:30	WG1508889
Endrin ketone	U		0.00816	0.0230	1	07/14/2020 22:30	WG1508889
Heptachlor	U		0.00491	0.0230	1	07/14/2020 22:30	WG1508889
Heptachlor epoxide	U		0.00389	0.0230	1	07/14/2020 22:30	WG1508889
Hexachlorobenzene	U		0.00397	0.0230	1	07/14/2020 22:30	WG1508889
Methoxychlor	U		0.00556	0.0230	1	07/14/2020 22:30	WG1508889
Chlordane	U		0.118	0.344	1	07/14/2020 22:30	WG1508889
Toxaphene	U		0.142	0.459	1	07/14/2020 22:30	WG1508889
(S) Decachlorobiphenyl	*78.7*			*10.0-135*		*07/14/2020 22:30*	WG1508889
(S) Tetrachloro-m-xylene	*81.2*			*10.0-139*		*07/14/2020 22:30*	WG1508889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	76.0		1	07/15/2020 23:17	WG1508927

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Mercury	U		0.0237	0.0527	1	07/13/2020 17:16	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Antimony	U		0.658	2.63	1	07/13/2020 18:52	WG1507676
Arsenic	11.3		0.606	2.63	1	07/13/2020 18:52	WG1507676
Barium	1520		0.316	0.658	1	07/13/2020 18:52	WG1507676
Beryllium	0.604		0.105	0.263	1	07/13/2020 18:52	WG1507676
Cadmium	0.124	J	0.107	0.658	1	07/13/2020 18:52	WG1507676
Chromium	27.9		0.329	1.32	1	07/13/2020 18:52	WG1507676
Cobalt	12.8		0.303	1.32	1	07/13/2020 18:52	WG1507676
Copper	28.3		0.666	2.63	1	07/13/2020 18:52	WG1507676
Lead	10.1		0.274	0.658	1	07/13/2020 18:52	WG1507676
Molybdenum	1.29		0.263	0.658	1	07/13/2020 18:52	WG1507676
Nickel	35.0		0.645	2.63	1	07/13/2020 18:52	WG1507676
Selenium	2.69		0.812	2.63	1	07/13/2020 18:52	WG1507676
Silver	U		0.300	1.32	1	07/13/2020 18:52	WG1507676
Thallium	U		0.466	2.63	1	07/13/2020 18:52	WG1507676
Vanadium	56.7		0.904	2.63	1	07/13/2020 18:52	WG1507676
Zinc	65.6		1.24	6.58	1	07/13/2020 18:52	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPHG C5 - C12	U		0.0437	0.132	1	07/14/2020 15:16	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*103*			*59.0-128*		*07/14/2020 15:16*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Acetone	U		0.0626	0.0857	1	07/13/2020 11:38	WG1508015
Acrylonitrile	U		0.00619	0.0214	1	07/13/2020 11:38	WG1508015
Benzene	U		0.000801	0.00171	1	07/13/2020 11:38	WG1508015
Bromobenzene	U		0.00154	0.0214	1	07/13/2020 11:38	WG1508015
Bromodichloromethane	U		0.00124	0.00429	1	07/13/2020 11:38	WG1508015
Bromoform	U		0.00201	0.0429	1	07/13/2020 11:38	WG1508015
Bromomethane	U		0.00338	0.0214	1	07/13/2020 11:38	WG1508015
n-Butylbenzene	U		0.00900	0.0214	1	07/13/2020 11:38	WG1508015
sec-Butylbenzene	U		0.00494	0.0214	1	07/13/2020 11:38	WG1508015
tert-Butylbenzene	U		0.00334	0.00857	1	07/13/2020 11:38	WG1508015
Carbon tetrachloride	U		0.00154	0.00857	1	07/13/2020 11:38	WG1508015
Chlorobenzene	U		0.000360	0.00429	1	07/13/2020 11:38	WG1508015
Chlorodibromomethane	U		0.00105	0.00429	1	07/13/2020 11:38	WG1508015
Chloroethane	U		0.00291	0.00857	1	07/13/2020 11:38	WG1508015
Chloroform	U		0.00177	0.00429	1	07/13/2020 11:38	WG1508015
Chloromethane	U		0.00746	0.0214	1	07/13/2020 11:38	WG1508015
2-Chlorotoluene	U		0.00148	0.00429	1	07/13/2020 11:38	WG1508015
4-Chlorotoluene	U		0.000772	0.00857	1	07/13/2020 11:38	WG1508015

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
1,2-Dibromo-3-Chloropropane	U		0.00669	0.0429	1	07/13/2020 11:38	WG1508015
1,2-Dibromoethane	U		0.00111	0.00429	1	07/13/2020 11:38	WG1508015
Dibromomethane	U		0.00129	0.00857	1	07/13/2020 11:38	WG1508015
1,2-Dichlorobenzene	U		0.000729	0.00857	1	07/13/2020 11:38	WG1508015
1,3-Dichlorobenzene	U		0.00103	0.00857	1	07/13/2020 11:38	WG1508015
1,4-Dichlorobenzene	U		0.00120	0.00857	1	07/13/2020 11:38	WG1508015
Dichlorodifluoromethane	U		0.00276	0.00429	1	07/13/2020 11:38	WG1508015
1,1-Dichloroethane	U		0.000842	0.00429	1	07/13/2020 11:38	WG1508015
1,2-Dichloroethane	U		0.00111	0.00429	1	07/13/2020 11:38	WG1508015
1,1-Dichloroethene	U		0.00104	0.00429	1	07/13/2020 11:38	WG1508015
cis-1,2-Dichloroethene	U		0.00126	0.00429	1	07/13/2020 11:38	WG1508015
trans-1,2-Dichloroethene	U		0.00178	0.00857	1	07/13/2020 11:38	WG1508015
1,2-Dichloropropane	U		0.00243	0.00857	1	07/13/2020 11:38	WG1508015
1,1-Dichloropropene	U		0.00139	0.00429	1	07/13/2020 11:38	WG1508015
1,3-Dichloropropane	U		0.000859	0.00857	1	07/13/2020 11:38	WG1508015
cis-1,3-Dichloropropene	U		0.00130	0.00429	1	07/13/2020 11:38	WG1508015
trans-1,3-Dichloropropene	U		0.00195	0.00857	1	07/13/2020 11:38	WG1508015
2,2-Dichloropropane	U		0.00237	0.00429	1	07/13/2020 11:38	WG1508015
Di-isopropyl ether	U		0.000703	0.00171	1	07/13/2020 11:38	WG1508015
Ethylbenzene	U		0.00126	0.00429	1	07/13/2020 11:38	WG1508015
Hexachloro-1,3-butadiene	U		0.0103	0.0429	1	07/13/2020 11:38	WG1508015
Isopropylbenzene	U		0.000729	0.00429	1	07/13/2020 11:38	WG1508015
p-Isopropyltoluene	U		0.00437	0.00857	1	07/13/2020 11:38	WG1508015
2-Butanone (MEK)	U		0.109	0.171	1	07/13/2020 11:38	WG1508015
Methylene Chloride	U		0.0114	0.0429	1	07/13/2020 11:38	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00391	0.0429	1	07/13/2020 11:38	WG1508015
Methyl tert-butyl ether	U		0.000600	0.00171	1	07/13/2020 11:38	WG1508015
Naphthalene	U		0.00837	0.0214	1	07/13/2020 11:38	WG1508015
n-Propylbenzene	U		0.00163	0.00857	1	07/13/2020 11:38	WG1508015
Styrene	U		0.000393	0.0214	1	07/13/2020 11:38	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00163	0.00429	1	07/13/2020 11:38	WG1508015
1,1,2,2-Tetrachloroethane	U		0.00119	0.00429	1	07/13/2020 11:38	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.00129	0.00429	1	07/13/2020 11:38	WG1508015
Tetrachloroethene	U		0.00154	0.00429	1	07/13/2020 11:38	WG1508015
Toluene	U		0.00223	0.00857	1	07/13/2020 11:38	WG1508015
1,2,3-Trichlorobenzene	U		0.0126	0.0214	1	07/13/2020 11:38	WG1508015
1,2,4-Trichlorobenzene	U		0.00754	0.0214	1	07/13/2020 11:38	WG1508015
1,1,1-Trichloroethane	U		0.00158	0.00429	1	07/13/2020 11:38	WG1508015
1,1,2-Trichloroethane	U		0.00102	0.00429	1	07/13/2020 11:38	WG1508015
Trichloroethene	U		0.00100	0.00171	1	07/13/2020 11:38	WG1508015
Trichlorofluoromethane	U		0.00142	0.00429	1	07/13/2020 11:38	WG1508015
1,2,3-Trichloropropane	U		0.00278	0.0214	1	07/13/2020 11:38	WG1508015
1,2,4-Trimethylbenzene	U		0.00271	0.00857	1	07/13/2020 11:38	WG1508015
1,2,3-Trimethylbenzene	U		0.00271	0.00857	1	07/13/2020 11:38	WG1508015
1,3,5-Trimethylbenzene	U		0.00343	0.00857	1	07/13/2020 11:38	WG1508015
Vinyl chloride	U		0.00199	0.00429	1	07/13/2020 11:38	WG1508015
Xylenes, Total	U		0.00151	0.0111	1	07/13/2020 11:38	WG1508015
(S) Toluene-d8	*104*			*75.0-131*		*07/13/2020 11:38*	WG1508015
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*07/13/2020 11:38*	WG1508015
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*07/13/2020 11:38*	WG1508015

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	U		0.965	5.27	1	07/15/2020 04:38	WG1506713
C22-C32 Hydrocarbons	U		1.75	5.27	1	07/15/2020 04:38	WG1506713
C32-C40 Hydrocarbons	1.94	J	1.75	5.27	1	07/15/2020 04:38	WG1506713
(S) o-Terphenyl	*64.2*			*18.0-148*		*07/15/2020 04:38*	WG1506713

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		0.00495	0.0263	1	07/14/2020 22:44	WG1508889
Alpha BHC	U		0.00484	0.0263	1	07/14/2020 22:44	WG1508889
Beta BHC	U		0.00499	0.0263	1	07/14/2020 22:44	WG1508889
Delta BHC	U		0.00456	0.0263	1	07/14/2020 22:44	WG1508889
Gamma BHC	U		0.00453	0.0263	1	07/14/2020 22:44	WG1508889
4,4-DDD	U		0.00487	0.0263	1	07/14/2020 22:44	WG1508889
4,4-DDE	U		0.00482	0.0263	1	07/14/2020 22:44	WG1508889
4,4-DDT	U		0.00825	0.0263	1	07/14/2020 22:44	WG1508889
Dieldrin	U		0.00453	0.0263	1	07/14/2020 22:44	WG1508889
Endosulfan I	U		0.00478	0.0263	1	07/14/2020 22:44	WG1508889
Endosulfan II	U		0.00441	0.0263	1	07/14/2020 22:44	WG1508889
Endosulfan sulfate	U		0.00479	0.0263	1	07/14/2020 22:44	WG1508889
Endrin	U		0.00461	0.0263	1	07/14/2020 22:44	WG1508889
Endrin aldehyde	U		0.00446	0.0263	1	07/14/2020 22:44	WG1508889
Endrin ketone	U		0.00936	0.0263	1	07/14/2020 22:44	WG1508889
Heptachlor	U		0.00563	0.0263	1	07/14/2020 22:44	WG1508889
Heptachlor epoxide	U		0.00446	0.0263	1	07/14/2020 22:44	WG1508889
Hexachlorobenzene	U		0.00456	0.0263	1	07/14/2020 22:44	WG1508889
Methoxychlor	U		0.00637	0.0263	1	07/14/2020 22:44	WG1508889
Chlordane	U		0.136	0.395	1	07/14/2020 22:44	WG1508889
Toxaphene	U		0.163	0.527	1	07/14/2020 22:44	WG1508889
(S) Decachlorobiphenyl	*80.7*			*10.0-135*		*07/14/2020 22:44*	WG1508889
(S) Tetrachloro-m-xylene	*85.4*			*10.0-139*		*07/14/2020 22:44*	WG1508889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	85.9		1	07/15/2020 23:03	WG1508928

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Mercury	U		0.0209	0.0466	1	07/13/2020 17:18	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Antimony	U	J6	0.582	2.33	1	07/13/2020 18:35	WG1507676
Arsenic	11.6		0.535	2.33	1	07/13/2020 18:35	WG1507676
Barium	306	J5 O1	0.279	0.582	1	07/13/2020 18:35	WG1507676
Beryllium	0.518		0.0931	0.233	1	07/13/2020 18:35	WG1507676
Cadmium	U		0.0943	0.582	1	07/13/2020 18:35	WG1507676
Chromium	24.9	O1	0.291	1.16	1	07/13/2020 18:35	WG1507676
Cobalt	7.23		0.268	1.16	1	07/13/2020 18:35	WG1507676
Copper	38.6	O1	0.589	2.33	1	07/13/2020 18:35	WG1507676
Lead	10.7		0.242	0.582	1	07/13/2020 18:35	WG1507676
Molybdenum	1.17		0.233	0.582	1	07/13/2020 18:35	WG1507676
Nickel	20.6		0.570	2.33	1	07/13/2020 18:35	WG1507676
Selenium	2.95		0.718	2.33	1	07/13/2020 18:35	WG1507676
Silver	U		0.265	1.16	1	07/13/2020 18:35	WG1507676
Thallium	U		0.412	2.33	1	07/13/2020 18:35	WG1507676
Vanadium	47.3	O1	0.800	2.33	1	07/13/2020 18:35	WG1507676
Zinc	63.9	O1	1.09	5.82	1	07/13/2020 18:35	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPHG C5 - C12	U		0.0386	0.116	1	07/14/2020 15:36	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*103*			*59.0-128*		*07/14/2020 15:36*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Acetone	0.0564	J	0.0500	0.0686	1	07/13/2020 11:58	WG1508015
Acrylonitrile	U		0.00495	0.0171	1	07/13/2020 11:58	WG1508015
Benzene	U		0.000640	0.00137	1	07/13/2020 11:58	WG1508015
Bromobenzene	U		0.00123	0.0171	1	07/13/2020 11:58	WG1508015
Bromodichloromethane	U		0.000994	0.00343	1	07/13/2020 11:58	WG1508015
Bromoform	U		0.00160	0.0343	1	07/13/2020 11:58	WG1508015
Bromomethane	U		0.00270	0.0171	1	07/13/2020 11:58	WG1508015
n-Butylbenzene	U		0.00720	0.0171	1	07/13/2020 11:58	WG1508015
sec-Butylbenzene	U		0.00395	0.0171	1	07/13/2020 11:58	WG1508015
tert-Butylbenzene	U		0.00267	0.00686	1	07/13/2020 11:58	WG1508015
Carbon tetrachloride	U		0.00123	0.00686	1	07/13/2020 11:58	WG1508015
Chlorobenzene	U		0.000288	0.00343	1	07/13/2020 11:58	WG1508015
Chlorodibromomethane	U		0.000839	0.00343	1	07/13/2020 11:58	WG1508015
Chloroethane	U		0.00233	0.00686	1	07/13/2020 11:58	WG1508015
Chloroform	U		0.00141	0.00343	1	07/13/2020 11:58	WG1508015
Chloromethane	U		0.00596	0.0171	1	07/13/2020 11:58	WG1508015
2-Chlorotoluene	U		0.00119	0.00343	1	07/13/2020 11:58	WG1508015
4-Chlorotoluene	U		0.000617	0.00686	1	07/13/2020 11:58	WG1508015

B-3-1.5'

Collected date/time: 07/08/20 08:17

SAMPLE RESULTS - 03

L1238537

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
1,2-Dibromo-3-Chloropropane	U		0.00535	0.0343	1	07/13/2020 11:58	WG1508015
1,2-Dibromoethane	U		0.000889	0.00343	1	07/13/2020 11:58	WG1508015
Dibromomethane	U		0.00103	0.00686	1	07/13/2020 11:58	WG1508015
1,2-Dichlorobenzene	U		0.000583	0.00686	1	07/13/2020 11:58	WG1508015
1,3-Dichlorobenzene	U		0.000823	0.00686	1	07/13/2020 11:58	WG1508015
1,4-Dichlorobenzene	U		0.000960	0.00686	1	07/13/2020 11:58	WG1508015
Dichlorodifluoromethane	U		0.00221	0.00343	1	07/13/2020 11:58	WG1508015
1,1-Dichloroethane	U		0.000673	0.00343	1	07/13/2020 11:58	WG1508015
1,2-Dichloroethane	U		0.000890	0.00343	1	07/13/2020 11:58	WG1508015
1,1-Dichloroethene	U		0.000831	0.00343	1	07/13/2020 11:58	WG1508015
cis-1,2-Dichloroethene	U		0.00101	0.00343	1	07/13/2020 11:58	WG1508015
trans-1,2-Dichloroethene	U		0.00143	0.00686	1	07/13/2020 11:58	WG1508015
1,2-Dichloropropane	U		0.00195	0.00686	1	07/13/2020 11:58	WG1508015
1,1-Dichloropropene	U		0.00111	0.00343	1	07/13/2020 11:58	WG1508015
1,3-Dichloropropane	U		0.000687	0.00686	1	07/13/2020 11:58	WG1508015
cis-1,3-Dichloropropene	U		0.00104	0.00343	1	07/13/2020 11:58	WG1508015
trans-1,3-Dichloropropene	U		0.00156	0.00686	1	07/13/2020 11:58	WG1508015
2,2-Dichloropropane	U		0.00189	0.00343	1	07/13/2020 11:58	WG1508015
Di-isopropyl ether	U		0.000562	0.00137	1	07/13/2020 11:58	WG1508015
Ethylbenzene	U		0.00101	0.00343	1	07/13/2020 11:58	WG1508015
Hexachloro-1,3-butadiene	U		0.00823	0.0343	1	07/13/2020 11:58	WG1508015
Isopropylbenzene	U		0.000583	0.00343	1	07/13/2020 11:58	WG1508015
p-Isopropyltoluene	U		0.00350	0.00686	1	07/13/2020 11:58	WG1508015
2-Butanone (MEK)	U		0.0871	0.137	1	07/13/2020 11:58	WG1508015
Methylene Chloride	U		0.00910	0.0343	1	07/13/2020 11:58	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00313	0.0343	1	07/13/2020 11:58	WG1508015
Methyl tert-butyl ether	U		0.000480	0.00137	1	07/13/2020 11:58	WG1508015
Naphthalene	U		0.00669	0.0171	1	07/13/2020 11:58	WG1508015
n-Propylbenzene	U		0.00130	0.00686	1	07/13/2020 11:58	WG1508015
Styrene	U		0.000314	0.0171	1	07/13/2020 11:58	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00130	0.00343	1	07/13/2020 11:58	WG1508015
1,1,2,2-Tetrachloroethane	U		0.000953	0.00343	1	07/13/2020 11:58	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.00103	0.00343	1	07/13/2020 11:58	WG1508015
Tetrachloroethene	U		0.00123	0.00343	1	07/13/2020 11:58	WG1508015
Toluene	U		0.00178	0.00686	1	07/13/2020 11:58	WG1508015
1,2,3-Trichlorobenzene	U		0.0101	0.0171	1	07/13/2020 11:58	WG1508015
1,2,4-Trichlorobenzene	U		0.00603	0.0171	1	07/13/2020 11:58	WG1508015
1,1,1-Trichloroethane	U		0.00127	0.00343	1	07/13/2020 11:58	WG1508015
1,1,2-Trichloroethane	U		0.000819	0.00343	1	07/13/2020 11:58	WG1508015
Trichloroethene	U		0.000801	0.00137	1	07/13/2020 11:58	WG1508015
Trichlorofluoromethane	U		0.00113	0.00343	1	07/13/2020 11:58	WG1508015
1,2,3-Trichloropropane	U		0.00222	0.0171	1	07/13/2020 11:58	WG1508015
1,2,4-Trimethylbenzene	U		0.00217	0.00686	1	07/13/2020 11:58	WG1508015
1,2,3-Trimethylbenzene	U		0.00217	0.00686	1	07/13/2020 11:58	WG1508015
1,3,5-Trimethylbenzene	U		0.00274	0.00686	1	07/13/2020 11:58	WG1508015
Vinyl chloride	U		0.00159	0.00343	1	07/13/2020 11:58	WG1508015
Xylenes, Total	U		0.00121	0.00891	1	07/13/2020 11:58	WG1508015
(S) Toluene-d8	*102*			*75.0-131*		*07/13/2020 11:58*	WG1508015
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*07/13/2020 11:58*	WG1508015
(S) 1,2-Dichloroethane-d4	*96.9*			*70.0-130*		*07/13/2020 11:58*	WG1508015

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C12-C22 Hydrocarbons	U		0.853	4.66	1	07/15/2020 04:51	WG1506713
C22-C32 Hydrocarbons	U		1.55	4.66	1	07/15/2020 04:51	WG1506713
C32-C40 Hydrocarbons	2.06	J	1.55	4.66	1	07/15/2020 04:51	WG1506713
(S) o-Terphenyl	*62.9*			*18.0-148*		*07/15/2020 04:51*	WG1506713

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.00438	0.0233	1	07/14/2020 22:57	WG1508889
Alpha BHC	U		0.00428	0.0233	1	07/14/2020 22:57	WG1508889
Beta BHC	U		0.00441	0.0233	1	07/14/2020 22:57	WG1508889
Delta BHC	U		0.00403	0.0233	1	07/14/2020 22:57	WG1508889
Gamma BHC	U		0.00400	0.0233	1	07/14/2020 22:57	WG1508889
4,4-DDD	U		0.00431	0.0233	1	07/14/2020 22:57	WG1508889
4,4-DDE	U		0.00426	0.0233	1	07/14/2020 22:57	WG1508889
4,4-DDT	U		0.00730	0.0233	1	07/14/2020 22:57	WG1508889
Dieldrin	U		0.00400	0.0233	1	07/14/2020 22:57	WG1508889
Endosulfan I	U		0.00422	0.0233	1	07/14/2020 22:57	WG1508889
Endosulfan II	U		0.00390	0.0233	1	07/14/2020 22:57	WG1508889
Endosulfan sulfate	U		0.00424	0.0233	1	07/14/2020 22:57	WG1508889
Endrin	U		0.00407	0.0233	1	07/14/2020 22:57	WG1508889
Endrin aldehyde	U		0.00395	0.0233	1	07/14/2020 22:57	WG1508889
Endrin ketone	U		0.00827	0.0233	1	07/14/2020 22:57	WG1508889
Heptachlor	U		0.00498	0.0233	1	07/14/2020 22:57	WG1508889
Heptachlor epoxide	U		0.00395	0.0233	1	07/14/2020 22:57	WG1508889
Hexachlorobenzene	U		0.00403	0.0233	1	07/14/2020 22:57	WG1508889
Methoxychlor	U		0.00563	0.0233	1	07/14/2020 22:57	WG1508889
Chlordane	U		0.120	0.349	1	07/14/2020 22:57	WG1508889
Toxaphene	U		0.144	0.466	1	07/14/2020 22:57	WG1508889
(S) Decachlorobiphenyl	*68.2*			*10.0-135*		*07/14/2020 22:57*	WG1508889
(S) Tetrachloro-m-xylene	*74.1*			*10.0-139*		*07/14/2020 22:57*	WG1508889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.4		1	07/15/2020 23:03	WG1508928

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0221	J	0.0206	0.0458	1	07/13/2020 17:20	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.572	2.29	1	07/13/2020 18:55	WG1507676
Arsenic	9.99		0.526	2.29	1	07/13/2020 18:55	WG1507676
Barium	680		0.275	0.572	1	07/13/2020 18:55	WG1507676
Beryllium	0.899		0.0915	0.229	1	07/13/2020 18:55	WG1507676
Cadmium	0.121	J	0.0927	0.572	1	07/13/2020 18:55	WG1507676
Chromium	29.7		0.286	1.14	1	07/13/2020 18:55	WG1507676
Cobalt	9.72		0.263	1.14	1	07/13/2020 18:55	WG1507676
Copper	22.0		0.579	2.29	1	07/13/2020 18:55	WG1507676
Lead	9.29		0.238	0.572	1	07/13/2020 18:55	WG1507676
Molybdenum	0.790		0.229	0.572	1	07/13/2020 18:55	WG1507676
Nickel	34.8		0.561	2.29	1	07/13/2020 18:55	WG1507676
Selenium	U		0.706	2.29	1	07/13/2020 18:55	WG1507676
Silver	U		0.261	1.14	1	07/13/2020 18:55	WG1507676
Thallium	U		0.405	2.29	1	07/13/2020 18:55	WG1507676
Vanadium	63.9		0.786	2.29	1	07/13/2020 18:55	WG1507676
Zinc	56.5		1.07	5.72	1	07/13/2020 18:55	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	U		0.0380	0.114	1	07/14/2020 15:57	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*105*			*59.0-128*		*07/14/2020 15:57*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0533	J	0.0483	0.0661	1	07/13/2020 12:18	WG1508015
Acrylonitrile	U		0.00478	0.0165	1	07/13/2020 12:18	WG1508015
Benzene	U		0.000618	0.00132	1	07/13/2020 12:18	WG1508015
Bromobenzene	U		0.00119	0.0165	1	07/13/2020 12:18	WG1508015
Bromodichloromethane	U		0.000959	0.00331	1	07/13/2020 12:18	WG1508015
Bromoform	U		0.00155	0.0331	1	07/13/2020 12:18	WG1508015
Bromomethane	U		0.00261	0.0165	1	07/13/2020 12:18	WG1508015
n-Butylbenzene	U		0.00695	0.0165	1	07/13/2020 12:18	WG1508015
sec-Butylbenzene	U		0.00381	0.0165	1	07/13/2020 12:18	WG1508015
tert-Butylbenzene	U		0.00258	0.00661	1	07/13/2020 12:18	WG1508015
Carbon tetrachloride	U		0.00119	0.00661	1	07/13/2020 12:18	WG1508015
Chlorobenzene	U		0.000278	0.00331	1	07/13/2020 12:18	WG1508015
Chlorodibromomethane	U		0.000810	0.00331	1	07/13/2020 12:18	WG1508015
Chloroethane	U		0.00225	0.00661	1	07/13/2020 12:18	WG1508015
Chloroform	U		0.00136	0.00331	1	07/13/2020 12:18	WG1508015
Chloromethane	U		0.00575	0.0165	1	07/13/2020 12:18	WG1508015
2-Chlorotoluene	U		0.00114	0.00331	1	07/13/2020 12:18	WG1508015
4-Chlorotoluene	U		0.000595	0.00661	1	07/13/2020 12:18	WG1508015

