DES Waste Management Division 29 Hazen Drive; PO Box 95 Concord, NH 03302-0095

NH DES Site #: Project Type: Project Number:

Prepared For:

Prepared By:

Ransom Consulting, Inc.
Pease International Tradeport
112 Corporate Drive
Portsmouth, NH 03801
603.436.1490



EXECUTIVE SUMMARY

The following report presents the findings of a Supplemental Phase II Environmental Site Assessment (ESA) performed by Ransom Consulting, LLC (Ransom) for the Southwest Region Planning Commission (SWRPC). The Supplemental Phase II ESA was performed for the W. W. Cross Property located at 39 Webster Street in the Town of Jaffrey, Cheshire County, New Hampshire (the "Site").

The Site is located at 39 Webster Street in the Town of Jaffrey, New Hampshire. The Site includes an approximately 11.29-acre parcel which is the site of the vacant 100,810 square foot Former W. W. Cross Factory building and a separate bulk-oil aboveground storage tank (AST) structure. The Site is identified by the Town of Jaffrey Assessor's Office as Lot 7.2 on Tax Map 245. At the request of the users (Town of Jaffrey) and in consideration of the known environmental conditions of the eastern 60% of the parcel, the Supplemental Phase II ESA was designed to provide additional assessment of the western 40% of the parcel, which is being proposed for re-development. Evolving plans for the Site could also include portions of the east 60% of the parcel, which were not included in this assessment.

The main Site building was constructed circa 1915 as the W. W. Cross Factory, a manufacturer of tacks and fasteners, and operated as an industrial manufacturing facility until the late 1990s. Municipal water and sewer services are available to the Site and surrounding properties. Prior to circa 1982, and dating back to circa 1915, industrial wastewater generated on the Site was disposed of either on the Site or immediately abutting the Site.

Based on the findings of an October 31, 2017 Phase I ESA, five recognized environmental conditions (RECs) and three areas of potential environmental concern (PECs) were identified in connection with the western 40% of the Site parcel. To evaluate the RECs and PECs, a March 13, 2019 Phase II ESA was conducted, in which the following six areas of concern (AOC) were developed for the Site: (1) AOC 1 Wastewater Disposal Systems (Drains & Sewer); (2) Former Plating Area; (3) Former Fuel Oil Underground Storage Tank (UST) Area: (4) Inactive Fuel Oil AST Area; (5) Facility Loading/Unloading Areas; and (6) Off-Site Sources.

Based on the information collected as part of the Phase II ESA, Ransom concluded that the RECs identified in the Phase I ESA were confirmed, discounted or undetermined as follows:

- 1. Non-compliant 20,000-gallon No. 6 oil AST: Confirmed. The PAHs documented in soil at B5 and B22 may be indicative of a release of No. 6 oil in that area adjoining the inactive fuel oil AST. The soils are in a paved area and do not present an immediate human risk exposure. Although there were no exceedances of Ambient Groundwater Quality Standards (AGQSs), VOCs including naphthalene (30 micrograms per liter (µg/L)) were detected in the groundwater sample collected from the monitoring well (MW105) installed in this area.
- 2. Historic oil UST (size unknown) located south of the central portion of the Site building: Discounted (for petroleum). Evidence of a petroleum release was identified; however, no violations of soil or groundwater standards were documented.
- 3. Floor drains and sumps that historically received process-derived wastewater:
 Confirmed. Cadmium in soil at boring B2 and cyanide in groundwater at MW102
 (installed in B2) are likely associated with a release of wastewaters or plating solutions in the former industrial wastewater/plating area. The sampled soils were beneath a concrete slab and do not present an immediate human exposure risk. Tetrachloroethylene (PCE) impacts to groundwater in the area of MW102 and MW104 (above AGQS) could also be

- related to an on-Site release or, alternatively to the remnants of a plume from a neighboring known or unknown off-Site source.
- 4. Contaminated groundwater (cyanide and PCE exceeding AGQSs) in monitoring wells located on the eastern portion of the Site that could indicate the potential for unassessed or unidentified source areas, including areas on the western portion of the Site: Confirmed. Cyanide was detected in groundwater above AGQS in the wastewater/plating area. As noted above, PCE impacts to groundwater in the area of MW102 and MW104 (above AGQS) could be related to an on-Site release or, alternatively to the remnants of a plume from a neighboring known or unknown off-Site source.
- 5. A neighboring former dry-cleaning facility has adversely impacted groundwater on numerous parcels in the vicinity of the Site; the contaminated groundwater plume may extend onto the Site: Undetermined. Additional investigations within and north of the Site building need to be conducted to rule out whether PCE is migrating onto the northern portion of the Site from a known or unknown source.

Therefore, based on the data collected during the Phase II ESA, Ransom recommended that additional investigation was warranted to further delineate the extent of:

- 1. Cadmium, cyanide and PCE impacts to soils and/or groundwater in proximity to the former plating and wastewater treatment areas near B2/MW102;
- 2. PCE impacts to groundwater as was documented in the sample collected from monitoring well MW104 (in conjunction with the MW102 area investigations);
- 3. PAH impacts to soil broadly in the area of B12 and B26, and naphthalene impacts to groundwater as was documented in the sample collected from exterior monitoring well MW108; and
- 4. PAH impacts to soil (B5 and B22) in the area of the inactive No. 6 oil AST.

To further delineate the extent of contamination identified in the Phase II ESA, this Supplemental Phase II ESA developed the following three AOCs for the Site:

- 1. AOC A—PCE Impacts to Groundwater;
- 2. AOC B—Further Investigation of Cadmium, Cyanide, and PCE Impacts; and
- 3. AOC C—Delineation of PAHs in Soil / Further Investigation of Petroleum in Groundwater.

To assess AOC A through AOC C, Ransom designed a Supplemental Phase II ESA which included the advancement of soils borings, the collection and analyses of soil samples for field screening for the presence of metals using a x-ray fluorescence (XRF) analyzer and photoionizable compounds (PICs) using a photoionization detector (PID), the selection and laboratory analyses of soil samples for the presence of priority pollutant metals (PPMs), polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), total petroleum hydrocarbons-diesel range organics (TPH-DRO) and/or total cyanide; the installation of three additional monitoring wells and the collection and laboratory analyses of groundwater samples from the monitoring wells for the presence of VOCs, dissolved (field-filtered)

metals and/or total cyanide according to United States Environmental Protection Agency (U.S. EPA) methods, as appropriate.

RESULTS

The Site is generally underlain by fine to medium sands, with little fine to medium gravels and silt; with soil density and the presence of cobbles increasing with depth. The depth to groundwater during this investigation ranged from 2.66 to 11.55 feet below grade. Based on the measured depth to groundwater across the Site, groundwater was inferred to generally flow to the southeast. Soil density (very low density, fine to coarse sand), soils with cobbles and rock at fairly consistent depths (4 to 6 feet below grade), occasional anthropomorphic constituents (asphalt, concrete), and dark silty layers (possible former wet ground surface proximal to the present-day groundwater table) all indicated the likelihood of historical fill placement in the central portion of the Site and beneath the building and extending up to a steep topographic drop on the southeast portion of the lot. These likely fill soils are underlain by denser medium to coarse sand, with gravel and cobbles and occasionally with evidence of layering.

The following results are indicated for each AOC:

AOC A—Tetrachloroethylene Impacts to Groundwater

Boring B101 was advanced along the northern interior wall of the Site building, near the north property boundary, to assess the spatial extent of PCE and to help differentiate and clarify whether the documented on-Site PCE impacts are associated with a potential on-site source or may be related to potential off-site source(s). Groundwater-saturated soils were encountered at approximately 8 feet below grade in the boring and monitoring well MW201 was installed.

The boring was advanced through the poured concrete slab flooring, which was approximately 5.5 inches thick. Soils encountered beneath the concrete slab generally consisted of fine to coarse sands, with little to some gravel, with the presence of cobbles increasing with depth and possible bedrock at about 13.7 feet.

With the exception of a detected low concentration of acetone (a likely laboratory or preservative contaminant), no VOCs were detected in the soil sample selected for laboratory analyses from boring B101, collected from 0.5 to 2 feet below grade.

No VOCS were detected in the groundwater sample collected from monitoring well MW201 at concentrations above AGQSs. PCE and its degradation daughter compound cis 1,2-dichloroethelene (DCE) were detected at low levels, and at similar concentrations, in the groundwater sample. This pair of compounds and the parity of the analytes concentrations were noted in samples from other monitoring wells on the upgradient (northwest) portion of the property and likely an off-site source. This pairing of related compounds may be a differentiator for an inferred separate PCE on-site source as documented in groundwater samples collected from near the former plating room/wastewater treatment area which have lesser or no detectable concentrations of 1,2-DCE.

AOC B—Further Investigation of Cadmium, Cyanide, and Tetrachloroethylene Impacts

Borings B103 and B113 were advanced in the Site building to further address the former plating room area. The borings were advanced through the poured concrete slab flooring, which was approximately 5.5 inches thick. In general, soils encountered consisted of fine to medium sands, with little gravel, trace to little silt, and cobbles increasing with depth. Refusal was encountered in borings B103 and B113 at

depths of 8 and 12.3 feet, respectively. Boring B103 was advanced to a depth of approximately 12.3 feet below grade and finished as groundwater monitoring well MW203.

No VOCs or PPMs were detected above Soil Remediation Standards (SRSs) in the soil samples submitted for laboratory analyses from borings B103 and B113. No cyanide was detected above laboratory detection limits in the soil samples analyzed for cyanide from borings B103 and B113.

The boring advanced as part of this Supplemental Phase II ESA in conjunction with the previously advance boring and collective soils data constrain the area of known cadmium-impacted soils to the area proximal to boring B2 (monitoring well MW102). Assuming a volume of cadmium-impacted soils centered on B2 measuring approximately 30 feet by 30 feet by 7 feet deep, then the impacted mass of soils would be on the order of 230 cubic yards, equivalent to 300 tons of soil at 1.4 tons/cubic yard. This volume estimate is an approximation based on data for cadmium concentrations in proximal borings which help to constrain the limits of the impacted area.

To assess for potential impacts to groundwater quality due to past discharges associated with the former plating/wastewater treatment area, groundwater samples were collected from two of the newly installed monitoring wells (MW201 and MW203) and existing monitoring well MW102.

Cyanide (at a concentration of 746 μ g/L) was detected in the groundwater sample collected from monitoring well MW102 at a concentration above the AGQS for cyanide of 200 μ g/L. Cyanide was not detected above laboratory detection limits in the groundwater samples collected from monitoring well MW203. The source of the cyanide is likely associated with previous on-site industrial operations and based on its location centered on MW102 may be generally co-located with soils impacted by cadmium beneath the former plating room/wastewater treatment areas. Removal and proper disposal of the cadmium impacted soils would lessen any co-located cyanide source and would be likely to lessen the time to achieve AGQS for cyanide.

No VOCs or dissolved (field-filtered) metals were detected in the groundwater samples collected from monitoring well MW203 at concentrations above AGQSs. The VOC PCE was detected at concentrations below the AGQSs in the samples from MW102, MW201 and MW203. PCE was also detected in the sample from nearby MW104 at a concentration (5.8 ug/L) just above its AGQS (5 ug/L). 1,2 DCE was not detected in the area where these slightly elevated PCE concentrations were detected which may indicate a separate low-level source of PCE as compared to samples from the on-site upgradient monitoring wells. The two modest plumes, a possible low-level (below AGQS) off-site plume migrating onto the Site and a possible low-level (slightly exceeding AGQS) plume from an on-site source, likely comingle as groundwater flows from northwest to southeast across the Site.

Because very low level PCE AGQS violations have been documented and no residual source mass has been identified, it is possible that a "monitoring only" remedial approach to remediation could be supported for PCE impacts to groundwater.

AOC C—Delineation of Polynuclear Aromatic Hydrocarbons in Soil / Further Investigation of Petroleum in Groundwater

Borings B104, B105, B107 through B111, B116 and B117 were advanced to further delineate and characterize the areas of identified PAH/petroleum impacts to soil in the area of B12 and B26 (unknown source) and naphthalene impacts to groundwater as was documented in the sample collected from exterior monitoring well MW108 (installed in boring B26).

Borings B104, B105 and B107 were advanced within the Site building in the general area of boring B12 to further delineate PAHs in soil inside the building. In general, soils encountered consisted of fine to coarse sands, with little gravel, and trace to little silt. Refusal (possibly concrete and/or cobbles/boulders) was encountered in borings B104, B105 and B107 at depths of 4.2, 2.5 and 4 feet below grade, respectively; soils over this dense layer are interpreted as fill. No unusual odor was noted in soils and no groundwater was encountered in these borings. Previously advanced boring B12 (for which an oil/creosote odor had been noted in soils) was re-drilled and advanced to a depth of approximately 14 feet below grade to install groundwater monitoring well MW204 to assess groundwater in this area.

Borings B108, B109, B110, B111, B116 and B117 were advanced in the south loading dock area in the general area of boring B26 to further delineate PAHs in soil. In general, soils encountered consisted of fine to coarse sands, with little gravel, and trace to little silt. For these borings and this area, soils less than 5 feet below ground surface (bgs) are inferred to be fill. The majority of the borings were advanced to a depth of 12 feet bgs; refusal was not encountered in the borings. Groundwater saturated soils were encountered at approximately 4 feet below bgs.

PICs (ranging from less than 1 to 22 ppmv) were measured in soil samples collected from B111. A strong tar/creosote-type odor was noted during the advancement of borings B110, B111 and B117, particularly in very shallow soils. These borings were advanced along the western exterior wall of the southwestern portion of the Site building. The VOCs benzene and naphthalene were detected in the shallow soil sample collected from B111 at concentrations above SRSs.

PAHs were detected above SRSs in the soil samples analyzed from borings B109, B110, B111 and/or B117. The concentrations of several of these PAHs exceeded the Risk Characterization and Management Policy (RCMP) Method 1 NH S-3 standard for the soil samples collected from borings B111 and B117 (as did a sample with similar characteristics from previous boring B12)). The sample from B111 was collected from 0.0 to 0.5 feet below the pavement and the sample from B117 was collected from 0.0 to 2.0 feet below the pavement. Additional PAHs were detected in samples from borings B104, B105, B108, B109, B110, B111 and B117; however, at concentrations below the applicable SRSs.

TPH-DRO (21,500 mg/kg) was detected in the soil sample collected for laboratory analyses from boring B111 at a concentration exceeding the SRS (equal to the RCMP Method 1 NH S-3 standard) for TPH-DRO (10,000 mg/kg). Based on the petroleum hydrocarbon fingerprint of the sample from B111, the laboratory opined that the contaminant "appears to be similar to a coal tar/creosote."

The area of creosote-impacted soils is estimated to cover approximately 8,500 square feet and for most borings appears to be most pronounced in a relatively thin layer, less than 2 feet thick, just below paving. Spot locations (B12 and perhaps B111) appeared to have a greater thickness of impacted soils. The estimated mass of impacted soils is likely on the order of 1,000 tons.

Borings B114 and B115 were advanced to the south and west of a building housing the inactive heating oil AST. In general, soils encountered consisted of fine to coarse sands, with little gravel, trace to little silt, and cobbles increasing with depth; placed fill is inferred to comprise the upper 7 to 8 feet of overburden in this area. Refusal was not encountered in either boring to 12 feet bgs. Groundwater saturated soils were encountered in each of these borings at depths ranging from 4 to 5 feet bgs.

No elevated PICs (above 1 ppmv), odors, or staining were noted in the soils from either boring and no VOCs, PAHs or TPH-DRO were detected above SRSs in the soil samples collected from these borings.

It is unclear whether the area of PAH soil impacts near the inactive AST (at B22 and B5) are related to oil storage or fill materials, but dissolved naphthalene detected in the Phase II ESA sampling at MW105

(installed in B5) suggest a possible petroleum source. Borings B114 and B115 appear to constrain the lateral extent of soils impacts. If the area of soil impacts extends up to and beneath the AST building and is limited vertically by the presence of groundwater, then the volume of impacted soils is likely on the order of 350 cubic yards, with an estimated mass of approximately 500 tons.