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
1,2-Dibromo-3-Chloropropane	U		0.00516	0.0331	1	07/13/2020 12:18	WG1508015
1,2-Dibromoethane	U		0.000857	0.00331	1	07/13/2020 12:18	WG1508015
Dibromomethane	U		0.000992	0.00661	1	07/13/2020 12:18	WG1508015
1,2-Dichlorobenzene	U		0.000562	0.00661	1	07/13/2020 12:18	WG1508015
1,3-Dichlorobenzene	U		0.000794	0.00661	1	07/13/2020 12:18	WG1508015
1,4-Dichlorobenzene	U		0.000926	0.00661	1	07/13/2020 12:18	WG1508015
Dichlorodifluoromethane	U		0.00213	0.00331	1	07/13/2020 12:18	WG1508015
1,1-Dichloroethane	U		0.000650	0.00331	1	07/13/2020 12:18	WG1508015
1,2-Dichloroethane	U		0.000859	0.00331	1	07/13/2020 12:18	WG1508015
1,1-Dichloroethene	U		0.000802	0.00331	1	07/13/2020 12:18	WG1508015
cis-1,2-Dichloroethene	U		0.000971	0.00331	1	07/13/2020 12:18	WG1508015
trans-1,2-Dichloroethene	U		0.00138	0.00661	1	07/13/2020 12:18	WG1508015
1,2-Dichloropropane	U		0.00188	0.00661	1	07/13/2020 12:18	WG1508015
1,1-Dichloropropene	U		0.00107	0.00331	1	07/13/2020 12:18	WG1508015
1,3-Dichloropropane	U		0.000663	0.00661	1	07/13/2020 12:18	WG1508015
cis-1,3-Dichloropropene	U		0.00100	0.00331	1	07/13/2020 12:18	WG1508015
trans-1,3-Dichloropropene	U		0.00151	0.00661	1	07/13/2020 12:18	WG1508015
2,2-Dichloropropane	U		0.00183	0.00331	1	07/13/2020 12:18	WG1508015
Di-isopropyl ether	U		0.000542	0.00132	1	07/13/2020 12:18	WG1508015
Ethylbenzene	U		0.000975	0.00331	1	07/13/2020 12:18	WG1508015
Hexachloro-1,3-butadiene	U		0.00794	0.0331	1	07/13/2020 12:18	WG1508015
Isopropylbenzene	U		0.000562	0.00331	1	07/13/2020 12:18	WG1508015
p-Isopropyltoluene	U		0.00337	0.00661	1	07/13/2020 12:18	WG1508015
2-Butanone (MEK)	U		0.0840	0.132	1	07/13/2020 12:18	WG1508015
Methylene Chloride	U		0.00878	0.0331	1	07/13/2020 12:18	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00302	0.0331	1	07/13/2020 12:18	WG1508015
Methyl tert-butyl ether	U		0.000463	0.00132	1	07/13/2020 12:18	WG1508015
Naphthalene	U		0.00646	0.0165	1	07/13/2020 12:18	WG1508015
n-Propylbenzene	U		0.00126	0.00661	1	07/13/2020 12:18	WG1508015
Styrene	U		0.000303	0.0165	1	07/13/2020 12:18	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00125	0.00331	1	07/13/2020 12:18	WG1508015
1,1,2,2-Tetrachloroethane	U		0.000919	0.00331	1	07/13/2020 12:18	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.000998	0.00331	1	07/13/2020 12:18	WG1508015
Tetrachloroethene	U		0.00119	0.00331	1	07/13/2020 12:18	WG1508015
Toluene	U		0.00172	0.00661	1	07/13/2020 12:18	WG1508015
1,2,3-Trichlorobenzene	U		0.00970	0.0165	1	07/13/2020 12:18	WG1508015
1,2,4-Trichlorobenzene	U		0.00582	0.0165	1	07/13/2020 12:18	WG1508015
1,1,1-Trichloroethane	U		0.00122	0.00331	1	07/13/2020 12:18	WG1508015
1,1,2-Trichloroethane	U		0.000790	0.00331	1	07/13/2020 12:18	WG1508015
Trichloroethene	U		0.000773	0.00132	1	07/13/2020 12:18	WG1508015
Trichlorofluoromethane	U		0.00109	0.00331	1	07/13/2020 12:18	WG1508015
1,2,3-Trichloropropane	U		0.00214	0.0165	1	07/13/2020 12:18	WG1508015
1,2,4-Trimethylbenzene	U		0.00209	0.00661	1	07/13/2020 12:18	WG1508015
1,2,3-Trimethylbenzene	U		0.00209	0.00661	1	07/13/2020 12:18	WG1508015
1,3,5-Trimethylbenzene	U		0.00265	0.00661	1	07/13/2020 12:18	WG1508015
Vinyl chloride	U		0.00153	0.00331	1	07/13/2020 12:18	WG1508015
Xylenes, Total	U		0.00116	0.00860	1	07/13/2020 12:18	WG1508015
(S) Toluene-d8	*102*			*75.0-131*		*07/13/2020 12:18*	WG1508015
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/13/2020 12:18*	WG1508015
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*07/13/2020 12:18*	WG1508015

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	0.921	J	0.839	4.58	1	07/15/2020 05:04	WG1506713
C22-C32 Hydrocarbons	4.07	J	1.52	4.58	1	07/15/2020 05:04	WG1506713
C32-C40 Hydrocarbons	4.39	J	1.52	4.58	1	07/15/2020 05:04	WG1506713
(S) o-Terphenyl	*70.1*			*18.0-148*		*07/15/2020 05:04*	WG1506713

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		0.00430	0.0229	1	07/14/2020 23:10	WG1508889
Alpha BHC	U		0.00421	0.0229	1	07/14/2020 23:10	WG1508889
Beta BHC	U		0.00434	0.0229	1	07/14/2020 23:10	WG1508889
Delta BHC	U		0.00396	0.0229	1	07/14/2020 23:10	WG1508889
Gamma BHC	U		0.00394	0.0229	1	07/14/2020 23:10	WG1508889
4,4-DDD	U		0.00423	0.0229	1	07/14/2020 23:10	WG1508889
4,4-DDE	U		0.00419	0.0229	1	07/14/2020 23:10	WG1508889
4,4-DDT	U		0.00717	0.0229	1	07/14/2020 23:10	WG1508889
Dieldrin	U		0.00394	0.0229	1	07/14/2020 23:10	WG1508889
Endosulfan I	U		0.00415	0.0229	1	07/14/2020 23:10	WG1508889
Endosulfan II	U		0.00383	0.0229	1	07/14/2020 23:10	WG1508889
Endosulfan sulfate	U		0.00416	0.0229	1	07/14/2020 23:10	WG1508889
Endrin	U		0.00400	0.0229	1	07/14/2020 23:10	WG1508889
Endrin aldehyde	U		0.00388	0.0229	1	07/14/2020 23:10	WG1508889
Endrin ketone	U		0.00813	0.0229	1	07/14/2020 23:10	WG1508889
Heptachlor	U		0.00490	0.0229	1	07/14/2020 23:10	WG1508889
Heptachlor epoxide	U		0.00388	0.0229	1	07/14/2020 23:10	WG1508889
Hexachlorobenzene	U		0.00396	0.0229	1	07/14/2020 23:10	WG1508889
Methoxychlor	U		0.00554	0.0229	1	07/14/2020 23:10	WG1508889
Chlordane	U		0.118	0.343	1	07/14/2020 23:10	WG1508889
Toxaphene	U		0.142	0.458	1	07/14/2020 23:10	WG1508889
(S) Decachlorobiphenyl	*93.8*			*10.0-135*		*07/14/2020 23:10*	WG1508889
(S) Tetrachloro-m-xylene	*96.8*			*10.0-139*		*07/14/2020 23:10*	WG1508889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	88.8		1	07/15/2020 23:03	WG1508928

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Mercury	0.0248	J	0.0203	0.0451	1	07/13/2020 17:23	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Antimony	U		0.563	2.25	1	07/13/2020 19:03	WG1507676
Arsenic	15.8		0.518	2.25	1	07/13/2020 19:03	WG1507676
Barium	269		0.270	0.563	1	07/13/2020 19:03	WG1507676
Beryllium	0.751		0.0901	0.225	1	07/13/2020 19:03	WG1507676
Cadmium	0.0986	J	0.0913	0.563	1	07/13/2020 19:03	WG1507676
Chromium	33.1		0.282	1.13	1	07/13/2020 19:03	WG1507676
Cobalt	9.22		0.259	1.13	1	07/13/2020 19:03	WG1507676
Copper	34.6		0.570	2.25	1	07/13/2020 19:03	WG1507676
Lead	14.6		0.234	0.563	1	07/13/2020 19:03	WG1507676
Molybdenum	0.896		0.225	0.563	1	07/13/2020 19:03	WG1507676
Nickel	40.1		0.552	2.25	1	07/13/2020 19:03	WG1507676
Selenium	U		0.695	2.25	1	07/13/2020 19:03	WG1507676
Silver	U		0.257	1.13	1	07/13/2020 19:03	WG1507676
Thallium	U		0.399	2.25	1	07/13/2020 19:03	WG1507676
Vanadium	73.8		0.774	2.25	1	07/13/2020 19:03	WG1507676
Zinc	110		1.06	5.63	1	07/13/2020 19:03	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPHG C5 - C12	U		0.0374	0.113	1	07/14/2020 16:18	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*100*			*59.0-128*		*07/14/2020 16:18*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Acetone	0.0694		0.0473	0.0647	1	07/13/2020 12:38	WG1508015
Acrylonitrile	U		0.00467	0.0162	1	07/13/2020 12:38	WG1508015
Benzene	U		0.000605	0.00129	1	07/13/2020 12:38	WG1508015
Bromobenzene	U		0.00117	0.0162	1	07/13/2020 12:38	WG1508015
Bromodichloromethane	U		0.000939	0.00324	1	07/13/2020 12:38	WG1508015
Bromoform	U		0.00151	0.0324	1	07/13/2020 12:38	WG1508015
Bromomethane	U		0.00255	0.0162	1	07/13/2020 12:38	WG1508015
n-Butylbenzene	U		0.00680	0.0162	1	07/13/2020 12:38	WG1508015
sec-Butylbenzene	U		0.00373	0.0162	1	07/13/2020 12:38	WG1508015
tert-Butylbenzene	U		0.00252	0.00647	1	07/13/2020 12:38	WG1508015
Carbon tetrachloride	U		0.00116	0.00647	1	07/13/2020 12:38	WG1508015
Chlorobenzene	U		0.000272	0.00324	1	07/13/2020 12:38	WG1508015
Chlorodibromomethane	U		0.000792	0.00324	1	07/13/2020 12:38	WG1508015
Chloroethane	U		0.00220	0.00647	1	07/13/2020 12:38	WG1508015
Chloroform	U		0.00133	0.00324	1	07/13/2020 12:38	WG1508015
Chloromethane	U		0.00563	0.0162	1	07/13/2020 12:38	WG1508015
2-Chlorotoluene	U		0.00112	0.00324	1	07/13/2020 12:38	WG1508015
4-Chlorotoluene	U		0.000583	0.00647	1	07/13/2020 12:38	WG1508015

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
1,2-Dibromo-3-Chloropropane	U		0.00505	0.0324	1	07/13/2020 12:38	WG1508015
1,2-Dibromoethane	U		0.000839	0.00324	1	07/13/2020 12:38	WG1508015
Dibromomethane	U		0.000971	0.00647	1	07/13/2020 12:38	WG1508015
1,2-Dichlorobenzene	U		0.000550	0.00647	1	07/13/2020 12:38	WG1508015
1,3-Dichlorobenzene	U		0.000777	0.00647	1	07/13/2020 12:38	WG1508015
1,4-Dichlorobenzene	U		0.000906	0.00647	1	07/13/2020 12:38	WG1508015
Dichlorodifluoromethane	U		0.00208	0.00324	1	07/13/2020 12:38	WG1508015
1,1-Dichloroethane	U		0.000636	0.00324	1	07/13/2020 12:38	WG1508015
1,2-Dichloroethane	U		0.000840	0.00324	1	07/13/2020 12:38	WG1508015
1,1-Dichloroethene	U		0.000785	0.00324	1	07/13/2020 12:38	WG1508015
cis-1,2-Dichloroethene	U		0.000950	0.00324	1	07/13/2020 12:38	WG1508015
trans-1,2-Dichloroethene	U		0.00135	0.00647	1	07/13/2020 12:38	WG1508015
1,2-Dichloropropane	U		0.00184	0.00647	1	07/13/2020 12:38	WG1508015
1,1-Dichloropropene	U		0.00105	0.00324	1	07/13/2020 12:38	WG1508015
1,3-Dichloropropane	U		0.000649	0.00647	1	07/13/2020 12:38	WG1508015
cis-1,3-Dichloropropene	U		0.000980	0.00324	1	07/13/2020 12:38	WG1508015
trans-1,3-Dichloropropene	U		0.00148	0.00647	1	07/13/2020 12:38	WG1508015
2,2-Dichloropropane	U		0.00179	0.00324	1	07/13/2020 12:38	WG1508015
Di-isopropyl ether	U		0.000531	0.00129	1	07/13/2020 12:38	WG1508015
Ethylbenzene	U		0.000954	0.00324	1	07/13/2020 12:38	WG1508015
Hexachloro-1,3-butadiene	U		0.00777	0.0324	1	07/13/2020 12:38	WG1508015
Isopropylbenzene	U		0.000550	0.00324	1	07/13/2020 12:38	WG1508015
p-Isopropyltoluene	U		0.00330	0.00647	1	07/13/2020 12:38	WG1508015
2-Butanone (MEK)	0.107	J	0.0822	0.129	1	07/13/2020 12:38	WG1508015
Methylene Chloride	U		0.00860	0.0324	1	07/13/2020 12:38	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00295	0.0324	1	07/13/2020 12:38	WG1508015
Methyl tert-butyl ether	U		0.000453	0.00129	1	07/13/2020 12:38	WG1508015
Naphthalene	U		0.00632	0.0162	1	07/13/2020 12:38	WG1508015
n-Propylbenzene	U		0.00123	0.00647	1	07/13/2020 12:38	WG1508015
Styrene	U		0.000296	0.0162	1	07/13/2020 12:38	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00123	0.00324	1	07/13/2020 12:38	WG1508015
1,1,2,2-Tetrachloroethane	U		0.000900	0.00324	1	07/13/2020 12:38	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.000976	0.00324	1	07/13/2020 12:38	WG1508015
Tetrachloroethene	U		0.00116	0.00324	1	07/13/2020 12:38	WG1508015
Toluene	U		0.00168	0.00647	1	07/13/2020 12:38	WG1508015
1,2,3-Trichlorobenzene	U		0.00949	0.0162	1	07/13/2020 12:38	WG1508015
1,2,4-Trichlorobenzene	U		0.00570	0.0162	1	07/13/2020 12:38	WG1508015
1,1,1-Trichloroethane	U		0.00119	0.00324	1	07/13/2020 12:38	WG1508015
1,1,2-Trichloroethane	U		0.000773	0.00324	1	07/13/2020 12:38	WG1508015
Trichloroethene	U		0.000756	0.00129	1	07/13/2020 12:38	WG1508015
Trichlorofluoromethane	U		0.00107	0.00324	1	07/13/2020 12:38	WG1508015
1,2,3-Trichloropropane	U		0.00210	0.0162	1	07/13/2020 12:38	WG1508015
1,2,4-Trimethylbenzene	U		0.00205	0.00647	1	07/13/2020 12:38	WG1508015
1,2,3-Trimethylbenzene	U		0.00205	0.00647	1	07/13/2020 12:38	WG1508015
1,3,5-Trimethylbenzene	U		0.00259	0.00647	1	07/13/2020 12:38	WG1508015
Vinyl chloride	U		0.00150	0.00324	1	07/13/2020 12:38	WG1508015
Xylenes, Total	U		0.00114	0.00841	1	07/13/2020 12:38	WG1508015
(S) Toluene-d8	*98.3*			*75.0-131*		*07/13/2020 12:38*	WG1508015
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*07/13/2020 12:38*	WG1508015
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*07/13/2020 12:38*	WG1508015

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	0.826	4.51	1	07/14/2020 21:53	WG1508649
C22-C32 Hydrocarbons	U		1.50	4.51	1	07/14/2020 21:53	WG1508649
C32-C40 Hydrocarbons	U		1.50	4.51	1	07/14/2020 21:53	WG1508649
(S) o-Terphenyl	*91.8*			*18.0-148*		*07/14/2020 21:53*	WG1508649

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		0.00424	0.0225	1	07/14/2020 23:24	WG1508889
Alpha BHC	U		0.00415	0.0225	1	07/14/2020 23:24	WG1508889
Beta BHC	U		0.00427	0.0225	1	07/14/2020 23:24	WG1508889
Delta BHC	U		0.00390	0.0225	1	07/14/2020 23:24	WG1508889
Gamma BHC	U		0.00388	0.0225	1	07/14/2020 23:24	WG1508889
4,4-DDD	U		0.00417	0.0225	1	07/14/2020 23:24	WG1508889
4,4-DDE	U		0.00412	0.0225	1	07/14/2020 23:24	WG1508889
4,4-DDT	U		0.00706	0.0225	1	07/14/2020 23:24	WG1508889
Dieldrin	U		0.00388	0.0225	1	07/14/2020 23:24	WG1508889
Endosulfan I	U		0.00409	0.0225	1	07/14/2020 23:24	WG1508889
Endosulfan II	U		0.00377	0.0225	1	07/14/2020 23:24	WG1508889
Endosulfan sulfate	U		0.00410	0.0225	1	07/14/2020 23:24	WG1508889
Endrin	U		0.00394	0.0225	1	07/14/2020 23:24	WG1508889
Endrin aldehyde	U		0.00382	0.0225	1	07/14/2020 23:24	WG1508889
Endrin ketone	U		0.00801	0.0225	1	07/14/2020 23:24	WG1508889
Heptachlor	U		0.00482	0.0225	1	07/14/2020 23:24	WG1508889
Heptachlor epoxide	U		0.00382	0.0225	1	07/14/2020 23:24	WG1508889
Hexachlorobenzene	U		0.00390	0.0225	1	07/14/2020 23:24	WG1508889
Methoxychlor	U		0.00545	0.0225	1	07/14/2020 23:24	WG1508889
Chlordane	U		0.116	0.338	1	07/14/2020 23:24	WG1508889
Toxaphene	U		0.140	0.451	1	07/14/2020 23:24	WG1508889
(S) Decachlorobiphenyl	*73.8*			*10.0-135*		*07/14/2020 23:24*	WG1508889
(S) Tetrachloro-m-xylene	*81.2*			*10.0-139*		*07/14/2020 23:24*	WG1508889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.4		1	07/15/2020 23:03	WG1508928

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0195	0.0433	1	07/13/2020 16:45	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	0.746	J	0.541	2.16	1	07/13/2020 19:06	WG1507676
Arsenic	3.14		0.498	2.16	1	07/13/2020 19:06	WG1507676
Barium	683		0.260	0.541	1	07/13/2020 19:06	WG1507676
Beryllium	0.379		0.0866	0.216	1	07/13/2020 19:06	WG1507676
Cadmium	U		0.0877	0.541	1	07/13/2020 19:06	WG1507676
Chromium	22.0		0.271	1.08	1	07/13/2020 19:06	WG1507676
Cobalt	18.3		0.249	1.08	1	07/13/2020 19:06	WG1507676
Copper	20.2		0.548	2.16	1	07/13/2020 19:06	WG1507676
Lead	8.41		0.225	0.541	1	07/13/2020 19:06	WG1507676
Molybdenum	0.415	J	0.216	0.541	1	07/13/2020 19:06	WG1507676
Nickel	35.4		0.530	2.16	1	07/13/2020 19:06	WG1507676
Selenium	U		0.668	2.16	1	07/13/2020 19:06	WG1507676
Silver	U		0.247	1.08	1	07/13/2020 19:06	WG1507676
Thallium	U		0.383	2.16	1	07/13/2020 19:06	WG1507676
Vanadium	52.1		0.744	2.16	1	07/13/2020 19:06	WG1507676
Zinc	49.1		1.02	5.41	1	07/13/2020 19:06	WG1507676

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	U		0.0359	0.108	1	07/14/2020 16:39	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*105*			*59.0-128*		*07/14/2020 16:39*	WG1508563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0571		0.0395	0.0541	1	07/13/2020 12:58	WG1508015
Acrylonitrile	U		0.00391	0.0135	1	07/13/2020 12:58	WG1508015
Benzene	U		0.000505	0.00108	1	07/13/2020 12:58	WG1508015
Bromobenzene	U		0.000974	0.0135	1	07/13/2020 12:58	WG1508015
Bromodichloromethane	U		0.000785	0.00271	1	07/13/2020 12:58	WG1508015
Bromoform	U		0.00127	0.0271	1	07/13/2020 12:58	WG1508015
Bromomethane	U		0.00213	0.0135	1	07/13/2020 12:58	WG1508015
n-Butylbenzene	U		0.00568	0.0135	1	07/13/2020 12:58	WG1508015
sec-Butylbenzene	U		0.00312	0.0135	1	07/13/2020 12:58	WG1508015
tert-Butylbenzene	U		0.00211	0.00541	1	07/13/2020 12:58	WG1508015
Carbon tetrachloride	U		0.000972	0.00541	1	07/13/2020 12:58	WG1508015
Chlorobenzene	U		0.000227	0.00271	1	07/13/2020 12:58	WG1508015
Chlorodibromomethane	U		0.000662	0.00271	1	07/13/2020 12:58	WG1508015
Chloroethane	U		0.00184	0.00541	1	07/13/2020 12:58	WG1508015
Chloroform	U		0.00111	0.00271	1	07/13/2020 12:58	WG1508015
Chloromethane	U		0.00471	0.0135	1	07/13/2020 12:58	WG1508015
2-Chlorotoluene	U		0.000936	0.00271	1	07/13/2020 12:58	WG1508015
4-Chlorotoluene	U		0.000487	0.00541	1	07/13/2020 12:58	WG1508015

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
1,2-Dibromo-3-Chloropropane	U		0.00422	0.0271	1	07/13/2020 12:58	WG1508015
1,2-Dibromoethane	U		0.000701	0.00271	1	07/13/2020 12:58	WG1508015
Dibromomethane	U		0.000812	0.00541	1	07/13/2020 12:58	WG1508015
1,2-Dichlorobenzene	U		0.000460	0.00541	1	07/13/2020 12:58	WG1508015
1,3-Dichlorobenzene	U		0.000649	0.00541	1	07/13/2020 12:58	WG1508015
1,4-Dichlorobenzene	U		0.000758	0.00541	1	07/13/2020 12:58	WG1508015
Dichlorodifluoromethane	U		0.00174	0.00271	1	07/13/2020 12:58	WG1508015
1,1-Dichloroethane	U		0.000531	0.00271	1	07/13/2020 12:58	WG1508015
1,2-Dichloroethane	U		0.000702	0.00271	1	07/13/2020 12:58	WG1508015
1,1-Dichloroethene	U		0.000656	0.00271	1	07/13/2020 12:58	WG1508015
cis-1,2-Dichloroethene	U		0.000794	0.00271	1	07/13/2020 12:58	WG1508015
trans-1,2-Dichloroethene	U		0.00113	0.00541	1	07/13/2020 12:58	WG1508015
1,2-Dichloropropane	U		0.00154	0.00541	1	07/13/2020 12:58	WG1508015
1,1-Dichloropropene	U		0.000876	0.00271	1	07/13/2020 12:58	WG1508015
1,3-Dichloropropane	U		0.000542	0.00541	1	07/13/2020 12:58	WG1508015
cis-1,3-Dichloropropene	U		0.000819	0.00271	1	07/13/2020 12:58	WG1508015
trans-1,3-Dichloropropene	U		0.00123	0.00541	1	07/13/2020 12:58	WG1508015
2,2-Dichloropropane	U		0.00149	0.00271	1	07/13/2020 12:58	WG1508015
Di-isopropyl ether	U		0.000444	0.00108	1	07/13/2020 12:58	WG1508015
Ethylbenzene	U		0.000798	0.00271	1	07/13/2020 12:58	WG1508015
Hexachloro-1,3-butadiene	U		0.00649	0.0271	1	07/13/2020 12:58	WG1508015
Isopropylbenzene	U		0.000460	0.00271	1	07/13/2020 12:58	WG1508015
p-Isopropyltoluene	U		0.00276	0.00541	1	07/13/2020 12:58	WG1508015
2-Butanone (MEK)	0.0751	J	0.0687	0.108	1	07/13/2020 12:58	WG1508015
Methylene Chloride	U		0.00719	0.0271	1	07/13/2020 12:58	WG1508015
4-Methyl-2-pentanone (MIBK)	U		0.00247	0.0271	1	07/13/2020 12:58	WG1508015
Methyl tert-butyl ether	U		0.000379	0.00108	1	07/13/2020 12:58	WG1508015
Naphthalene	U		0.00528	0.0135	1	07/13/2020 12:58	WG1508015
n-Propylbenzene	U		0.00103	0.00541	1	07/13/2020 12:58	WG1508015
Styrene	U		0.000248	0.0135	1	07/13/2020 12:58	WG1508015
1,1,1,2-Tetrachloroethane	U		0.00103	0.00271	1	07/13/2020 12:58	WG1508015
1,1,2,2-Tetrachloroethane	U		0.000752	0.00271	1	07/13/2020 12:58	WG1508015
1,1,2-Trichlorotrifluoroethane	U		0.000816	0.00271	1	07/13/2020 12:58	WG1508015
Tetrachloroethene	U		0.000970	0.00271	1	07/13/2020 12:58	WG1508015
Toluene	U		0.00141	0.00541	1	07/13/2020 12:58	WG1508015
1,2,3-Trichlorobenzene	U		0.00793	0.0135	1	07/13/2020 12:58	WG1508015
1,2,4-Trichlorobenzene	U		0.00476	0.0135	1	07/13/2020 12:58	WG1508015
1,1,1-Trichloroethane	U		0.000999	0.00271	1	07/13/2020 12:58	WG1508015
1,1,2-Trichloroethane	U		0.000646	0.00271	1	07/13/2020 12:58	WG1508015
Trichloroethene	U		0.000632	0.00108	1	07/13/2020 12:58	WG1508015
Trichlorofluoromethane	U		0.000895	0.00271	1	07/13/2020 12:58	WG1508015
1,2,3-Trichloropropane	U		0.00175	0.0135	1	07/13/2020 12:58	WG1508015
1,2,4-Trimethylbenzene	U		0.00171	0.00541	1	07/13/2020 12:58	WG1508015
1,2,3-Trimethylbenzene	U		0.00171	0.00541	1	07/13/2020 12:58	WG1508015
1,3,5-Trimethylbenzene	U		0.00216	0.00541	1	07/13/2020 12:58	WG1508015
Vinyl chloride	U		0.00126	0.00271	1	07/13/2020 12:58	WG1508015
Xylenes, Total	U		0.000952	0.00703	1	07/13/2020 12:58	WG1508015
(S) Toluene-d8	*99.9*			*75.0-131*		*07/13/2020 12:58*	WG1508015
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*07/13/2020 12:58*	WG1508015
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*07/13/2020 12:58*	WG1508015

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	U		0.793	4.33	1	07/15/2020 08:34	WG1508886
C22-C32 Hydrocarbons	U		1.44	4.33	1	07/15/2020 08:34	WG1508886
C32-C40 Hydrocarbons	U		1.44	4.33	1	07/15/2020 08:34	WG1508886
(S) o-Terphenyl	*91.6*			*18.0-148*		*07/15/2020 08:34*	WG1508886

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		0.00407	0.0216	1	07/14/2020 23:37	WG1508889
Alpha BHC	U		0.00398	0.0216	1	07/14/2020 23:37	WG1508889
Beta BHC	U		0.00410	0.0216	1	07/14/2020 23:37	WG1508889
Delta BHC	U		0.00374	0.0216	1	07/14/2020 23:37	WG1508889
Gamma BHC	U		0.00372	0.0216	1	07/14/2020 23:37	WG1508889
4,4-DDD	U		0.00400	0.0216	1	07/14/2020 23:37	WG1508889
4,4-DDE	U		0.00396	0.0216	1	07/14/2020 23:37	WG1508889
4,4-DDT	U		0.00679	0.0216	1	07/14/2020 23:37	WG1508889
Dieldrin	U		0.00372	0.0216	1	07/14/2020 23:37	WG1508889
Endosulfan I	U		0.00393	0.0216	1	07/14/2020 23:37	WG1508889
Endosulfan II	U		0.00363	0.0216	1	07/14/2020 23:37	WG1508889
Endosulfan sulfate	U		0.00394	0.0216	1	07/14/2020 23:37	WG1508889
Endrin	U		0.00379	0.0216	1	07/14/2020 23:37	WG1508889
Endrin aldehyde	U		0.00367	0.0216	1	07/14/2020 23:37	WG1508889
Endrin ketone	U		0.00769	0.0216	1	07/14/2020 23:37	WG1508889
Heptachlor	U		0.00463	0.0216	1	07/14/2020 23:37	WG1508889
Heptachlor epoxide	U		0.00367	0.0216	1	07/14/2020 23:37	WG1508889
Hexachlorobenzene	U		0.00374	0.0216	1	07/14/2020 23:37	WG1508889
Methoxychlor	U		0.00524	0.0216	1	07/14/2020 23:37	WG1508889
Chlordane	U		0.111	0.325	1	07/14/2020 23:37	WG1508889
Toxaphene	U		0.134	0.433	1	07/14/2020 23:37	WG1508889
(S) Decachlorobiphenyl	*84.8*			*10.0-135*		*07/14/2020 23:37*	WG1508889
(S) Tetrachloro-m-xylene	*87.0*			*10.0-139*		*07/14/2020 23:37*	WG1508889