To assess further the naphthalene impacts to groundwater as was previously documented in the sample collected from exterior monitoring well MW108, groundwater quality was evaluated by collecting groundwater samples from newly installed monitoring well MW204 and existing monitoring well MW108. No VOCS were detected in the groundwater samples collected from monitoring wells MW108 or MW204 at concentrations above AGQSs.

Because no AGQS violations were noted in this sampling round it is possible that a remedial approach could allow for much of the creosote-impacted and heating oil impacted soils to remain in place under an Activity and Use Restriction, depending in part on future land use. Targeted removal and proper disposal of "hot spots" or soils generated during site redevelopment and not approved for on-site re-use is anticipated.

CONCLUSIONS

Based on the information collected as part of this Supplemental Phase II ESA, the spatial extent and nature of the previously detected releases of PCE, metals (cadmium), cyanide, heavy oil/creosote, and heating oil were better defined, and Ransom concludes the following:

- 1. AOC A—PCE Impacts to Groundwater. Relatively low concentrations of dissolved PCE are inferred to be migrating onto the Site with groundwater, from the northwest. Groundwater associated with this plume does not, at present, exceed the AGQS for PCE and is inferred to be separate from a low-level on-site plume also with minor (in concentration and extent) PCE impacts. No residual PCE source area, i.e. no soils with SRS exceedances, have been identified, but impacted groundwater does slightly exceed the PCE AGQS (MW104, and intermittently MW102) and is likely associated with past Site industrial activities.
- 2. AOC B—Further Investigation of Cadmium, Cyanide, and PCE Impacts. No source areas concentrations of PPMs (namely cadmium) or cyanide have been documented in soils collected and analyzed from borings proximal to B2/MW102 which suggests a localized source centered on the boring B2 location beneath the former plating room. A remedial approach involving the removal and proper disposal of the cadmium-impacted soils would also lessen any co-located cyanide source and would be likely to lessen the time to achieve AGQS for cyanide. At present, human contact exposure risks relative to impacted soils are mitigated due to the inaccessibility of soils beneath the building.

A relatively minor PCE source proximal to the former plating room and wastewater treatment area is inferred based on no SRS exceedances for PCE detected in soils samples, and a localized plume with primarily PCE detected and generally little to no 1,2-DCE which is inferred to differentiate this localized plume from low-level impacted groundwater migrating onto the site. Based on the spatial distribution of PCE impacts to groundwater as well as documented land use history, it is likely that the detected PCE is associated with past industrial operations. Consideration of a remedial approach involving a monitoring-only management of the low-level PCE impacts to groundwater is warranted. There is no consumptive use of groundwater at the Site or proximal to the Site.

3. AOC C—Delineation of PAH in Soil / Further Investigation of Petroleum in Groundwater. The extent of PAHs (and in one location, VOCs) in Site soils above SRSs has been delineated in shallow fill soils in the general area of the southeast corner of the building and appears to be associated with creosote or coal tar type impacts to shallow soils beneath paying and a portion of the building. PAH impacts above SRSs were also noted in fill soils off the east side of the inactive heating oil AST (a possible oil release), and have previously been identified proximal to a sewer manhole (possible urban fill) near boring B3 and in shallow surface soils along the north-abutting railroad corridor (coal combustion residuals). Because no impacts to groundwater exceeding AGOS have been identified for PAHs (or the associated VOCs) much of these soils could remain in place under an Activity and Use Restriction (AUR) where regulated (for a creosote or oil source); however, it is probable that the NH DES will require removal of soils with naphthalene concentrations above leaching-based soil standards. Where not strictly regulated (urban fill or coal combustion residual source), soils could also be left in place and would not require management under an AUR, although joint management with regulated soils under an a comprehensive AUR is prudent. Targeted hot-spot soils, where encountered, and disturbed soils not approved for on-site re-use by the NH DES would require proper management, characterization, and off-site disposal. At present, with the exception of inferred unregulated soils along the railroad corridor, human contact exposure risks relative to impacted soils are mitigated due to the inaccessibility of soils beneath the building and parking lot.

RECOMMENDATIONS

Based on the data collected during this Supplemental Phase II ESA, Ransom recommends the following relative to identified AOCs and the findings of this investigation:

- 1. Assessment of soils beneath the inactive heating oil AST in coordination with the removal and closure of that system in compliance with Env-Or 300 (and coordinated proper management/abatement of the assumed asbestos containing vermiculite insulation in that building in compliance with applicable NH DES rules).
- 2. Several additional borings are warranted to confirm the spatial extent of PAH impacted soils near the southwest portion of the building.
- 3. If the eastern portion of the property is to be part of a possible re-use plan, then additional assessment of that portion of the property not previously assessed is warranted, including at a minimum beneath the east portion of the building and adjacent to the electrical transformers as part of environmental due diligence.
- 4. A remedial action plan should be completed consistent with the requirements of Env-Or 600, which could include monitoring of attenuation, management of certain soils in place under an AUR and/or limited soils removal and disposal.
- 5. Groundwater monitoring under a Groundwater Management Permit will be required for impacts to groundwater above AGQS. An additional round of groundwater sampling is recommended to help to clarify which wells should be included in future monitoring events.
- 6. A soils management plan should be completed and approved by the NH DES for soils management during Site redevelopment.

7.	In coordination with Site redevelopment, and appropriate pre-acquisition environmental due diligence, application should be made to the NH Brownfields Covenant Program to provide additional liability relief.

TABLE OF CONTENTS

1.0		RODUCTION	
	1.1	Purpose	
	1.2	Special Terms and Conditions	
	1.3	Limitations and Exceptions of Assessment	
	1.4	Site Description and Setting.	
	1.5	Previous Investigations	
	1.6	Recognized Environmental Conditions	
		1.6.1 Areas of Concern	8
2.0	INVI	ESTIGATION METHODOLOGY	9
3.0	RES	ULTS	11
	3.1	Geology and Hydrogeology	11
	3.2	Soil	12
	3.3	Groundwater	14
4.0	DISC	CUSSION	17
5.0	QUA	LITY ANALYSIS/QUALITY CONTROL	19
	5.1	Precision	
	5.2	Bias	20
		5.2.1 Volatile Organic Compounds	21
	5.3	Accuracy	22
		5.3.1 Semi-Volatile Organic Compounds	22
		5.3.2 Total Petroleum Hydrocarbons-Diesel Range Organics	23
		5.3.3 Metals	23
	5.4	Representativeness	23
	5.5	Comparability	
	5.6	Completeness	24
	5.7	Project Quantitation Limits	24
6.0	CON	ICLUSIONS	25
7.0	REC	OMMENDATIONS	27
9.0	REFERENCES		28
10.0	SIGN	NATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)	29
TABI	LES		
	T-1.1	Coil Comple VDE Field Conserving Descrite	
	Table		
	Table	The state of the s	
	Table		
	Table	1 ,	
	Table		
	Table	e 6. Summary of Duplicate Groundwater Sample Analytical Results	

FIGURES

Figure 1.	Site Location Map
Figure 2.	Site Area Plan
Figure 3.	Boring/Monitoring Well Locations
Figure 4.	Inferred Groundwater Flow Map (August 29, 2019)
Figure 5.	Soil Contaminant Distribution Map
Figure 6.	Dissolved Contaminant Distribution Map

APPENDICES

Soil Boring/Monitoring Well Logs and Groundwater Sampling Logs Laboratory Analytical Reports Appendix A. Appendix B.

1.0 INTRODUCTION

Ransom Consulting, LLC (Ransom) is pleased to present this report documenting a Supplemental Phase II Environmental Site Assessment (ESA) for the W. W. Cross Property located at 39 Webster Street in the Town of Jaffrey, Cheshire County, New Hampshire (the "Site"). The Site includes an approximately 11.29-acre parcel which is the site of the vacant 100,810 square foot W. W. Cross Factory building and a separate bulk aboveground storage tank (AST) structure. The Site is identified by the Town of Jaffrey Assessor's Office as Lot 7.2 on Tax Map 245. At the request of the users and in consideration of the known environmental conditions of the eastern 60% of the parcel, the Supplemental Phase II ESA proposed herein has been designed to assess the western 40% of the parcel, which is being proposed for re-development. It is Ransom's understanding that the eastern 60% of the parcel is currently identified by the New Hampshire Department of Environmental Services (NH DES) as a Groundwater Management Zone and is not currently proposed for redevelopment. Evolving re-use plans for the Site could also include portions of the east 60% of the parcel, which were not included in this assessment.

Refer to the attached Site Location Map (Figure 1) to view the general location of the Site on a 7.5-minute topographic quadrangle.

This report was prepared for the Southwest Region Planning Commission (SWRPC), who received a United States Environmental Protection Agency (U.S. EPA) Brownfields Assessment Grant to conduct site assessments and investigations at properties within the region with the intent to revitalize underutilized properties.

The work was completed in accordance with Ransom's Site-Specific Quality Assurance Project Plan (SSQAPP) for the W. W. Cross Site, dated May 17, 2019. The SSQAPP was reviewed and approved by the NH DES and the U.S. EPA prior to implementation of the field activities.

1.1 Purpose

The objectives of this Supplemental Phase II ESA are to further evaluate and investigate the recognized environmental conditions (RECs) and/or areas of potential environmental concern (PECs) identified in a Phase I ESA, dated October 31, 2017, and to supplement the findings of the Phase II Environmental Site Assessment, dated March 13, 2019, both prepared by Ransom. This Supplemental Phase II ESA addresses the recommendations of the Phase II ESA.

1.2 Special Terms and Conditions

This Supplemental Phase II ESA was conducted in accordance with our executed Scope of Work, dated February 25, 2019 and a Change Order dated July 24, 2019. Authorization to perform this Supplemental Phase II ESA was provided by SWRPC.

The services and the contents of any project reports and associated documents provided by Ransom are solely for the benefit of SWRPC, and its Brownfields Program, their affiliates and subsidiaries, and their successors, assigns, and grantees. Reliance or use by any such third party without explicit authorization in the report does not make said third party a third-party beneficiary to Ransom's contract with SWRPC. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

1.3 Limitations and Exceptions of Assessment

The Supplemental Phase II ESA was executed in general accordance with the scope of work proposed in the SSQAPP. Any revisions to the scope of work or methodologies outlined in the SSQAPP are discussed in Section 2.0 (Investigation Methodology).

Furthermore, the findings provided by Ransom in this report are based solely on the information reported in this document and the results of limited explorations, field screening and confirmatory laboratory testing. Ransom's findings and conclusions must be considered as professional opinion based on limited data gathered during the course of this ESA. Ransom does not and cannot represent that the Site contains no hazardous substances and/or petroleum or other adverse environmental conditions beyond that observed by Ransom during the field investigation. Should additional information become available in the future, this information can be reviewed by Ransom and the findings, presented herein, may be modified as a result of the review.

1.4 Site Description and Setting

The Site includes an approximately 11.29-acre parcel which is the site of the vacant 100,810 square foot W. W. Cross Factory building and a separate bulk AST structure. The Site is identified by the Town of Jaffrey Assessor's Office as Lot 7.2 on Tax Map 245. At the request of the users and in consideration of the known environmental conditions of the eastern 60% of the parcel, this Phase II ESA was designed to assess the western 40% of the parcel, which is being proposed for re-development. The eastern 60% of the parcel is currently identified by the NH DES as a Groundwater Management Zone associated with historical impacts from industrial operations practices on that portion of the parcel.

The Site building was constructed circa 1915 as the W. W. Cross Factory, a manufacturer of tacks and fasteners, and operated as an industrial manufacturing facility until the late 1990s. Most recently, the Site was purchased at auction in 2007 by the current owner, Mr. Larry Thibeault. Subsequent uses of the Site building, which was divided into tenant spaces/units, were storage/warehouse spaces, a wood working facility, two gyms, and various other tenants. Dating back to circa 2012, there have been no active business operations at the Site, and the Site building has fallen into a state of disrepair. Additional structures and features on the western 40% of the Site include a concrete block structure housing a 20,000-gallon No. 6 oil AST which is not in compliance with applicable rules, is the site of a reported release of fuel oil (20 gallons, estimated) and historically fueled boilers which provided the Site building with heat.

The properties abutting the Site are primarily residential along Webster Street, with the exception of two auto body shops, a Head Start preschool, and the American Legion Hall. Properties abutting the Site to the north, beyond the drainage swale, include a retail shopping plaza and a courthouse with frontage along Peterborough Road (Route 202). The east abutting property is a vegetated parcel which was historically a portion of the Site; this parcel was the location of an infiltration bed/surface impoundment area which received industrial process wastewater historically generated at the Site building.

The Site and abutting/neighboring properties are serviced by the municipal water supply and wastewater collection systems operated by the Town of Jaffrey. Currently, utility services have been interrupted/discontinued to the Site building, which has remained vacant for approximately seven years.

The Site is located in a mixed-use residential and commercial area, and a former railroad corridor abuts the Site to the north. Several neighboring properties have been identified as having the potential to have contributed to adverse environmental conditions at the Site.

The topography of the Site is generally level on the developed portion of the Site; with a relatively abrupt downward slope east of the Site building leading to the two ponds located at the eastern extent of the Site and a steep drop to the south, off of the south edge of the paved parking area. The vegetated slope down to the ponds east of the Site building is the area of a capped tack/waste pile landfill. Directly beyond the ponds, and only a few feet elevated relative to the water bodies, is the east abutting parcel which historically served as a surface impoundment area for process derived wastewater generated at the Site. Refer to the attached Site Location Map (Figure 1) to view the general location of the Site on a 7.5-minute topographic quadrangle.

A property boundary survey was not completed as part of this investigation. The property boundaries shown on the attached figures are approximate based on Town of Jaffrey tax maps.

Refer to the attached Site Area Plan and the Site plan (Figure 2 and Figure 3, respectively) for a layout of the Site and the locations of key Site features.

1.5 Previous Investigations

A Phase I ESA was conducted by Ransom to evaluate the entire Site for evidence of RECs using the procedures set forth in the requirements of ASTM International Standard Practice E 1527-13. A hazardous building material inventory (HBMI) was also completed. Based on the findings, conclusions, and recommendations of the Phase I ESA, a Phase II ESA was conducted on the western 40% of the Site by Ransom to evaluate the identified RECs and/or areas of concern (AOCs) identified for this portion of the Site in the Phase I ESA. The scope of work for this Supplemental Phase II ESA as detailed in a May 17, 2019 SSQAPP is to further investigate the sources and extent of specific RECs confirmed in the Phase II ESA.

The following provides a summary of some of the key findings presented in these reports.

Phase I Environmental Site Assessment, Former W. W. Cross Property, NH DES Site #198708007, 39 Webster Street, Jaffrey, New Hampshire; Ransom, dated November 1, 2017

The Phase I ESA was performed for the entire Site parcel, including the eastern 60% of the property that is designated as a Groundwater Management Zone. The eastern portion of the property includes a fenced grassed area which slopes steeply downward to two waterbodies (a "fire pond" which is separated by a berm from a second pond located further to the south). Both of the water bodies are located near the eastern property boundary. The sloped grassed area is the engineered vegetated cap associated with a landfill located on the Site. According to previous environmental reports, this earthen cap was installed as a remedial measure for a "tack dump" disposal area, after the removal of targeted soils with elevated cyanide (and metals) concentrations. According to these previous reports, waste tacks and other waste materials generated by the operations conducted in the Site building from circa 1915 to the mid-1970s were dumped over the banking on this portion of the Site. Environmental investigations related to the tack pile/dump began in December 1993; subsequently, a Remedial Action Plan (RAP) was developed and approved by the NH DES, leading to the targeted soil removals and the November 1999 construction of the capping system over the tack pile. A February 2000 deed reference (Cheshire County Book 1738, Page 0430) is a notice made by Former W. W. Cross Inc. of an unlined landfill capping system on the Site (Tax Map 245, Lot 7.2), and includes restrictions to prohibit disturbing soils, fencing and monitoring wells and ensures continued access to the NH DES for inspection purposes and to Black & Decker for monitoring and maintenance purposes.

Ransom conducted a reconnaissance of the Site on May 11, 2017. Ransom observed suspect hazardous substances and petroleum products stored by the current Site owner, former Site tenants, and/or related to

past maintenance of the Site. Ransom also observed concrete patches associated with former floor drains, trenches/sumps, metal plating facilities, and the former wastewater treatment facility reportedly constructed circa 1982. Process-derived effluent, including oil and/or hazardous materials (OHM) associated with the manufacturing operations historically conducted onsite, is known to have been directed to these drains/sumps and piped to a surface impoundment area on the east abutting property. Loading docks and historic loading/unloading areas were noted in connection with the Site building that likely included handling of OHM as part of the manufacturing activities along west, south and east sides of the building as well as along the north side of the building adjacent to a former railroad spur.

In addition to the on-Site environmental concerns noted above, the following documented or potential off-Site concerns were identified that have the potential to affect groundwater or surface water quality on the Site:

- 1. A neighboring former dry-cleaning facility has adversely impacted groundwater on numerous parcels in the vicinity of the Site, including the detection of impacted groundwater immediately abutting the Site and in an inferred upgradient position; the contaminated groundwater plume may extend onto the Site.
- 2. An auto body shop which, by industry type, typically use hazardous substances and is a Resource Conservation and Recovery Act (RCRA) generator, is located south of and proximal to the western portion of the Site in an inferred cross-gradient to upgradient location.
- 3. An auto body shop which, by industry type, typically used hazardous substances and is a RCRA generator, is located southeast of and proximal to the eastern portion of the Site in an inferred upgradient location to the eastern portion of the property.
- 4. A former historical wood product manufacturing facility (now a shopping plaza) located to the north of the Site in an inferred cross-gradient to upgradient location to the western portion of the property.

Based on the findings of the Phase I ESA, the following RECs were identified in connection with the western 40% of the Site parcel (RECs and AOCs for the eastern portion of the Site were not discussed):

- 1. A non-compliant 20,000-gallon No. 6 oil AST: is located in a cement block structure on the Site; the condition of the AST, and the volume of oil remaining in the tank, if any, is unknown; the ground surface beneath the tank could not be viewed to look for staining; it is the site of a reported release of fuel oil to the ground surface; and vermiculite (presumed asbestos containing) was noted on the ground surface adjacent to the cement block structure [vermiculite is an insulating material around the AST].
- 2. Historically, an oil underground storage tank (UST) (size unknown) was located south of the central portion of the Site building (as depicted on a 1924 Sanborn Map), this area is now occupied by the central portion of the Site building; no records identifying the removal of this UST were identified during the course of this Phase I ESA; the historic presence of this UST and associated petroleum storage had the potential for adverse impacts to Site soils and/or groundwater.
- 3. Floor drains and sumps historically received process derived wastewater, including OHM, across the manufacturing/industrial portions of the Site building; most of these

- structures were closed in place and potential adverse impact to Site soils and/or groundwater beneath and adjacent to these drains/sumps has not been assessed.
- 4. The detection of low concentrations of cyanide and/or tetrachloroethylene in groundwater samples from monitoring wells MW-14 and MW-2 (located on the eastern portion of the Site), including exceedances of Env-Or 600 Ambient Groundwater Quality Standards (AGQS) as recently as 2012 and/or 2014, could indicate the potential for unassessed or unidentified source areas, including areas on the western portion of the Site.
- 5. A neighboring former dry-cleaning facility has adversely impacted groundwater on numerous parcels in the vicinity of the Site, including the detection of impacted groundwater immediately abutting the Site and in an inferred upgradient position; the contaminated groundwater plume may extend onto the Site.

Although not considered RECs, Ransom identified the following potential environmental AOCs in connection with the western 40% of the Site:

- 1. Given the unsecured nature of the Site building and the number of potential OHM containers that were observed to be remaining in the Site building, there is a threat of additional OHM releases.
- 2. Additional investigations are necessary to assess whether petroleum and hazardous substance handling over many years of operation in loading/unloading areas may have resulted in releases of OHM in those areas.
- 3. Additional investigations are necessary to assess whether potential releases of OHM from relatively high-risk properties located to the north and south have impacted groundwater quality on the Site.

Based on the information obtained during the Phase I ESA, Ransom concluded that additional investigations were warranted. Ransom recommended the following to address the identified RECs and areas of potential environmental concern for the western 40% of the Site:

1. The completion of a Phase II ESA at the Site, including the advancement of soil borings, installation of groundwater monitoring wells, and laboratory analyses of Site soils and groundwater to assess and evaluate the identified RECs and areas of environmental concern

Ransom also provided the following non-scope recommendations:

- 1. A HBMI is being conducted at the Site, the results of which will be delivered under separate cover. Prior to any planned renovation or demolition of the Site buildings or other structures, asbestos and other hazardous building materials must be abated/removed and disposed of as required by applicable regulation and as detailed in the HBMI Report for the Site.
- 2. Ransom recommends an assessment of the OHM containers remaining at the Site, and the subsequent removal and appropriate disposal.
- 3. The 20,000-gallon No. 6 oil AST should be pumped, cleaned, assessed for leaks and removed from the Site.

4. Copies of potential agreements made between the historical responsible party (Black & Decker) and the NH DES and current or past owner(s) should be obtained and reviewed to assess what contractual limitations of liability and corrective action obligations may be available to a prospective purchaser [this was completed].

Ransom prepared a SSQAPP, dated August 3, 2018, which outlined the planned activities proposed to address the RECs and AOCs identified in the Phase I ESA. The HBMI was completed and a report, dated September 22, 2017, was delivered to the SWRPC.

Phase II Environmental Site Assessment, Former W. W. Cross Property, NH DES Site #198708007, 39 Webster Street, Jaffrey, New Hampshire; Ransom, dated March 13, 2019

The Phase II ESA was performed for the western 40% of the Site parcel, excluding the eastern 60% of the property that is designated as a Groundwater Management Zone. To evaluate the RECs and PECs, the following six AOCs were developed for the Site:

- 1. AOC 1—Wastewater disposal systems (drains & sewer);
- 2. AOC 2—Former plating area;
- 3. AOC 3—Former fuel oil UST area;
- 4. AOC 4—Inactive fuel oil AST area;
- 5. AOC 5—Facility loading/unloading areas; and
- 6. AOC 6—Off-site sources.

To assess AOC 1 through 6, Ransom designed a Phase II ESA which included the advancement of soils borings, the collection and analyses of soil samples for field screening for the presence of metals using a x-ray fluorescence (XRF) analyzer and photoionizable compounds (PICs) using a photoionization detector (PID), the selection and laboratory analyses of soil and/or concrete samples for the presence of selected metals, hexavalent chromium (if warranted based on total chromium), polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) including 1,4-dioxane, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH)-diesel range organics (DRO) and/or total cyanide; the installation of eight monitoring wells and the collection and laboratory analyses of groundwater samples from the monitoring wells for the presence of dissolved (field-filtered) metals, dissolved (field-filtered) PAHs, VOCs, total cyanide, sulfate, and/or per- and polyfluoroalkyl substances (PFAS) according to U.S. EPA methods, as appropriate.

Based on the information collected as part of the assessment, RECs identified in the Phase I ESA were confirmed, discounted or undetermined as follows:

1. Non-compliant 20,000-gallon No. 6 oil AST: Confirmed. The PAHs documented in soil at B5 and B22 may be indicative of a release of No. 6 oil in that area adjoining the inactive fuel oil AST and exceed Env-Or 600 Soil Remediation Standards (SRS). The soils are in a paved area and do not present an immediate human risk exposure. Although there were no exceedances of AGQSs, VOCs including naphthalene (30 micrograms per liter (μg/L)) were detected in the groundwater sample collected from the monitoring well (MW105) installed in this area.

- 2. Historic oil UST (size unknown) located south of the central portion of the Site building: Discounted (for petroleum). Evidence of a petroleum release was identified; however, no violations of soil or groundwater standards were documented [for petroleum constituents].
- 3. Floor drains and sumps that historically received process derived wastewater: Confirmed. Cadmium in soil at boring B2 and cyanide in groundwater at MW102 (installed in B2) are likely associated with a release of wastewaters or plating solutions in the former industrial wastewater/plating area. The sampled soils are beneath a concrete slab and do not present an immediate human exposure risk. Tetrachloroethylene (PCE) impacts to groundwater in the area of MW102 and MW104 (above AGQS) could also be related to an on-Site release or, alternatively to the remnants of a plume from a neighboring known or unknown off-Site source.
- 4. Contaminated groundwater (cyanide and PCE exceeding AGQSs) in monitoring wells located on the eastern portion of the Site that could indicate the potential for unassessed or unidentified source areas, including areas on the western portion of the Site: Confirmed. Cyanide was detected in groundwater above AGQS in the wastewater/plating area. As noted above, PCE impacts to groundwater in the area of MW102 and MW104 (above AGQS) could be related to an on-Site release or, alternatively to the remnants of a plume from a neighboring known or unknown off-Site source.
- 5. A neighboring former dry-cleaning facility has adversely impacted groundwater on numerous parcels in the vicinity of the Site; the contaminated groundwater plume may extend onto the Site: Undetermined. Additional investigations within and north of the Site building need to be conducted to determine rule out whether PCE is migrating onto the northern portion of the Site.

In assessing the other identified AOCs, Ransom concluded the following:

- 1. The source of the PAHs in the area of boring B3 from 5 to 8 feet below ground surface (bgs) but above the groundwater table is unclear but may be related to backfilled soil near sewer infrastructures or another unknown source.
- 2. The PAHs in soil at boring B12 and B26 that exceed SRSs as well as naphthalene in groundwater at MW108 [other PAHs such as benzo[a]anthracene and benzo[b]fluoranthene were detected at concentrations slightly less that AGQSs], are likely associated with a release (or releases) of a petroleum or a petroleum-like product. The source of an exceedance of arsenic in soil at nearby B18 is unclear; however, no staining similar to that noted at B12 and B25 was observed in soil from this boring. The impacts to soils were documented beneath pavement or concrete and do not present an immediate human exposure risk.
- 3. The PAHs in soil samples collected from adjacent to a railroad corridor are inferred to constitute a background condition per Env-Or 600 (presence of coal combustion residuals in urban fill).

Based on the data collected during the Phase II ESA, Ransom concluded that additional investigation was warranted. Ransom recommended additional assessment to further delineate the extent of:

- 1. Cadmium, cyanide and PCE impacts to soils and/or groundwater in proximity to the former plating and wastewater treatment areas near MW102/B2;
- 2. PCE impacts to groundwater as was documented in the sample collected from monitoring well MW104 (in conjunction with MW102 area investigations);
- 3. PAH impacts to soil broadly in the area of B12 and B26, and naphthalene impacts to groundwater as was documented in the sample collected from exterior monitoring well MW108; and
- 4. PAH impacts to soil (B5 and B22) in the area of the inactive No. 6 oil AST.

Contaminant levels detected in soils in some locations on Site (i.e., the railroad corridor) are consistent with background conditions or in most locations assessed do not rise to the level requiring remedial action and could likely be managed in place. However, soils with relatively low-level and mid-level contaminants would/could be subject to regulation and re-use restrictions if excavated and relocated on Site and/or removed from the property.

This Supplemental Phase II ESA scope or work detailed in the May 17, 2019 SSQAPP was designed to further investigate the findings of the Phase II ESA.

1.6 Recognized Environmental Conditions

The intent of this Supplemental Phase II ESA was to further investigate the three recommendations made in the Phase II ESA report for western 40% of the Site; as described in the following AOCs:

1.6.1 Areas of Concern

AOC A—Tetrachloroethylene Impacts to Groundwater

The Phase II ESA identified PCE impacts to groundwater, as was documented in the samples collected from monitoring well MW102 and MW104. The scope of this Supplemental Phase II ESA includes further investigation of the spatial extent of this contaminant of concern to help differentiate and clarify whether the documented PCE impacts are associated with a potential onsite source or may be related to potential off-site source(s).

AOC B—Further Investigation of Cadmium, Cyanide, and Tetrachloroethylene Impacts

The Phase II ESA identified cadmium, cyanide and PCE impacts to soils and/or groundwater in proximity to the former plating and wastewater treatment areas near MW102/B2. The scope of this Supplemental Phase II ESA includes further investigation of the contaminants in this impacted area.

AOC C—Delineation of Polynuclear Aromatic Hydrocarbons in Soil / Further Investigation of Petroleum in Groundwater

The Phase II ESA identified PAH/petroleum impacts to soil broadly in the area of B12 and B26 (unknown source), the area of borings B5 and B22 (possible inactive heating oil AST source), and naphthalene impacts to groundwater as was documented in the sample collected from exterior monitoring well MW108. The scope of this Supplemental Phase II ESA includes further delineation and characterization of the identified impacts in these areas.

2.0 INVESTIGATION METHODOLOGY

Based on the findings of Ransom's 2018 Phase II ESA, a sampling program was developed to further investigate the extent of soil and groundwater contamination on the western 40% of the Site.

As noted above, contaminants of concern (COCs) evaluated as part of this Supplemental Phase II ESA include: Priority Pollutant metals (PPMs) (including antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl) and zinc (Zn)), VOCs, PAHs, TPH-DRO and cyanide.

These COCs were selected based on the findings of Ransom's 2018 Phase II ESA. Potential exposure routes associated with these COCs include direct contact with impacted soils; direct contact with impacted groundwater; ingestion of contaminated soil or ingestion/inhalation of airborne dust, particularly during any construction activity at the Site; and ingestion of contaminated groundwater (although no nearby potable use of groundwater is known).

As noted in Section 1.5.1 in greater detail and as fully elaborated in the SSQAPP, the scope of work for the Supplemental Phase II ESA includes the advancement of soil borings, the collection of soil samples from the soil borings, the installation of monitoring wells, and the collection of groundwater samples from new and selected existing monitoring wells. Sample locations for the Supplemental Phase II ESA are shown on the attached Figure 3.

Deviations from the proposed scope of work were as follows: (1) proposed B112 could not be installed due to building wall obstructions; however, data from B14 and B19, jointly, met the data needs of B112 which was intended to help constrain former plating room/wastewater treatment area soils impacts; (2) two additional borings (B116 and B117) were advanced off of the southwest building corner based on real-time evaluation of soils quality in the area of elevated PAHs, and the need for additional delineation effort at those locations; and (3) proposed monitoring well MW202 was not installed due to difficult drilling conditions which necessitated prioritization of the work that could be accomplished, as well as a re-assessment that MW201, alone, would meet the needs of additional PCE plume characterization (i.e. assessing dissolved PCE was from an off-site or an on-site source), which was the primary purpose of MW202.

On June 17 and 18, 2019, Ransom oversaw the advancement of eleven soil borings (B101, B103, B014, B105, B107, B108, B109, B110, B111, B114 and B115) throughout the areas of concern on the Site by New England Boring Contractors (NEBC) of Derry, New Hampshire. Two of the borings (B101 and B103) were completed as groundwater monitoring wells (MW201 and MW203, respectively).

On August 12, 2019, Ransom returned to the Site and oversaw the advancement of four additional borings (B105A, B113, B116 and B117) and the over-drilling of previously advanced boring B12 (completed as groundwater monitoring well MW204) throughout the areas of concern on the Site by Eastern Analytical, Inc. (EAI) of Concord, New Hampshire.

Soil boring locations are shown on Figure 3. Soils encountered in the soil borings were generally classified using the Burmister Soil Classification System. Soil samples collected from the borings were screened in the field for total VOCs using a MiniRAE 2000 PID calibrated with 100 parts per million by volume (ppmv) isobutylene and corrected to read as benzene. In addition, the soil samples were field-screened for metals using an XRF analyzer. Soil samples were collected for laboratory analysis from locations and depth intervals selected based on visual and olfactory observations and field screening results, as described in the SSQAPP. Based on field screening results, observations and/or location, at least one soil sample was collected from thirteen of the soil borings (see Table 2) for laboratory analysis

of the specific COCs for the given AOC. Soil boring logs documenting soil profiles, observations, and PID field screening results are included in Appendix A. Results of XRF screening of soil samples are provided in Table 1. Soil samples were submitted for laboratory analysis for the specific parameters specified for each AOC. Soil laboratory analytical results for the selected samples are provided in Table 2. Results are summarized in Section 3.0, below.

Groundwater sampling activities were conducted on September 20, 2019. Measurements of static water levels are summarized in Table 4. Groundwater samples were collected from three of the newly installed monitoring wells (MW201, MW203 and MW204) and three of the existing monitoring wells (MW102, MW104 and MW106), utilizing low-flow sampling procedures. Groundwater sampling logs documenting the field parameters recorded during the low-flow sampling activities are included in Appendix A.