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Method Blank (MB)

(MB) R3550147-1 07/15/20 23:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

Laboratory Control Sample (LCS)

(LCS) R3550147-2 07/15/20 23:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.1	100	85.0-115	

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Method Blank (MB)

(MB) R3550142-1 07/15/20 23:03

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

L1238537-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1238537-03 07/15/20 23:03 • (DUP) R3550142-3 07/15/20 23:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	85.9	85.1	1	0.941		10

Laboratory Control Sample (LCS)

(LCS) R3550142-2 07/15/20 23:03

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) R3549051-1 07/13/20 16:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3549051-2 07/13/20 16:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Mercury	0.500	0.527	105	80.0-120	

L1238537-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238537-06 07/13/20 16:45 • (MS) R3549051-3 07/13/20 16:48 • (MSD) R3549051-4 07/13/20 16:50

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.541	U	0.449	0.526	82.9	97.2	1	75.0-125			15.8	20

Method Blank (MB)

(MB) R3549064-1 07/13/20 18:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.500	2.00
Arsenic	U		0.460	2.00
Barium	U		0.240	0.500
Beryllium	U		0.0800	0.200
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Cobalt	U		0.230	1.00
Copper	U		0.506	2.00
Lead	U		0.208	0.500
Molybdenum	U		0.200	0.500
Nickel	U		0.490	2.00
Selenium	U		0.617	2.00
Silver	U		0.228	1.00
Thallium	U		0.354	2.00
Vanadium	U		0.687	2.00
Zinc	U		0.939	5.00

Laboratory Control Sample (LCS)

(LCS) R3549064-2 07/13/20 18:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	102	102	80.0-120	
Arsenic	100	95.5	95.5	80.0-120	
Barium	100	102	102	80.0-120	
Beryllium	100	103	103	80.0-120	
Cadmium	100	98.3	98.3	80.0-120	
Chromium	100	100	100	80.0-120	
Cobalt	100	103	103	80.0-120	
Copper	100	101	101	80.0-120	
Lead	100	99.6	99.6	80.0-120	
Molybdenum	100	104	104	80.0-120	
Nickel	100	101	101	80.0-120	
Selenium	100	100	100	80.0-120	
Silver	20.0	17.8	89.0	80.0-120	
Thallium	100	98.9	98.9	80.0-120	
Vanadium	100	99.9	99.9	80.0-120	
Zinc	100	99.8	99.8	80.0-120	

L1238537-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238537-03 07/13/20 18:35 • (MS) R3549064-5 07/13/20 18:43 • (MSD) R3549064-6 07/13/20 18:46

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 %
Antimony	116	U	47.9	49.6	41.1	42.6	1	75.0-125	J6	J6	3.58	20
Arsenic	116	11.6	117	124	91.0	96.7	1	75.0-125			5.58	20
Barium	116	306	599	572	252	229	1	75.0-125	J5	J5	4.52	20
Beryllium	116	0.518	112	116	96.1	99.1	1	75.0-125			3.00	20
Cadmium	116	U	109	113	93.9	97.4	1	75.0-125			3.69	20
Chromium	116	24.9	134	138	94.1	97.6	1	75.0-125			3.03	20
Cobalt	116	7.23	127	135	103	110	1	75.0-125			6.08	20
Copper	116	38.6	137	147	84.5	92.9	1	75.0-125			6.88	20
Lead	116	10.7	121	128	94.9	101	1	75.0-125			5.78	20
Molybdenum	116	1.17	109	113	92.4	96.1	1	75.0-125			3.91	20
Nickel	116	20.6	144	150	106	111	1	75.0-125			4.52	20
Selenium	116	2.95	113	116	94.2	97.3	1	75.0-125			3.12	20
Silver	23.3	U	18.7	19.4	80.4	83.5	1	75.0-125			3.87	20
Thallium	116	U	109	112	93.5	96.4	1	75.0-125			2.97	20
Vanadium	116	47.3	164	169	99.9	105	1	75.0-125			3.28	20
Zinc	116	63.9	167	179	88.5	99.3	1	75.0-125			7.26	20

Method Blank (MB)

(MB) R3549505-2 07/14/20 11:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPHG C5 - C12	U		0.0332	0.100
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3549505-1 07/14/20 10:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
TPHG C5 - C12	5.50	6.30	115	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

Method Blank (MB)

(MB) R3550794-2 07/13/20 06:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3550794-2 07/13/20 06:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*101*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3550794-1 07/13/20 05:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.432	69.1	10.0-160	
Acrylonitrile	0.625	0.609	97.4	45.0-153	
Benzene	0.125	0.134	107	70.0-123	
Bromobenzene	0.125	0.135	108	73.0-121	
Bromodichloromethane	0.125	0.133	106	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3550794-1 07/13/20 05:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.104	83.2	64.0-132	
Bromomethane	0.125	0.121	96.8	56.0-147	
n-Butylbenzene	0.125	0.129	103	68.0-135	
sec-Butylbenzene	0.125	0.141	113	74.0-130	
tert-Butylbenzene	0.125	0.123	98.4	75.0-127	
Carbon tetrachloride	0.125	0.125	100	66.0-128	
Chlorobenzene	0.125	0.111	88.8	76.0-128	
Chlorodibromomethane	0.125	0.139	111	74.0-127	
Chloroethane	0.125	0.144	115	61.0-134	
Chloroform	0.125	0.128	102	72.0-123	
Chloromethane	0.125	0.134	107	51.0-138	
2-Chlorotoluene	0.125	0.122	97.6	75.0-124	
4-Chlorotoluene	0.125	0.106	84.8	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.124	99.2	59.0-130	
1,2-Dibromoethane	0.125	0.137	110	74.0-128	
Dibromomethane	0.125	0.122	97.6	75.0-122	
1,2-Dichlorobenzene	0.125	0.145	116	76.0-124	
1,3-Dichlorobenzene	0.125	0.131	105	76.0-125	
1,4-Dichlorobenzene	0.125	0.107	85.6	77.0-121	
Dichlorodifluoromethane	0.125	0.110	88.0	43.0-156	
1,1-Dichloroethane	0.125	0.129	103	70.0-127	
1,2-Dichloroethane	0.125	0.127	102	65.0-131	
1,1-Dichloroethene	0.125	0.130	104	65.0-131	
cis-1,2-Dichloroethene	0.125	0.131	105	73.0-125	
trans-1,2-Dichloroethene	0.125	0.128	102	71.0-125	
1,2-Dichloropropane	0.125	0.121	96.8	74.0-125	
1,1-Dichloropropene	0.125	0.148	118	73.0-125	
1,3-Dichloropropane	0.125	0.114	91.2	80.0-125	
cis-1,3-Dichloropropene	0.125	0.109	87.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.123	98.4	73.0-127	
2,2-Dichloropropane	0.125	0.144	115	59.0-135	
Di-isopropyl ether	0.125	0.131	105	60.0-136	
Ethylbenzene	0.125	0.132	106	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.119	95.2	57.0-150	
Isopropylbenzene	0.125	0.114	91.2	72.0-127	
p-Isopropyltoluene	0.125	0.136	109	72.0-133	
2-Butanone (MEK)	0.625	0.544	87.0	30.0-160	
Methylene Chloride	0.125	0.109	87.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.630	101	56.0-143	
Methyl tert-butyl ether	0.125	0.132	106	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3550794-1 07/13/20 05:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0967	77.4	59.0-130	
n-Propylbenzene	0.125	0.115	92.0	74.0-126	
Styrene	0.125	0.122	97.6	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.113	90.4	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.127	102	68.0-128	
Tetrachloroethene	0.125	0.125	100	70.0-136	
Toluene	0.125	0.124	99.2	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.128	102	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.123	98.4	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.110	88.0	62.0-137	
1,1,1-Trichloroethane	0.125	0.117	93.6	69.0-126	
1,1,2-Trichloroethane	0.125	0.112	89.6	78.0-123	
Trichloroethene	0.125	0.106	84.8	76.0-126	
Trichlorofluoromethane	0.125	0.148	118	61.0-142	
1,2,3-Trichloropropane	0.125	0.138	110	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.119	95.2	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.146	117	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.122	97.6	73.0-127	
Vinyl chloride	0.125	0.133	106	63.0-134	
Xylenes, Total	0.375	0.384	102	72.0-127	
(S) Toluene-d8			*99.2*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.9*	*70.0-130*	

Method Blank (MB)

(MB) R3549604-1 07/15/20 00:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	*84.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3549604-2 07/15/20 00:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C22-C32 Hydrocarbons	25.0	19.6	78.4	50.0-150	
C12-C22 Hydrocarbons	25.0	21.9	87.6	50.0-150	
(S) o-Terphenyl			*86.8*	*18.0-148*	

Method Blank (MB)

(MB) R3549376-1 07/14/20 14:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	*89.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3549376-2 07/14/20 14:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C22-C32 Hydrocarbons	25.0	20.0	80.0	50.0-150	
C12-C22 Hydrocarbons	25.0	20.2	80.8	50.0-150	
(S) o-Terphenyl			*68.0*	*18.0-148*	

Method Blank (MB)

(MB) R3549606-1 07/14/20 23:50

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	*94.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3549606-2 07/15/20 00:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C22-C32 Hydrocarbons	25.0	21.2	84.8	50.0-150	
C12-C22 Hydrocarbons	25.0	24.7	98.8	50.0-150	
(S) o-Terphenyl			*99.4*	*18.0-148*	

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

Method Blank (MB)

(MB) R3549712-1 07/14/20 19:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00376	0.0200
Alpha BHC	U		0.00368	0.0200
Beta BHC	U		0.00379	0.0200
Delta BHC	U		0.00346	0.0200
Gamma BHC	U		0.00344	0.0200
4,4-DDD	U		0.00370	0.0200
4,4-DDE	U		0.00366	0.0200
4,4-DDT	U		0.00627	0.0200
Dieldrin	U		0.00344	0.0200
Endosulfan I	U		0.00363	0.0200
Endosulfan II	U		0.00335	0.0200
Endosulfan sulfate	U		0.00364	0.0200
Endrin	U		0.00350	0.0200
Endrin aldehyde	U		0.00339	0.0200
Endrin ketone	U		0.00711	0.0200
Heptachlor	U		0.00428	0.0200
Heptachlor epoxide	U		0.00339	0.0200
Hexachlorobenzene	U		0.00346	0.0200
Methoxychlor	U		0.00484	0.0200
Chlordane	U		0.103	0.300
Toxaphene	U		0.124	0.400
(S) Decachlorobiphenyl	*92.2*			*10.0-135*
(S) Tetrachloro-m-xylene	*91.1*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3549712-2 07/14/20 19:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0663	99.5	34.0-136	
Alpha BHC	0.0666	0.0672	101	34.0-139	
Beta BHC	0.0666	0.0653	98.0	34.0-133	
Delta BHC	0.0666	0.0685	103	34.0-135	
Gamma BHC	0.0666	0.0689	103	34.0-136	
4,4-DDD	0.0666	0.0626	94.0	33.0-141	
4,4-DDE	0.0666	0.0640	96.1	34.0-134	
4,4-DDT	0.0666	0.0648	97.3	30.0-143	
Dieldrin	0.0666	0.0653	98.0	35.0-137	
Endosulfan I	0.0666	0.0656	98.5	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3549712-2 07/14/20 19:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0618	92.8	35.0-132	
Endosulfan sulfate	0.0666	0.0638	95.8	35.0-132	
Endrin	0.0666	0.0660	99.1	34.0-137	
Endrin aldehyde	0.0666	0.0576	86.5	23.0-121	
Endrin ketone	0.0666	0.0646	97.0	35.0-144	
Heptachlor	0.0666	0.0660	99.1	36.0-141	
Heptachlor epoxide	0.0666	0.0636	95.5	36.0-134	
Hexachlorobenzene	0.0666	0.0609	91.4	33.0-129	
Methoxychlor	0.0666	0.0591	88.7	28.0-150	
(S) Decachlorobiphenyl			*96.2*	*10.0-135*	
(S) Tetrachloro-m-xylene			*96.5*	*10.0-139*	

L1238504-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238504-06 07/14/20 20:05 • (MS) R3549712-3 07/14/20 20:18 • (MSD) R3549712-4 07/14/20 20:31

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	0.0856	U	0.0502	0.0574	58.7	67.1	1	20.0-135	P		13.4	37
Alpha BHC	0.0856	U	0.0510	0.0590	59.6	68.9	1	27.0-140	P		14.5	35
Beta BHC	0.0856	U	0.0550	0.0651	64.3	76.1	1	23.0-141			16.9	37
Delta BHC	0.0856	U	0.0507	0.0583	59.3	68.2	1	21.0-138			13.9	35
Gamma BHC	0.0856	U	0.0522	0.0603	61.0	70.4	1	27.0-137			14.4	36
4,4-DDD	0.0856	U	0.0506	0.0570	59.2	66.7	1	15.0-152	P	P	11.9	39
4,4-DDE	0.0856	0.0337	0.0721	0.0763	44.9	49.8	1	10.0-152	P		5.71	40
4,4-DDT	0.0856	0.0614	0.0985	0.105	43.4	50.6	1	10.0-151	P		6.07	40
Dieldrin	0.0856	0.00809	0.0614	0.0659	62.3	67.6	1	17.0-145	P		7.06	37
Endosulfan I	0.0856	U	0.0511	0.0582	59.8	68.0	1	20.0-137	P		12.9	36
Endosulfan II	0.0856	U	0.0516	0.0576	60.4	67.3	1	15.0-141	P	P	10.8	37
Endosulfan sulfate	0.0856	U	0.0470	0.0527	55.0	61.6	1	15.0-143	P	P	11.3	38
Endrin	0.0856	U	0.0582	0.0641	68.0	74.9	1	19.0-143	P		9.66	37
Endrin aldehyde	0.0856	U	0.0689	0.0708	80.5	82.7	1	10.0-139			2.76	40
Endrin ketone	0.0856	U	0.0533	0.0592	62.3	69.2	1	17.0-149	P		10.5	38
Heptachlor	0.0856	U	0.0522	0.0596	61.0	69.7	1	22.0-138	P		13.3	37
Heptachlor epoxide	0.0856	U	0.0492	0.0560	57.5	65.5	1	22.0-138	P		12.9	36
Hexachlorobenzene	0.0856	U	0.0272	0.0358	31.8	41.9	1	25.0-126	P	P	27.3	35
Methoxychlor	0.0856	U	0.0445	0.0516	52.0	60.4	1	10.0-159	P	P	15.0	40
(S) Decachlorobiphenyl					*61.0*	*67.4*		*10.0-135*				
(S) Tetrachloro-m-xylene					*57.7*	*64.7*		*10.0-139*				

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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

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.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
P	RPD between the primary and confirmatory analysis exceeded 40%.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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	LA000356
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.

Rosso Environmental, Inc. - Berkeley, CA

1400 Shattuck Avenue

Billing Information:
Accounts Payable
PO Box 1923
Lafayette, CA 94549-1923

Pres Chk

Report to: Jeremy Wilson

Email To: jeremywilson@rossoenv.com;jglover@rossoenv

Project Description: Byron Airport

City/State Collected: Byron, CA

Please Circle: PT MT CT ET

Phone: ~~510-647-8298~~ 415-583-9067

Client Project # 20-0020.02

Lab Project # ROSENVLCA-20002002

Collected by (print): Jeremy Wilson

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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: Standard TAT

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CAM17 Metals 6010 4ozClr-NoPres	DROCAER TPH-d/mo 4ozClr-NoPres	GROCA 40ml/NaHSO4/Syr/MeOH	SV8081CA - Pest 4ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	water DROCAERLVI 40mlAmb-HCl-BT	water GROCA 40mlAmb HCl	water V8260 40mlAmb-HCl			Remarks	Sample # (lab only)
B-1-2.0'	Grab	SS	2.0'	7-8-20	841	5	X	X	X	X	X							-01
B-2-1.5'		SS	1.5'		1036	5	X	X	X	X	X							02
B-3-1.5'		SS	1.5'		817	5	X	X	X	X	X							03
B-4-1.0'		SS	1.0'		911	5	X	X	X	X	X							04
B-5-1.0'		SS	1.0'		1001	5	X	X	X	X	X							05
B-6-1.5'		SS	1.5'		936	~~5~~ 4 CA	X	X	X	X	X							06
		SS																
		SS																
		SS																
		SS																

Analysis / Container / Preservative

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

SDG # L1230537

E038

Acctnum: ROSENVLCA
Template: T170099
Prelogin: P783199
PM: 546 - Jared Starkey
PB:

Shipped Via:

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

Remarks: Each Sample includes 3 VOAs and 2 4oz Jars, 1 sample includes 3 VOAs & 1 8oz Jar
VOCs by Prep 5035

pH ____ Temp ____
Flow ____ Other ____

Samples returned via: __ UPS X FedEx __ Courier

Tracking # 4994 8844 7713

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: Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	7-9-2020	1015	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No HCL / MeOH TBR

Temp: 4.5±0=4.5 °C Bottles Received: 29

Date: 7/10/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

LELAP CERTIFICATE NUMBER: 01955
DOD-ELAP ACCREDITATION NUMBER: 74960

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast
7979 Innovation Park Dr.
Baton Rouge, LA 70820
(225) 769-4900

Report Date 07/31/2020

Report # 220071065

Project L1238311 - Byron Airport

Deliver To	***Additional Recipients***
Jared Starkey Pace Analytical Services, Inc. 12065 Lebanon Road Mt. Juliet, TN 37122 (615) 773-9698	Suboutteam, Pace Jeremy Wilson, Pace Analytical Services, Inc.

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

Revision 1

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
Pace Gulf Coast Report 220071065

Revision 1

Certifications

Certification	Certification Number
DOD ELAP	74960
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Revision 1

Case Narrative

Client: Pace Analytical Services **Report:** 220071065

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report is revised 07/31/20. The data is updated to report non-detects to the DL with J flags.

SEMI-VOLATILES MASS SPECTROMETRY

In the EPA 537 Modified analysis for prep batch 687724, the LCS and/or LCSD recoveries are above the upper control limits for 11Cl-PF3OUdS, 6:2 Fluorotelomer sulfonate (6:2 FTS), and 9Cl-PF3ONS. These analytes were not detected in the associated samples. The recovery for the extracted internal standard, M2PFTeDA is outside control limits in the MB, LCS,and LCSD. No additional sample volume was available to re-extract the associated samples.

In the EPA 537 Modified analysis for prep batch 687725, the LCS and/or LCSD recoveries are above the upper control limits for 11Cl-PF3OUdS and 9Cl-PF3ONS. These analytes were not detected in the associated samples.

MISCELLANEOUS

PFAS Abbreviations
6:2 FTS - 6:2 Fluorotelomer sulfonate
8:2 FTS - 8:2 Fluorotelomer sulfonate
FOSA - Perfluorooctane Sulfonamide
PFBA - Perfluorobutanoic acid
PFBS - Perfluorobutanesulfonic acid
PFDA - Perfluorodecanoic acid
PFDS - Perfluorodecane Sulfonate
PFDoA - Perfluorododecanoic acid
PFHpA - Perfluoroheptanoic acid
PFHpS - Perfluoro-1-heptanesulfonate
PFHxA - Perfluorohexanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid
PFOA - Perfluorooctanoic acid
PFOS - Perfluorooctanesulfonic acid
PFPeA - Perfluoropentanoic acid
PFTeDA - Perfluorotetradecanoic acid
PFTrDA - Perfluorotridecanoic acid
PFUdA - Perfluoroundecanoic acid

Revision 1

Sample Summary

LAB ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
22007106501	B-1-1'	Solid	07/08/2020 09:00	07/10/2020 10:10
22007106502	B-2-1'	Solid	07/08/2020 08:00	07/10/2020 10:10
22007106503	B-3-1'	Solid	07/08/2020 08:35	07/10/2020 10:10
22007106504	B-4-1'	Solid	07/08/2020 09:30	07/10/2020 10:10
22007106505	B-5-1'	Solid	07/08/2020 10:20	07/10/2020 10:10
22007106506	B-6-1'	Solid	07/08/2020 09:50	07/10/2020 10:10

Revision 1

Summary of Compounds Detected

B-1-1'

Collect Date 07/08/2020 09:00 **LAB ID** 22007106501

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	DL	LOQ	Units
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	1.02J	0.177	1.04	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.339J	0.270	1.04	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.338J	0.135	1.04	ug/Kg
335-76-2	Perfluorodecanoic acid (PFDA)	0.292J	0.125	1.04	ug/Kg
307-55-1	Perfluorododecanoic acid (PFDoA)	0.214J	0.208	1.04	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.407J	0.135	1.04	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.497J	0.156	1.04	ug/Kg
375-95-1	Perfluorononanoic acid (PFNA)	0.780J	0.094	1.04	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	1.08	0.156	1.04	ug/Kg
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.757J	0.156	1.04	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.174J	0.146	1.04	ug/Kg

B-3-1'

Collect Date 07/08/2020 08:35 **LAB ID** 22007106503

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	DL	LOQ	Units
335-76-2	Perfluorodecanoic acid (PFDA)	0.172J	0.119	0.991	ug/Kg
375-95-1	Perfluorononanoic acid (PFNA)	0.215J	0.089	0.991	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	0.292J	0.149	0.991	ug/Kg

B-4-1'

Collect Date 07/08/2020 09:30 **LAB ID** 22007106504

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	DL	LOQ	Units
375-95-1	Perfluorononanoic acid (PFNA)	0.112J	0.096	1.07	ug/Kg

Revision 1

Sample Results

B-1-1'	**Collect Date**	07/08/2020 09:00	**LAB ID**	22007106501
	Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified	1	07/16/2020 02:10	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.166U	0.166	1.04	ug/Kg
27619-97-2	**6:2 Fluorotelomer sulfonate (6:2 FTS)**	**1.02J**	**0.177**	**1.04**	**ug/Kg**
39108-34-4	**8:2 Fluorotelomer sulfonate (8:2 FTS)**	**0.339J**	**0.270**	**1.04**	**ug/Kg**
13252-13-6	HFPO-DA	0.281U	0.281	1.04	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.198U	0.198	1.04	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.291U	0.291	1.04	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.177U	0.177	1.04	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.125U	0.125	1.04	ug/Kg
375-22-4	**Perfluorobutanoic acid (PFBA)**	**0.338J**	**0.135**	**1.04**	**ug/Kg**
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.187U	0.187	1.04	ug/Kg
335-76-2	**Perfluorodecanoic acid (PFDA)**	**0.292J**	**0.125**	**1.04**	**ug/Kg**
307-55-1	**Perfluorododecanoic acid (PFDoA)**	**0.214J**	**0.208**	**1.04**	**ug/Kg**
375-85-9	**Perfluoroheptanoic acid (PFHpA)**	**0.407J**	**0.135**	**1.04**	**ug/Kg**
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.146U	0.146	1.04	ug/Kg
307-24-4	**Perfluorohexanoic acid (PFHxA)**	**0.497J**	**0.156**	**1.04**	**ug/Kg**
375-95-1	**Perfluorononanoic acid (PFNA)**	**0.780J**	**0.094**	**1.04**	**ug/Kg**
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.125U	0.125	1.04	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.187U	0.187	1.04	ug/Kg
335-67-1	**Perfluorooctanoic acid (PFOA)**	**1.08**	**0.156**	**1.04**	**ug/Kg**
2706-90-3	**Perfluoropentanoic acid (PFPeA)**	**0.757J**	**0.156**	**1.04**	**ug/Kg**
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.229U	0.229	1.04	ug/Kg
2058-94-8	**Perfluoroundecanoic acid (PFUdA)**	**0.174J**	**0.146**	**1.04**	**ug/Kg**
474511-07-4	PFNS	0.146U	0.146	1.04	ug/Kg

Revision 1

Sample Results

B-1-1'				
	Collect Date	07/08/2020 09:00	**LAB ID**	22007106501
	Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified (Continued)	1	07/16/2020 02:10	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
2706-91-4	PFPeS	0.187U	0.187	1.04	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	99.20	62.8	ug/Kg	63	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	99.20	71.5	ug/Kg	72	50 - 150
757124-72-4-EIS	M2 4:2 FTS	99.20	107	ug/Kg	108	50 - 150
27619-97-2-EIS	M2 6:2 FTS	99.20	91.7	ug/Kg	92	50 - 150
39108-34-4-EIS	M2 8:2 FTS	99.20	104	ug/Kg	105	50 - 150
376-06-7-EIS	M2PFTeDA	99.20	18.2	ug/Kg	**18***	50 - 150
13252-13-6-EIS	M3HFPODA	99.20	134	ug/Kg	135	50 - 150
375-73-5-EIS	M3PFBS	99.20	104	ug/Kg	105	50 - 150
355-46-4-EIS	M3PFHxS	99.20	86.6	ug/Kg	87	50 - 150
375-85-9-EIS	M4PFHpA	99.20	112	ug/Kg	113	50 - 150
307-24-4-EIS	M5PFHxA	99.20	105	ug/Kg	106	50 - 150
2706-90-3-EIS	M5PFPeA	99.20	106	ug/Kg	107	50 - 150
335-76-2-EIS	M6PFDA	99.20	100	ug/Kg	101	50 - 150
2058-94-8-EIS	M7PFUdA	99.20	108	ug/Kg	109	50 - 150
754-91-6-EIS	M8FOSA	99.20	85.7	ug/Kg	86	50 - 150
335-67-1-EIS	M8PFOA	99.20	91.7	ug/Kg	92	50 - 150
1763-23-1-EIS	M8PFOS	99.20	65	ug/Kg	66	50 - 150
375-95-1-EIS	M9PFNA	99.20	111	ug/Kg	112	50 - 150
375-22-4-EIS	MPFBA	99.20	105	ug/Kg	106	50 - 150
307-55-1-EIS	MPFDoA	99.20	107	ug/Kg	107	50 - 150

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified	1	07/16/2020 22:23	BMH	688208

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.125U	0.125	1.04	ug/Kg
756426-58-1	9Cl-PF3ONS	0.156U	0.156	1.04	ug/Kg
919005-14-4	ADONA	0.187U	0.187	1.04	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	99.20	108	ug/Kg	109	50 - 150
1763-23-1-EIS	M8PFOS	99.20	106	ug/Kg	107	50 - 150

Revision 1

Sample Results

B-1-1'

Collect Date 07/08/2020 09:00 **LAB ID** 22007106501

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/17/2020 10:00	688172	EPA 537 Modified	1	07/22/2020 06:02	BMH	688374

CAS#	Parameter	Result	DL	LOQ	Units
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.167U	0.167	1.05	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
376-06-7-EIS	M2PFTeDA	99.80	89.3	ug/Kg	89	50 - 150

B-2-1'

Collect Date 07/08/2020 08:00 **LAB ID** 22007106502

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified	1	07/16/2020 02:22	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.163U	0.163	1.02	ug/Kg
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.173U	0.173	1.02	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.265U	0.265	1.02	ug/Kg
13252-13-6	HFPO-DA	0.275U	0.275	1.02	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.193U	0.193	1.02	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.285U	0.285	1.02	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.173U	0.173	1.02	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.122U	0.122	1.02	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.132U	0.132	1.02	ug/Kg
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.183U	0.183	1.02	ug/Kg
335-76-2	Perfluorodecanoic acid (PFDA)	0.122U	0.122	1.02	ug/Kg
307-55-1	Perfluorododecanoic acid (PFDoA)	0.204U	0.204	1.02	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.132U	0.132	1.02	ug/Kg
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.142U	0.142	1.02	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.153U	0.153	1.02	ug/Kg
375-95-1	Perfluorononanoic acid (PFNA)	0.092U	0.092	1.02	ug/Kg
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.122U	0.122	1.02	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.183U	0.183	1.02	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	0.153U	0.153	1.02	ug/Kg
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.153U	0.153	1.02	ug/Kg
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.224U	0.224	1.02	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.142U	0.142	1.02	ug/Kg
474511-07-4	PFNS	0.142U	0.142	1.02	ug/Kg

Revision 1

Sample Results

B-2-1'

Collect Date	07/08/2020 08:00	**LAB ID**	22007106502
Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified (Continued)	1	07/16/2020 02:22	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
2706-91-4	PFPeS	0.183U	0.183	1.02	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	99.20	94.3	ug/Kg	95	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	99.20	75.7	ug/Kg	76	50 - 150
757124-72-4-EIS	M2 4:2 FTS	99.20	121	ug/Kg	122	50 - 150
27619-97-2-EIS	M2 6:2 FTS	99.20	102	ug/Kg	103	50 - 150
39108-34-4-EIS	M2 8:2 FTS	99.20	108	ug/Kg	109	50 - 150
376-06-7-EIS	M2PFTeDA	99.20	13.5	ug/Kg	**14***	50 - 150
13252-13-6-EIS	M3HFPODA	99.20	120	ug/Kg	121	50 - 150
375-73-5-EIS	M3PFBS	99.20	106	ug/Kg	107	50 - 150
355-46-4-EIS	M3PFHxS	99.20	94.4	ug/Kg	95	50 - 150
375-85-9-EIS	M4PFHpA	99.20	114	ug/Kg	115	50 - 150
307-24-4-EIS	M5PFHxA	99.20	111	ug/Kg	112	50 - 150
2706-90-3-EIS	M5PFPeA	99.20	114	ug/Kg	115	50 - 150
335-76-2-EIS	M6PFDA	99.20	114	ug/Kg	115	50 - 150
2058-94-8-EIS	M7PFUdA	99.20	112	ug/Kg	113	50 - 150
754-91-6-EIS	M8FOSA	99.20	97.6	ug/Kg	98	50 - 150
335-67-1-EIS	M8PFOA	99.20	105	ug/Kg	106	50 - 150
1763-23-1-EIS	M8PFOS	99.20	83.4	ug/Kg	84	50 - 150
375-95-1-EIS	M9PFNA	99.20	109	ug/Kg	110	50 - 150
375-22-4-EIS	MPFBA	99.20	115	ug/Kg	116	50 - 150
307-55-1-EIS	MPFDoA	99.20	110	ug/Kg	111	50 - 150

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 07:30	687724	EPA 537 Modified	1	07/16/2020 22:36	BMH	688208

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.122U	0.122	1.02	ug/Kg
756426-58-1	9Cl-PF3ONS	0.153U	0.153	1.02	ug/Kg
919005-14-4	ADONA	0.183U	0.183	1.02	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	99.20	111	ug/Kg	112	50 - 150
1763-23-1-EIS	M8PFOS	99.20	93.6	ug/Kg	94	50 - 150

Revision 1

Sample Results

B-2-1'

Collect Date 07/08/2020 08:00 **LAB ID** 22007106502

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/17/2020 10:00	688172	EPA 537 Modified	1	07/22/2020 06:16	BMH	688374

CAS#	Parameter	Result	DL	LOQ	Units
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.158U	0.158	0.986	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
376-06-7-EIS	M2PFTeDA	96.20	87.8	ug/Kg	91	50 - 150

B-3-1'

Collect Date 07/08/2020 08:35 **LAB ID** 22007106503

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/16/2020 03:21	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.119U	0.119	0.991	ug/Kg
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.159U	0.159	0.991	ug/Kg
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.168U	0.168	0.991	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.258U	0.258	0.991	ug/Kg
756426-58-1	9Cl-PF3ONS	0.149U	0.149	0.991	ug/Kg
13252-13-6	HFPO-DA	0.268U	0.268	0.991	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.188U	0.188	0.991	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.277U	0.277	0.991	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.168U	0.168	0.991	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.119U	0.119	0.991	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.129U	0.129	0.991	ug/Kg
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.178U	0.178	0.991	ug/Kg
335-76-2	**Perfluorodecanoic acid (PFDA)**	**0.172J**	**0.119**	**0.991**	**ug/Kg**
307-55-1	Perfluorododecanoic acid (PFDoA)	0.198U	0.198	0.991	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.129U	0.129	0.991	ug/Kg
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.139U	0.139	0.991	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.149U	0.149	0.991	ug/Kg
375-95-1	**Perfluorononanoic acid (PFNA)**	**0.215J**	**0.089**	**0.991**	**ug/Kg**
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.119U	0.119	0.991	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.178U	0.178	0.991	ug/Kg
335-67-1	**Perfluorooctanoic acid (PFOA)**	**0.292J**	**0.149**	**0.991**	**ug/Kg**
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.149U	0.149	0.991	ug/Kg
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.159U	0.159	0.991	ug/Kg
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.218U	0.218	0.991	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.139U	0.139	0.991	ug/Kg
474511-07-4	PFNS	0.139U	0.139	0.991	ug/Kg

Revision 1

Sample Results

B-3-1'				
	Collect Date	07/08/2020 08:35	**LAB ID**	22007106503
	Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified (Continued)	1	07/16/2020 03:21	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
2706-91-4	PFPeS	0.178U	0.178	0.991	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	97.10	92.7	ug/Kg	96	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	97.10	83.7	ug/Kg	86	50 - 150
757124-72-4-EIS	M2 4:2 FTS	97.10	115	ug/Kg	119	50 - 150
27619-97-2-EIS	M2 6:2 FTS	97.10	85.7	ug/Kg	88	50 - 150
39108-34-4-EIS	M2 8:2 FTS	97.10	92.6	ug/Kg	95	50 - 150
376-06-7-EIS	M2PFTeDA	97.10	53.5	ug/Kg	55	50 - 150
13252-13-6-EIS	M3HFPODA	97.10	123	ug/Kg	126	50 - 150
375-73-5-EIS	M3PFBS	97.10	94.5	ug/Kg	97	50 - 150
355-46-4-EIS	M3PFHxS	97.10	82.5	ug/Kg	85	50 - 150
375-85-9-EIS	M4PFHpA	97.10	108	ug/Kg	111	50 - 150
307-24-4-EIS	M5PFHxA	97.10	99.8	ug/Kg	103	50 - 150
2706-90-3-EIS	M5PFPeA	97.10	103	ug/Kg	106	50 - 150
335-76-2-EIS	M6PFDA	97.10	93.2	ug/Kg	96	50 - 150
2058-94-8-EIS	M7PFUdA	97.10	99.4	ug/Kg	102	50 - 150
754-91-6-EIS	M8FOSA	97.10	84.3	ug/Kg	87	50 - 150
335-67-1-EIS	M8PFOA	97.10	97.6	ug/Kg	101	50 - 150
1763-23-1-EIS	M8PFOS	97.10	74.1	ug/Kg	76	50 - 150
375-95-1-EIS	M9PFNA	97.10	98.2	ug/Kg	101	50 - 150
375-22-4-EIS	MPFBA	97.10	104	ug/Kg	107	50 - 150
307-55-1-EIS	MPFDoA	97.10	89.2	ug/Kg	92	50 - 150

Revision 1

Sample Results

B-3-1'

Collect Date 07/08/2020 08:35 **LAB ID** 22007106503

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/17/2020 14:14	BMH	688349

CAS#	Parameter	Result	DL	LOQ	Units
919005-14-4	ADONA	0.178U	0.178	0.991	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	97.10	117	ug/Kg	121	50 - 150

B-4-1'

Collect Date 07/08/2020 09:30 **LAB ID** 22007106504

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/16/2020 03:33	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.129U	0.129	1.07	ug/Kg
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.172U	0.172	1.07	ug/Kg
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.182U	0.182	1.07	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.279U	0.279	1.07	ug/Kg
756426-58-1	9Cl-PF3ONS	0.161U	0.161	1.07	ug/Kg
13252-13-6	HFPO-DA	0.289U	0.289	1.07	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.204U	0.204	1.07	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.300U	0.300	1.07	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.182U	0.182	1.07	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.129U	0.129	1.07	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.139U	0.139	1.07	ug/Kg
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.193U	0.193	1.07	ug/Kg
335-76-2	Perfluorodecanoic acid (PFDA)	0.129U	0.129	1.07	ug/Kg
307-55-1	Perfluorododecanoic acid (PFDoA)	0.214U	0.214	1.07	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.139U	0.139	1.07	ug/Kg
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.150U	0.150	1.07	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.161U	0.161	1.07	ug/Kg
375-95-1	**Perfluorononanoic acid (PFNA)**	**0.112J**	**0.096**	**1.07**	**ug/Kg**
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.129U	0.129	1.07	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.193U	0.193	1.07	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	0.161U	0.161	1.07	ug/Kg
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.161U	0.161	1.07	ug/Kg
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.172U	0.172	1.07	ug/Kg
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.236U	0.236	1.07	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.150U	0.150	1.07	ug/Kg
474511-07-4	PFNS	0.150U	0.150	1.07	ug/Kg

Revision 1

Sample Results

B-4-1'

Collect Date	07/08/2020 09:30	**LAB ID**	22007106504
Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified (Continued)	1	07/16/2020 03:33	BMH	688129

CAS#	Parameter	Result	DL	LOQ	Units
2706-91-4	PFPeS	0.193U	0.193	1.07	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	100	94.4	ug/Kg	94	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	100	96.3	ug/Kg	96	50 - 150
757124-72-4-EIS	M2 4:2 FTS	100	105	ug/Kg	105	50 - 150
27619-97-2-EIS	M2 6:2 FTS	100	96.2	ug/Kg	96	50 - 150
39108-34-4-EIS	M2 8:2 FTS	100	99.4	ug/Kg	99	50 - 150
376-06-7-EIS	M2PFTeDA	100	58.1	ug/Kg	58	50 - 150
13252-13-6-EIS	M3HFPODA	100	140	ug/Kg	140	50 - 150
375-73-5-EIS	M3PFBS	100	92.5	ug/Kg	93	50 - 150
355-46-4-EIS	M3PFHxS	100	79.1	ug/Kg	79	50 - 150
375-85-9-EIS	M4PFHpA	100	103	ug/Kg	103	50 - 150
307-24-4-EIS	M5PFHxA	100	102	ug/Kg	102	50 - 150
2706-90-3-EIS	M5PFPeA	100	105	ug/Kg	105	50 - 150
335-76-2-EIS	M6PFDA	100	93.6	ug/Kg	94	50 - 150
2058-94-8-EIS	M7PFUdA	100	99.4	ug/Kg	99	50 - 150
754-91-6-EIS	M8FOSA	100	85.2	ug/Kg	85	50 - 150
335-67-1-EIS	M8PFOA	100	100	ug/Kg	100	50 - 150
1763-23-1-EIS	M8PFOS	100	67.8	ug/Kg	68	50 - 150
375-95-1-EIS	M9PFNA	100	97.1	ug/Kg	97	50 - 150
375-22-4-EIS	MPFBA	100	101	ug/Kg	101	50 - 150
307-55-1-EIS	MPFDoA	100	90	ug/Kg	90	50 - 150

Revision 1

Sample Results

B-4-1'

Collect Date 07/08/2020 09:30 **LAB ID** 22007106504

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/17/2020 14:27	BMH	688349

CAS#	Parameter	Result	DL	LOQ	Units
919005-14-4	ADONA	0.193U	0.193	1.07	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	100	110	ug/Kg	110	50 - 150

B-5-1'

Collect Date 07/08/2020 10:20 **LAB ID** 22007106505

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/16/2020 03:56	BMH	688199

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.123U	0.123	1.03	ug/Kg
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.164U	0.164	1.03	ug/Kg
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.174U	0.174	1.03	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.267U	0.267	1.03	ug/Kg
756426-58-1	9Cl-PF3ONS	0.154U	0.154	1.03	ug/Kg
13252-13-6	HFPO-DA	0.277U	0.277	1.03	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.195U	0.195	1.03	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.287U	0.287	1.03	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.174U	0.174	1.03	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.123U	0.123	1.03	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.133U	0.133	1.03	ug/Kg
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.185U	0.185	1.03	ug/Kg
335-76-2	Perfluorodecanoic acid (PFDA)	0.123U	0.123	1.03	ug/Kg
307-55-1	Perfluorododecanoic acid (PFDoA)	0.205U	0.205	1.03	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.133U	0.133	1.03	ug/Kg
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.144U	0.144	1.03	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.154U	0.154	1.03	ug/Kg
375-95-1	Perfluorononanoic acid (PFNA)	0.092U	0.092	1.03	ug/Kg
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.123U	0.123	1.03	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.185U	0.185	1.03	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	0.154U	0.154	1.03	ug/Kg
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.154U	0.154	1.03	ug/Kg
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.226U	0.226	1.03	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.144U	0.144	1.03	ug/Kg
474511-07-4	PFNS	0.144U	0.144	1.03	ug/Kg

Revision 1

Sample Results

B-5-1'	**Collect Date**	07/08/2020 10:20	**LAB ID**	22007106505
	Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified (Continued)	1	07/16/2020 03:56	BMH	688199

CAS#	Parameter	Result	DL	LOQ	Units
2706-91-4	PFPeS	0.185U	0.185	1.03	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	99.80	107	ug/Kg	108	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	99.80	95.7	ug/Kg	96	50 - 150
757124-72-4-EIS	M2 4:2 FTS	99.80	116	ug/Kg	116	50 - 150
27619-97-2-EIS	M2 6:2 FTS	99.80	103	ug/Kg	103	50 - 150
39108-34-4-EIS	M2 8:2 FTS	99.80	97.8	ug/Kg	98	50 - 150
13252-13-6-EIS	M3HFPODA	99.80	123	ug/Kg	124	50 - 150
375-73-5-EIS	M3PFBS	99.80	104	ug/Kg	104	50 - 150
355-46-4-EIS	M3PFHxS	99.80	77	ug/Kg	77	50 - 150
375-85-9-EIS	M4PFHpA	99.80	115	ug/Kg	115	50 - 150
307-24-4-EIS	M5PFHxA	99.80	111	ug/Kg	112	50 - 150
2706-90-3-EIS	M5PFPeA	99.80	110	ug/Kg	110	50 - 150
335-76-2-EIS	M6PFDA	99.80	92.6	ug/Kg	93	50 - 150
2058-94-8-EIS	M7PFUdA	99.80	105	ug/Kg	106	50 - 150
754-91-6-EIS	M8FOSA	99.80	89.7	ug/Kg	90	50 - 150
335-67-1-EIS	M8PFOA	99.80	101	ug/Kg	102	50 - 150
1763-23-1-EIS	M8PFOS	99.80	83.9	ug/Kg	84	50 - 150
375-95-1-EIS	M9PFNA	99.80	103	ug/Kg	103	50 - 150
375-22-4-EIS	MPFBA	99.80	112	ug/Kg	113	50 - 150
307-55-1-EIS	MPFDoA	99.80	99.6	ug/Kg	100	50 - 150

Revision 1

Sample Results

B-5-1'

Collect Date	07/08/2020 10:20	**LAB ID**	22007106505
Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/17/2020 14:40	BMH	688349

CAS#	Parameter	Result	DL	LOQ	Units
919005-14-4	ADONA	0.185U	0.185	1.03	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	99.80	124	ug/Kg	124	50 - 150

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/20/2020 14:50	688171	EPA 537 Modified	1	07/22/2020 00:35	BMH	688374

CAS#	Parameter	Result	DL	LOQ	Units
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.165U	0.165	1.03	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
376-06-7-EIS	M2PFTeDA	100	98.3	ug/Kg	98	50 - 150

B-6-1'

Collect Date	07/08/2020 09:50	**LAB ID**	22007106506
Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/16/2020 04:08	BMH	688199

CAS#	Parameter	Result	DL	LOQ	Units
763051-92-9	11Cl-PF3OUdS	0.122U	0.122	1.02	ug/Kg
757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	0.163U	0.163	1.02	ug/Kg
27619-97-2	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.173U	0.173	1.02	ug/Kg
39108-34-4	8:2 Fluorotelomer sulfonate (8:2 FTS)	0.265U	0.265	1.02	ug/Kg
756426-58-1	9Cl-PF3ONS	0.153U	0.153	1.02	ug/Kg
13252-13-6	HFPO-DA	0.275U	0.275	1.02	ug/Kg
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.194U	0.194	1.02	ug/Kg
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.285U	0.285	1.02	ug/Kg
375-92-8	Perfluoro-1-heptanesulfonate (PFHpS)	0.173U	0.173	1.02	ug/Kg
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.122U	0.122	1.02	ug/Kg
375-22-4	Perfluorobutanoic acid (PFBA)	0.132U	0.132	1.02	ug/Kg
335-77-3	Perfluorodecane Sulfonate (PFDS)	0.183U	0.183	1.02	ug/Kg
335-76-2	Perfluorodecanoic acid (PFDA)	0.122U	0.122	1.02	ug/Kg

Revision 1

Sample Results

B-6-1'

Collect Date 07/08/2020 09:50 **LAB ID** 22007106506

Receive Date 07/10/2020 10:10 **Matrix** Solid

EPA 537 Modified (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified (Continued)	1	07/16/2020 04:08	BMH	688199

CAS#	Parameter	Result	DL	LOQ	Units
307-55-1	Perfluorododecanoic acid (PFDoA)	0.204U	0.204	1.02	ug/Kg
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.132U	0.132	1.02	ug/Kg
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.143U	0.143	1.02	ug/Kg
307-24-4	Perfluorohexanoic acid (PFHxA)	0.153U	0.153	1.02	ug/Kg
375-95-1	Perfluorononanoic acid (PFNA)	0.092U	0.092	1.02	ug/Kg
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.122U	0.122	1.02	ug/Kg
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.183U	0.183	1.02	ug/Kg
335-67-1	Perfluorooctanoic acid (PFOA)	0.153U	0.153	1.02	ug/Kg
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.153U	0.153	1.02	ug/Kg
376-06-7	Perfluorotetradecanoic acid (PFTeDA)	0.163U	0.163	1.02	ug/Kg
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	0.224U	0.224	1.02	ug/Kg
2058-94-8	Perfluoroundecanoic acid (PFUdA)	0.143U	0.143	1.02	ug/Kg
474511-07-4	PFNS	0.143U	0.143	1.02	ug/Kg
2706-91-4	PFPeS	0.183U	0.183	1.02	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2355-31-9-EIS	d3-NMeFOSAA	98.60	79	ug/Kg	80	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	98.60	87.1	ug/Kg	88	50 - 150
757124-72-4-EIS	M2 4:2 FTS	98.60	107	ug/Kg	109	50 - 150
27619-97-2-EIS	M2 6:2 FTS	98.60	90.7	ug/Kg	92	50 - 150
39108-34-4-EIS	M2 8:2 FTS	98.60	95.5	ug/Kg	97	50 - 150
376-06-7-EIS	M2PFTeDA	98.60	75.4	ug/Kg	76	50 - 150
13252-13-6-EIS	M3HFPODA	98.60	143	ug/Kg	145	50 - 150
375-73-5-EIS	M3PFBS	98.60	99	ug/Kg	100	50 - 150
355-46-4-EIS	M3PFHxS	98.60	82.6	ug/Kg	84	50 - 150
375-85-9-EIS	M4PFHpA	98.60	113	ug/Kg	114	50 - 150
307-24-4-EIS	M5PFHxA	98.60	104	ug/Kg	105	50 - 150
2706-90-3-EIS	M5PFPeA	98.60	111	ug/Kg	113	50 - 150
335-76-2-EIS	M6PFDA	98.60	99.6	ug/Kg	101	50 - 150
2058-94-8-EIS	M7PFUdA	98.60	114	ug/Kg	115	50 - 150
754-91-6-EIS	M8FOSA	98.60	94.4	ug/Kg	96	50 - 150
335-67-1-EIS	M8PFOA	98.60	89.4	ug/Kg	91	50 - 150
1763-23-1-EIS	M8PFOS	98.60	58.3	ug/Kg	59	50 - 150
375-95-1-EIS	M9PFNA	98.60	106	ug/Kg	107	50 - 150
375-22-4-EIS	MPFBA	98.60	107	ug/Kg	108	50 - 150
307-55-1-EIS	MPFDoA	98.60	93	ug/Kg	94	50 - 150

Revision 1

Sample Results

B-6-1'				
	Collect Date	07/08/2020 09:50	**LAB ID**	22007106506
	Receive Date	07/10/2020 10:10	**Matrix**	Solid

EPA 537 Modified

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
07/11/2020 09:30	687725	EPA 537 Modified	1	07/17/2020 14:52	BMH	688349

CAS#	Parameter	Result	DL	LOQ	Units
919005-14-4	ADONA	0.183U	0.183	1.02	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
335-67-1-EIS	M8PFOA	98.60	100	ug/Kg	102	50 - 150

Revision 1

LC-MS/MS PFAS QC Summary

Analytical Batch 688129 **Prep Batch** 687724 **Prep Method** EPA 537 Modified		Client ID	MB687724 2060317		LCS687724 2060318				LCSD687724 2060319				
		LAB ID	MB		LCS				LCSD				
		Sample Type	07/11/2020		07/11/2020 07:30				07/11/2020 07:30				
		Prep Date	07:30		07/15/2020 22:01				07/15/2020 22:13				
		Analysis Date	07/15/2020		Solid				Solid				
		Matrix	21:49										
			Solid										
EPA 537 Modified		Units	Result	ug/Kg DL	Spike Added	Result	%R	Control Limits	Spike Added	Result	%R	RPD	RPD Limit
11Cl-PF3OUdS	763051-92-9		0.120U	0.120	1.88	2.49	132*	70 - 130	1.88	2.19	116	13	30
4:2 Fluorotelomer sulfonate (4:2 FTS)	757124-72-4		0.160U	0.160	1.87	2.09	112	70 - 130	1.87	1.94	104	7	30
6:2 Fluorotelomer sulfonate (6:2 FTS)	27619-97-2		0.170U	0.170	1.90	2.31	122	70 - 130	1.90	2.50	132*	8	30
8:2 Fluorotelomer sulfonate (8:2 FTS)	39108-34-4		0.260U	0.260	1.92	2.00	104	70 - 130	1.92	2.22	116	10	30
9Cl-PF3ONS	756426-58-1		0.150U	0.150	1.86	2.59	139*	70 - 130	1.86	2.24	120	14	30
ADONA	919005-14-4		0.180U	0.180	1.88	2.39	127	70 - 130	1.88	2.12	113	12	30
HFPO-DA	13252-13-6		0.270U	0.270	4.00	3.28	82	70 - 130	4.00	3.30	83	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6		0.190U	0.190	2.00	1.94	97	70 - 130	2.00	1.94	97	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9		0.280U	0.280	2.00	2.11	106	70 - 130	2.00	1.98	99	7	30
Perfluoro-1-heptanesulfonate (PFHpS)	375-92-8		0.170U	0.170	1.90	2.01	106	70 - 130	1.90	1.83	96	9	30
Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.120U	0.120	1.77	1.90	107	70 - 130	1.77	1.74	99	8	30
Perfluorobutanoic acid (PFBA)	375-22-4		0.130U	0.130	2.00	1.86	93	70 - 130	2.00	1.85	93	1	30
Perfluorodecane Sulfonate (PFDS)	335-77-3		0.180U	0.180	1.93	1.57	82	70 - 130	1.93	1.51	78	4	30
Perfluorodecanoic acid (PFDA)	335-76-2		0.120U	0.120	2.00	2.23	111	70 - 130	2.00	2.01	100	10	30
Perfluorododecanoic acid (PFDoA)	307-55-1		0.200U	0.200	2.00	2.06	103	70 - 130	2.00	2.01	100	3	30
Perfluoroheptanoic acid (PFHpA)	375-85-9		0.130U	0.130	2.00	1.92	96	70 - 130	2.00	1.89	95	2	30
Perfluorohexanesulfonic acid (PFHxS)	355-46-4		0.140U	0.140	1.82	1.54	84	70 - 130	1.82	1.84	101	18	30
Perfluorohexanoic acid (PFHxA)	307-24-4		0.150U	0.150	2.00	2.07	103	70 - 130	2.00	1.98	99	5	30
Perfluorononanoic acid (PFNA)	375-95-1		0.090U	0.090	2.00	1.93	96	70 - 130	2.00	1.86	93	4	30
Perfluorooctane Sulfonamide (FOSA)	754-91-6		0.120U	0.120	2.00	2.49	124	70 - 130	2.00	2.31	115	8	30
Perfluorooctanesulfonic acid (PFOS)	1763-23-1		0.180U	0.180	1.85	1.98	107	70 - 130	1.85	1.72	93	14	30
Perfluorooctanoic acid (PFOA)	335-67-1		0.150U	0.150	2.00	2.12	106	70 - 130	2.00	2.00	100	6	30
Perfluoropentanoic acid (PFPeA)	2706-90-3		0.150U	0.150	2.00	1.91	96	70 - 130	2.00	1.79	89	7	30
Perfluorotridecanoic acid (PFTrDA)	72629-94-8		0.220U	0.220	2.00	1.62	81	70 - 130	2.00	1.89	95	16	30
Perfluoroundecanoic acid (PFUdA)	2058-94-8		0.140U	0.140	2.00	1.98	99	70 - 130	2.00	1.93	97	2	30
PFNS	474511-07-4		0.140U	0.140	1.92	1.57	82	70 - 130	1.92	1.53	80	3	30
PFPeS	2706-91-4		0.180U	0.180	1.88	1.78	95	70 - 130	1.88	1.70	91	4	30
Surrogate													
d3-NMeFOSAA	2355-31-9-EIS		109	109	100	88	88	50 - 150	100	111	111	NA	NA
d5-NEtFOSAA	2991-50-6-EIS		108	108	100	87.7	88	50 - 150	100	110	110	NA	NA
M2 4:2 FTS	757124-72-4-EIS		121	121	100	108	108	50 - 150	100	123	123	NA	NA
M2 6:2 FTS	27619-97-2-EIS		97.4	97	100	94.5	94	50 - 150	100	102	102	NA	NA
M2 8:2 FTS	39108-34-4-EIS		99	99	100	111	111	50 - 150	100	109	109	NA	NA
M3HFPODA	13252-13-6-EIS		129	129	100	126	126	50 - 150	100	148	148	NA	NA
M3PFBS	375-73-5-EIS		97.8	98	100	97.2	97	50 - 150	100	111	111	NA	NA
M3PFHxS	355-46-4-EIS		91.4	91	100	95.8	96	50 - 150	100	91.6	92	NA	NA
M4PFHpA	375-85-9-EIS		116	116	100	108	108	50 - 150	100	118	118	NA	NA
M5PFHxA	307-24-4-EIS		108	108	100	100	100	50 - 150	100	114	114	NA	NA
M5PFPeA	2706-90-3-EIS		108	108	100	102	102	50 - 150	100	119	119	NA	NA
M6PFDA	335-76-2-EIS		105	105	100	98.5	99	50 - 150	100	116	116	NA	NA
M7PFUdA	2058-94-8-EIS		111	111	100	112	112	50 - 150	100	122	122	NA	NA
M8FOSA	754-91-6-EIS		91.5	92	100	82.5	83	50 - 150	100	98	98	NA	NA
M8PFOA	335-67-1-EIS		104	104	100	96.3	96	50 - 150	100	108	108	NA	NA
M8PFOS	1763-23-1-EIS		70.8	71	100	74.2	74	50 - 150	100	88.7	89	NA	NA
M9PFNA	375-95-1-EIS		99.8	100	100	100	100	50 - 150	100	117	117	NA	NA
MPFBA	375-22-4-EIS		105	105	100	103	103	50 - 150	100	112	112	NA	NA
MPFDoA	307-55-1-EIS		108	108	100	101	101	50 - 150	100	112	112	NA	NA