Groundwater samples were submitted for laboratory analysis of dissolved PPMs, VOCs and cyanide. Groundwater samples collected for metals analyses were field-filtered. The locations of the monitoring wells were surveyed to a common datum and are shown on the attached Site Plans.

Field duplicate samples were collected for each matrix/analysis and laboratory analyzed for quality assurance purposes (summarized in Section 4.0).

Soil and groundwater samples were collected directly from sampling equipment into laboratory-prepared sample containers and placed on ice. All samples collected for laboratory analysis during the Supplemental Phase II ESA were handled and transported under chain-of-custody procedures. Chain-of-custody documentation is included in the laboratory reports (Appendix B). The soil and groundwater samples were delivered to Alpha Analytical (Alpha) of Portsmouth, New Hampshire.

3.0 RESULTS

The following subsections document the results of the Supplemental Phase II ESA activities. XRF field screening measurements are summarized in Table 1 and groundwater field parameter measurements are summarized in Table 3. Analytical results are summarized by media in Table 2 (soil) and Table 4 (groundwater). A summary of duplicate soil sample analytical results is presented in Table 5. Groundwater sample duplicate results are included in Table 6. Certified laboratory analytical reports are included in Appendix B.

Analytical results were compared to regulatory guidelines presented in the SSQAPP. The regulatory guidelines include the following:

- 1. NH DES Env-Or 600 SRS;
- 2. U.S. EPA Regional Screening Levels (RSLs);
- 3. NH DES AGQS; and
- 4. U.S. EPA Maximum Contaminant Levels (MCLs).

Soil analytical results were compared to the NH DES SRS, and in addition, to NH DES Risk Characterization Management Policy (RCMP) Method 1 NH S-1, S-2 and S-3 standards. For detected contaminants that do not have an established SRS, the concentrations were compared to the corresponding U.S. EPA RSLs. Groundwater analytical results were compared to the NH DES AGQS and the U.S. EPA MCLs.

3.1 Geology and Hydrogeology

Based on observations made by Ransom during this Supplemental Phase II ESA and the previous Phase II ESA, the Site is generally underlain by fine to medium sands, with little fine to medium gravels and silt; with soil density and the presence of cobbles increasing with depth.

The bedrock stratigraphic unit underlying the Site and vicinity is mapped on the Bedrock Geologic Map of New Hampshire (1997), as the Spaulding Tonalite (Spaulding Quartz Diorite of Fowler-Billings, 1949 (Early Devonian)) (Ds1-6); detailed as weakly foliated to non-foliated, spotted biotite quartz diorite, tonalite, granodiorite, and granite. Near-surface soils encountered in the investigations areas on the central portion of the Site are inferred to be historical fill based on the following: (1) soil density (very low density, fine to coarse sand outside of the building footprint), (2) soils with cobbles and rock at fairly consistent depths (4 to 6 feet below grade), (3) occasional anthropomorphic constituents (asphalt, concrete), and (4) dark silty layers (possible former wet ground surface proximal to the present-day groundwater table). A broad layer of fill is also consistent with the steep topographic drop on the southeast portion of the lot, presumably down to native soils in a surface water drainage depression. These fill soils are underlain by denser medium to coarse sand, with gravel and cobbles with occasional with evidence of layering. Bedrock is inferred beneath these native soils at depths of about 12 feet below grade in the footprint area of the central portion of the building.

The depth to groundwater ranged from 2.66 to 11.55 feet below grade in sandy soils and unconfined conditions. Depth to groundwater measurements are presented in Table 3. Based on the measured depth to groundwater across the Site, groundwater was inferred to generally flow to the southeast. A groundwater flow map is included as Figure 4 and presents the linear interpolation of static water elevations across the Site based on the depth to groundwater as measured at each monitoring well on the

sampling date (September 20, 2019). The depth to groundwater is deepest along the southeastern portion of the property and shallowest along the western portion of the property.

3.2 Soil

Soil samples were collected for laboratory analyses from thirteen of the seventeen soil borings from the depth interval(s) where evidence of contamination was identified based on field screening results and/or visual and olfactory observations. XRF field screening results of the soil samples are presented in the attached Table 1. Analytical results of soil samples are presented in the attached Table 2.

A summary of observations, field screening results and analytical results for each AOC follows:

AOC A—PCE Impacts to Groundwater

Boring B101 was advanced along the northern interior wall the Site building, near the north property boundary, to assess the spatial extent of PCE and to help differentiate and clarify whether the documented on-Site PCE impacts are associated with a potential on-site source or may be related to potential off-site source(s). Groundwater-saturated soils were encountered at approximately 8 feet below grade in the boring. Boring B101 was finished as groundwater monitoring well MW201.

The boring was advanced through the poured concrete slab flooring, which was approximately 5.5 inches thick. Soils encountered beneath the concrete slab generally consisted of fine to coarse sands, with little to some gravel, with the presence of cobbles increasing with depth and possible bedrock at about 13.7 feet below grade.

Elevated PICs (above 2 ppmv) were not encountered in soil samples from B101. Neither odors nor staining was noted in the soils from B101.

XRF measurements taken at 2-foot or less sample intervals over the depth of boring B101 indicated the potential for a slightly elevated concentration of antimony (above SRS) at a depth of 4 to 5 feet below the concrete slab. XRF measurements did not indicate additional metals concentrations above SRSs in soil samples from this boring.

One soil sample was selected for laboratory analyses from boring B101. Sample S1, collected from 0.5 to 2 feet below grade, was selected for VOC analyses. With the exception of a detected low concentration of acetone (a likely laboratory or preservative contaminant) which was detected much below the applicable Env-Or 600 SRS, no VOCs were detected above laboratory detection limits in soil sample B101.

AOC B—Further Investigation of Cadmium, Cyanide and Tetrachloroethylene Impacts

Borings B103 and B113 were advanced in the Site building to further address the former plating room area. The borings were advanced through the poured concrete slab flooring, which was approximately 5.5 inches thick. In general, soils encountered consisted of fine to medium sands, with little gravel, trace to little silt, and cobbles increasing with depth. Refusal was encountered in borings B103 and B113 at depths of 8 and 12.3 feet, respectively. Boring B103 was advanced to a depth of approximately 12.3 feet below grade and finished as groundwater monitoring well MW203.

Elevated PICs (above 1 ppmv) were not encountered in soil samples from B103 and B113. Neither odors nor staining were noted in the soils from either boring.

XRF measurements taken at 2-foot or less sample intervals over the depth of the borings indicated the potential for a slightly elevated concentration of antimony at a concentration above its SRSs in one soil sample from boring B103. XRF measurements did not indicate additional metals concentrations above SRSs in soil samples from these borings.

One soil sample was selected for laboratory analyses from each boring for VOC, PPM and cyanide analyses. Sample S2, collected from 2 to 4 feet below grade, was selected from boring B103. Sample S4, collected from 6 to 8 feet below grade, was selected from boring B113.

No VOCs or PPMs were detected above SRSs in the soil samples submitted for laboratory analyses from borings B103 and B113. No cyanide was detected above laboratory detection limits in the soil samples analyzed for cyanide from borings B103 and B113.

AOC C—Delineation of Polynuclear Aromatic Hydrocarbons in Soil / Further Investigation of Petroleum in Groundwater

Borings B104, B105, B107 through B111, B116 and B117 were advanced to further delineate and characterize the areas of identified PAH/petroleum impacts to soil in the area of B12 and B26 (unknown source) and naphthalene impacts to groundwater as was documented in the sample collected from exterior monitoring well MW108 (installed in boring B26).

Borings B104, B105 and B107 were advanced within the Site building in the general area of boring B12 to further delineate PAHs in soil inside the building. In general, soils encountered consisted of fine to coarse sands, with little gravel, and trace to little silt. Refusal (possibly concrete and/or cobbles/boulders) was encountered in borings B104, B105 and B107 at depths of 4.2, 2.5 and 4 feet below grade, respectively; soils over this dense layer are interpreted as fill. No unusual odor was noted in soils and no groundwater was encountered in these borings. Because no groundwater was encountered in these borings (one of which was planned to be completed as a groundwater monitoring well), previously advanced boring B12 (for which an oil/creosote odor had been noted in soils) was re-drilled and advanced to a depth of approximately 14 feet below grade to install groundwater monitoring well MW204.

Borings B108, B109, B110, B111, B116 and B117 were advanced in the south loading dock area in the general area of boring B26 to further delineate PAHs in soil in that area. In general, soils encountered consisted of fine to coarse sands, with little gravel, and trace to little silt. For these borings and this area, soils less than 5 feet bgs are inferred to be fill based on low soil density, occasional anthropogenic materials, and evidence of the former ground surface below grade. The majority of the borings were advanced to a depth of 12 feet bgs; refusal was not encountered in the borings. Groundwater saturated soils were encountered in borings B108, B109, B110, B111 at approximately 4 feet below bgs. Borings B116 and B117 were advanced to 4 feet bgs; and no groundwater was encountered.

XRF measurements taken at 2-foot or less sample intervals over the depth of the borings indicated the potential for slightly elevated concentrations (above SRS) of antimony in the soil samples from borings B108, B109 and B110. XRF measurements did not indicate additional metals concentrations above SRSs in soil samples from these borings.

Elevated PICs (above 1 ppmv) were not encountered in soil samples from B104, B105, B107, B108, B109, B110, B111, B116, and B117. PICs (ranging from less than 1 to 22 ppmv) were measured in soil samples collected from B111. A strong tar/creosote-type odor was noted during the advancement of borings B110, B111 and B117, particularly in very shallow soils. These borings were advanced along the western exterior wall of the southwestern portion of the Site building.

No VOCs were detected above SRSs in the soil samples collected from these borings and submitted for laboratory analyses (B105, B107, B108, B109, B110 and B117). However, benzene and naphthalene were detected in the shallow soil sample collected from B111 at concentrations above SRSs (equal to the RCMP Method 1 NH S-3 standard).

PAHs (including naphthalene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluorene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene and/or 2-methylnaphthalene) were detected above SRSs in the soil samples analyzed from borings B109, B110, B111 and/or B117. The concentrations of several of these PAHs exceeded the RCMP Method 1 NH S-3 standard for the soil samples collected from borings B111 and B117 (as did a sample with similar characteristics from previous boring B12). The sample from B111 was collected from 0.0 to 0.5 feet below the pavement and the sample from B117 was collected from 0.0 to 2.0 feet below grade and beneath pavement.

Additional PAHs were detected in samples from borings B104, B105, B108, B109, B110, B111 and B117; however, at concentrations below the applicable SRSs.

TPH-DRO (21,500 mg/kg) was detected in the soil sample collected for laboratory analyses from boring B111 at a concentration exceeding the SRS (equal to the RCMP Method 1 NH S-3 standard) for TPH-DRO (10,000 mg/kg). TPH-DRO was detected in the soil sample collected for laboratory analyses from boring B117; however, at a concentration below the SRS for TPH-DRO. Based on the petroleum hydrocarbon fingerprint of the sample from B111, the laboratory opined that the contaminant "appears to be similar to a coal tar/creosote."

Borings B114 and B115 were advanced to the south and west of a building housing the inactive heating oil AST. In general, soils encountered consisted of fine to coarse sands, with little gravel, trace to little silt, and cobbles increasing with depth; placed fill is inferred to comprise the upper 7 to 8 feet of overburden in this area. Each boring was advanced to a depth of 12 feet below grade; refusal was not encountered in either boring. Groundwater saturated soils were encountered in each of these borings at depths ranging from 4 to 5 feet bgs.

Elevated PICs (above 1 ppmv) were not encountered in soil samples from B114 and B115. Neither odors nor staining were noted in the soils from either boring.

XRF measurements taken at 2-foot or less sample intervals over the depth of the borings indicated the potential for a slightly elevated concentration of antimony at a concentration above its SRS in three soil samples from borings B114 and B115. XRF measurements did not indicate additional metals concentrations above SRSs in soil samples from these borings.

No VOCs, PAHs or TPH-DRO were detected above SRSs in the soil samples collected from these borings.

3.3 Groundwater

Groundwater samples were collected from the three newly installed monitoring wells installed as part of this investigation (MW201, MW203 and MW204) and from three existing monitoring wells (MW102, MW104 and MW108).

Monitoring well locations and groundwater detections exceeding AGQSs are shown on the attached Figure 6. Groundwater field parameter results are shown in Table 3. Groundwater analytical results are summarized in Table 4.

The groundwater samples were analyzed for the presence of VOCs (MW102, MW104, MW108, MW201, MW203, and MW204), dissolved (field-filtered) PPMs (MW203), and cyanide (MW102 and MW203).

A summary of the analytical results for each AOC is as follows:

AOC A— Tetrachloroethylene Impacts to Groundwater

To assess the spatial extent of PCE and to help differentiate and clarify whether the documented PCE impacts are associated with a potential on-site source or may be related to potential off-site source(s), groundwater quality was evaluated by collecting groundwater samples from monitoring well newly-installed monitoring well MW201 (within the building but proximal to the upgradient property boundary) and existing monitoring well MW104 (in the center of the building and in a former manufacturing area).

The groundwater samples were analyzed for the presence of VOCs.

No VOCS were detected in the groundwater sample collected from monitoring well MW201 at concentrations above AGQSs. PCE and its degradation daughter compound cis 1,2-dichloroethelene (DCE) were detected at low levels, and each compound was detected at similar concentrations (2.6 and 2.2 ug/L, respectively), in the groundwater sample.

PCE was detected at a concentration (5.8 ug/L) above its AGQS (5 ug/L) in the sample from MW104. 1,2-DCE was not detected in this sample.

AOC B—Further Investigation of Cadmium, Cyanide and Tetrachloroethylene Impacts

To assess for potential impacts to groundwater quality due to past discharges associated with the former plating and wastewater treatment area, groundwater quality was evaluated by collecting groundwater samples from one of the newly installed monitoring wells (MW203) and existing monitoring wells MW102 and MW104.

The groundwater samples were analyzed for the presence of VOCs (MW102, MW104 and MW203), dissolved (field-filtered) PPMs (MW203), and cyanide (MW102 and MW203).

Cyanide (at a concentration of 746 $\mu g/L$) was detected in the groundwater sample collected from existing monitoring well MW102 at a concentration above the AGQS for cyanide of 200 $\mu g/L$. Cyanide was not detected above laboratory detection limits in the groundwater samples collected from monitoring well MW203.

No VOCs or dissolved (field-filtered) metals were detected in the groundwater samples collected from monitoring well MW203 at concentrations above AGQSs. The VOC PCE was detected at concentrations below the AGQSs in the samples from MW102 and MW203. PCE was also detected in the sample from nearby MW104 at a concentration (5.8 μ g/L) just above its AGQS (5 μ g/L). 1,2 DCE was not detected in the area where these slightly elevated PCE concentrations were detected.

AOC C—Delineation of Polynuclear Aromatic Hydrocarbons in Soil / Further Investigation of Petroleum in Groundwater

To assess further the naphthalene impacts to groundwater as was previously documented in the sample collected from exterior monitoring well MW108, groundwater quality was evaluated by collecting groundwater samples from newly installed monitoring well MW204 and existing monitoring well MW108.

ne groundwater samples were analyzed for the presence of VOCs. No VOCS were detected in the oundwater samples collected from monitoring wells MW108 and MW204 at concentrations above GQSs.	

4.0 DISCUSSION

The following subsections provide a discussion and interpretation of pertinent results by AOC.

AOC A—Tetrachloroethylene Impacts to Groundwater

As noted above PCE and its degradation daughter compound cis 1,2-dichloroethelene (1,2-DCE) were detected at low levels, and at similar concentrations, in the groundwater sample from the upgradient monitoring well (monitoring well MW201). This pair of compounds and the parity of the analytes' concentrations were noted in samples from monitoring well MW106 also near the upgradient (northwest) property boundary and have been detected in monitoring rounds (sampled by others) at off-site monitoring wells just northwest of the northwest property boundary and support an off-site source for these low-level contaminants.

This pairing of related compounds may be a differentiator for an inferred separate PCE on-site source as documented in groundwater samples collected from near the former plating room and wastewater treatment area which have lesser or no detectable concentrations of 1,2-DCE (see AOC B, below).