Revision 1

LC-MS/MS PFAS QC Summary

Analytical Batch 688208 **Prep Batch** 687724 **Prep Method** EPA 537 Modified	Client ID / LAB ID / Sample Type / Prep Date / Analysis Date / Matrix	MB687724 2060317 MB 07/11/2020 07:30 07/16/2020 17:58 Solid		LCS687724 2060318 LCS 07/11/2020 07:30 07/16/2020 18:11 Solid				LCSD687724 2060319 LCSD 07/11/2020 07:30 07/16/2020 18:23 Solid				
EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
11Cl-PF3OUdS	763051-92-9	0.120U	0.120	1.88	1.97	105	70 - 130	1.88	2.01	107	2	30
9Cl-PF3ONS	756426-58-1	0.150U	0.150	1.86	2.08	112	70 - 130	1.86	2.14	115	3	30
ADONA	919005-14-4	0.180U	0.180	1.88	1.91	101	70 - 130	1.88	1.87	99	2	30
Surrogate												
M8PFOA	335-67-1-EIS	106	106	100	102	102	50 - 150	100	115	115	NA	NA
M8PFOS	1763-23-1-EIS	83.4	83	100	88	88	50 - 150	100	96.1	96	NA	NA

Analytical Batch 688129 **Prep Batch** 687725 **Prep Method** EPA 537 Modified	Client ID / LAB ID / Sample Type / Prep Date / Analysis Date / Matrix	MB687725 2060320 MB 07/11/2020 09:30 07/16/2020 02:45 Solid		LCS687725 2060321 LCS 07/11/2020 09:30 07/16/2020 02:57 Solid				LCSD687725 2060322 LCSD 07/11/2020 09:30 07/16/2020 03:09 Solid				
EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
11Cl-PF3OUdS	763051-92-9	0.120U	0.120	1.88	2.91	154*	70 - 130	1.88	2.23	118	26	30
4:2 Fluorotelomer sulfonate (4:2 FTS)	757124-72-4	0.160U	0.160	1.87	1.86	99	70 - 130	1.87	1.87	100	1	30
6:2 Fluorotelomer sulfonate (6:2 FTS)	27619-97-2	0.170U	0.170	1.90	2.17	114	70 - 130	1.90	2.14	113	1	30
8:2 Fluorotelomer sulfonate (8:2 FTS)	39108-34-4	0.260U	0.260	1.92	2.16	113	70 - 130	1.92	2.16	113	0	30
9Cl-PF3ONS	756426-58-1	0.150U	0.150	1.86	2.70	145*	70 - 130	1.86	2.29	123	17	30
HFPO-DA	13252-13-6	0.270U	0.270	4.00	3.46	86	70 - 130	4.00	3.45	86	0	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	0.190U	0.190	2.00	1.93	96	70 - 130	2.00	1.85	92	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	0.280U	0.280	2.00	1.80	90	70 - 130	2.00	1.81	91	1	30
Perfluoro-1-heptanesulfonate (PFHpS)	375-92-8	0.170U	0.170	1.90	1.89	100	70 - 130	1.90	1.94	102	3	30
Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.120U	0.120	1.77	1.73	98	70 - 130	1.77	1.80	102	4	30
Perfluorobutanoic acid (PFBA)	375-22-4	0.130U	0.130	2.00	1.80	90	70 - 130	2.00	1.87	93	4	30
Perfluorodecane Sulfonate (PFDS)	335-77-3	0.180U	0.180	1.93	1.53	79	70 - 130	1.93	1.49	77	3	30
Perfluorodecanoic acid (PFDA)	335-76-2	0.120U	0.120	2.00	2.05	102	70 - 130	2.00	1.95	97	5	30
Perfluorododecanoic acid (PFDoA)	307-55-1	0.200U	0.200	2.00	2.04	102	70 - 130	2.00	1.87	93	9	30
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.130U	0.130	2.00	1.71	86	70 - 130	2.00	1.79	89	4	30
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	0.140U	0.140	1.82	1.63	89	70 - 130	1.82	1.74	95	7	30
Perfluorohexanoic acid (PFHxA)	307-24-4	0.150U	0.150	2.00	1.91	96	70 - 130	2.00	1.92	96	1	30
Perfluorononanoic acid (PFNA)	375-95-1	0.090U	0.090	2.00	1.81	90	70 - 130	2.00	1.82	91	1	30
Perfluorooctane Sulfonamide (FOSA)	754-91-6	0.120U	0.120	2.00	2.45	122	70 - 130	2.00	2.42	121	1	30
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.180U	0.180	1.85	2.08	113	70 - 130	1.85	1.81	98	14	30
Perfluorooctanoic acid (PFOA)	335-67-1	0.150U	0.150	2.00	1.90	95	70 - 130	2.00	1.89	95	0	30
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.150U	0.150	2.00	1.83	91	70 - 130	2.00	1.78	89	2	30
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.160U	0.160	2.00	2.21	111	70 - 130	2.00	2.12	106	4	30
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.220U	0.220	2.00	2.01	101	70 - 130	2.00	1.91	95	5	30
Perfluoroundecanoic acid (PFUdA)	2058-94-8	0.140U	0.140	2.00	2.02	101	70 - 130	2.00	1.91	96	6	30
PFNS	474511-07-4	0.140U	0.140	1.92	1.35	70	70 - 130	1.92	1.39	73	3	30
PFPeS	2706-91-4	0.180U	0.180	1.88	1.69	90	70 - 130	1.88	1.71	91	1	30
Surrogate												
d3-NMeFOSAA	2355-31-9-EIS	116	116	100	120	120	50 - 150	100	121	121	NA	NA
d5-NEtFOSAA	2991-50-6-EIS	118	118	100	115	115	50 - 150	100	117	117	NA	NA
M2 4:2 FTS	757124-72-4-EIS	130	130	100	121	121	50 - 150	100	117	117	NA	NA
M2 6:2 FTS	27619-97-2-EIS	115	115	100	106	106	50 - 150	100	99.4	99	NA	NA
M2 8:2 FTS	39108-34-4-EIS	115	115	100	103	103	50 - 150	100	104	104	NA	NA
M2PFTeDA	376-06-7-EIS	93.3	93	100	91.2	91	50 - 150	100	96.3	96	NA	NA
M3HFPODA	13252-13-6-EIS	131	131	100	133	133	50 - 150	100	135	135	NA	NA
M3PFBS	375-73-5-EIS	113	113	100	108	108	50 - 150	100	100	100	NA	NA
M3PFHxS	355-46-4-EIS	94.6	95	100	95.1	95	50 - 150	100	85.6	86	NA	NA
M4PFHpA	375-85-9-EIS	130	130	100	124	124	50 - 150	100	116	116	NA	NA
M5PFHxA	307-24-4-EIS	115	115	100	110	110	50 - 150	100	107	107	NA	NA

Revision 1

M5PFPeA	2706-90-3-EIS	123	123	100	118	118	50 - 150	100	114	114	NA	NA
M6PFDA	335-76-2-EIS	117	117	100	110	110	50 - 150	100	110	110	NA	NA
M7PFUdA	2058-94-8-EIS	125	125	100	117	117	50 - 150	100	113	113	NA	NA

Revision 1

LC-MS/MS PFAS QC Summary

Analytical Batch	Client ID	MB687725	LCS687725	LCSD687725
688129	LAB ID	2060320	2060321	2060322
Prep Batch	Sample Type	MB	LCS	LCSD
687725	Prep Date	07/11/2020 09:30	07/11/2020 09:30	07/11/2020 09:30
Prep Method	Analysis Date	07/16/2020 02:45	07/16/2020 02:57	07/16/2020 03:09
EPA 537 Modified	Matrix	Solid	Solid	Solid

EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
M8FOSA	754-91-6-EIS	91.5	92	100	92	92	50 - 150	100	94.8	95	NA	NA
M8PFOA	335-67-1-EIS	119	119	100	109	109	50 - 150	100	102	102	NA	NA
M8PFOS	1763-23-1-EIS	79.5	79	100	69.4	69	50 - 150	100	80.1	80	NA	NA
M9PFNA	375-95-1-EIS	112	112	100	117	117	50 - 150	100	109	109	NA	NA
MPFBA	375-22-4-EIS	121	121	100	116	116	50 - 150	100	110	110	NA	NA
MPFDoA	307-55-1-EIS	104	104	100	107	107	50 - 150	100	105	105	NA	NA

Analytical Batch	Client ID	MB687725	LCS687725	LCSD687725
688349	LAB ID	2060320	2060321	2060322
Prep Batch	Sample Type	MB	LCS	LCSD
687725	Prep Date	07/11/2020 09:30	07/11/2020 09:30	07/11/2020 09:30
Prep Method	Analysis Date	07/17/2020 13:36	07/17/2020 13:49	07/17/2020 14:02
EPA 537 Modified	Matrix	Solid	Solid	Solid

EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
ADONA	919005-14-4	0.180U	0.180	1.88	1.77	94	70 - 130	1.88	1.74	92	2	30
Surrogate												
M8PFOA	335-67-1-EIS	132	132	100	125	125	50 - 150	100	121	121	NA	NA

Analytical Batch	Client ID	MB688171	LCS688171	LCSD688171
688374	LAB ID	2062569	2062570	2062571
Prep Batch	Sample Type	MB	LCS	LCSD
688171	Prep Date	07/20/2020 14:50	07/20/2020 14:50	07/20/2020 14:50
Prep Method	Analysis Date	07/21/2020 21:45	07/21/2020 21:59	07/21/2020 22:13
EPA 537 Modified	Matrix	Solid	Solid	Solid

EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.160U	0.160	4.00	4.38	110	70 - 130	4.00	4.74	119	8	30
Surrogate												
M2PFTeDA	376-06-7-EIS	95.1	95	100	100	100	50 - 150	100	78	78	NA	NA

Analytical Batch	Client ID	MB688172	LCS688172	LCSD688172
688374	LAB ID	2062572	2062573	2062574
Prep Batch	Sample Type	MB	LCS	LCSD
688172	Prep Date	07/17/2020 10:00	07/17/2020 10:00	07/17/2020 10:00
Prep Method	Analysis Date	07/22/2020 01:04	07/22/2020 01:18	07/22/2020 01:32
EPA 537 Modified	Matrix	Solid	Solid	Solid

EPA 537 Modified		Units Result	ug/Kg DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.160U	0.160	2.00	1.95	97	70 - 130	2.00	1.93	96	1	30
Surrogate												
M2PFTeDA	376-06-7-EIS	80.9	81	100	114	114	50 - 150	100	107	107	NA	NA

Revision 1

Client ID: 4367 - Pace Analytical Services
SDG: 220071065
PM: EPM

CHAIN-OF-CUSTODY / Analytical Request

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Pace Analytical National	Report To:	Pace Analytical National Subout Team	Attention:	Jeremy Wilson
Address:	12065 Lebanon Road	Copy To:		Company Name:	
Mount Juliet, TN 37122				Address:	
Email:	SuboutTeam@pacenational.com	Purchase Order #:	L1238311	Pace Quote	
Phone:	(615)773-9756 Fax: (615)758-5859	Project Name:	Byron Airport	Pace Project Manager:	Daria Haydel
Requested Due Date:	17-Jul	Project #:	20-0020.02	Pace Profile #:	38076

Regulatory Agency	
State / Location	CA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): PFAS by 537	Residual Chlorine (Y/N)	
1	B-1-1'	SL				08-Jul	9:00		1								1		X		Direct Sub 1
2	B-2-1'	SL				08-Jul	8:00		1								1		X		2
3	B-3-1'	SL				08-Jul	8:35		1								1		X		3
4	B-4-1'	SL				08-Jul	9:30		1								1		X		4
5	B-5-1'	SL				08-Jul	10:20		1								1		X		5
6	B-6-1'	SL				08-Jul	9:50		1								1		X		6
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	James C Huckaba	10-Jul	14:48							
Pace Analytical National Batch: WG1507164	FedEx	7-10-20	10:10	DocuVCune	7-10-20	10:10				
Pace Analytical National SDGs: L1238311		4.9								
Location: Baton Rouge, LA 70809	3946 6745 0060	4X	E80							

SAMPLER NAME AND SIGNATURE: EPM
PRINT Name of SAMPLER: 07/13/20
SIGNATURE of SAMPLER: DATE Signed:

Revision 1

SAMPLE RECEIVING CHECKLIST

SAMPLE DELIVERY GROUP 220071065	
Client PM EPM 4367 - Pace Analytical Services	**Transport Method** FEDEX
Profile Number 285947	**Received By** McCune, Dodie N.
Line Item(s) 2 - S-PFAS (28 cmpds)	**Receive Date(s)** 07/10/20

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☑	☐
Preservative added to any containers?	☐	☑
If received, was headspace for VOC water containers < 6mm?	☑	☐
Samples collected in containers provided by Pace Gulf Coast?	☑	☐

COOLERS

Airbill	Thermometer ID: E26	Temp °C
394667450060		4.9

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - PLM ARB 435

1269
Jeremy Wilson
Rosso Environmental, Inc.
P.O. Box 1923
Lafayette, CA 94549

PROJECT:
JOB NO. 20-0020.02

Micro Log In **272942**
Total Samples 2
Date Sampled 07/08/2020
Date Received 07/14/2020
Date Analyzed 07/16/2020

SAMPLE INFORMATION	ASBESTOS INFORMATION QUANTITY (AREA %) / TYPES / LAYERS / DISTINCT SAMPLES	DOMINANT OTHER MATERIALS
Client #: A1/A2/A3/A4 Micro #: 272942-01 Analyst: SL GR SOIL Asb. / Total Pts. 0 / 400 Matrix Removed 0% Sensitivity 0.250%	ND COMPOSITE ANALYSIS OF SOILS (A1+A2+A3+A4)	Matrix Type: ROCK FRAGMENTS SOIL
Client #: B1/B2/B3/B4 Micro #: 272942-02 Analyst: SL SOIL Asb. / Total Pts. 0 / 400 Matrix Removed 0% Sensitivity 0.250%	ND COMPOSITE ANALYSIS OF SOILS (B1+B2+B3+B4)	Matrix Type: ROCK FRAGMENTS SOIL

Technical Supervisor: Baojia Ke, Ph.D. 7/16/2020 Date Reported

Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101,Rev.1/4/2013 for building materials (based on EPA-600/R93-116 (1993)), and California ARB 435 (1991) for applicable soil, rock, or aggregate samples. NOTES: Weight % cannot be determined by PLM estimation or point counts. Asbestos fibers with diameter below ~1 µm may not be detected by PLM. The absence of asbestos in dust or debris (including wipe or microvacuum), and in some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Only dominant non-asbestos materials are indicated. This report must not be interpreted as a conclusive identification of non-asbestos (fibrous or not). Quantities of non-asbestos fibers are estimated, not point counted. Preparation (all samples): grinding, milling; teasing bundles apart; drying, if needed, by hotplate. Acid dissolution, ashing, or other matrix reduction techniques may be applied to some samples; residue asbestos % is corrected for amount of matrix removed. Various sample interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Notes are made if point counting is used; otherwise, asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (<<1%) may not be reliable or reproducible by PLM. Lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos by weight; however, reliable determination of asbestos weight percent at this level cannot be done by PLM, and TEM is recommended. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. Composite asbestos percentages on multilayered samples are applicable only to layered wall systems (wallboard, joint compound, and related materials); compositing is based on clients' descriptions of a material as "joint compound". Clients are solely responsible for identification and description of bulk materials listed on field forms. Laboratory sample descriptions may differ from descriptions given by the client. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Samples that were reanalyzed are denoted by two sets of analyst initials. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. ND = NO ASBESTOS DETECTED.

Client ID # p 1 of 1

MICRO ANALYTICAL LABORATORIES, INC.

5900 Hollis St., Suite M, Emeryville, CA 94608
(510) 653-0824 - FAX (510) 653-1361 - www.labmicro.com
Chain of Custody Rev. 2/5/2020

Log in # 272942

Name / Client / Address:
Rosso Environmental
PO Box 1923
Lafayette CA 94549

Job No. 20-0020.02

Tel. 415-583-9067
E-mail jwilson@rossoenv.com

Asbestos (TEM) AHERA Yamate II Mod. NIOSH 7402 CARB
Asbestos / Fibers PCM PLM PLM-400 PLM-1200
Asbestos Soil/Rock PLM CARB 435 400 pts CARB 435 (Mod.) 1200 pts
Lead Air Paint Soil Wipe
Water Bulk CA WET TCLP
Mold / Fungi Air (Spore Trap) Tape Lift Bulk Andersen Swab
Coliform Presence / Absence MTF Sample Temperature (°C)
Other Analyses (Specify)

Number of Samples	Turn-Around Time
8	Standard

Micro ID # (For Lab Use Only)	Client Sample ID#	Description	Date Sampled	Time Sampled Start / Stop / Total Minutes	Average LPM	Total Liters	Wipe / Swab Sample Area
	AAA A1	Soil	7-8-20	1610			
1	A2			1620			
	A3			1640			
	A4			1630			
	B1			1710			
2	B2			1705			
	B3			1645			
	B4			1700			

Instructions / Comments: ☒ E-mail To: jwilson@rossoenv.com
Two 4 Pt. Composite Samples Comp A = A1, A2, A3 + A4
Comp B = B1, B2, B3 + B4

Sample Return: YES (NO) If "YES" is checked, samples will be returned to the client or archived at Micro Analytical if required.
If "NO" is checked, solid samples may be disposed of within 60 days (one week for liquid samples, lab suspensions, and digestates).

Sampler's Signature / Name Jeremy Wilson

Note to Lab: If any samples are not acceptable, record reasons for rejection.

Relinquished By — Date / Time — Drop Box / Courier — Received By (CS) 7/14/20 14:30 — Date / Time

Relinquished By — Date / Time — Received By — Date / Time

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 17, 2020

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

Rosso Environmental, Inc. - Berkeley, CA

Sample Delivery Group:	L1238560
Samples Received:	07/10/2020
Project Number:	
Description:	Bryan Airport
Report To:	Jeremy Wilson 1400 Shattuck Avenue Berkeley, CA 94709

Entire Report Reviewed By:

Jared Starkey
Project Manager

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ONE LAB. NATIONWIDE.

COMP A L1238560-01 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 00:00 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508929	1	07/15/20 16:36	07/15/20 17:10	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:25	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507886	1	07/13/20 05:49	07/14/20 21:34	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/13/20 15:56	07/14/20 16:59	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1508886	1	07/14/20 15:31	07/15/20 08:47	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1509187	1	07/15/20 06:35	07/15/20 17:17	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1509187	1	07/15/20 06:35	07/15/20 12:10	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1508252	1	07/13/20 17:02	07/14/20 05:50	AAT	Mt. Juliet, TN

COMP B L1238560-02 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 00:00 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508931	1	07/15/20 13:44	07/15/20 13:53	KBC	Mt. Juliet, TN
Mercury by Method 7471A	WG1507947	1	07/13/20 09:46	07/13/20 17:28	TCT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1507886	1	07/13/20 05:49	07/14/20 21:37	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1508563	1	07/13/20 15:56	07/14/20 17:20	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1508886	1	07/14/20 15:31	07/15/20 09:00	AEG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1509187	1	07/15/20 06:35	07/15/20 17:30	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1509187	1	07/15/20 06:35	07/15/20 12:24	MTJ	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1508252	1	07/13/20 17:02	07/14/20 06:11	AAT	Mt. Juliet, TN

A2 L1238560-03 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 16:20 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508931	1	07/15/20 13:44	07/15/20 13:53	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508448	1.11	07/08/20 16:20	07/13/20 23:03	ADM	Mt. Juliet, TN

B3 L1238560-04 Solid

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 16:45 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508931	1	07/15/20 13:44	07/15/20 13:53	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1508448	1	07/08/20 16:45	07/13/20 23:22	ADM	Mt. Juliet, TN

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.

Jared Starkey
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	97.5		1	07/15/2020 17:10	WG1508929

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Mercury	0.0361	J	0.0185	0.0410	1	07/13/2020 17:25	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Antimony	U		0.513	2.05	1	07/14/2020 21:34	WG1507886
Arsenic	6.32		0.472	2.05	1	07/14/2020 21:34	WG1507886
Barium	314		0.246	0.513	1	07/14/2020 21:34	WG1507886
Beryllium	0.428		0.0821	0.205	1	07/14/2020 21:34	WG1507886
Cadmium	0.149	J	0.0831	0.513	1	07/14/2020 21:34	WG1507886
Chromium	36.4		0.257	1.03	1	07/14/2020 21:34	WG1507886
Cobalt	14.4		0.236	1.03	1	07/14/2020 21:34	WG1507886
Copper	27.4		0.519	2.05	1	07/14/2020 21:34	WG1507886
Lead	8.59		0.213	0.513	1	07/14/2020 21:34	WG1507886
Molybdenum	0.719		0.205	0.513	1	07/14/2020 21:34	WG1507886
Nickel	44.5		0.503	2.05	1	07/14/2020 21:34	WG1507886
Selenium	U		0.633	2.05	1	07/14/2020 21:34	WG1507886
Silver	U		0.234	1.03	1	07/14/2020 21:34	WG1507886
Thallium	U		0.363	2.05	1	07/14/2020 21:34	WG1507886
Vanadium	67.2		0.705	2.05	1	07/14/2020 21:34	WG1507886
Zinc	56.9		0.964	5.13	1	07/14/2020 21:34	WG1507886

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPHG C5 - C12	U		0.0341	0.103	1	07/14/2020 16:59	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*103*			*59.0-128*		*07/14/2020 16:59*	WG1508563

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C12-C22 Hydrocarbons	U		0.752	4.10	1	07/15/2020 08:47	WG1508886
C22-C32 Hydrocarbons	U		1.36	4.10	1	07/15/2020 08:47	WG1508886
C32-C40 Hydrocarbons	3.86	J	1.36	4.10	1	07/15/2020 08:47	WG1508886
(S) o-Terphenyl	*82.9*			*18.0-148*		*07/15/2020 08:47*	WG1508886

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Aldrin	U		0.00386	0.0205	1	07/15/2020 17:17	WG1509187
Alpha BHC	U		0.00378	0.0205	1	07/15/2020 17:17	WG1509187
Beta BHC	U		0.00389	0.0205	1	07/15/2020 17:17	WG1509187
Delta BHC	U		0.00355	0.0205	1	07/15/2020 17:17	WG1509187
Gamma BHC	U		0.00353	0.0205	1	07/15/2020 17:17	WG1509187
4,4-DDD	U		0.00380	0.0205	1	07/15/2020 17:17	WG1509187
4,4-DDE	U		0.00376	0.0205	1	07/15/2020 17:17	WG1509187
4,4-DDT	U		0.00643	0.0205	1	07/15/2020 17:17	WG1509187
Dieldrin	U		0.00353	0.0205	1	07/15/2020 17:17	WG1509187

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Endosulfan I	U		0.00372	0.0205	1	07/15/2020 17:17	WG1509187
Endosulfan II	U		0.00344	0.0205	1	07/15/2020 17:17	WG1509187
Endosulfan sulfate	U		0.00374	0.0205	1	07/15/2020 17:17	WG1509187
Endrin	U		0.00359	0.0205	1	07/15/2020 17:17	WG1509187
Endrin aldehyde	U		0.00348	0.0205	1	07/15/2020 17:17	WG1509187
Endrin ketone	U		0.00730	0.0205	1	07/15/2020 17:17	WG1509187
Heptachlor	U		0.00439	0.0205	1	07/15/2020 17:17	WG1509187
Heptachlor epoxide	U		0.00348	0.0205	1	07/15/2020 17:17	WG1509187
Hexachlorobenzene	U		0.00355	0.0205	1	07/15/2020 17:17	WG1509187
Methoxychlor	U		0.00497	0.0205	1	07/15/2020 17:17	WG1509187
Chlordane	U		0.106	0.308	1	07/15/2020 17:17	WG1509187
Toxaphene	U		0.127	0.410	1	07/15/2020 17:17	WG1509187
(S) Decachlorobiphenyl	*73.8*			*10.0-135*		*07/15/2020 17:17*	WG1509187
(S) Tetrachloro-m-xylene	*77.6*			*10.0-139*		*07/15/2020 17:17*	WG1509187

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0121	0.0349	1	07/15/2020 12:10	WG1509187
PCB 1221	U		0.0121	0.0349	1	07/15/2020 12:10	WG1509187
PCB 1232	U		0.0121	0.0349	1	07/15/2020 12:10	WG1509187
PCB 1242	U		0.0121	0.0349	1	07/15/2020 12:10	WG1509187
PCB 1248	U		0.00757	0.0174	1	07/15/2020 12:10	WG1509187
PCB 1254	U		0.00757	0.0174	1	07/15/2020 12:10	WG1509187
PCB 1260	U		0.00757	0.0174	1	07/15/2020 12:10	WG1509187
(S) Decachlorobiphenyl	*95.7*			*10.0-135*		*07/15/2020 12:10*	WG1509187
(S) Tetrachloro-m-xylene	*97.8*			*10.0-139*		*07/15/2020 12:10*	WG1509187

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00236	0.00616	1	07/14/2020 05:50	WG1508252
Acenaphthene	U		0.00214	0.00616	1	07/14/2020 05:50	WG1508252
Acenaphthylene	U		0.00222	0.00616	1	07/14/2020 05:50	WG1508252
Benzo(a)anthracene	U		0.00178	0.00616	1	07/14/2020 05:50	WG1508252
Benzo(a)pyrene	U		0.00184	0.00616	1	07/14/2020 05:50	WG1508252
Benzo(b)fluoranthene	U		0.00157	0.00616	1	07/14/2020 05:50	WG1508252
Benzo(g,h,i)perylene	U		0.00182	0.00616	1	07/14/2020 05:50	WG1508252
Benzo(k)fluoranthene	U		0.00221	0.00616	1	07/14/2020 05:50	WG1508252
Chrysene	U		0.00238	0.00616	1	07/14/2020 05:50	WG1508252
Dibenz(a,h)anthracene	U		0.00176	0.00616	1	07/14/2020 05:50	WG1508252
Fluoranthene	U		0.00233	0.00616	1	07/14/2020 05:50	WG1508252
Fluorene	U		0.00210	0.00616	1	07/14/2020 05:50	WG1508252
Indeno(1,2,3-cd)pyrene	U		0.00186	0.00616	1	07/14/2020 05:50	WG1508252
Naphthalene	U		0.00419	0.0205	1	07/14/2020 05:50	WG1508252
Phenanthrene	U		0.00237	0.00616	1	07/14/2020 05:50	WG1508252
Pyrene	U		0.00205	0.00616	1	07/14/2020 05:50	WG1508252
1-Methylnaphthalene	U		0.00461	0.0205	1	07/14/2020 05:50	WG1508252
2-Methylnaphthalene	U		0.00438	0.0205	1	07/14/2020 05:50	WG1508252
2-Chloronaphthalene	U		0.00478	0.0205	1	07/14/2020 05:50	WG1508252
(S) p-Terphenyl-d14	*79.9*			*23.0-120*		*07/14/2020 05:50*	WG1508252
(S) Nitrobenzene-d5	*125*			*14.0-149*		*07/14/2020 05:50*	WG1508252
(S) 2-Fluorobiphenyl	*88.5*			*34.0-125*		*07/14/2020 05:50*	WG1508252

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	07/15/2020 13:53	WG1508931

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0187	0.0415	1	07/13/2020 17:28	WG1507947

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.519	2.07	1	07/14/2020 21:37	WG1507886
Arsenic	7.34		0.477	2.07	1	07/14/2020 21:37	WG1507886
Barium	297		0.249	0.519	1	07/14/2020 21:37	WG1507886
Beryllium	0.459		0.0830	0.207	1	07/14/2020 21:37	WG1507886
Cadmium	0.155	J	0.0840	0.519	1	07/14/2020 21:37	WG1507886
Chromium	34.1		0.259	1.04	1	07/14/2020 21:37	WG1507886
Cobalt	12.1		0.239	1.04	1	07/14/2020 21:37	WG1507886
Copper	26.1		0.525	2.07	1	07/14/2020 21:37	WG1507886
Lead	9.94		0.216	0.519	1	07/14/2020 21:37	WG1507886
Molybdenum	0.536		0.207	0.519	1	07/14/2020 21:37	WG1507886
Nickel	37.9		0.508	2.07	1	07/14/2020 21:37	WG1507886
Selenium	1.95	J	0.640	2.07	1	07/14/2020 21:37	WG1507886
Silver	U		0.237	1.04	1	07/14/2020 21:37	WG1507886
Thallium	U		0.367	2.07	1	07/14/2020 21:37	WG1507886
Vanadium	63.3		0.713	2.07	1	07/14/2020 21:37	WG1507886
Zinc	58.2		0.974	5.19	1	07/14/2020 21:37	WG1507886

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	U		0.0344	0.104	1	07/14/2020 17:20	WG1508563
(S) a,a,a-Trifluorotoluene(FID)	*105*			*59.0-128*		*07/14/2020 17:20*	WG1508563

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C12-C22 Hydrocarbons	U		0.760	4.15	1	07/15/2020 09:00	WG1508886
C22-C32 Hydrocarbons	1.98	J	1.38	4.15	1	07/15/2020 09:00	WG1508886
C32-C40 Hydrocarbons	5.49		1.38	4.15	1	07/15/2020 09:00	WG1508886
(S) o-Terphenyl	*82.4*			*18.0-148*		*07/15/2020 09:00*	WG1508886

Pesticides (GC) by Method 8081

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.00390	0.0207	1	07/15/2020 17:30	WG1509187
Alpha BHC	U		0.00382	0.0207	1	07/15/2020 17:30	WG1509187
Beta BHC	U		0.00393	0.0207	1	07/15/2020 17:30	WG1509187
Delta BHC	U		0.00359	0.0207	1	07/15/2020 17:30	WG1509187
Gamma BHC	U		0.00357	0.0207	1	07/15/2020 17:30	WG1509187
4,4-DDD	U		0.00384	0.0207	1	07/15/2020 17:30	WG1509187
4,4-DDE	U		0.00380	0.0207	1	07/15/2020 17:30	WG1509187
4,4-DDT	U		0.00650	0.0207	1	07/15/2020 17:30	WG1509187
Dieldrin	U		0.00357	0.0207	1	07/15/2020 17:30	WG1509187

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Endosulfan I	U		0.00377	0.0207	1	07/15/2020 17:30	WG1509187
Endosulfan II	U		0.00347	0.0207	1	07/15/2020 17:30	WG1509187
Endosulfan sulfate	U		0.00378	0.0207	1	07/15/2020 17:30	WG1509187
Endrin	U		0.00363	0.0207	1	07/15/2020 17:30	WG1509187
Endrin aldehyde	U		0.00352	0.0207	1	07/15/2020 17:30	WG1509187
Endrin ketone	U		0.00738	0.0207	1	07/15/2020 17:30	WG1509187
Heptachlor	U		0.00444	0.0207	1	07/15/2020 17:30	WG1509187
Heptachlor epoxide	U		0.00352	0.0207	1	07/15/2020 17:30	WG1509187
Hexachlorobenzene	U		0.00359	0.0207	1	07/15/2020 17:30	WG1509187
Methoxychlor	U		0.00502	0.0207	1	07/15/2020 17:30	WG1509187
Chlordane	U		0.107	0.311	1	07/15/2020 17:30	WG1509187
Toxaphene	U		0.129	0.415	1	07/15/2020 17:30	WG1509187
(S) Decachlorobiphenyl	*67.6*			*10.0-135*		*07/15/2020 17:30*	WG1509187
(S) Tetrachloro-m-xylene	*63.7*			*10.0-139*		*07/15/2020 17:30*	WG1509187

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0122	0.0353	1	07/15/2020 12:24	WG1509187
PCB 1221	U		0.0122	0.0353	1	07/15/2020 12:24	WG1509187
PCB 1232	U		0.0122	0.0353	1	07/15/2020 12:24	WG1509187
PCB 1242	U		0.0122	0.0353	1	07/15/2020 12:24	WG1509187
PCB 1248	U		0.00766	0.0176	1	07/15/2020 12:24	WG1509187
PCB 1254	U		0.00766	0.0176	1	07/15/2020 12:24	WG1509187
PCB 1260	U		0.00766	0.0176	1	07/15/2020 12:24	WG1509187
(S) Decachlorobiphenyl	*69.2*			*10.0-135*		*07/15/2020 12:24*	WG1509187
(S) Tetrachloro-m-xylene	*72.4*			*10.0-139*		*07/15/2020 12:24*	WG1509187

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00239	0.00622	1	07/14/2020 06:11	WG1508252
Acenaphthene	U		0.00217	0.00622	1	07/14/2020 06:11	WG1508252
Acenaphthylene	U		0.00224	0.00622	1	07/14/2020 06:11	WG1508252
Benzo(a)anthracene	U		0.00179	0.00622	1	07/14/2020 06:11	WG1508252
Benzo(a)pyrene	U		0.00186	0.00622	1	07/14/2020 06:11	WG1508252
Benzo(b)fluoranthene	U		0.00159	0.00622	1	07/14/2020 06:11	WG1508252
Benzo(g,h,i)perylene	U		0.00184	0.00622	1	07/14/2020 06:11	WG1508252
Benzo(k)fluoranthene	U		0.00223	0.00622	1	07/14/2020 06:11	WG1508252
Chrysene	U		0.00241	0.00622	1	07/14/2020 06:11	WG1508252
Dibenz(a,h)anthracene	U		0.00178	0.00622	1	07/14/2020 06:11	WG1508252
Fluoranthene	U		0.00235	0.00622	1	07/14/2020 06:11	WG1508252
Fluorene	U		0.00213	0.00622	1	07/14/2020 06:11	WG1508252
Indeno(1,2,3-cd)pyrene	U		0.00188	0.00622	1	07/14/2020 06:11	WG1508252
Naphthalene	U		0.00423	0.0207	1	07/14/2020 06:11	WG1508252
Phenanthrene	U		0.00240	0.00622	1	07/14/2020 06:11	WG1508252
Pyrene	U		0.00207	0.00622	1	07/14/2020 06:11	WG1508252
1-Methylnaphthalene	U		0.00466	0.0207	1	07/14/2020 06:11	WG1508252
2-Methylnaphthalene	U		0.00443	0.0207	1	07/14/2020 06:11	WG1508252
2-Chloronaphthalene	U		0.00483	0.0207	1	07/14/2020 06:11	WG1508252
(S) p-Terphenyl-d14	*91.8*			*23.0-120*		*07/14/2020 06:11*	WG1508252
(S) Nitrobenzene-d5	*134*			*14.0-149*		*07/14/2020 06:11*	WG1508252
(S) 2-Fluorobiphenyl	*93.7*			*34.0-125*		*07/14/2020 06:11*	WG1508252

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	97.8		1	07/15/2020 13:53	WG1508931

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Acetone	U		0.0414	0.0567	1.11	07/13/2020 23:03	WG1508448
Acrylonitrile	U		0.00410	0.0142	1.11	07/13/2020 23:03	WG1508448
Benzene	U		0.000530	0.00113	1.11	07/13/2020 23:03	WG1508448
Bromobenzene	U		0.00102	0.0142	1.11	07/13/2020 23:03	WG1508448
Bromodichloromethane	U		0.000823	0.00284	1.11	07/13/2020 23:03	WG1508448
Bromoform	U		0.00133	0.0284	1.11	07/13/2020 23:03	WG1508448
Bromomethane	U		0.00224	0.0142	1.11	07/13/2020 23:03	WG1508448
n-Butylbenzene	U		0.00596	0.0142	1.11	07/13/2020 23:03	WG1508448
sec-Butylbenzene	U		0.00327	0.0142	1.11	07/13/2020 23:03	WG1508448
tert-Butylbenzene	U	J4	0.00221	0.00567	1.11	07/13/2020 23:03	WG1508448
Carbon tetrachloride	U	J4	0.00102	0.00567	1.11	07/13/2020 23:03	WG1508448
Chlorobenzene	U		0.000238	0.00284	1.11	07/13/2020 23:03	WG1508448
Chlorodibromomethane	U		0.000694	0.00284	1.11	07/13/2020 23:03	WG1508448
Chloroethane	U		0.00193	0.00567	1.11	07/13/2020 23:03	WG1508448
Chloroform	U		0.00117	0.00284	1.11	07/13/2020 23:03	WG1508448
Chloromethane	U		0.00494	0.0142	1.11	07/13/2020 23:03	WG1508448
2-Chlorotoluene	U		0.000981	0.00284	1.11	07/13/2020 23:03	WG1508448
4-Chlorotoluene	U		0.000511	0.00567	1.11	07/13/2020 23:03	WG1508448
1,2-Dibromo-3-Chloropropane	U		0.00443	0.0284	1.11	07/13/2020 23:03	WG1508448
1,2-Dibromoethane	U		0.000735	0.00284	1.11	07/13/2020 23:03	WG1508448
Dibromomethane	U		0.000852	0.00567	1.11	07/13/2020 23:03	WG1508448
1,2-Dichlorobenzene	U		0.000483	0.00567	1.11	07/13/2020 23:03	WG1508448
1,3-Dichlorobenzene	U		0.000681	0.00567	1.11	07/13/2020 23:03	WG1508448
1,4-Dichlorobenzene	U		0.000794	0.00567	1.11	07/13/2020 23:03	WG1508448
Dichlorodifluoromethane	U		0.00183	0.00284	1.11	07/13/2020 23:03	WG1508448
1,1-Dichloroethane	U		0.000557	0.00284	1.11	07/13/2020 23:03	WG1508448
1,2-Dichloroethane	U		0.000736	0.00284	1.11	07/13/2020 23:03	WG1508448
1,1-Dichloroethene	U		0.000688	0.00284	1.11	07/13/2020 23:03	WG1508448
cis-1,2-Dichloroethene	U		0.000833	0.00284	1.11	07/13/2020 23:03	WG1508448
trans-1,2-Dichloroethene	U		0.00118	0.00567	1.11	07/13/2020 23:03	WG1508448
1,2-Dichloropropane	U		0.00162	0.00567	1.11	07/13/2020 23:03	WG1508448
1,1-Dichloropropene	U		0.000918	0.00284	1.11	07/13/2020 23:03	WG1508448
1,3-Dichloropropane	U		0.000568	0.00567	1.11	07/13/2020 23:03	WG1508448
cis-1,3-Dichloropropene	U		0.000859	0.00284	1.11	07/13/2020 23:03	WG1508448
trans-1,3-Dichloropropene	U		0.00130	0.00567	1.11	07/13/2020 23:03	WG1508448
2,2-Dichloropropane	U		0.00156	0.00284	1.11	07/13/2020 23:03	WG1508448
Di-isopropyl ether	U		0.000465	0.00113	1.11	07/13/2020 23:03	WG1508448
Ethylbenzene	U		0.000836	0.00284	1.11	07/13/2020 23:03	WG1508448
Hexachloro-1,3-butadiene	U		0.00681	0.0284	1.11	07/13/2020 23:03	WG1508448
Isopropylbenzene	U		0.000483	0.00284	1.11	07/13/2020 23:03	WG1508448
p-Isopropyltoluene	U	J4	0.00289	0.00567	1.11	07/13/2020 23:03	WG1508448
2-Butanone (MEK)	0.120		0.0721	0.113	1.11	07/13/2020 23:03	WG1508448
Methylene Chloride	U		0.00753	0.0284	1.11	07/13/2020 23:03	WG1508448
4-Methyl-2-pentanone (MIBK)	U		0.00259	0.0284	1.11	07/13/2020 23:03	WG1508448
Methyl tert-butyl ether	U		0.000398	0.00113	1.11	07/13/2020 23:03	WG1508448
Naphthalene	U		0.00554	0.0142	1.11	07/13/2020 23:03	WG1508448
n-Propylbenzene	U		0.00107	0.00567	1.11	07/13/2020 23:03	WG1508448
Styrene	0.000398	J	0.000260	0.0142	1.11	07/13/2020 23:03	WG1508448
1,1,1,2-Tetrachloroethane	U		0.00107	0.00284	1.11	07/13/2020 23:03	WG1508448
1,1,2,2-Tetrachloroethane	U		0.000788	0.00284	1.11	07/13/2020 23:03	WG1508448

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.000856	0.00284	1.11	07/13/2020 23:03	WG1508448
Tetrachloroethene	U		0.00102	0.00284	1.11	07/13/2020 23:03	WG1508448
Toluene	0.00168	J	0.00147	0.00567	1.11	07/13/2020 23:03	WG1508448
1,2,3-Trichlorobenzene	U		0.00832	0.0142	1.11	07/13/2020 23:03	WG1508448
1,2,4-Trichlorobenzene	U		0.00499	0.0142	1.11	07/13/2020 23:03	WG1508448
1,1,1-Trichloroethane	U		0.00104	0.00284	1.11	07/13/2020 23:03	WG1508448
1,1,2-Trichloroethane	U		0.000678	0.00284	1.11	07/13/2020 23:03	WG1508448
Trichloroethene	U		0.000662	0.00113	1.11	07/13/2020 23:03	WG1508448
Trichlorofluoromethane	U		0.000939	0.00284	1.11	07/13/2020 23:03	WG1508448
1,2,3-Trichloropropane	U		0.00184	0.0142	1.11	07/13/2020 23:03	WG1508448
1,2,4-Trimethylbenzene	U		0.00179	0.00567	1.11	07/13/2020 23:03	WG1508448
1,2,3-Trimethylbenzene	U		0.00179	0.00567	1.11	07/13/2020 23:03	WG1508448
1,3,5-Trimethylbenzene	U		0.00227	0.00567	1.11	07/13/2020 23:03	WG1508448
Vinyl chloride	U		0.00132	0.00284	1.11	07/13/2020 23:03	WG1508448
Xylenes, Total	U		0.000999	0.00738	1.11	07/13/2020 23:03	WG1508448
(S) Toluene-d8	*103*			*75.0-131*		*07/13/2020 23:03*	WG1508448
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*07/13/2020 23:03*	WG1508448
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*07/13/2020 23:03*	WG1508448

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	97.1		1	07/15/2020 13:53	WG1508931

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	U		0.0376	0.0515	1	07/13/2020 23:22	WG1508448
Acrylonitrile	U		0.00372	0.0129	1	07/13/2020 23:22	WG1508448
Benzene	U		0.000481	0.00103	1	07/13/2020 23:22	WG1508448
Bromobenzene	U		0.000927	0.0129	1	07/13/2020 23:22	WG1508448
Bromodichloromethane	U		0.000747	0.00258	1	07/13/2020 23:22	WG1508448
Bromoform	U		0.00121	0.0258	1	07/13/2020 23:22	WG1508448
Bromomethane	U		0.00203	0.0129	1	07/13/2020 23:22	WG1508448
n-Butylbenzene	U		0.00541	0.0129	1	07/13/2020 23:22	WG1508448
sec-Butylbenzene	U		0.00297	0.0129	1	07/13/2020 23:22	WG1508448
tert-Butylbenzene	U	J4	0.00201	0.00515	1	07/13/2020 23:22	WG1508448
Carbon tetrachloride	U	J4	0.000925	0.00515	1	07/13/2020 23:22	WG1508448
Chlorobenzene	U		0.000216	0.00258	1	07/13/2020 23:22	WG1508448
Chlorodibromomethane	U		0.000630	0.00258	1	07/13/2020 23:22	WG1508448
Chloroethane	U		0.00175	0.00515	1	07/13/2020 23:22	WG1508448
Chloroform	U		0.00106	0.00258	1	07/13/2020 23:22	WG1508448
Chloromethane	U		0.00448	0.0129	1	07/13/2020 23:22	WG1508448
2-Chlorotoluene	U		0.000891	0.00258	1	07/13/2020 23:22	WG1508448
4-Chlorotoluene	U		0.000464	0.00515	1	07/13/2020 23:22	WG1508448
1,2-Dibromo-3-Chloropropane	U		0.00402	0.0258	1	07/13/2020 23:22	WG1508448
1,2-Dibromoethane	U		0.000668	0.00258	1	07/13/2020 23:22	WG1508448
Dibromomethane	U		0.000773	0.00515	1	07/13/2020 23:22	WG1508448
1,2-Dichlorobenzene	U		0.000438	0.00515	1	07/13/2020 23:22	WG1508448
1,3-Dichlorobenzene	U		0.000618	0.00515	1	07/13/2020 23:22	WG1508448
1,4-Dichlorobenzene	U		0.000721	0.00515	1	07/13/2020 23:22	WG1508448
Dichlorodifluoromethane	U		0.00166	0.00258	1	07/13/2020 23:22	WG1508448
1,1-Dichloroethane	U		0.000506	0.00258	1	07/13/2020 23:22	WG1508448
1,2-Dichloroethane	U		0.000669	0.00258	1	07/13/2020 23:22	WG1508448
1,1-Dichloroethene	U		0.000624	0.00258	1	07/13/2020 23:22	WG1508448
cis-1,2-Dichloroethene	U		0.000756	0.00258	1	07/13/2020 23:22	WG1508448
trans-1,2-Dichloroethene	U		0.00107	0.00515	1	07/13/2020 23:22	WG1508448
1,2-Dichloropropane	U		0.00146	0.00515	1	07/13/2020 23:22	WG1508448
1,1-Dichloropropene	U		0.000833	0.00258	1	07/13/2020 23:22	WG1508448
1,3-Dichloropropane	U		0.000516	0.00515	1	07/13/2020 23:22	WG1508448
cis-1,3-Dichloropropene	U		0.000780	0.00258	1	07/13/2020 23:22	WG1508448
trans-1,3-Dichloropropene	U		0.00117	0.00515	1	07/13/2020 23:22	WG1508448
2,2-Dichloropropane	U		0.00142	0.00258	1	07/13/2020 23:22	WG1508448
Di-isopropyl ether	U		0.000422	0.00103	1	07/13/2020 23:22	WG1508448
Ethylbenzene	U		0.000759	0.00258	1	07/13/2020 23:22	WG1508448
Hexachloro-1,3-butadiene	U		0.00618	0.0258	1	07/13/2020 23:22	WG1508448
Isopropylbenzene	U		0.000438	0.00258	1	07/13/2020 23:22	WG1508448
p-Isopropyltoluene	U	J4	0.00263	0.00515	1	07/13/2020 23:22	WG1508448
2-Butanone (MEK)	0.111		0.0654	0.103	1	07/13/2020 23:22	WG1508448
Methylene Chloride	U		0.00684	0.0258	1	07/13/2020 23:22	WG1508448
4-Methyl-2-pentanone (MIBK)	U		0.00235	0.0258	1	07/13/2020 23:22	WG1508448
Methyl tert-butyl ether	U		0.000361	0.00103	1	07/13/2020 23:22	WG1508448
Naphthalene	U		0.00503	0.0129	1	07/13/2020 23:22	WG1508448
n-Propylbenzene	U		0.000979	0.00515	1	07/13/2020 23:22	WG1508448
Styrene	U		0.000236	0.0129	1	07/13/2020 23:22	WG1508448
1,1,1,2-Tetrachloroethane	U		0.000977	0.00258	1	07/13/2020 23:22	WG1508448
1,1,2,2-Tetrachloroethane	U		0.000716	0.00258	1	07/13/2020 23:22	WG1508448

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.000777	0.00258	1	07/13/2020 23:22	WG1508448
Tetrachloroethene	U		0.000923	0.00258	1	07/13/2020 23:22	WG1508448
Toluene	U		0.00134	0.00515	1	07/13/2020 23:22	WG1508448
1,2,3-Trichlorobenzene	U		0.00755	0.0129	1	07/13/2020 23:22	WG1508448
1,2,4-Trichlorobenzene	U		0.00453	0.0129	1	07/13/2020 23:22	WG1508448
1,1,1-Trichloroethane	U		0.000951	0.00258	1	07/13/2020 23:22	WG1508448
1,1,2-Trichloroethane	U		0.000615	0.00258	1	07/13/2020 23:22	WG1508448
Trichloroethene	U		0.000602	0.00103	1	07/13/2020 23:22	WG1508448
Trichlorofluoromethane	U		0.000852	0.00258	1	07/13/2020 23:22	WG1508448
1,2,3-Trichloropropane	U		0.00167	0.0129	1	07/13/2020 23:22	WG1508448
1,2,4-Trimethylbenzene	U		0.00163	0.00515	1	07/13/2020 23:22	WG1508448
1,2,3-Trimethylbenzene	U		0.00163	0.00515	1	07/13/2020 23:22	WG1508448
1,3,5-Trimethylbenzene	U		0.00206	0.00515	1	07/13/2020 23:22	WG1508448
Vinyl chloride	U		0.00120	0.00258	1	07/13/2020 23:22	WG1508448
Xylenes, Total	U		0.000907	0.00670	1	07/13/2020 23:22	WG1508448
(S) Toluene-d8	*101*			*75.0-131*		*07/13/2020 23:22*	WG1508448
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*07/13/2020 23:22*	WG1508448
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*07/13/2020 23:22*	WG1508448

Method Blank (MB)

(MB) R3550069-1 07/15/20 17:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

L1238559-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1238559-02 07/15/20 17:10 • (DUP) R3550069-3 07/15/20 17:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	88.1	88.2	1	0.105		10

Laboratory Control Sample (LCS)

(LCS) R3550069-2 07/15/20 17:10

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) R3550039-1 07/15/20 13:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

L1238654-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1238654-06 07/15/20 13:53 • (DUP) R3550039-3 07/15/20 13:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	90.8	92.0	1	1.37		10

Laboratory Control Sample (LCS)

(LCS) R3550039-2 07/15/20 13:53

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) R3549051-1 07/13/20 16:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3549051-2 07/13/20 16:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Mercury	0.500	0.527	105	80.0-120	

L1238537-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238537-06 07/13/20 16:45 • (MS) R3549051-3 07/13/20 16:48 • (MSD) R3549051-4 07/13/20 16:50

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.500	U	0.415	0.486	82.9	97.2	1	75.0-125			15.8	20

Method Blank (MB)

(MB) R3549477-1 07/14/20 20:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.500	2.00
Arsenic	U		0.460	2.00
Barium	U		0.240	0.500
Beryllium	U		0.0800	0.200
Cadmium	U		0.0810	0.500
Chromium	U		0.250	1.00
Cobalt	U		0.230	1.00
Copper	U		0.506	2.00
Lead	U		0.208	0.500
Molybdenum	U		0.200	0.500
Nickel	U		0.490	2.00
Selenium	U		0.617	2.00
Silver	U		0.228	1.00
Thallium	U		0.354	2.00
Vanadium	U		0.687	2.00
Zinc	U		0.939	5.00

Laboratory Control Sample (LCS)

(LCS) R3549477-2 07/14/20 21:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	96.2	96.2	80.0-120	
Arsenic	100	95.7	95.7	80.0-120	
Barium	100	99.6	99.6	80.0-120	
Beryllium	100	96.2	96.2	80.0-120	
Cadmium	100	95.0	95.0	80.0-120	
Chromium	100	97.8	97.8	80.0-120	
Cobalt	100	100	100	80.0-120	
Copper	100	97.1	97.1	80.0-120	
Lead	100	97.4	97.4	80.0-120	
Molybdenum	100	101	101	80.0-120	
Nickel	100	99.9	99.9	80.0-120	
Selenium	100	99.4	99.4	80.0-120	
Silver	20.0	18.7	93.6	80.0-120	
Thallium	100	96.3	96.3	80.0-120	
Vanadium	100	101	101	80.0-120	
Zinc	100	96.1	96.1	80.0-120	

L1238710-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238710-18 07/14/20 21:03 • (MS) R3549477-5 07/14/20 21:12 • (MSD) R3549477-6 07/14/20 21:14

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	0.540	57.7	59.3	57.1	58.7	1	75.0-125	J6	J6	2.77	20
Arsenic	100	5.95	94.1	95.4	88.2	89.5	1	75.0-125			1.34	20
Barium	100	82.6	188	224	106	141	1	75.0-125		J5	17.2	20
Beryllium	100	0.173	89.7	91.2	89.5	91.0	1	75.0-125			1.61	20
Cadmium	100	0.0933	89.4	90.5	89.3	90.4	1	75.0-125			1.14	20
Chromium	100	22.1	111	116	89.3	94.1	1	75.0-125			4.17	20
Cobalt	100	12.6	108	110	94.9	97.0	1	75.0-125			1.93	20
Copper	100	9.61	99.8	101	90.2	91.6	1	75.0-125			1.41	20
Lead	100	2.21	94.2	95.6	92.0	93.4	1	75.0-125			1.47	20
Molybdenum	100	0.968	90.6	91.7	89.7	90.8	1	75.0-125			1.22	20
Nickel	100	7.06	103	104	96.1	97.3	1	75.0-125			1.13	20
Selenium	100	U	93.8	95.1	93.8	95.1	1	75.0-125			1.29	20
Silver	20.0	U	17.3	17.5	86.4	87.4	1	75.0-125			1.12	20
Thallium	100	U	88.6	89.7	88.6	89.7	1	75.0-125			1.16	20
Vanadium	100	51.8	142	142	90.6	90.6	1	75.0-125			0.0107	20
Zinc	100	18.7	109	111	90.3	92.2	1	75.0-125			1.72	20

Method Blank (MB)

(MB) R3549505-2 07/14/20 11:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPHG C5 - C12	U		0.0332	0.100
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3549505-1 07/14/20 10:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
TPHG C5 - C12	5.50	6.30	115	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

Method Blank (MB)

(MB) R3550389-2 07/13/20 19:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3550389-2 07/13/20 19:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3550389-1 07/13/20 18:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.243	38.9	10.0-160	
Acrylonitrile	0.625	0.777	124	45.0-153	
Benzene	0.125	0.121	96.8	70.0-123	
Bromobenzene	0.125	0.121	96.8	73.0-121	
Bromodichloromethane	0.125	0.124	99.2	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3550389-1 07/13/20 18:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.140	112	64.0-132	
Bromomethane	0.125	0.115	92.0	56.0-147	
n-Butylbenzene	0.125	0.0970	77.6	68.0-135	
sec-Butylbenzene	0.125	0.0947	75.8	74.0-130	
tert-Butylbenzene	0.125	0.0909	72.7	75.0-127	J4
Carbon tetrachloride	0.125	0.177	142	66.0-128	J4
Chlorobenzene	0.125	0.120	96.0	76.0-128	
Chlorodibromomethane	0.125	0.139	111	74.0-127	
Chloroethane	0.125	0.129	103	61.0-134	
Chloroform	0.125	0.151	121	72.0-123	
Chloromethane	0.125	0.0877	70.2	51.0-138	
2-Chlorotoluene	0.125	0.142	114	75.0-124	
4-Chlorotoluene	0.125	0.125	100	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.106	84.8	59.0-130	
1,2-Dibromoethane	0.125	0.117	93.6	74.0-128	
Dibromomethane	0.125	0.117	93.6	75.0-122	
1,2-Dichlorobenzene	0.125	0.114	91.2	76.0-124	
1,3-Dichlorobenzene	0.125	0.132	106	76.0-125	
1,4-Dichlorobenzene	0.125	0.103	82.4	77.0-121	
Dichlorodifluoromethane	0.125	0.129	103	43.0-156	
1,1-Dichloroethane	0.125	0.149	119	70.0-127	
1,2-Dichloroethane	0.125	0.137	110	65.0-131	
1,1-Dichloroethene	0.125	0.136	109	65.0-131	
cis-1,2-Dichloroethene	0.125	0.111	88.8	73.0-125	
trans-1,2-Dichloroethene	0.125	0.126	101	71.0-125	
1,2-Dichloropropane	0.125	0.122	97.6	74.0-125	
1,1-Dichloropropene	0.125	0.120	96.0	73.0-125	
1,3-Dichloropropane	0.125	0.110	88.0	80.0-125	
cis-1,3-Dichloropropene	0.125	0.110	88.0	76.0-127	
trans-1,3-Dichloropropene	0.125	0.114	91.2	73.0-127	
2,2-Dichloropropane	0.125	0.154	123	59.0-135	
Di-isopropyl ether	0.125	0.0970	77.6	60.0-136	
Ethylbenzene	0.125	0.113	90.4	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.156	125	57.0-150	
Isopropylbenzene	0.125	0.109	87.2	72.0-127	
p-Isopropyltoluene	0.125	0.0867	69.4	72.0-133	J4
2-Butanone (MEK)	0.625	0.538	86.1	30.0-160	
Methylene Chloride	0.125	0.136	109	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.613	98.1	56.0-143	
Methyl tert-butyl ether	0.125	0.144	115	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3550389-1 07/13/20 18:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0828	66.2	59.0-130	
n-Propylbenzene	0.125	0.113	90.4	74.0-126	
Styrene	0.125	0.113	90.4	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.0987	79.0	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.0918	73.4	68.0-128	
Tetrachloroethene	0.125	0.142	114	70.0-136	
Toluene	0.125	0.113	90.4	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.140	112	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0919	73.5	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.115	92.0	62.0-137	
1,1,1-Trichloroethane	0.125	0.117	93.6	69.0-126	
1,1,2-Trichloroethane	0.125	0.132	106	78.0-123	
Trichloroethene	0.125	0.136	109	76.0-126	
Trichlorofluoromethane	0.125	0.161	129	61.0-142	
1,2,3-Trichloropropane	0.125	0.143	114	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.0960	76.8	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.101	80.8	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.116	92.8	73.0-127	
Vinyl chloride	0.125	0.108	86.4	63.0-134	
Xylenes, Total	0.375	0.352	93.9	72.0-127	
(S) Toluene-d8			*95.3*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.3*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*100*	*70.0-130*	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3550389-3 07/14/20 05:21 • (MSD) R3550389-4 07/14/20 05:40