AOC B—Further Investigation of Cadmium, Cyanide, and Tetrachloroethylene Impacts

The borings advanced as part of this Supplemental Phase II ESA in conjunction with the previously advance borings and collective soils data constrain the area of known cadmium-impacted soils to the area proximal to boring B2 (monitoring well MW102), i.e. in the former plating room/wastewater treatment area. Assuming a volume of cadmium-impacted soils centered on B2 measuring approximately 30 feet by 30 feet by 7 feet deep, then the impacted mass of soils would be on the order of 230 cubic yards, equivalent to 300 tons of soil at 1.4 tons/cubic yard. This volume estimate is an approximation based on data for cadmium concentrations in proximal borings which help to constrain the limits of the impacted area.

The source of the cyanide detected in Site groundwater at one location sampled as part of the ESA (MW102) is likely associated with previous on-site industrial operations, and based on its location centered on MW102 the area of impacts may generally be co-located with soils impacted by cadmium beneath the former plating room/wastewater treatment areas. Removal and proper disposal of the cadmium impacted soils would also lessen any co-located cyanide source and would be likely to lessen the time to achieve AGQS for cyanide.

As noted above, 1,2-DCE was not detected in monitoring wells in or proximal to the former plating room/wastewater treatment area where slightly elevated PCE concentrations were detected. This finding may indicate a separate on-site low-level source of PCE as compared to the PCE detected in samples from the on-site upgradient monitoring wells and nearby off-site upgradient well, where 1,2-DCE is present. The two modest plumes, a possible low-level (below AGQS) off-site plume migrating onto the Site and a possible low-level (slightly exceeding AGQS) plume from an on-site source, likely comingle as groundwater flows from northwest to southeast across the Site.

Because very low level PCE AGQS violations have been documented and no residual source mass has been identified in Site soils, it is possible that a "monitoring only" remedial approach to remediation could be supported for PCE impacts to groundwater.

AOC C—Delineation of Polynuclear Aromatic Hydrocarbons in Soil / Further Investigation of Petroleum in Groundwater

The area of creosote-impacted soils (characterized by elevated PAH concentrations and creosote odor) off the southwest corner of the Site building and beneath a portion of the building in that area is estimated to cover approximately 8,500 square feet and for most borings appears to be most pronounced in a relatively thin layer, less than 2 feet thick, just below paving. Spot locations (B12 and perhaps B111) appeared to have a greater thickness of impacted soils. Based on the available information, the estimated mass of impacted soils is likely on the order of 1,000 tons.

It is unclear whether the area of PAH soil impacts near the inactive heating oil AST (at B22 and B5) are related to oil storage or fill materials, but dissolved naphthalene detected in the Phase II ESA sampling at MW105 (installed in B5) suggest a possible petroleum source. Borings B114 and B115 appear to constrain the lateral extent of soils impacts. If the area of soil impacts extends up to and beneath the AST building and is limited vertically by the presence of groundwater, then the volume of impacted soils is likely on the order of 350 cubic yards, with an estimated mass of approximately 500 tons.

To assess further the naphthalene impacts to groundwater as was previously documented in the sample collected from exterior monitoring well MW108, groundwater quality was evaluated by collecting groundwater samples from newly installed monitoring well MW204 and existing monitoring well MW108.

Because no petroleum or creosote-related AGQS violations were noted in this sampling round it is possible that a remedial approach could allow for much of the creosote-impacted and heating oil impacted soils to remain in place under an Activity and Use Restriction, depending in part on future land use. Targeted removal and proper disposal of "hot spots" or soils generated during site redevelopment and not approved for on-site re-use is anticipated.

PAH impacted soils are also present at other locations on Site including the former railroad corridor and in urban fill soils. These were not investigated further in this Supplemental Phase II ESA but could be left in place based on no groundwater impacts and likely exemption from regulation under Env-Or 600 as coal combustion residuals.

5.0 QUALITY ANALYSIS/QUALITY CONTROL

The contracted laboratory, Alpha, provided Level II analytical data according to U.S. EPA protocols and U.S. EPA laboratory data validation guidance as required by Ransom's SSQAPP for Tier I Plus data review. Alpha provided the following information in analytical reports:

- 1. Data results sheets;
- 2. Method blank results;
- 3. Surrogate recoveries and acceptance limits;
- 4. Duplicate results/acceptance limits;
- 5. Spike/duplicate results/acceptance limits;
- 6. Laboratory control sample results;
- 7. Description of analytical methods and results; and
- 8. Other pertinent results/limits as deemed appropriate.

As outlined in the SSQAPP, at the completion of the field tasks and subsequent to receipt of the analytical results, a data usability analysis was conducted to document the precision, bias, accuracy, representativeness, comparability, and completeness of the results. The following sections present this analysis. A summary of duplicate sample analytical results is included in Table 5 (for soil) and Table 6 (for groundwater).

5.1 Precision

Precision measures the reproducibility of measurements. The precision measurement is established using the relative percent difference (RPD) between the duplicate sample results. Relative percent differences were calculated for samples where both sample and duplicate values were greater than five times the Practical Quantitation Limit (PQL) of the analyte. The RPD is calculated as follows:

$$RPD = \underline{\text{(Sample Result - Duplicate Result)}} \times 100$$

$$Mean of the Two Results$$

Precision of the sampling and analytical results is considered acceptable if the RPDs are less than or equal to 50% for soil samples or 35% for aqueous samples.

Duplicate soil samples were collected from soil boring B103-S2 (designated "DUP3"; analyzed for 13 PPMs and cyanide) and from B111-0.5' (designated "DUP2"; analyzed for VOCs, PAHs, TPH-DRO and GC-FID Chromatogram (fingerprint)). Duplicate groundwater samples were collected from monitoring wells MW108 (VOCs) and MW203 (13 PPMs and cyanide). Duplicate soil and groundwater samples are detailed in Table 5 and Table 6, respectively.

B111-0.5' / DUP3

One VOC was detected at concentrations greater than five times the PQL for the analytes for this soil sample pair. The RPD for this VOC (naphthalene) was 6%; therefore, the precision of this sample result is acceptable because the RPD is below the 50% limit for soil duplicates.

Thirteen PAHs were detected at concentrations greater than five times the PQL for the analytes. The RPDs for the PAHs ranged from 5% to 24%; therefore, the precision of these sample results is acceptable because the RPDs are below the 50% limit for soil duplicates.

The RPD was 80% for TPH-DRO for the soil sample pair B111-0.5' and DUP3, which is outside of the acceptable 50% allowance. This result is likely due to sample heterogeneity for this grossly contaminated sample; however, the result is not inferred to adversely affect data usability because the lower of the two concentrations was over 2X the SRS for TPH-DRO.

B103-S2 / DUP2

Total cyanide was not detected therefore an RPD could not be calculated for this soil sample pair.

Four metals were detected at concentrations greater than five times the PQL for the analytes. The RPDs for the detected PPMs ranged from 3% to 38%; therefore, the precision of these sample results is acceptable because the RPDs are below the 50% limit for soil duplicates.

MW108 / DUP-1

One VOC was detected at concentration greater than five times the PQL for the analyte. The RPD for this VOC (naphthalene) was 11%; therefore, the precision of this sample result is acceptable because the RPDs is below the 35% limit for the groundwater duplicates.

MW203 / DUP-2

Total cyanide was not detected; therefore, a total cyanide RPD could not be calculated for this groundwater sample pair.

Dissolved metals were not detected above 5x the PQL, therefore, dissolved metal RPDs could not be calculated for this groundwater sample pair.

5.2 Bias

Bias is the systematic or persistent distortion of a measurement process that causes errors in one direction. Bias assessments are made using personnel, equipment, and spiking materials or reference materials as independent as possible from those used in the calibration of the measurement system. Bias assessments were based on the analysis of spiked samples so that the effect of the matrix on recovery is incorporated into the assessment. A documented spiking protocol and consistency in following that protocol are important to obtaining meaningful data quality estimates.

Matrix spike and matrix spike duplicate samples (MS/MSD) were used to assess bias as prescribed in the specified methods. Unless specified in the notes below for each analytic method and media, acceptable recovery values were within the recoveries specified by each of the analysis methods. Laboratory control samples for assessing bias were analyzed at a rate as specified in the analytical SOPs and specified analytical methods.

The lab provides quality control non-conformance reports that indicate if Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD) and/or MS/MSD had low, failing, or high recoveries and if the sample result was affected. Likewise, the lab reports any compounds that had failing RPDs in the LCS/LCSD pair or the MS/MSD pair. This indicates the percent difference between the lab sample and its duplicate or the spike and its duplicate. Specific comments from the laboratory and LCS/LCSD results meriting discussion are provided below for each analytical method and media. Quantitative significance of detections below PQLs are not discussed.

Method blanks are run by the laboratory to assess contamination resulting from the complete preparation and analytical procedure. Trip blanks can assess for aggregate contamination associated with sources associated with transportation and handling, as well as the complete preparation and analytical procedure. Detections at concentrations above PQLs associated with method blanks or trip blanks are included in the discussions below.

5.2.1 Volatile Organic Compounds

Soil

For up to six compounds (chloromethane, acetone, 2-butanone, 2-hexanone, tetrahydrofuran, and isopropyl ether), the percent recovery was slightly outside of the laboratory's percent recovery limits (ranging from 69 to 153%) compared to laboratory criteria (typically 70 to 130%) for the LCS/LCSD pair for the low level and high-level extraction analyses as documented in the soil laboratory reports. None of the compounds are COCs for the Site, and if detected the results would be biased slightly high or low, but well below applicable SRSs; therefore, no adverse effect on data usability is inferred. The RPD for one VOC (tert-butyl alcohol, TBA) in the Batch WG1280700-3 and WG1280700-04 LCS/LCSD pair was high at 50% compared to the laboratory criteria of 20% (laboratory report L1926634). TBA was detected in many Site soil samples, but because it has only been detected at very low concentrations (100X less than the SRS), no adverse effect on data usability is inferred.

L1926634-06 (Trip Blank): The Trip Blank has results for acetone and tert-butyl alcohol present above the reporting limits (PQLs). The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carryover.

L1926197-11 (Trip Blank): The Trip Blank has results for acetone and tert-butyl alcohol present above the reporting limits (PQLs). The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carryover.

L1926969-05 (Trip Blank): The Trip Blank has results for acetone, ethyl ether, and tert-butyl alcohol present above the reporting limits (PQLs). The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carryover.

The noted low-level method blank and trip blank detections likely point to a sample preservative source of contamination; however, at these very low concentrations, well under the AGQSs for the analytes, the usability of the data in not adversely effected. These analytes, as well as methyl tertiary butyl ether and 2-butanone, were detected in many of the groundwater samples at similar very low concentrations, which corroborates a likely low-level contaminant, perhaps in the sample preservative.

Groundwater

For trans 1,3-dichloropropene and TBA, the percent recovery was slightly outside of the laboratory's percent recovery limits (ranging from 69 to 134%) compared to laboratory criteria (70 to 130%) for the LCS/LCSD pair as documented in the groundwater laboratory report. Neither of the compounds are COCs for the Site, and if detected the results would be biased slightly high or low, but well below applicable AGQSs; therefore, no adverse effect on data usability is inferred. The RPD for two VOCs (2,2-dichloropropane and TBA) in the Batch WG1280700-3 and WG1280700-04 LCS/LCSD pair was high at 34% and 50%, respectively, compared to the laboratory criteria of 20%. Neither compound was detected in Site groundwater samples and 2,2-dichloropropane does not have an AGQS or an MCL; therefore, no adverse effect on data usability is inferred.

5.3 Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error (variability due to imprecision) and systemic error. It therefore reflects the total error associated with a measurement. A measurement is accurate when the value reported does not differ from the true value or known concentration of the spike or standard. For VOCs, surrogate compound recoveries are also used to assess accuracy and method performance for each sample analyzed. Analysis of performance evaluation samples will also be used to provide additional information for assessing the accuracy of the analytical data being produced. Both accuracy and precision are calculated for each analytical batch, and the associated sample results are interpreted by considering these specific measurements.

The laboratory provides a non-conformance summary that reports if all of the quality control criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for analysis were within acceptable limits. According to the laboratory, unless noted in the non-conformance summary, all of the quality control criteria for these analyses were within acceptable limits.

Estimated concentrations are reported with a "J" flag designation by the laboratory for analytes that are detected at concentrations below the PQL (also called the Reporting Limit) but above the method detection limit. J flagged results are noted in the summary tables of this Supplemental Phase II ESA as well as in the laboratory reports.

5.3.1 Semi-Volatile Organic Compounds

Soil

L1926197-10 (sample B111-0.5'): The sample has elevated detection limits due to the limited sample volume utilized during the extraction and due to the dilution required by the sample matrix.

L1926197-10 (sample B111-0.5'): The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1926969-04 (sample DUP3): The sample has elevated detection limits due to the dilution required by the sample matrix.

L1926969-04 (sample DUP3): The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Due to the elevated detected contaminant levels in the above referenced sample pair, i.e. concentrations well above SRSs, potential inaccuracies indicated by low surrogate recoveries or elevated detection limits do not have an adverse effect on data usability.

5.3.2 Total Petroleum Hydrocarbons-Diesel Range Organics

Soil

L1926969-04 (sample DUP3): The surrogate recovery is below the acceptance criteria for oterphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Due to the elevated detected contaminant levels in the above referenced sample, i.e. concentrations well above SRSs, potential inaccuracies indicated by low surrogate recoveries do not have an adverse effect on data usability.

5.3.3 Metals

Groundwater

L1939565-06 and -09 (samples MW203 and DUP-2, respectively): The sample was received above the appropriate pH for the Dissolved Metals analysis. The laboratory added HNO3 to a pH <2. Because the samples were received by the laboratory the same day they were collected, any necessary adjustments to pH by the laboratory were timely, and de minimis impact on results is anticipated. Detected concentrations of metals were more than 10x less than the AGQSs; therefore, it is unlikely that data usability was adversely affected.

5.4 Representativeness

Objectives for representativeness are defined for each sampling and analysis task and are a function of the investigative objectives. Representativeness was accomplished during this project through use of standard field, sampling, and analytical procedures.

5.5 Comparability

Comparability is the confidence with which one data set can be compared to another data set. The objective for this quality assurance/quality control (QA/QC) program is to produce data with the greatest possible degree of comparability. Comparability was achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions and using standard and comprehensive reporting formats. Complete field documentation was used, including standardized data collection forms to support the assessment of comparability. Historical comparability shall be achieved through consistent use of methods and documentation procedures throughout the project.

5.6 Completeness

Completeness is calculated by comparing the number of samples successfully analyzed to the number of samples collected. The goal for completeness is 95 percent. The completeness for this project was 100 percent, as there were no samples that could not be analyzed due to holding time violations, samples spilled or broken, or any other reason.

5.7 Project Quantitation Limits

Project specific PQLs were developed for the SSQAPP to ensure analytical results would meet relevant applicable standards.

For one soil sample, B111-0.5', analyte PQLs did exceed the applicable standards for certain VOCs. For this sample the elevated PQLs were due to sample dilution due to matrix interferences encountered during analyses. This outcome did not affect the usability of the data because the sample was highly contaminated and target analytes were detected above PQLs that allowed for interpretation of the sample as "contaminated" and exceeding SRSs for benzene and naphthalene.

6.0 CONCLUSIONS

Based on the information collected as part of this Supplemental Phase II ESA, the spatial extent and nature of the previously detected releases of PCE, metals (cadmium), cyanide, heavy oil/creosote, and heating oil were better defined, and Ransom concludes the following:

- 1. AOC A—PCE Impacts to Groundwater. Relatively low concentrations of dissolved PCE are inferred to be migrating onto the Site with groundwater, from the northwest. Groundwater associated with this plume does not, at present, exceed the AGQS for PCE and is inferred to be separate from a low-level on-site plume also with minor (in concentration and extent) PCE impacts. No residual PCE source area, i.e. no soils with SRS exceedances, have been identified, but impacted groundwater does slightly exceed the PCE AGQS (MW104, and intermittently MW102) and is likely associated with past Site industrial activities.
- 2. AOC B—Further Investigation of Cadmium, Cyanide, and PCE Impacts. No source area concentrations of PPMs (namely cadmium) or cyanide have been documented in soils collected and analyzed from borings proximal to B2/MW102 which suggests a localized source centered on the boring B2 location beneath the former plating room. A remedial approach involving the removal and proper disposal of the cadmium-impacted soils would also lessen any co-located cyanide source and would be likely to lessen the time to achieve AGQS for cyanide. At present, human contact exposure risks relative to impacted soils are mitigated due to the inaccessibility of soils beneath the building.