Analyte	Spike Amount mg/kg	Original Result	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.625		0.714	1.49	53.6	151	1	10.0-160		J3	70.5	40
Acrylonitrile	0.625		0.600	0.855	75.4	107	1	10.0-160			35.0	40
Benzene	0.125		0.135	0.152	84.4	94.8	1	10.0-149			11.6	37
Bromobenzene	0.125		0.153	0.170	96.0	106	1	10.0-156			10.3	38
Bromodichloromethane	0.125		0.136	0.150	84.5	93.3	1	10.0-143			9.78	37
Bromoform	0.125		0.134	0.159	84.0	100	1	10.0-146			17.4	36
Bromomethane	0.125		0.144	0.139	90.4	87.2	1	10.0-149			3.60	38
n-Butylbenzene	0.125		0.135	0.106	84.8	66.5	1	10.0-160			24.2	40
sec-Butylbenzene	0.125		0.138	0.134	83.2	80.8	1	10.0-159			2.82	39
tert-Butylbenzene	0.125		0.123	0.125	77.1	78.4	1	10.0-156			1.65	39

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3550389-3 07/14/20 05:21 • (MSD) R3550389-4 07/14/20 05:40

Analyte	Spike Amount mg/kg	Original Result	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.125		0.184	0.203	115	127	1	10.0-145			9.90	37
Chlorobenzene	0.125		0.152	0.159	95.2	100	1	10.0-152			4.92	39
Chlorodibromomethane	0.125		0.164	0.172	103	108	1	10.0-146			4.55	37
Chloroethane	0.125		0.125	0.121	78.2	75.8	1	10.0-146			3.22	40
Chloroform	0.125		0.149	0.172	93.6	108	1	10.0-146			14.3	37
Chloromethane	0.125		0.109	0.101	68.6	63.5	1	10.0-159			7.63	37
2-Chlorotoluene	0.125		0.177	0.198	111	124	1	10.0-159			10.9	38
4-Chlorotoluene	0.125		0.157	0.170	98.4	106	1	10.0-155			7.81	39
1,2-Dibromo-3-Chloropropane	0.125		0.0781	0.0964	49.0	60.5	1	10.0-151			20.9	39
1,2-Dibromoethane	0.125		0.148	0.168	92.8	106	1	10.0-148			12.9	34
Dibromomethane	0.125		0.115	0.147	72.5	92.0	1	10.0-147			23.7	35
1,2-Dichlorobenzene	0.125		0.136	0.148	85.6	92.8	1	10.0-155			8.07	37
1,3-Dichlorobenzene	0.125		0.163	0.178	102	112	1	10.0-153			8.96	38
1,4-Dichlorobenzene	0.125		0.120	0.134	75.0	84.0	1	10.0-151			11.3	38
Dichlorodifluoromethane	0.125		0.168	0.161	106	101	1	10.0-160			4.65	35
1,1-Dichloroethane	0.125		0.150	0.178	94.4	112	1	10.0-147			17.1	37
1,2-Dichloroethane	0.125		0.126	0.164	78.9	103	1	10.0-148			26.7	35
1,1-Dichloroethene	0.125		0.153	0.157	96.0	98.4	1	10.0-155			2.47	37
cis-1,2-Dichloroethene	0.125		0.115	0.135	72.5	84.8	1	10.0-149			15.7	37
trans-1,2-Dichloroethene	0.125		0.126	0.145	79.0	91.2	1	10.0-150			14.3	37
1,2-Dichloropropane	0.125		0.117	0.162	73.3	102	1	10.0-148			32.4	37
1,1-Dichloropropene	0.125		0.144	0.161	90.4	101	1	10.0-153			10.9	35
1,3-Dichloropropane	0.125		0.148	0.155	92.8	97.6	1	10.0-154			5.04	35
cis-1,3-Dichloropropene	0.125		0.143	0.152	89.6	95.2	1	10.0-151			6.06	37
trans-1,3-Dichloropropene	0.125		0.147	0.155	92.0	97.6	1	10.0-148			5.91	37
2,2-Dichloropropane	0.125		0.155	0.178	97.6	112	1	10.0-138			13.7	36
Di-isopropyl ether	0.125		0.0998	0.114	62.6	71.4	1	10.0-147			13.1	36
Ethylbenzene	0.125		0.159	0.163	91.1	93.5	1	10.0-160			2.37	38
Hexachloro-1,3-butadiene	0.125		0.235	0.215	147	135	1	10.0-160			8.50	40
Isopropylbenzene	0.125		0.133	0.140	82.2	87.0	1	10.0-155			5.61	38
p-Isopropyltoluene	0.125		0.155	0.155	91.4	91.4	1	10.0-160			0.000	40
2-Butanone (MEK)	0.625		0.695	0.851	66.2	85.9	1	10.0-160			20.3	40
Methylene Chloride	0.125		0.126	0.150	79.0	94.4	1	10.0-141			17.8	37
4-Methyl-2-pentanone (MIBK)	0.625		2.71	2.96	209	239	1	10.0-160	J5	J5	8.54	35
Methyl tert-butyl ether	0.125		0.124	0.158	77.9	99.2	1	11.0-147			24.0	35
Naphthalene	0.125		0.122	0.123	49.0	49.5	1	10.0-160			0.728	36
n-Propylbenzene	0.125		0.161	0.170	94.9	101	1	10.0-158			5.41	38
Styrene	0.125		0.134	0.148	84.0	92.8	1	10.0-160			9.95	40
1,1,1,2-Tetrachloroethane	0.125		0.111	0.118	69.4	74.0	1	10.0-149			6.47	39
1,1,2,2-Tetrachloroethane	0.125		0.102	0.127	64.2	79.8	1	10.0-160			21.8	35

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3550389-3 07/14/20 05:21 • (MSD) R3550389-4 07/14/20 05:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg		mg/kg	mg/kg	%	%		%			%	%
Tetrachloroethene	0.125		0.185	0.185	116	116	1	10.0-156			0.000	39
Toluene	0.125		0.155	0.162	93.7	97.7	1	10.0-156			4.02	38
1,1,2-Trichlorotrifluoroethane	0.125		0.189	0.177	118	111	1	10.0-160			6.27	36
1,2,3-Trichlorobenzene	0.125		0.0563	0.0487	35.4	30.6	1	10.0-160			14.6	40
1,2,4-Trichlorobenzene	0.125		0.116	0.116	72.9	73.0	1	10.0-160			0.110	40
1,1,1-Trichloroethane	0.125		0.125	0.139	78.5	87.2	1	10.0-144			10.5	35
1,1,2-Trichloroethane	0.125		0.172	0.189	108	118	1	10.0-160			9.19	35
Trichloroethene	0.125		0.168	0.185	106	116	1	10.0-156			9.39	38
Trichlorofluoromethane	0.125		0.196	0.199	123	125	1	10.0-160			1.29	40
1,2,3-Trichloropropane	0.125		0.152	0.195	95.2	122	1	10.0-156			25.0	35
1,2,3-Trimethylbenzene	0.125		0.459	0.441	130	119	1	10.0-160			3.97	36
1,2,4-Trimethylbenzene	0.125		0.710	0.686	161	146	1	10.0-160	J5		3.47	36
1,3,5-Trimethylbenzene	0.125		0.414	0.404	130	124	1	10.0-160			2.49	38
Vinyl chloride	0.125		0.135	0.133	84.8	83.2	1	10.0-160			1.90	37
Xylenes, Total	0.375		0.684	0.774	92.5	111	1	10.0-160			12.2	38
(S) Toluene-d8					*99.7*	*97.4*		*75.0-131*				
(S) 4-Bromofluorobenzene					*94.6*	*96.8*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*90.5*	*97.3*		*70.0-130*				

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Method Blank (MB)

(MB) R3549606-1 07/14/20 23:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	*94.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3549606-2 07/15/20 00:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
C22-C32 Hydrocarbons	25.0	21.2	84.8	50.0-150	
C12-C22 Hydrocarbons	25.0	24.7	98.8	50.0-150	
(S) o-Terphenyl			*99.4*	*18.0-148*	

Method Blank (MB)

(MB) R3550187-1 07/15/20 13:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00376	0.0200
Alpha BHC	U		0.00368	0.0200
Beta BHC	U		0.00379	0.0200
Delta BHC	U		0.00346	0.0200
Gamma BHC	U		0.00344	0.0200
4,4-DDD	U		0.00370	0.0200
4,4-DDE	U		0.00366	0.0200
4,4-DDT	U		0.00627	0.0200
Dieldrin	U		0.00344	0.0200
Endosulfan I	U		0.00363	0.0200
Endosulfan II	U		0.00335	0.0200
Endosulfan sulfate	U		0.00364	0.0200
Endrin	U		0.00350	0.0200
Endrin aldehyde	U		0.00339	0.0200
Endrin ketone	U		0.00711	0.0200
Heptachlor	U		0.00428	0.0200
Heptachlor epoxide	U		0.00339	0.0200
Hexachlorobenzene	U		0.00346	0.0200
Methoxychlor	U		0.00484	0.0200
Chlordane	U		0.103	0.300
Toxaphene	U		0.124	0.400
(S) Decachlorobiphenyl	*77.9*			*10.0-135*
(S) Tetrachloro-m-xylene	*74.0*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3550187-2 07/15/20 13:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0325	48.8	34.0-136	
Alpha BHC	0.0666	0.0306	45.9	34.0-139	
Beta BHC	0.0666	0.0334	50.2	34.0-133	
Delta BHC	0.0666	0.0314	47.1	34.0-135	
Gamma BHC	0.0666	0.0308	46.2	34.0-136	
4,4-DDD	0.0666	0.0281	42.2	33.0-141	
4,4-DDE	0.0666	0.0304	45.6	34.0-134	
4,4-DDT	0.0666	0.0285	42.8	30.0-143	
Dieldrin	0.0666	0.0315	47.3	35.0-137	
Endosulfan I	0.0666	0.0331	49.7	34.0-134	

Laboratory Control Sample (LCS)

(LCS) R3550187-2 07/15/20 13:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0305	45.8	35.0-132	
Endosulfan sulfate	0.0666	0.0308	46.2	35.0-132	
Endrin	0.0666	0.0327	49.1	34.0-137	
Endrin aldehyde	0.0666	0.0328	49.2	23.0-121	
Endrin ketone	0.0666	0.0306	45.9	35.0-144	
Heptachlor	0.0666	0.0312	46.8	36.0-141	
Heptachlor epoxide	0.0666	0.0310	46.5	36.0-134	
Hexachlorobenzene	0.0666	0.0352	52.9	33.0-129	
Methoxychlor	0.0666	0.0323	48.5	28.0-150	
(S) Decachlorobiphenyl			*74.0*	*10.0-135*	
(S) Tetrachloro-m-xylene			*73.4*	*10.0-139*	

L1238728-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238728-02 07/15/20 17:55 • (MS) R3550187-3 07/15/20 18:07 • (MSD) R3550187-4 07/15/20 18:19

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	0.0936	U	0.0621	0.0805	66.4	86.0	1	20.0-135			25.8	37
Alpha BHC	0.0936	U	0.0731	0.0797	78.1	85.1	1	27.0-140			8.65	35
Beta BHC	0.0936	U	0.0770	0.0838	82.3	89.5	1	23.0-141			8.39	37
Delta BHC	0.0936	U	0.0738	0.0807	78.8	86.2	1	21.0-138			8.92	35
Gamma BHC	0.0936	U	0.0742	0.0805	79.3	86.0	1	27.0-137			8.17	36
4,4-DDD	0.0936	U	0.0585	0.0729	62.5	77.9	1	15.0-152			22.0	39
4,4-DDE	0.0936	U	0.0568	0.0750	60.7	80.2	1	10.0-152			27.7	40
4,4-DDT	0.0936	U	0.0528	0.0708	56.5	75.7	1	10.0-151			29.1	40
Dieldrin	0.0936	U	0.0658	0.0790	70.3	84.4	1	17.0-145			18.3	37
Endosulfan I	0.0936	U	0.0687	0.0822	73.4	87.8	1	20.0-137			17.9	36
Endosulfan II	0.0936	U	0.0642	0.0763	68.6	81.5	1	15.0-141			17.2	37
Endosulfan sulfate	0.0936	U	0.0684	0.0769	73.1	82.1	1	15.0-143			11.6	38
Endrin	0.0936	U	0.0668	0.0805	71.3	86.0	1	19.0-143			18.7	37
Endrin aldehyde	0.0936	U	0.0764	0.0856	81.7	91.4	1	10.0-139			11.3	40
Endrin ketone	0.0936	U	0.0700	0.0780	74.8	83.3	1	17.0-149			10.8	38
Heptachlor	0.0936	U	0.0628	0.0793	67.1	84.7	1	22.0-138			23.1	37
Heptachlor epoxide	0.0936	U	0.0646	0.0776	69.1	82.9	1	22.0-138			18.2	36
Hexachlorobenzene	0.0936	U	0.0704	0.0870	75.2	92.9	1	25.0-126			21.1	35
Methoxychlor	0.0936	U	0.0623	0.0759	66.5	81.1	1	10.0-159			19.7	40
(S) Decachlorobiphenyl					*96.4*	*96.5*		*10.0-135*				
(S) Tetrachloro-m-xylene					*89.2*	*91.9*		*10.0-139*				

Method Blank (MB)

(MB) R3550232-1 07/15/20 11:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	*86.6*			*10.0-135*
(S) Tetrachloro-m-xylene	*87.1*			*10.0-139*

Laboratory Control Sample (LCS)

(LCS) R3550232-2 07/15/20 11:16

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
PCB 1260	0.167	0.169	101	37.0-145	
PCB 1016	0.167	0.181	108	36.0-141	
(S) Decachlorobiphenyl			*106*	*10.0-135*	
(S) Tetrachloro-m-xylene			*103*	*10.0-139*	

L1238760-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238760-23 07/15/20 11:29 • (MS) R3550232-3 07/15/20 11:43 • (MSD) R3550232-4 07/15/20 11:57

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
PCB 1260	0.167	U	0.173	0.173	104	104	1	10.0-160			0.000	38
PCB 1016	0.167	U	0.177	0.175	106	105	1	10.0-160			1.14	37
(S) Decachlorobiphenyl					*106*	*108*		*10.0-135*				
(S) Tetrachloro-m-xylene					*105*	*107*		*10.0-139*				

Method Blank (MB)

(MB) R3549100-2 07/14/20 00:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*101*			*14.0-149*
(S) 2-Fluorobiphenyl	*86.7*			*34.0-125*
(S) p-Terphenyl-d14	*88.4*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3549100-1 07/14/20 00:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Anthracene	0.0800	0.0662	82.8	50.0-126	
Acenaphthene	0.0800	0.0712	89.0	50.0-120	
Acenaphthylene	0.0800	0.0660	82.5	50.0-120	
Benzo(a)anthracene	0.0800	0.0690	86.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0622	77.8	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0597	74.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0612	76.5	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0700	87.5	49.0-125	
Chrysene	0.0800	0.0720	90.0	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0636	79.5	47.0-125	
Fluoranthene	0.0800	0.0731	91.4	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3549100-1 07/14/20 00:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0717	89.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0633	79.1	46.0-125	
Naphthalene	0.0800	0.0654	81.8	50.0-120	
Phenanthrene	0.0800	0.0665	83.1	47.0-120	
Pyrene	0.0800	0.0705	88.1	43.0-123	
1-Methylnaphthalene	0.0800	0.0742	92.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0665	83.1	50.0-120	
2-Chloronaphthalene	0.0800	0.0695	86.9	50.0-120	
(S) Nitrobenzene-d5			*125*	*14.0-149*	
(S) 2-Fluorobiphenyl			*101*	*34.0-125*	
(S) p-Terphenyl-d14			*101*	*23.0-120*	

L1236870-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1236870-03 07/14/20 02:45 • (MS) R3549100-3 07/14/20 03:05 • (MSD) R3549100-4 07/14/20 03:26

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 %
Anthracene	0.104	U	0.0680	0.0778	65.5	74.9	1	10.0-145			13.4	30
Acenaphthene	0.104	U	0.0797	0.0917	76.8	88.3	1	14.0-127			13.9	27
Acenaphthylene	0.104	U	0.0745	0.0836	71.8	80.5	1	21.0-124			11.5	25
Benzo(a)anthracene	0.104	U	0.0612	0.0762	58.9	73.4	1	10.0-139			21.9	30
Benzo(a)pyrene	0.104	U	0.0593	0.0721	57.1	69.4	1	10.0-141			19.4	31
Benzo(b)fluoranthene	0.104	U	0.0506	0.0664	48.8	63.9	1	10.0-140			26.9	36
Benzo(g,h,i)perylene	0.104	U	0.0558	0.0682	53.8	65.6	1	10.0-140			19.9	33
Benzo(k)fluoranthene	0.104	U	0.0652	0.0734	62.8	70.6	1	10.0-137			11.8	31
Chrysene	0.104	U	0.0680	0.0795	65.5	76.5	1	10.0-145			15.5	30
Dibenz(a,h)anthracene	0.104	U	0.0595	0.0700	57.3	67.4	1	10.0-132			16.2	31
Fluoranthene	0.104	U	0.0686	0.0825	66.0	79.4	1	10.0-153			18.4	33
Fluorene	0.104	U	0.0743	0.0862	71.5	83.0	1	11.0-130			14.9	29
Indeno(1,2,3-cd)pyrene	0.104	U	0.0578	0.0699	55.6	67.3	1	10.0-137			18.9	32
Naphthalene	0.104	U	0.0812	0.0925	78.1	89.0	1	10.0-135			13.0	27
Phenanthrene	0.104	U	0.0674	0.0792	64.9	76.3	1	10.0-144			16.1	31
Pyrene	0.104	U	0.0592	0.0755	57.0	72.6	1	10.0-148			24.1	35
1-Methylnaphthalene	0.104	U	0.0879	0.101	84.6	97.3	1	10.0-142			13.9	28
2-Methylnaphthalene	0.104	U	0.0775	0.0887	74.6	85.4	1	10.0-137			13.4	28
2-Chloronaphthalene	0.104	U	0.0779	0.0865	75.0	83.3	1	29.0-120			10.4	24
(S) Nitrobenzene-d5					*127*	*159*		*14.0-149*	J1			
(S) 2-Fluorobiphenyl					*72.8*	*97.4*		*34.0-125*				
(S) p-Terphenyl-d14					*55.5*	*82.4*		*23.0-120*				

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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

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.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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	LA000356
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.

Rosso Environmental, Inc. - Berkeley, CA

1400 Shattuck Avenue

Billing Information:
Accounts Payable
PO Box 1923
Lafayette, CA 94549-1923

Fres Chk

Report to: Jeremy Wilson

Email To: jeremywilson@rossoenv.com;eleif@rossoenv.c

Project Description: Byron Airport

City/State Collected: Byron, CA

Please Circle: (PT) MT CT ET

Phone: ~~510-647-8298~~ 415-583-9067

Client Project #

Lab Project # ROSENVLCA-WILSON

Collected by (print): Jeremy Wilson

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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: Standard TAT

Analysis / Container / Preservative

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

SDG # L1238560
F222

Acctnum: ROSENVLCA
Template: T170461
Prelogin: P784377
PM: 546 - Jared Starkey
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	DROCAER 4ozClr-NoPres	GROCA 40ml/NaHSO4/Syr/MeOH	M6010CAM17 Metals 4ozClr-NoPres	P/PCB SV8081/8082CA 4ozClr-NoPres	V8260 40mlAmb/MeOH5ml/Syr	dry weight 4ozClr-NoPres	PAHs 8270 - SIM	Remarks	Sample # (lab only)
~~A1~~ A1	Comp	SS	0.5	9-8-20	1610	4									-01
~~A2~~ A2		SS			1620	4									
A3		SS			1640	4									
A4		SS			1630	4									
B1	Comp	SS			1710	4									02
B2		SS			1705	4									
B3		SS			1645	4									
B4		SS			1700	4									
A2	Grab	SS			1620	2					X				03
B3	Grab	SS			1645	2					X				04

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

Remarks: 4 pt. Composite Sample (Comp A) = A1, A2, A3, A4 pH _____ Temp _____
Lab to composite 4 pt composite Sample (Comp B) = B1, B2, B3, B4 Flow _____ Other _____
A2 + B3 Discrete VOC analysis

Samples returned via: __ UPS X FedEx __ Courier

Tracking # 479488424253

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: Y __N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	7-9-2020	1015	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
			07/10/20 0830

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: WM A7 °C Bottles Received: 36
.7±0.7

If preservation required by Login: Date/Time

07-075

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

July 15, 2020

Rosso Environmental, Inc. - Berkeley, CA

Sample Delivery Group:	L1238395
Samples Received:	07/10/2020
Project Number:	20-0020.02
Description:	

Report To:

Jeremy Wilson
1400 Shattuck Avenue
Berkeley, CA 94709

Entire Report Reviewed By:

Jared Starkey
Project Manager

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ONE LAB. NATIONWIDE.

B-1-SV L1238395-01 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 13:20 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1507804	1	07/13/20 01:20	07/13/20 01:20	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508174	20	07/13/20 18:48	07/13/20 18:48	CAW	Mt. Juliet, TN

B-2-SV L1238395-02 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 14:53 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1507804	1	07/13/20 02:04	07/13/20 02:04	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508174	10	07/13/20 19:30	07/13/20 19:30	CAW	Mt. Juliet, TN

B-3-SV L1238395-03 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 13:00 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1507804	1	07/13/20 02:48	07/13/20 02:48	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508174	10	07/13/20 20:12	07/13/20 20:12	CAW	Mt. Juliet, TN

B-4-SV L1238395-04 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 14:23 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1508179	1	07/13/20 12:15	07/13/20 12:15	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508756	20	07/14/20 19:32	07/14/20 19:32	MBF	Mt. Juliet, TN

B-5-SV L1238395-05 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 14:02 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1508179	1	07/13/20 12:55	07/13/20 12:55	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508756	100	07/14/20 20:11	07/14/20 20:11	MBF	Mt. Juliet, TN

B-6-SV L1238395-06 Air

Collected by: Jeremy Wilson | Collected date/time: 07/08/20 13:46 | Received date/time: 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1508179	1	07/13/20 13:34	07/13/20 13:34	CAW	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1508756	20	07/14/20 20:51	07/14/20 20:51	MBF	Mt. Juliet, TN

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.