A relatively minor PCE source proximal to the former plating room and wastewater treatment area is inferred based on no SRS exceedances for PCE detected in soils samples, and a localized plume with primarily PCE detected and generally little to no 1,2-DCE which is inferred to differentiate this localized plume from low-level impacted groundwater migrating onto the site. Based on the spatial distribution of PCE impacts to groundwater as well as documented land use history, it is likely that the detected PCE is associated with past industrial operations. Consideration of a remedial approach involving a monitoring-only management of the low-level PCE impacts to groundwater is warranted. There is no consumptive use of groundwater at the Site or proximal to the Site.

3. AOC C—Delineation of PAH in Soil / Further Investigation of Petroleum in Groundwater. The extent of PAHs (and in one location, VOCs) in Site soils above SRSs has been delineated in shallow fill soils in the general area of the southeast corner of the building and appears to be associated with creosote or coal tar type impacts to shallow soils beneath paving and a portion of the building. PAH impacts above SRSs were also noted in fill soils off the east side of the inactive heating oil AST (a possible oil release), and have previously been identified proximal to a sewer manhole (possible urban fill) near boring B3 and in shallow surface soils along the north-abutting railroad corridor (coal combustion residuals). Because no impacts to groundwater exceeding AGQS have been identified for PAHs (or the associated VOCs) much of these soils could remain in place under an Activity and Use Restriction (AUR) where regulated (for a creosote or oil source); however, it is probable that the NH DES will require removal of soils with naphthalene concentrations above leaching-based standards. Where not strictly regulated (urban fill or coal combustion residual source), soils could also be left in place and would not require management under an AUR, although joint management with regulated soils under an a comprehensive AUR is prudent. Targeted hot-spot soils, where encountered,

and disturbed soils not approved for on-site re-use by the NH DES would require proper management, characterization, and off-site disposal. At present, with the exception of inferred unregulated soils along the railroad corridor, human contact exposure risks relative to impacted soils are mitigated due to the inaccessibility of soils beneath the building and parking lot.

7.0 RECOMMENDATIONS

Based on the data collected during this Supplemental Phase II ESA, Ransom recommends the following relative to identified AOCs and the findings of this investigation:

- 1. Assessment of soils beneath the inactive heating oil AST in coordination with the removal and closure of that system in compliance with Env-Or 300 (and coordinated proper management/abatement of the assumed asbestos containing vermiculite insulation in that building in compliance with applicable NH DES rules).
- 2. Several additional borings are warranted to confirm the spatial extent of PAH impacted soils near the southwest portion of the building.
- 3. If the eastern portion of the property is to be part of a possible re-use plan, then additional assessment of that portion of the property not previously assessed is warranted, including at a minimum beneath the east portion of the building and adjacent to the electrical transformers as part of environmental due diligence.
- 4. A remedial action plan should be completed consistent with the requirements of Env-Or 600, which could include monitoring of attenuation, management of certain soils in place under an AUR and/or limited soils removal and disposal.
- 5. Groundwater monitoring under a Groundwater Management Permit will be required for impacts to groundwater above AGQSs. An additional round of groundwater sampling is recommended to help to clarify which wells should be included in future monitoring events.
- 6. A soils management plan should be completed and approved by the NH DES for soils management during Site redevelopment.
- 7. In coordination with Site redevelopment, and appropriate pre-acquisition environmental due diligence, application should be made to the NH Brownfields Covenant Program to provide additional liability relief.

9.0 REFERENCES

- 1. Ransom November 2017; Phase I Environmental Site Assessment, 39 Webster Street, Jaffrey, New Hampshire.
- 2. Ransom March 2019; Phase II Environmental Site Assessment, 39 Webster Street, Jaffrey, New Hampshire.
- 3. NH DES Env-Or 600 Soil Remediation Standards and Ambient Groundwater Quality Standards, Revised September 1, 2018.
- 4. NH DES Risk Characterization and Management Policy, Method 1 Soil Standards, Updated February 2013.
- 5. U.S. EPA; November 2018; Maximum Contaminant Levels.
- 6. U.S. EPA; November 2018; Regional Screening Levels.
- 7. NH DES OneStop Database.
- 8. Ransom; dated May 14 (fully executed May 17), 2019; Site-Specific Quality Assurance Project Plan –Supplemental Phase II Environmental Site Assessment, W. W. Cross Site, Jaffrey, New Hampshire; RFA #17091, Addendum No. 10, Rev. 1 to the State of New Hampshire Brownfields Assessment Projects Generic Quality Assurance Project Plan.
- 9. NH DES Env-Or 300 Aboveground Petroleum Storage Facilities, Revised February 7, 2014.

10.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Ransom performed services in a manner consistent with the guidelines set forth in the ASTM International E 1903-97, and in accordance with the scope of work and standard operating procedures outlined in the Generic QAPP and SSQAPP.

The following Ransom personnel possess the sufficient training and experience necessary to conduct a Phase II ESA, and from the information generated by such activities, have the ability to develop opinions and conclusions regarding recognized environmental conditions in connection with the Site.

Environmental Professionals:

Sani A. Best

Bonr	110	\mathbf{D}_{Δ}	~+
DOLL	116		×I.

Environmental Scientist

John M. Ouells

John M. Ouellette

Project Manager

Stephen Dyer, P.E.

Senior Engineer/ QA/QC Manager

Steven Rickerich, P.G.

Senior Geologist/ Program Manager / Principal-in-Charge

TABLE 1. SOIL SAMPLE XRF FIELD SCREENING RESULTS

W.W. Cross Property 39 Webster Street Jaffrey, New Hampshire

March Marc	Hg Hg lercury) Error/LOD (r/LOD (Zinc) Error/LOD
10 10 10 10 10 10 10 10	/	/ 100 16	400	180	89	1,000
Sign			_	< LOD 11 < LOD 9		12 44 ±22
18				< LOD 9 < LOD 11		12 < LOD 28 13 < LOD 29
Sec C				< LOD 9		11 < LOD 26
March Marc				< LOD 10		12 < LOD 27
1.1 1.2 1.2 1.2 1.0 1.2 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0				< LOD 10		12 37 ±22
## ## ## ## ## ## ## ## ## ## ## ## ##	< LOD 18	< LOD 18		< LOD 9	< LOD 1:	11 < LOD 31
12	< LOD 14	< LOD 14	< LOD 91	< LOD 10	< LOD 1:	11 51 ±23
100 15 100 15	< LOD 17	< LOD 17	< LOD 91	< LOD 11	< LOD 13	13 33 ±21
\$1			_	< LOD 10	< LOD 12	
SS			_	< LOD 10		12 < LOD 27
6/20/2019 1004 101				< LOD 11		11 59 ±25
\$2				< LOD 9		10 < LOD 30
\$\frac{1}{600}\f				< LOD 9 < LOD 11		12 < LOD 30 12 104 ±30
\$\frac{907099}{9105}\$ \frac{950}{910}\$ \				<lod 11<="" td=""><td>< LOD 12</td><td></td></lod>	< LOD 12	
\$\frac{915}{520}\$ \$0056\$ \$\frac{11}{12}\$ \$\frac{1}{2}\$ \$\frac{1}{3}\$ \$\frac{1}{4}\$ \$\f				< LOD 9	< LOD 12	
Part				_	_	.73 34.55 6.52
679/2019 9107 51					<lod 5.6<="" td=""><td></td></lod>	
10 10 12 13 14 14 15 16 17 15 17 15 17 15 18 18 19 11 15 16 17 15 17 15 18 18 18 19 11 15 16 18 18 19 11 15 16 10 16 16 16 16 17 16 16 17 16 16				< LOD 9		12 < LOD 26
S2				< LOD 11	< LOD 12	
S2	< LOD 17	< LOD 17	< LOD 94	< LOD 11	< LOD 12	12 < LOD 28
S3-6	< LOD 16	< LOD 16	< LOD 97	< LOD 10	< LOD 14	14 < LOD 28
S3-C				< LOD 9	< LOD 12	
S4A 6-8			_	< LOD 7	< LOD 8	
S4-8			_	< LOD 9		12 < LOD 22
S5A				< LOD 10		11 < LOD 30
S5-8				< LOD 8		11 < LOD 22
Section Sect				< LOD 9 < LOD 9		10 < LOD 25
Since Sinc				< LOD 9 < LOD 8		12 < LOD 27 12 < LOD 25
S2				<lod 8<="" td=""><td></td><td>12 < LOD 25</td></lod>		12 < LOD 25
S3				<lod 11<="" td=""><td></td><td>12 < LOD 28</td></lod>		12 < LOD 28
S4				< LOD 10		12 < LOD 27
S5				<lod 9<="" td=""><td>< LOD 12</td><td></td></lod>	< LOD 12	
	< LOD 16	< LOD 16	< LOD 83	< LOD 9	< LOD 1:	11 < LOD 22
S2	< LOD 15	< LOD 15	< LOD 84	< LOD 10	< LOD 12	12 29 ±19
S3	< LOD 18	< LOD 18	< LOD 93	< LOD 10	< LOD 13	13 43 ±23
S4				< LOD 10		12 < LOD 30
S			_	< LOD 8	< LOD 11	
6/20/2019 8111 52 2 - 4				< LOD 9		12 < LOD 23
S3				< LOD 7		12 < LOD 25
S4				< LOD 12	< LOD 12	
S5				< LOD 10 < LOD 8	< LOD 1:	
S6				< LOD 8 < LOD 9		11 29 ±18 12 < LOD 24
8/15/2019 8113				< LOD 9	< LOD 12	
S2				_		.94 47.73 7.17
S3					<lod 5.9<="" td=""><td></td></lod>	
S1-A						.68 34.71 6.34
S1-B	<lod 5.49<="" td=""><td><lod 5.49<="" td=""><td><lod 27.83<="" td=""><td><lod 2.36<="" td=""><td><lod 5.6<="" td=""><td>64 39.43 6.56</td></lod></td></lod></td></lod></td></lod></td></lod>	<lod 5.49<="" td=""><td><lod 27.83<="" td=""><td><lod 2.36<="" td=""><td><lod 5.6<="" td=""><td>64 39.43 6.56</td></lod></td></lod></td></lod></td></lod>	<lod 27.83<="" td=""><td><lod 2.36<="" td=""><td><lod 5.6<="" td=""><td>64 39.43 6.56</td></lod></td></lod></td></lod>	<lod 2.36<="" td=""><td><lod 5.6<="" td=""><td>64 39.43 6.56</td></lod></td></lod>	<lod 5.6<="" td=""><td>64 39.43 6.56</td></lod>	64 39.43 6.56
S2	< LOD 19	< LOD 19	< LOD 96	< LOD 12	< LOD 13	13 < LOD 33
S3	< LOD 17	< LOD 17	< LOD 96	< LOD 14	< LOD 12	12 238 ±42
S4 6-8				< LOD 10		12 88 ±28
S5				< LOD 9	< LOD 11	
S6				< LOD 7		11 < LOD 25
6/20/2019 B115 S1 1-3				<lod 10<="" td=""><td></td><td>11 59 ±25</td></lod>		11 59 ±25
\$2				<lod 11<="" td=""><td></td><td>13 50 ±23 12 39 ±21</td></lod>		13 50 ±23 12 39 ±21
S3 5-7 < LOD 22 < LOD 14 < LOD 14 < LOD 78 < LOD 40 < LOD 20 < LOD 12 < LOD S4 7-9 < LOD				< LOD 10 < LOD 12		12 39 ±21 12 64 ±25
S4 7-9 < LOD				<lod 12<="" td=""><td>< LOD 1.</td><td></td></lod>	< LOD 1.	
S5 9-10 < LOD 24 < LOD 17 < LOD 15 74 ±47 < LOD 43 < LOD 21 < LOD 16 < LOD				<lod 8<="" td=""><td></td><td>13 46 ±23</td></lod>		13 46 ±23
S6 10-12 <lod 15="" 16="" 19="" 24="" 40="" 66="" <lod="" <lod<="" td=""><td></td><td></td><td></td><td><lod 8<="" td=""><td></td><td>15 40 123 11 48 ±23</td></lod></td></lod>				<lod 8<="" td=""><td></td><td>15 40 123 11 48 ±23</td></lod>		15 40 123 11 48 ±23
				<lod 10<="" td=""><td></td><td>12 < LOD 30</td></lod>		12 < LOD 30
8/15/2019 B116 S1 0-2 < LOD 16.11 < LOD 6.17 < LOD 9.42 < LOD 108.4 < LOD 16.13 16.32 5.55 < LOD 5.95 < LOD			<lod 29.59<="" td=""><td></td><td></td><td>.09 39.38 6.94</td></lod>			.09 39.38 6.94
52 2 - 4 <iod 14.92="" 15.05="" 4.95="" 5.42="" 5.58="" 8.82="" 9.3="" 97.2="" <iod="" <iod<="" td=""><td></td><td></td><td></td><td></td><td></td><td>.69 44.97 6.83</td></iod>						.69 44.97 6.83
8/15/2019 B117 S1 0-2 <lod 15.11="" 15.81="" 3.6="" 5.71="" 6="" 7.06="" 8.82="" 9.97="" 92.81="" <lod="" <lod<="" td=""><td></td><td></td><td></td><td></td><td><lod 5.6<="" td=""><td></td></lod></td></lod>					<lod 5.6<="" td=""><td></td></lod>	
S2 2-4 <lod 13.77="" 14.61="" 5="" 5.39="" 6.77="" 8.62="" 95.41="" <lod="" <lod<="" td=""><td></td><td></td><td></td><td></td><td></td><td>.53 30.89 5.98</td></lod>						.53 30.89 5.98

Notes:

- 1 Concentrations are in parts per million (milligrams per kilogram).
- 2 LOD = Limit of Detection; < = less than.
- 3 Instrument degree of measurement accuracy indicated by $\pm\,\text{value}$ by metal and sample.
- 4 Sample depth is in feet below ground surface.
- 5 Samples indicated in **bold** and *italics* were submitted for laboratory analyses for one or more parameters.
- 6 Values highlighted in yellow exceed the SRS for that metal.
- 7 Cr SRS is 130 for hexavalent Cr and 1,000 for trivalent Cr; for exceedance designation, Cr is inferred to be trivalent.