Jared Starkey
Project Manager

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	25.0	59.4	74.1	176		20	WG1508174
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1507804
Benzene	71-43-2	78.10	0.200	0.639	8.79	28.1		1	WG1507804
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1507804
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1507804
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1507804
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1507804
1,3-Butadiene	106-99-0	54.10	2.00	4.43	35.5	78.6		1	WG1507804
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.62	11.3		1	WG1507804
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1507804
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1507804
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1507804
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1507804
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1507804
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1507804
Cyclohexane	110-82-7	84.20	0.200	0.689	14.4	49.6		1	WG1507804
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1507804
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1507804
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1507804
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1507804
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1507804
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1507804
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1507804
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1507804
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1507804
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1507804
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1507804
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1507804
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1507804
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1507804
Ethanol	64-17-5	46.10	0.630	1.19	16.5	31.1		1	WG1507804
Ethylbenzene	100-41-4	106	0.200	0.867	8.15	35.3		1	WG1507804
4-Ethyltoluene	622-96-8	120	0.200	0.982	2.96	14.5		1	WG1507804
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.349	1.96		1	WG1507804
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.550	2.72		1	WG1507804
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1507804
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1507804
Heptane	142-82-5	100	0.200	0.818	11.7	47.9		1	WG1507804
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1507804
n-Hexane	110-54-3	86.20	12.6	44.4	81.4	287		20	WG1508174
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1507804
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1507804
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	9.42	38.5		1	WG1507804
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	38.3	113		1	WG1507804
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	4.09	16.7		1	WG1507804
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1507804
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1507804
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1507804
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1507804
Propene	115-07-1	42.10	8.00	13.8	1250	2150		20	WG1508174
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1507804
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1507804
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1507804
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1507804
Toluene	108-88-3	92.10	4.00	15.1	208	784		20	WG1508174
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1507804

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	0.200	1.09	ND	ND		1	WG1507804
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1507804
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1507804
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.74	13.4		1	WG1507804
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	1.08	5.30		1	WG1507804
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	11.7	54.7		1	WG1507804
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1507804
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1507804
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1507804
m&p-Xylene	1330-20-7	106	0.400	1.73	22.6	98.0		1	WG1507804
o-Xylene	95-47-6	106	0.200	0.867	7.64	33.1		1	WG1507804
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.7*				WG1508174

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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	12.5	29.7	88.9	211		10	WG1508174
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1507804
Benzene	71-43-2	78.10	0.200	0.639	1.79	5.72		1	WG1507804
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1507804
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1507804
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1507804
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1507804
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1507804
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1507804
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1507804
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1507804
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1507804
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1507804
Chloromethane	74-87-3	50.50	0.200	0.413	0.321	0.663		1	WG1507804
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1507804
Cyclohexane	110-82-7	84.20	0.200	0.689	1.06	3.65		1	WG1507804
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1507804
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1507804
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1507804
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1507804
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1507804
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1507804
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1507804
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1507804
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1507804
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1507804
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1507804
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1507804
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1507804
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1507804
Ethanol	64-17-5	46.10	0.630	1.19	11.2	21.1		1	WG1507804
Ethylbenzene	100-41-4	106	0.200	0.867	0.806	3.49		1	WG1507804
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.636	3.12		1	WG1507804
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.244	1.37		1	WG1507804
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.476	2.35		1	WG1507804
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1507804
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1507804
Heptane	142-82-5	100	0.200	0.818	1.77	7.24		1	WG1507804
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1507804
n-Hexane	110-54-3	86.20	0.630	2.22	2.14	7.54		1	WG1507804
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1507804
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1507804
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1507804
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	21.4	63.1		1	WG1507804
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1507804
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1507804
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1507804
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1507804
2-Propanol	67-63-0	60.10	1.25	3.07	6.83	16.8		1	WG1507804
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1507804
Styrene	100-42-5	104	0.200	0.851	0.320	1.36		1	WG1507804
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1507804
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1507804
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1507804
Toluene	108-88-3	92.10	2.00	7.53	300	1130		10	WG1508174
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1507804

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

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	0.200	1.09	ND	ND		1	WG1507804
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1507804
Trichloroethylene	79-01-6	131	0.200	1.07	0.322	1.73		1	WG1507804
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.804	3.95		1	WG1507804
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.236	1.16		1	WG1507804
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.14	5.33		1	WG1507804
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1507804
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1507804
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1507804
m&p-Xylene	1330-20-7	106	0.400	1.73	2.20	9.54		1	WG1507804
o-Xylene	95-47-6	106	0.200	0.867	0.662	2.87		1	WG1507804
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.0*				WG1508174

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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	1.25	2.97	100	238		1	WG1507804
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1507804
Benzene	71-43-2	78.10	0.200	0.639	9.48	30.3		1	WG1507804
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1507804
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1507804
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1507804
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1507804
1,3-Butadiene	106-99-0	54.10	2.00	4.43	3.10	6.86		1	WG1507804
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.52	7.84		1	WG1507804
Carbon tetrachloride	56-23-5	154	0.200	1.26	0.221	1.39		1	WG1507804
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1507804
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1507804
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1507804
Chloromethane	74-87-3	50.50	0.200	0.413	0.590	1.22		1	WG1507804
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1507804
Cyclohexane	110-82-7	84.20	0.200	0.689	10.8	37.2		1	WG1507804
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1507804
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1507804
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1507804
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1507804
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1507804
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1507804
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1507804
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1507804
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1507804
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1507804
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1507804
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1507804
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1507804
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1507804
Ethanol	64-17-5	46.10	0.630	1.19	16.0	30.2		1	WG1507804
Ethylbenzene	100-41-4	106	0.200	0.867	2.33	10.1		1	WG1507804
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.84	9.03		1	WG1507804
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.399	2.24		1	WG1507804
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.492	2.43		1	WG1507804
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1507804
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1507804
Heptane	142-82-5	100	0.200	0.818	11.7	47.9		1	WG1507804
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1507804
n-Hexane	110-54-3	86.20	0.630	2.22	47.8	169		1	WG1507804
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.465	2.29		1	WG1507804
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.342	1.19		1	WG1507804
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1507804
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	21.9	64.6		1	WG1507804
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1507804
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1507804
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1507804
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1507804
2-Propanol	67-63-0	60.10	1.25	3.07	5.74	14.1		1	WG1507804
Propene	115-07-1	42.10	0.400	0.689	95.5	164		1	WG1507804
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1507804
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1507804
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1507804
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1507804
Toluene	108-88-3	92.10	2.00	7.53	117	441		10	WG1508174
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1507804

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	0.200	1.09	ND	ND		1	WG1507804
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1507804
Trichloroethylene	79-01-6	131	0.200	1.07	0.296	1.59		1	WG1507804
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	2.10	10.3		1	WG1507804
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.609	2.99		1	WG1507804
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	4.37	20.4		1	WG1507804
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1507804
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1507804
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1507804
m&p-Xylene	1330-20-7	106	0.400	1.73	6.01	26.1		1	WG1507804
o-Xylene	95-47-6	106	0.200	0.867	2.18	9.45		1	WG1507804
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1507804
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.4*				WG1508174

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

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	1.25	2.97	76.4	182		1	WG1508179
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1508179
Benzene	71-43-2	78.10	0.200	0.639	6.78	21.7		1	WG1508179
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1508179
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1508179
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1508179
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1508179
1,3-Butadiene	106-99-0	54.10	2.00	4.43	12.6	27.9		1	WG1508179
Carbon disulfide	75-15-0	76.10	0.200	0.622	3.39	10.6		1	WG1508179
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1508179
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1508179
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1508179
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1508179
Chloromethane	74-87-3	50.50	0.200	0.413	1.20	2.48		1	WG1508179
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1508179
Cyclohexane	110-82-7	84.20	0.200	0.689	10.1	34.8		1	WG1508179
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1508179
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1508179
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1508179
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1508179
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1508179
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1508179
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1508179
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1508179
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1508179
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1508179
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1508179
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1508179
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1508179
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1508179
Ethanol	64-17-5	46.10	0.630	1.19	21.8	41.1		1	WG1508179
Ethylbenzene	100-41-4	106	0.200	0.867	6.41	27.8		1	WG1508179
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.60	7.85		1	WG1508179
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.316	1.78		1	WG1508179
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.570	2.82		1	WG1508179
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1508179
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1508179
Heptane	142-82-5	100	0.200	0.818	17.2	70.3		1	WG1508179
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1508179
n-Hexane	110-54-3	86.20	0.630	2.22	95.5	337		1	WG1508179
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1508179
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1508179
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1508179
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	19.2	56.6		1	WG1508179
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1508179
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1508179
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1508179
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1508179
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1508179
Propene	115-07-1	42.10	8.00	13.8	409	704		20	WG1508756
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1508179
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1508179
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.365	2.48		1	WG1508179
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1508179
Toluene	108-88-3	92.10	4.00	15.1	1580	5950		20	WG1508756
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1508179

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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	0.200	1.09	ND	ND		1	WG1508179
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1508179
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1508179
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	1.46	7.17		1	WG1508179
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.558	2.74		1	WG1508179
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	12.4	57.9		1	WG1508179
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1508179
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1508179
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1508179
m&p-Xylene	1330-20-7	106	0.400	1.73	18.0	78.0		1	WG1508179
o-Xylene	95-47-6	106	0.200	0.867	4.60	19.9		1	WG1508179
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*100*				WG1508756

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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	1.25	2.97	54.0	128		1	WG1508179
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1508179
Benzene	71-43-2	78.10	0.200	0.639	6.48	20.7		1	WG1508179
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1508179
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1508179
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1508179
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1508179
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1508179
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1508179
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1508179
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1508179
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1508179
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1508179
Chloromethane	74-87-3	50.50	0.200	0.413	0.629	1.30		1	WG1508179
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1508179
Cyclohexane	110-82-7	84.20	0.200	0.689	1.87	6.44		1	WG1508179
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1508179
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1508179
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1508179
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1508179
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1508179
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1508179
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1508179
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1508179
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1508179
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1508179
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1508179
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1508179
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1508179
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1508179
Ethanol	64-17-5	46.10	0.630	1.19	8.82	16.6		1	WG1508179
Ethylbenzene	100-41-4	106	0.200	0.867	4.91	21.3		1	WG1508179
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.18	5.79		1	WG1508179
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.263	1.48		1	WG1508179
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.540	2.67		1	WG1508179
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1508179
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1508179
Heptane	142-82-5	100	0.200	0.818	13.6	55.6		1	WG1508179
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1508179
n-Hexane	110-54-3	86.20	0.630	2.22	7.78	27.4		1	WG1508179
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1508179
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.667	2.32		1	WG1508179
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1508179
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	16.2	47.8		1	WG1508179
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1508179
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1508179
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1508179
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1508179
2-Propanol	67-63-0	60.10	1.25	3.07	11.6	28.5		1	WG1508179
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1508179
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1508179
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1508179
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1508179
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1508179
Toluene	108-88-3	92.10	20.0	75.3	1700	6400		100	WG1508756
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1508179

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	0.200	1.09	ND	ND		1	WG1508179
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1508179
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1508179
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.981	4.81		1	WG1508179
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.422	2.07		1	WG1508179
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	36.6	171		1	WG1508179
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1508179
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1508179
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1508179
m&p-Xylene	1330-20-7	106	0.400	1.73	13.2	57.2		1	WG1508179
o-Xylene	95-47-6	106	0.200	0.867	2.89	12.5		1	WG1508179
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*125*				WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.9*				WG1508756

Cp
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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	1.25	2.97	33.1	78.7		1	WG1508179
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1508179
Benzene	71-43-2	78.10	0.200	0.639	1.38	4.41		1	WG1508179
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1508179
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1508179
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1508179
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1508179
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1508179
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1508179
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1508179
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1508179
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1508179
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1508179
Chloromethane	74-87-3	50.50	0.200	0.413	0.346	0.715		1	WG1508179
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1508179
Cyclohexane	110-82-7	84.20	0.200	0.689	0.580	2.00		1	WG1508179
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1508179
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1508179
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1508179
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1508179
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1508179
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1508179
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1508179
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1508179
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1508179
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1508179
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1508179
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1508179
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1508179
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1508179
Ethanol	64-17-5	46.10	0.630	1.19	20.3	38.3		1	WG1508179
Ethylbenzene	100-41-4	106	0.200	0.867	1.69	7.33		1	WG1508179
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.598	2.93		1	WG1508179
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.238	1.34		1	WG1508179
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.504	2.49		1	WG1508179
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1508179
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1508179
Heptane	142-82-5	100	0.200	0.818	3.70	15.1		1	WG1508179
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1508179
n-Hexane	110-54-3	86.20	0.630	2.22	1.94	6.84		1	WG1508179
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1508179
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.05	3.65		1	WG1508179
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1508179
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	6.12	18.0		1	WG1508179
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1508179
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1508179
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1508179
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1508179
2-Propanol	67-63-0	60.10	1.25	3.07	9.07	22.3		1	WG1508179
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1508179
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1508179
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1508179
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG1508179
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1508179
Toluene	108-88-3	92.10	4.00	15.1	898	3380		20	WG1508756
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1508179

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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	0.200	1.09	ND	ND		1	WG1508179
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1508179
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1508179
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.664	3.26		1	WG1508179
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	0.223	1.09		1	WG1508179
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	8.11	37.9		1	WG1508179
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1508179
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1508179
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1508179
m&p-Xylene	1330-20-7	106	0.400	1.73	4.81	20.9		1	WG1508179
o-Xylene	95-47-6	106	0.200	0.867	1.22	5.29		1	WG1508179
Ethyl acetate	141-78-6	88	0.200	0.720	ND	ND		1	WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*109*				WG1508179
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.1*				WG1508756

Cp
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Method Blank (MB)

(MB) R3548939-3 07/12/20 11:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

Method Blank (MB)

(MB) R3548939-3 07/12/20 11:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	0.137	J	0.0932	0.400
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	0.630
Ethyl acetate	U		0.100	0.200
(S) 1,4-Bromofluorobenzene	*96.2*			*60.0-140*

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

(LCS) R3548939-1 07/12/20 09:43 • (LCSD) R3548939-2 07/12/20 10:31

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	3.98	4.13	106	110	55.0-148			3.70	25
Propene	3.75	3.79	3.77	101	101	64.0-144			0.529	25
Dichlorodifluoromethane	3.75	4.07	3.95	109	105	64.0-139			2.99	25
1,2-Dichlorotetrafluoroethane	3.75	4.11	4.11	110	110	70.0-130			0.000	25
Chloromethane	3.75	3.92	3.90	105	104	70.0-130			0.512	25

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

(LCS) R3548939-1 07/12/20 09:43 • (LCSD) R3548939-2 07/12/20 10:31

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	4.26	4.22	114	113	70.0-130			0.943	25
1,3-Butadiene	3.75	3.72	3.62	99.2	96.5	70.0-130			2.72	25
Bromomethane	3.75	4.20	4.04	112	108	70.0-130			3.88	25
Chloroethane	3.75	4.27	4.42	114	118	70.0-130			3.45	25
Trichlorofluoromethane	3.75	3.85	3.90	103	104	70.0-130			1.29	25
1,1,2-Trichlorotrifluoroethane	3.75	4.01	4.06	107	108	70.0-130			1.24	25
1,1-Dichloroethene	3.75	4.00	4.05	107	108	70.0-130			1.24	25
1,1-Dichloroethane	3.75	4.10	4.14	109	110	70.0-130			0.971	25
Acetone	3.75	3.68	3.72	98.1	99.2	70.0-130			1.08	25
2-Propanol	3.75	3.76	3.90	100	104	70.0-139			3.66	25
Carbon disulfide	3.75	4.05	4.11	108	110	70.0-130			1.47	25
Methylene Chloride	3.75	3.74	3.81	99.7	102	70.0-130			1.85	25
MTBE	3.75	4.21	4.20	112	112	70.0-130			0.238	25
trans-1,2-Dichloroethene	3.75	3.99	4.07	106	109	70.0-130			1.99	25
n-Hexane	3.75	4.17	4.19	111	112	70.0-130			0.478	25
Vinyl acetate	3.75	4.11	4.19	110	112	70.0-130			1.93	25
Methyl Ethyl Ketone	3.75	4.37	4.38	117	117	70.0-130			0.229	25
cis-1,2-Dichloroethene	3.75	4.09	4.09	109	109	70.0-130			0.000	25
Chloroform	3.75	3.97	3.99	106	106	70.0-130			0.503	25
Cyclohexane	3.75	4.37	4.41	117	118	70.0-130			0.911	25
1,1,1-Trichloroethane	3.75	3.90	3.92	104	105	70.0-130			0.512	25
Carbon tetrachloride	3.75	3.84	3.85	102	103	70.0-130			0.260	25
Benzene	3.75	4.12	4.19	110	112	70.0-130			1.68	25
1,2-Dichloroethane	3.75	3.66	3.74	97.6	99.7	70.0-130			2.16	25
Heptane	3.75	4.55	4.64	121	124	70.0-130			1.96	25
Trichloroethylene	3.75	3.93	3.88	105	103	70.0-130			1.28	25
1,2-Dichloropropane	3.75	4.06	4.03	108	107	70.0-130			0.742	25
1,4-Dioxane	3.75	4.11	4.16	110	111	70.0-140			1.21	25
Bromodichloromethane	3.75	3.82	3.78	102	101	70.0-130			1.05	25
cis-1,3-Dichloropropene	3.75	4.14	4.11	110	110	70.0-130			0.727	25
4-Methyl-2-pentanone (MIBK)	3.75	3.89	3.86	104	103	70.0-139			0.774	25
trans-1,3-Dichloropropene	3.75	4.17	4.18	111	111	70.0-130			0.240	25
1,1,2-Trichloroethane	3.75	3.94	4.00	105	107	70.0-130			1.51	25
Tetrachloroethylene	3.75	3.76	3.78	100	101	70.0-130			0.531	25
Methyl Butyl Ketone	3.75	4.02	4.03	107	107	70.0-149			0.248	25
Dibromochloromethane	3.75	3.85	3.89	103	104	70.0-130			1.03	25
1,2-Dibromoethane	3.75	4.18	4.19	111	112	70.0-130			0.239	25
Chlorobenzene	3.75	4.15	4.18	111	111	70.0-130			0.720	25
Ethylbenzene	3.75	4.12	4.16	110	111	70.0-130			0.966	25
m&p-Xylene	7.50	8.31	8.38	111	112	70.0-130			0.839	25

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

(LCS) R3548939-1 07/12/20 09:43 • (LCSD) R3548939-2 07/12/20 10:31

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
o-Xylene	3.75	4.15	4.13	111	110	70.0-130			0.483	25
Styrene	3.75	4.34	4.34	116	116	70.0-130			0.000	25
Bromoform	3.75	3.85	3.86	103	103	70.0-130			0.259	25
1,1,2,2-Tetrachloroethane	3.75	4.03	4.01	107	107	70.0-130			0.498	25
4-Ethyltoluene	3.75	4.12	4.16	110	111	70.0-130			0.966	25
1,3,5-Trimethylbenzene	3.75	4.11	4.14	110	110	70.0-130			0.727	25
1,2,4-Trimethylbenzene	3.75	4.17	4.19	111	112	70.0-130			0.478	25
1,3-Dichlorobenzene	3.75	4.13	4.16	110	111	70.0-130			0.724	25
1,4-Dichlorobenzene	3.75	4.23	4.31	113	115	70.0-130			1.87	25
Benzyl Chloride	3.75	4.42	4.45	118	119	70.0-152			0.676	25
1,2-Dichlorobenzene	3.75	3.99	4.06	106	108	70.0-130			1.74	25
1,2,4-Trichlorobenzene	3.75	4.01	4.13	107	110	70.0-160			2.95	25
Hexachloro-1,3-butadiene	3.75	3.72	3.79	99.2	101	70.0-151			1.86	25
Naphthalene	3.75	3.90	4.03	104	107	70.0-159			3.28	25
Allyl Chloride	3.75	4.22	4.19	113	112	70.0-130			0.713	25
2-Chlorotoluene	3.75	4.01	4.03	107	107	70.0-130			0.498	25
Methyl Methacrylate	3.75	4.31	4.18	115	111	70.0-130			3.06	25
Tetrahydrofuran	3.75	4.03	4.06	107	108	70.0-137			0.742	25
2,2,4-Trimethylpentane	3.75	4.29	4.29	114	114	70.0-130			0.000	25
Vinyl Bromide	3.75	4.12	4.19	110	112	70.0-130			1.68	25
Isopropylbenzene	3.75	4.14	4.17	110	111	70.0-130			0.722	25
Ethyl acetate	3.75	4.38	4.45	117	119	70.0-130			1.59	25
(S) 1,4-Bromofluorobenzene				*98.7*	*99.0*	*60.0-140*				

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

Method Blank (MB)

(MB) R3549115-3 07/13/20 10:46

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
n-Hexane	U		0.206	0.630
Propene	U		0.0932	0.400
Toluene	U		0.0870	0.200
(S) 1,4-Bromofluorobenzene	*94.0*			*60.0-140*

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

(LCS) R3549115-1 07/13/20 09:22 • (LCSD) R3549115-2 07/13/20 10:04

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	3.49	3.47	93.1	92.5	64.0-144			0.575	25
Acetone	3.75	4.05	3.51	108	93.6	70.0-130			14.3	25
n-Hexane	3.75	3.86	3.83	103	102	70.0-130			0.780	25
Toluene	3.75	4.68	4.59	125	122	70.0-130			1.94	25
(S) 1,4-Bromofluorobenzene				*95.5*	*95.6*	*60.0-140*				

Method Blank (MB)

(MB) R3549141-3 07/13/20 10:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl Chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.200
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630
Isopropylbenzene	U		0.0777	0.200

Method Blank (MB)

(MB) R3549141-3 07/13/20 10:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl Methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.200
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
Ethanol	U		0.265	0.630
Ethyl acetate	U		0.100	0.200
(S) 1,4-Bromofluorobenzene	*101*			*60.0-140*

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

(LCS) R3549141-1 07/13/20 09:14 • (LCSD) R3549141-2 07/13/20 09:53

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	4.06	4.01	108	107	55.0-148			1.24	25
Propene	3.75	4.16	3.97	111	106	64.0-144			4.67	25
Dichlorodifluoromethane	3.75	3.99	3.88	106	103	64.0-139			2.80	25
1,2-Dichlorotetrafluoroethane	3.75	3.95	3.83	105	102	70.0-130			3.08	25
Chloromethane	3.75	4.04	3.93	108	105	70.0-130			2.76	25

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

(LCS) R3549141-1 07/13/20 09:14 • (LCSD) R3549141-2 07/13/20 09:53

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	4.00	3.82	107	102	70.0-130			4.60	25
1,3-Butadiene	3.75	4.31	4.09	115	109	70.0-130			5.24	25
Bromomethane	3.75	3.81	3.67	102	97.9	70.0-130			3.74	25
Chloroethane	3.75	3.81	3.61	102	96.3	70.0-130			5.39	25
Trichlorofluoromethane	3.75	4.03	3.85	107	103	70.0-130			4.57	25
1,1,2-Trichlorotrifluoroethane	3.75	3.94	3.80	105	101	70.0-130			3.62	25
1,1-Dichloroethene	3.75	4.06	3.98	108	106	70.0-130			1.99	25
1,1-Dichloroethane	3.75	3.96	3.82	106	102	70.0-130			3.60	25
Acetone	3.75	4.33	4.25	115	113	70.0-130			1.86	25
2-Propanol	3.75	4.27	4.18	114	111	70.0-139			2.13	25
Carbon disulfide	3.75	3.99	3.86	106	103	70.0-130			3.31	25
Methylene Chloride	3.75	3.87	3.77	103	101	70.0-130			2.62	25
MTBE	3.75	4.05	3.95	108	105	70.0-130			2.50	25
trans-1,2-Dichloroethene	3.75	4.01	3.92	107	105	70.0-130			2.27	25
n-Hexane	3.75	4.04	3.94	108	105	70.0-130			2.51	25
Vinyl acetate	3.75	4.10	3.93	109	105	70.0-130			4.23	25
Methyl Ethyl Ketone	3.75	3.95	3.87	105	103	70.0-130			2.05	25
cis-1,2-Dichloroethene	3.75	4.00	3.90	107	104	70.0-130			2.53	25
Chloroform	3.75	3.89	3.75	104	100	70.0-130			3.66	25
Cyclohexane	3.75	3.99	3.90	106	104	70.0-130			2.28	25
1,1,1-Trichloroethane	3.75	3.85	3.76	103	100	70.0-130			2.37	25
Carbon tetrachloride	3.75	3.91	3.77	104	101	70.0-130			3.65	25
Benzene	3.75	3.83	3.70	102	98.7	70.0-130			3.45	25
1,2-Dichloroethane	3.75	3.91	3.79	104	101	70.0-130			3.12	25
Heptane	3.75	4.01	3.91	107	104	70.0-130			2.53	25
Trichloroethylene	3.75	3.86	3.67	103	97.9	70.0-130			5.05	25
1,2-Dichloropropane	3.75	3.91	3.78	104	101	70.0-130			3.38	25
1,4-Dioxane	3.75	3.96	3.81	106	102	70.0-140			3.86	25
Bromodichloromethane	3.75	3.82	3.69	102	98.4	70.0-130			3.46	25
cis-1,3-Dichloropropene	3.75	3.88	3.75	103	100	70.0-130			3.41	25
4-Methyl-2-pentanone (MIBK)	3.75	4.04	3.93	108	105	70.0-139			2.76	25
trans-1,3-Dichloropropene	3.75	3.93	3.81	105	102	70.0-130			3.10	25
1,1,2-Trichloroethane	3.75	3.83	3.70	102	98.7	70.0-130			3.45	25
Tetrachloroethylene	3.75	3.73	3.64	99.5	97.1	70.0-130			2.44	25
Methyl Butyl Ketone	3.75	4.07	3.96	109	106	70.0-149			2.74	25
Dibromochloromethane	3.75	3.80	3.68	101	98.1	70.0-130			3.21	25
1,2-Dibromoethane	3.75	3.87	3.70	103	98.7	70.0-130			4.49	25
Chlorobenzene	3.75	3.82	3.70	102	98.7	70.0-130			3.19	25
Ethylbenzene	3.75	3.96	3.84	106	102	70.0-130			3.08	25
m&p-Xylene	7.50	8.12	7.91	108	105	70.0-130			2.62	25

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

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

(LCS) R3549141-1 07/13/20 09:14 • (LCSD) R3549141-2 07/13/20 09:53

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
o-Xylene	3.75	3.94	3.88	105	103	70.0-130			1.53	25
Styrene	3.75	4.06	3.93	108	105	70.0-130			3.25	25
Bromoform	3.75	3.76	3.68	100	98.1	70.0-130			2.15	25
1,1,2,2-Tetrachloroethane	3.75	3.93	3.81	105	102	70.0-130			3.10	25
4-Ethyltoluene	3.75	4.00	3.92	107	105	70.0-130			2.02	25
1,3,5-Trimethylbenzene	3.75	4.09	3.98	109	106	70.0-130			2.73	25
1,2,4-Trimethylbenzene	3.75	4.07	3.97	109	106	70.0-130			2.49	25
1,3-Dichlorobenzene	3.75	3.85	3.74	103	99.7	70.0-130			2.90	25
1,4-Dichlorobenzene	3.75	3.95	3.85	105	103	70.0-130			2.56	25
Benzyl Chloride	3.75	3.91	3.82	104	102	70.0-152			2.33	25
1,2-Dichlorobenzene	3.75	3.84	3.73	102	99.5	70.0-130			2.91	25
1,2,4-Trichlorobenzene	3.75	3.84	3.74	102	99.7	70.0-160			2.64	25
Hexachloro-1,3-butadiene	3.75	3.65	3.55	97.3	94.7	70.0-151			2.78	25
Naphthalene	3.75	3.88	3.80	103	101	70.0-159			2.08	25
Allyl Chloride	3.75	4.16	4.10	111	109	70.0-130			1.45	25
2-Chlorotoluene	3.75	3.95	3.87	105	103	70.0-130			2.05	25
Methyl Methacrylate	3.75	3.89	3.77	104	101	70.0-130			3.13	25
Tetrahydrofuran	3.75	4.01	3.91	107	104	70.0-137			2.53	25
2,2,4-Trimethylpentane	3.75	4.14	4.05	110	108	70.0-130			2.20	25
Vinyl Bromide	3.75	3.84	3.71	102	98.9	70.0-130			3.44	25
Isopropylbenzene	3.75	4.07	3.97	109	106	70.0-130			2.49	25
Ethyl acetate	3.75	4.01	3.83	107	102	70.0-130			4.59	25
(S) 1,4-Bromofluorobenzene				*100*	*100*	*60.0-140*				

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

Method Blank (MB)

(MB) R3549596-1 07/14/20 10:31

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Propene	U		0.0932	0.400
Toluene	U		0.0870	0.200
(S) 1,4-Bromofluorobenzene	*102*			*60.0-140*

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

(LCS) R3549596-2 07/14/20 11:19 • (LCSD) R3549596-3 07/14/20 12:02

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	3.36	3.77	89.6	101	64.0-144			11.5	25
Toluene	3.75	4.16	4.26	111	114	70.0-130			2.38	25
(S) 1,4-Bromofluorobenzene				*99.0*	*104*	*60.0-140*				

Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

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

ONE LAB. NATIONWIDE.

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	LA000356
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.

Rosso Environmental, Inc. - Berkeley, CA

1400 Shattuck Avenue

Billing Information:
Accounts Payable
PO Box 1923
Lafayette, CA 94549-1923

Pres Chk

Report to: Jeremy Wilson

Email To: jeremywilson@rossoenv.com;jglover@rossoenv

Project Description: Byron Airport

City/State Collected: Byron, CA

Please Circle: PT MT CT ET

Phone: ~~510-647-8298~~ 415-583-9067

Client Project # 20-0020.02

Lab Project # ROSENVLCA-20002002

Collected by (print): Jeremy Wilson

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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: Standard TAT

Sample ID (Summa ID#)	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Remnant Vacuum (Hg")	Remarks	Sample # (lab only)
B-1-SV (5584)	Grab	Air	5'	7-8-20	1320	1	X	-1		01
B-2-SV (11191)		Air			1453	1	X	-1		02
B-3-SV (8512)		Air			1300	1	X	-1		03
B-4-SV (8800)		Air			1423	1	X	-1		04
B-5-SV (6261)		Air			1402	1	X	-1		05
B-6-SV (5514)		Air			1346	1	X	-1		06

* 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 X FedEx __Courier _____

Tracking # 141176053603

Relinquished by : (Signature)

Date: 7-9-2020 Time: 1015

Received by: (Signature)

Relinquished by : (Signature)

Date: Time:

Received by: (Signature)

Relinquished by : (Signature)

Date: Time:

Received for lab by: (Signature)

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: Amb °C Bottles Received: 6

Date: 7-10 Time: 0830

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y	N
COC Signed/Accurate:		X	N
Bottles arrive intact:		X	N
Correct bottles used:		X	N
Sufficient volume sent:		X	N
If Applicable			
VOA Zero Headspace:		Y	N
Preservation Correct/Checked:		X	N
RAD Screen <0.5 mR/hr:		X	N

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

SDG # 123895

E022

Acctnum: ROSENVLCA
Template: T170108
Prelogin: P783202
PM: 546 - Jared Starkey
PB: CS- 06/30/20
Shipped Via: FedEx Saver