141.05051.010 Ransom Consulting, Inc.

TABLE 2. SOIL SAMPLE ANALYTICAL RESULTS W. W. Cross Property Jaffrey, New Hampshire

	Jaffrey, New Ha	mpshire																							
Phase II ESA Area of Concern														AOC 1 //A	/astewater Disp	ocal System) /	AOC 2 (Formo	r Plating Area)							
Supplemental Phase II ESA Area of Concern	NH DES Soil	NH DES	NH DES	NH DES	US EPA R								AOC C	A00 1 (N	AOC A	osai System) /	AOC A	AOC A	AOC A	AOC A	AOC A/B	AOC C	AOC C	AOC C	AOC A
Sample Location	Remediation	RCMP	RCMP	RCMP	Screening Lev		B1-S2	B2-S3	B2-S4	B3-S2	B3-S3	B9-S2	B12-S2	B13-S5	B14-S2	B15-S4	B16-S4	B17-S3	B18-S3	B19-S2	B103-S2	B104-S3	B105-S1	B107-S2	B113-S4
Sample Depth (feet bgs)	Standards	Method 1 NH S-1	Method 1 NH S-2	Method 1 NH S-3	for S	OII	2.5-5.0	5-7.5	7.5-9.0	2.5-5.0	5.0-8.0	2.5-5.0	2.5-5.0	10-12.5	2.0-4.0	8.0-10	7.5-10	5.0-8.0	5.0-7.5	2.5-5.0	2.0-4.0	4.0-4.2	0.5-2.5	2.0-4.0	6.0-8.0
	(SRS)	Standards	Standards	Standards			2.5-5.0	5-7.5	7.5-9.0	2.5-5.0	5.0-6.0	2.5-5.0	2.5-5.0	10-12.5	2.0-4.0	6.0-10	7.5-10	5.0-6.0	5.0-7.5	2.5-5.0	2.0-4.0	4.0-4.2	0.5-2.5	2.0-4.0	6.0-6.0
Sample Date					Residential	Industrial	8/15/2018	8/17/2018	8/17/2018	8/16/2018	8/16/2018	8/15/2018	8/16/2018	8/15/2018	8/16/2018	8//16/2018	8/15/2018	8/15/2018	8/15/2018	8/15/2018	6/19/2019	6/18/2019	6/18/2019	6/18/2019	8/12/2019
Volatile Organic Compounds (VOCs) (mg/kg)																									
Methylene chloride	0.1	0.1	0.1	0.1	57	1,000	BDL(0.00034)	NA	BDL(0.0026)	NA	BDL(0.0028)	BDL(0.0035)	BDL(0.21)	BDL(0.0025)) BDL(0.0033)	0.0015 J	BDL(0.0030)	BDL(0.0030)	BDL(0.0029)	BDL(0.0041)	BDL(0.005)	NA	BDL(0.0049)	BDL(0.0046)	BDL(0.0032)
Tetrachloroethene (PCE)	2.0	2.0	2.0	2.0	24	100	BDL(0.00034)	NA	BDL(0.00026)	NA	0.0017	BDL(0.00035)	()	BDL(0.00025	,	BDL(0.00031)		, ,	, , ,	BDL(0.00041)	BDL(0.0005	,	. ,	BDL(0.00046)	, ,
Chlorobenzene Trichloroethene (TCE)	6 0.8	6 0.8	0.8	6 0.8	280 0.94	1,300	BDL(0.00034) BDL(0.00034)	NA NA	BDL(0.00026) BDL(0.00026)	NA NA	, ,	BDL(0.00035)	, ,	,	b) BDL(0.00033) b) BDL(0.00033)			, ,	, , ,	BDL(0.00041)	•	,	. ,	BDL(0.00046) BDL(0.00046)	, , ,
1,2-Dichlorobenzene	88	88	88	88	1,800	9,300	BDL(0.0014)	NA	BDL(0.0010)	NA	BDL(0.0011)	BDL(0.0014)	. ,		, ,	BDL(0.0012)	BLD(0.0012)	BDL(0.0012)	BDL(0.012)	BDL(0.0016)	BDL(0.002)	NA NA	BDL(0.002)	BDL(0.0018)	, ,
1,3-Dichlorobenzene	150	150	150	150	NS	NS	BDL(0.0014)	NA	BDL(0.0010)	NA	BDL(0.0011)	BDL(0.0014)	(BDL(0.0010)	, (,	. ,	,	. ,	. ,	BDL(0.0016)	BDL(0.002)		BDL(0.002)	BDL(0.0018)	
1,4-Dichlorobenzene Benzene	0.3	0.3	0.3	7 0.3	2.6 1.2	11 5.1	BDL(0.0014) BDL(0.00034)	NA NA	BDL(0.0010) BDL(0.00026)	NA NA	BDL(0.0011)	BDL(0.0014) BDL(0.00035)	(/	(0.00.00)	, , , , , ,	(/	BLD(0.0012) BDL(0.00030)	(, , , ,	BDL(0.012) BDL(0.00029)	BDL(0.0016)	BDL(0.002)	NA NA	BDL(0.002)	BDL(0.0018) BDL(0.00046)	. ,
Toluene	100	100	100	100	4,900	47,000	BDL(0.00034)	NA	BDL(0.00020)	NA NA	, ,	BDL(0.00033)	, ,	BDL(0.00050			BDL(0.00030)	, ,) BDL(0.00029)	(NA NA	(/	BDL(0.00040)	, (
Ethylbenzene	120	120	140	140	5.8	25	BDL(0.0068)	NA	BDL(0.00052)	NA	, ,	BDL(0.00069)	0.033 J	,) BDL(0.00065	BDL(0.00062)	BDL(0.00060)) BDL(0.0024)	BDL(0.00058)	BDL(0.00082		NA	BDL(0.00098)	BDL(0.00091)) BDL(0.00065)
p/m-Xylene	500	500	1,000	1,500	560	2,400	BDL(0.0014)	NA	BDL(0.0010)	NA	BDL(0.0011)	BDL(0.0014)	0.18	BDL(0.0010)	, ,		BDL(0.0012)	, ,	` ′	BDL(0.0016)	BDL(0.002)	NA	BDL(0.002)	BDL(0.0018)	, ,
o-Xylene Yylenes Total	500 500	500 500	1,000	1,500 1,500	650 580	2,800 2,500	BDL(0.0068)	NA NA	BDL(0.00052)	NA NA	,	BDL(0.00069)	0.15) BDL(0.00065)) BDL(0.00065)		,	, ,	BDL(0.00058) BDL(0.00058)		. ,	NA NA	. ,	BDL(0.00091) BDL(0.00091)	, , ,
Xylenes, Total Styrene	17	17	1,000	1,500	6,000	35,000	BDL(0.0068) BDL(0.0068)	NA NA	BDL(0.00052) BDL(0.00052)	NA NA		BDL(0.00069)		,) BDL(0.00065)) BDL(0.00058)) BDL(0.00058)						
Acetone	75	75	75	75	61,000	670,000	BDL(0.0068)	NA	0.0052	NA	. ,	BDL(0.0069)		0.0041 J	BDL(0.00065	BDL(0.0062)	BDL(0.0060)		0.0093	0.0042 J	0.022	NA	0.046	0.0190	0.094
n-Butylbenzene	110	110	110	110	3,900	58,000	BDL(0.0068)	NA	BDL(0.00052)	NA		BDL(0.00069)) BDL(0.00065			BDL(0.00059)		BDL(0.00082		NA NA			
Isopropylbenzene p-Isopropyltoluene	330 NS	330 NS	330 NS	330 NS	NS NS	NS NS	BDL(0.0068) BDL(0.0068)	NA NA	BDL(0.00052) BDL(0.00052)	NA NA	,	BDL(0.00069)	0.0062 J 0.012 J) BDL(0.00065) 0) BDL(0.00065)			, ,	, , ,	BDL(0.00082)	. ,	NA NA	. ,	BDL(0.00091) BDL(0.00091)	, ,
Naphthalene	28	28	28	28	3.8	17	BDL(0.0008)	NA	BDL(0.00032)	NA NA	0.00087 J	BDL(0.00009)	3.1 J	BDL(0.00030		BDL(0.00002)		, ,		BDL(0.00082)			. ,	. ,	, ,
n-Propylbenzene	85	85	85	85	3,800	24,000	BDL(0.0068)	NA	BDL(0.00052)	NA	BDL(0.00057)	BDL(0.00069)	0.029 J	BDL(0.00050) BDL(0.00065	BDL(0.00062)	BDL(0.00060)	BDL(0.00059)) BDL(0.00058)	BDL(0.00082)	BDL(0.001)	NA	BDL(0.00098)	BDL(0.00091)) BDL(0.00065)
1,3,5-Trimethylbenzene	96	96	96	96	270	1,500	BDL(0.0014)	NA	BDL(0.0010)	NA	BDL(0.0011)	,	0.22 J	BDL(0.0010)	, ,	. ,	,		, ,	BDL(0.0016)	BDL(0.002)		BDL(0.002)	BDL(0.0018)	. ,
1,2,4-Trimethylbenzene Methyl tert butyl ether (MtBE)	130 0.2	130 0.2	130 0.2	130 0.2	300 47	1,800 210	BDL(0.0014)	NA 	BDL(0.0010)	NA 	BDL(0.0011)	BDL(0.0014)	0.055 J	BDL(0.0017)) BDL(0.0013)	BDL(0.0012)	BDL(0.0012)	BDL(0.0012)	BDL(0.0012)	BDL(0.0016)	0.00068J	NA NA	BDL(0.002) 0.00067J	BDL(0.0018) 0.00052J	BDL(0.0013) BDL(0.0013)
Diethyl ether (Ethyl Ether)	3,900	3,900	3,900	3,900	16,000	230,000															0.002	NA	0.002	0.0019	0.0084
Tert-Butyl Alcohol (TBA)	2	2	2	2	NS	NS															0.017J	NA	0.016J	0.018	0.015
Ethyl-Tert-Butyl-Ether (ETBE) cis-1,2-Dichloroethene	0.7	0.7	0.7	0.7	NS 160	NS 2,300															BDL(0.002) BDL(0.001)	NA NA	BDL(0.002)	BDL(0.0018)	BDL(0.0013)
1,2-Dichloroethene, Total	NS	NS	NS	NS	NS	2,300 NS															BDL(0.001)	NA NA		. ,) BDL(0.00065)) BDL(0.00065)
2-Butanone	51	51	51	51	27,000	190,000															BDL(0.01)	NA	. ,	BDL(0.0091)	, , ,
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/kg)																									
Acenaphthene	340	340	340	340	3,600	45,000	BDL(0.14)	NA	BDL(0.14)	NA	0.38	BDL(0.14)	16	BDL(0.14)	BDL(0.14)	BDL(0.16)	NA	NA	NA	NA	NA	BDL(0.16)	BDL(0.14)	BDL(0.14)	NA
2-Chloronaphthalene	NS	NS	NS	NS	4,800	60,000	BDL(0.18)	NA	BDL(0.18)	NA	BDL(0.19)	BDL(0.18)	BDL(0.17)	BDL(0.18)	BDL(0.18)	BDL(0.2)	NA	NA	NA	NA	NA	BDL(0.19)	BDL(0.17)	BDL(0.17)	NA
Fluoranthene Naphthalene	960 28	960 28	2,500 28	5,000 28	2,400 3.8	30,000 17	BDL(0.11) BDL(0.18)	NA NA	BDL(0.11) BDL(0.18)	NA NA	4.9 0.26	BDL(0.11) BDL(0.18)	98 14	BDL(0.11) BDL(0.18)	BDL(0.11) BDL(0.18)	BDL(0.12) BDL(0.2)	NA NA	NA NA	NA NA	NA NA	NA NA	0.65 BDL(0.19)	0.17 BDL(0.17)	BDL(0.1) BDL(0.17)	NA NA
Benzo[a]anthracene	1	1	4	52	1.1	21	BDL(0.11)	NA	BDL(0.11)	NA	2.8	BDL(0.11)	43	BDL(0.11)	BDL(0.11)	BDL(0.12)	NA	NA	NA	NA	NA	0.27	0.087J	BDL(0.1)	NA
Benzo[a]pyrene	0.7	0.7	0.7	5	0.11	2.1	BDL(0.14)	NA	BDL(0.14)	NA	2.7	BDL(0.14)	26	BDL(0.14)	BDL(0.14)	BDL(0.16)	NA	NA	NA	NA	NA	0.19	0.057J	BDL(0.14)	NA
Benzo[b]fluoranthene Benzo[k]fluoranthene	1 12	1 12	36	52 520	1.1	21 210	BDL(0.11) BDL(0.11)	NA NA	BDL(0.11) BDL(0.11)	NA NA	3.7 1.3	BDL(0.11) BDL(0.11)	37 13	BDL(0.11) BDL(0.11)	BDL(0.11) BDL(0.11)	BDL(0.12) BDL(0.12)	NA NA	NA NA	NA NA	NA NA	NA NA	0.24 0.11J	0.088J 0.045J	BDL(0.1) BDL(0.1)	NA NA
Chrysene	120	120	360	5,200	110	2,100	BDL(0.11)	NA	BDL(0.11)	NA NA	2.8	BDL(0.11)	40	BDL(0.11)	BDL(0.11)	BDL(0.12)	NA NA	NA NA	NA NA	NA NA	NA NA	0.113	0.043J	BDL(0.1)	NA NA
Acenaphthylene	490	490	490	490	3,600	45,000	BDL(0.14)	NA	BDL(0.14)	NA	0.32	BDL(0.14)	20	BDL(0.14)	BDL(0.14)	BDL(0.16)	NA	NA	NA	NA	NA	0.086J	BDL(0.14)	BDL(0.14)	NA
Anthracene	1,000	1,000	2,500	5,000	18,000	23,000	BDL(0.11)	NA	BDL(0.11)	NA	0.94	BDL(0.11)	37	BDL(0.11)	BDL(0.11)	BDL(0.12)	NA	NA	NA	NA	NA	0.092J	BDL(0.1)	BDL(0.1)	NA
Benzo(g,h,i)perylene Fluorene	NS 77	NS 77	NS 77	NS 77	NS 2,400	NS 30,000	BDL(0.14) BDL(0.18)	NA NA	BDL(0.14) BDL(0.18)	NA NA	1.8 0.41	BDL(0.14) BDL(0.18)	17 34	BDL(0.14) BDL(0.18)	BDL(0.14) BDL(0.18)	BDL(0.16) BDL(0.2)	NA NA	NA NA	NA NA	NA NA	NA NA	0.12J 0.025J	0.046J BDL(0.17)	BDL(0.14) BDL(0.17)	NA NA
Phenanthrene	NS	NS	NS NS	NS	2,400 NS	NS	BDL(0.18)	NA NA	BDL(0.16)	NA NA	3.5	BDL(0.16)	140	BDL(0.16)	BDL(0.16)	BDL(0.2)	NA NA	NA NA	NA NA	NA NA	NA NA	0.0253	0.12	BDL(0.17)	NA NA
Dibenzo[a,h]anthracene	0.7	0.7	0.7	5	0.11	2.1	BDL(0.11)	NA	BDL(0.11)	NA	0.48	BDL(0.11)	4.8	BDL(0.11)	BDL(0.11)	BDL(0.12)	NA	NA	NA	NA	NA	0.022J	BDL(0.1)	BDL(0.1)	NA
Indeno[1,2,3-cd]pyrene	1	1	4	52	1.1	21	BDL(0.14)	NA	BDL(0.14)	NA	1.9	BDL(0.14)	18	BDL(0.14)	BDL(0.14)	BDL(0.16)	NA	NA	NA	NA	NA	0.12J	0.046J	BDL(0.14)	NA
Pyrene 1-Methylnaphthalene	720 NS	720 NS	2,500 NS	5,000 NS	1,800 18	23,000 730	BDL(0.11) BDL(0.18)	NA NA	BDL(0.11) BDL(0.18)	NA NA	4.1 0.12 J	BDL(0.11) BDL(0.18)	84 15	BDL(0.11) BDL(0.18)	BDL(0.11) BDL(0.18)	BDL(0.12) BDL(0.2)	NA NA	NA NA	NA NA	NA NA	NA NA	0.59 BDL(0.19)	0.14 BDL(0.17)	BDL(0.1) BDL(0.17)	NA NA
2-Methylnaphthalene	96	96	100	100	240	3,000	BDL(0.18)	NA NA	BDL(0.18)	NA NA	0.12 J 0.14 J	BDL(0.16)	20	BDL(0.16)	BDL(0.18)	BDL(0.24)	NA NA	NA NA	NA NA	NA NA	NA NA	BDL(0.19)	BDL(0.17) BDL(0.21)	BDL(0.17)	NA NA
Total Cyanide (mg/kg)	•	ш										<u> </u>			· · · · · · · · · · · · · · · · · · ·	· · · · · · ·									
Cyanide	22	22	100	200	23	150	BDL(1)	NA	BDL(1.1)	NA	BDL(0.42)	BDL(0.95)	BDL(1)	BDL(1.1)	BDL(1.1)	BDL(1.1)	BDL(1.1)	BDL(1.1)	BDL(1.2)	BDL(1)	BDL(1)	NA	NA	NA	BDL(1)
Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-D	RO) (ma/ka)																								
TPH-DRO	10,000	10,000	10,000	10,000	NS	NS	26.8 J	NA	BDL(36.4)	NA	324	BDL(32.9)	4,530	BDL(37)	6.01 J	BDL(39)	NA	NA	NA	NA	NA	NA	NA	5.57J	NA
Metals (mg/kg)									· · · · ·																
Antimony	9	9	74	74	31	470	0.669 J	0.668 J	NA	4.1	NA	1.02 J	1 J	1.69 J	1.3 J	1.6 J	1.07 J	0.974 J	1.33 J	1.23 J	0.21 J	NA	NA	NA	BDL(2.05)
Arsenic	11	11	11	47	0.68	3	5.15	7.2	NA	9.73	NA	3.66	4.6	5.13	5.21	5.33	4.13	6.18	20	5.69	4.86	NA	NA	NA	5.09
Beryllium	12	12	89	100	160	2,300	0.459	0.33	NA NA	0.169 J	NA NA	0.266	0.24	0.55	0.361 0.259 J	0.492	0.456 0.309 J	0.388	0.543	0.464 0.228 J	0.354 BDL(0.421)	NA NA	NA NA	NA NA	0.29 BDL(0.409)
Cadmium Chromium, Total	33 130*	33 130*	280 130*	280 130*	71 0.3	980 6.3	0.149 J 4.1	253 8.4	NA NA	17.2 23.7	NA NA	0.184 J 7.91	4.06 8.96	0.314 J 12.2	0.259 J 11.3	10.1	9.26	0.23 J 7.52	0.386 J 12.4	9.38	7.66	NA NA	NA NA	NA NA	6.04
Copper	NS	NS	NS	NS	3,100	47,000	6.06	128	NA	498	NA	7.04	6.42	10.8	9.71	31.2	6.6	33.8	8.42	9.92	7.54	NA	NA	NA	19.40
Lead	400	400	400	400	400	800	3.21	2.9	NA	98.9	NA	2.56	6.43	4.26	5.08	3.46	2.95	3.26	3.48	3.77	2.86	NA	NA	NA	3.58
Mercury Nickel	7 400	7 400	52 2,500	52 3.100	11 820	46 11,000	BDL(0.069)	BDL(0.07)	NA NA	BDL(0.082)	NA NA	BDL(0.065)	BDL(0.086)	BDL(0.071)		BDL(0.077)	BDL(0.078)	BDL(0.072) 4.89	BDL(0.074) 5.94	BDL(0.068)	BDL(0.069)		NA NA	NA NA	BDL(0.067) 3.97
Nickel Selenium	180	180	1,600	3,100 1,600	820 390	5,800	2.72 0.201 J	5.01 BDL(0.868)	NA NA	23 BDL(0.965)	NA NA	5.5 0.34 J	3.93 0.289 J	7.91 0.271 J	6.99 0.476 J	6.11 0.902 J	4.39 0.446 J	0.388 J	5.94 0.566 J	6.25 0.36 J	4.5 BDL(0.842)	NA NA	NA NA	NA NA	3.97 BDL(0.818)
Silver	89	89	690	690	390	5,800	BDL(0.437)	BDL(0.434)		BDL(0.482)		BDL(0.391)	BDL(0.407)			BDL(0.46)	BDL(0.491)	BDL(0.451)	BDL(0.46)	BDL(0.414)	BDL(0.421)		NA	NA	BDL(0.409)
Thallium	10	10	10	10	0.78	12	BDL(0.875)	BDL(0.868)	NA	BDL(0.965)	NA	BDL(0.781)	BDL(0.814)	BDL(0.873)	BDL(0.849)	BDL(0.92)	BDL(0.981)	BDL(0.902)	BDL(0.92)	BDL(0.829)	BDL(0.842)	NA	NA	NA	BDL(0.818)
Zinc	1,000	1,000	2,500	5,000	23,000	350,000	15.8	302	NA	456	NA	14.9	26.5	30.5	20.7	15.6	15.6	19	18.6	20.2	18.8	NA	NA	NA	15.8

Legend:

ACC - Area of Concern (identified in report text)

mg/kg = milligrams per kilogram

BDL() = Below laboratory detection limit shown in parenthesis

J = estimated concentration detected above laboratory detection limit, but below laboratory reporting li blue shaded = finger printed sample

- NOTES:

 1 NH DES Env-Or 600 Soil Remediation Standards, updated September 1, 2018.

 2 NHDES Risk Characterization and Management Policy (RCMP) standards were updated September 2018.

 3 US EPA Regional Screening Levels, updated November 2018, Total Hazard Quotient = 1.

 4 Bold type font and boxed value indicates concentration exceeds the NH DES SRS.

 5 Xylenes SRS listed are for total xylenes (mixed isomers). Total chromium SRS shown is for "worst case" hexavalent chromium.

 6 Concentration values shaded orange indicate RCMP Method 1, NH S-3 standard is exceeded.

 7 Highlighted blue is TPH instead of TPH-DRO

 8 Supplemental Phase II ESA Area of Concern:

 Tetrachloroethylene (PCE) Impacts to Groundwater = Further Investigation of Cadmium. Cyanide, and PCE Impacts =

Tetrachloroethylene (PCE) Impacts to Groundwater = Further Investigation of Cadmium, Cyanide, and PCE Impacts = Delineation of PAHs in Soil / Further Investigation of Petroleum in Groundwater =



TABLE 2. SOIL SAMPLE ANALYTICAL RESULTS W. W. Cross Property Jaffrey, New Hampshire

	Jaffrey, New Ha	ampshire																						
Phase II ESA Area of Concern							AOC 3 (For	ner UST Area)	I	AOC 4 (Inact	tive Fuel Oil AS	T)					AOC 5 (Facil	lity Loading /Lli	nloading Areas					AOC 6 (Off Site Sources)
Supplemental Phase II ESA Area of Concern®	NH DES Soil	NH DES	NH DES	NH DES	US EPA F		AUC 3 (FUII	ilei UST Alea)	AOC C	AOC 4 (IIIact	AOC C	AOC C					AOC C	AOC C	AOC C	AOC C	AOC C	AOC C	AOC C	AOC 8 (OII Site Sources)
Sample Location	Remediation	RCMP	RCMP	RCMP	Screening Le	. ,	B4-S3	B21-S4	B5-S3	B22- S2	B114-S3	B115-S3	B6-S1	B23	B24	B25	B26-S3	B105-S2	B108-S3	B109-S4	B110-S3	B111-0.5'	B117-S1	B101-S1
Sample Depth (feet bgs)	Standards	Method 1 NH S-1	Method 1 NH S-2	Method 1 NH S-3	iors	SOII	5.5-8.0	7.5-10	5.0-8.0	2.5-5.0	4.0-6.0	5.0-7.0	1.0-2.5	0.2-1.5	0.3-1.4	0.2-1.5	5.0-7.5	5.0-8.0	4.0-6.0	6.0-8.0	4.0-6.0	0.0-0.5	0.0-2.0	0.5-2.0
Sample Date	(SRS)	Standards	Standards	Standards	Residential	Industrial	3.3-0.0	7.5-10	3.0-0.0	2.5-5.0	4.0-0.0	3.0-7.0	1.0-2.3	0.2-1.0	0.3-1.4	0.2-1.0	3.0-7.3	3.0-0.0	4.0-0.0	0.0-0.0	4.0-0.0	0.0-0.5	0.0-2.0	0.3-2.0
Sample Date					Residential	iliuustilai	8/15/2018	8/15/2018	8/16/2018	8/16/2018	6/18/2019	6/18/2019	8/16/2018	9/13/2018	9/6/2018	9/6/2018	8/16/2018	8/12/2019	6/18/2019	6/18/2019	6/18/2019	6/18/2019	8/12/2019	6/18/2019
Volatile Organic Compounds (VOCs) (mg/kg)		П								T														
Methylene chloride Tetrachloroethene (PCE)	0.1 2.0	0.1 2.0	2.0	0.1 2.0	57 24	1,000 100	BDL(0.0034)	(,	0.14 J BDL(0.017)	BDL(0.0032) BDL(0.00032	, , ,		0.0023 J BDL(0.00031)	NA) NA	NA NA	NA NA	BDL(0.270 BDL(0.027		BDL(0.0055) BDL(0.00055)			. ,	BDL(0.18) BDL(0.018)	BDL(0.0043) BDL(0.00043)
Chlorobenzene	6	6	6	6	280	1,300	BDL(0.00034	(0.071		P) BDL(0.00037	, ,	BDL(0.00031)) NA	NA	NA		, ,	BDL(0.00055)		,	. ,	. ,	BDL(0.00043)
Trichloroethene (TCE)	0.8	0.8	0.8	0.8	0.94	6		BDL(0.00033	BDL(0.017)		P) BDL(0.00037	, ,	BDL(0.00031)) NA	NA	NA		, ,	BDL(0.00055)		, ,	, ,	. ,	BDL(0.00043)
1,2-Dichlorobenzene 1,3-Dichlorobenzene	88 150	88 150	88 150	88 150	1,800 NS	9,300 NS	BDL(0.0013) BDL(0.0013)	,	0.33 0.016 J	0.0028	BDL(0.0015) BDL(0.0015)	BDL(0.0024)	BDL(0.0012) BDL(0.0012)	NA NA	NA NA	NA NA	BDL(0.110)) BDL(0.0013)) BDL(0.0013)	. ,	. ,		, ,	BDL(0.074) BDL(0.074)	BDL(0.0017) BDL(0.0017)
1,4-Dichlorobenzene	7	7	7	7	2.6	11	BDL(0.0013)	,	0.016 J	BDL(0.0013)	, (,	(/	BDL(0.0012)	NA NA	NA NA	NA NA) BDL(0.0013)	(. ,		, ,	BDL(0.074)	BDL(0.0017)
Benzene	0.3	0.3	0.3	0.3	1.2	5.1	BDL(0.00034	. ,	BDL(0.017)	BDL(0.0013)	BDL(0.00037		BDL(0.00031)) NA	NA	NA			BDL(0.00055)			1.4J	BDL(0.018)	BDL(0.00043)
Toluene	100	100	100	100	4,900	47,000	BDL(0.00067		· · ·	•	BDL(0.00074	, , ,	BDL(0.00062)	,	NA	NA	•	, ,	BDL(0.0011)	,	<i>,</i> , ,	, , ,	` /	BDL(0.00086)
Ethylbenzene p/m-Xylene	120 500	120 500	1,000	140 1,500	5.8 560	25 2,400	BDL(0.00067 BDL(0.0013)		BDL(0.034) BDL(0.069)		BDL(0.00074 BDL(0.0015)	, ,	BDL(0.00062) BDL(0.0012)) NA NA	NA NA	NA NA	BDL (0.054)) BDL(0.00064)) BDL(0.0013)	, ,		<i>,</i> , ,	, , ,	BDL(0.037) BDL(0.074)	BDL(0.00086) BDL(0.0017))
o-Xylene	500	500	1,000	1,500	650	2,800	BDL(0.00067	,	· · ·	, ,	BDL(0.00074	, ,	BDL(0.00062)		NA	NA	0.023 J	BDL(0.00064)	, ,	. ,		4.7J	BDL(0.037)	BDL(0.00086)
Xylenes, Total	500	500	1,000	1,500	580	2,500	BDL(0.00067		, ,	•	BDL(0.00074		BDL(0.00062)	,	NA	NA	0.023 J		BDL(0.0011)	,	,	12J	BDL(0.037)	BDL(0.00086)
Styrene Acetone	17 75	17 75	17 75	17 75	6,000 61,000	35,000 670,000	BLD(0.00067 BDL(0.0067)		BDL(0.034) BDL(0.340)	,	0.038	0.11	BDL(0.00062) 0.055) NA NA	NA NA	NA NA	0.016 J BDL(0.540	BDL(0.00064) BDL(0.0064)	0.072	BDL(0.00092 0.062	9) 0.02J BDL(0.6)	3.8J BDL(83)	BDL(0.037) BDL(0.37)	BDL(0.00086) 0.014
n-Butylbenzene	110	110	110	110	3,900	58,000	BDL(0.0067)		, ,		0.036 BDL(0.00074		BDL(0.00062)		NA NA	NA NA	BDL(0.054)	, ,		BDL(0.00092	. ,	. ,	BDL(0.37)	BDL(0.00086)
Isopropylbenzene	330	330	330	330	NS	NS	BLD(0.00067	BDL(0.00067	BDL(0.034)	BDL(0.00064	BDL(0.00074	BDL(0.0012)	BDL(0.00062)) NA	NA	NA	BDL(0.054)	BDL(0.00064)	BDL(0.0011)	BDL(0.00092	BDL(0.06)	BDL(8.3)	BDL(0.037)	BDL(0.00086)
p-Isopropyltoluene	NS	NS	NS	NS	NS	NS 47	BLD(0.00067		, ,	•	BDL(0.00074	,	BDL(0.00062)	,	NA	NA) BDL(0.00064)	, ,	BDL(0.00092	, ,	BDL(8.3)	BDL(0.037)	BDL(0.00086)
Naphthalene n-Propylbenzene	28 85	28 85	28 85	28 85	3.8 3,800	17 24,000	BDL(0.0027) BDL(0.00067	. ,	BDL(0.140)	BDL(0.0026) BDL(0.00064	, ,	0.00084J) BDL(0.0012)	BDL(0.0025) BDL(0.00062)	NA) NA	NA NA	NA NA	24 BDL(0.054	BDL(0.0026) BDL(0.00064)	BDL(0.0044) BDL(0.0011)	0.0016J BDL(0.00092	14 !) BDL(0.06)	1,700) BDL(8.3)	1.3 BDL(0.037)	BDL(0.0034) BDL(0.00086)
1,3,5-Trimethylbenzene	96	96	96	96	270	1,500	BLD(0.00007		BDL(0.069)	,) BDL(0.00074) BDL(0.0015)		BDL(0.00002)	NA NA	NA	NA	0.035 J	BDL(0.00004)				4.9J	BDL(0.037)	BDL(0.00080)
1,2,4-Trimethylbenzene	130	130	130	130	300	1,800	BLD(0.0013)	BDL(0.0013)	BDL(0.069)	BDL(0.0013)	, (,	BDL(0.0024)	BDL(0.0012)	NA	NA	NA	0.1J	BDL(0.0013)	BDL(0.0022)	BDL(0.0018)		13J	BDL(0.074)	BDL(0.0017)
Methyl tert butyl ether (MtBE) Diethyl ether (Ethyl Ether)	0.2 3.900	0.2 3.900	0.2 3,900	0.2 3,900	47	210					0.00032J	0.00073J						BDL(0.0013)	0.00073J 0.0016J	0.00061J 0.0014J	BDL(0.12)	, ,	BDL(0.074)	0.00047J
Tert-Butyl Alcohol (TBA)	3,900	3,900	2	3,900	16,000 NS	230,000 NS					0.0014J 0.023	0.0017J 0.025						0.001 J BDL(0.013)	0.00163	0.0014J 0.017J	BDL(0.12)	BDL(17) BDL(170)	BDL(0.074) BDL(0.74)	0.0011J BDL(0.017)
Ethyl-Tert-Butyl-Ether (ETBE)	0.7	0.7	0.7	0.7	NS	NS					0.00013J	BDL(0.0024)						BDL(0.0013)	0.00017J	0.00013J	BDL(0.12)		BDL(0.074)	BDL(0.0017)
cis-1,2-Dichloroethene	2	2	2	2	160	2,300					BDL(0.00074	0.00061J						BDL(0.00064)	, ,	0.00029J	BDL(0.06)	, ,	. ,	BDL(0.00086)
1,2-Dichloroethene, Total 2-Butanone	NS 51	NS 51	NS 51	NS 51	NS 27,000	NS 190,000					BDL(0.00074 0.0034J	0.00061J 0.01J						BDL(0.00064)	, ,	0.00029J 0.01	BDL(0.06)	BDL(8.3) BDL(83)	BDL(0.037) BDL(0.37)	BDL(0.00086) BDL(0.0086)
	01	U 01	- 01	01	21,000	100,000					0.00040	0.010						BBE(0.000+)	BBE(0.011)	0.01	DDL(0.0)	DDL(00)	BBE(0.01)	BBE(0.0000)
Polynuclear Aromatic Hydrocarbons (PAHs) (mg/kg) Acenaphthene	340	340	340	340	3,600	45,000	BDL(0.14)	BDL(0.14)	2.2	BDL(0.15)	BDL(0.16)	0.057J	BDL(0.16)	0.61	0.43	9	0.9	BDL(0.14)	BDL(0.15)	0.14J	0.33	45	3.2 J	NA
2-Chloronaphthalene	NS	NS	NS	NS	4,800	60,000	BDL(0.18)	BDL(0.18)	BDL(0.19)	BDL(0.19)	BDL(0.2)	BDL(0.24)	BDL(0.2)	0.11 J	0.022 J	0.47 J	BDL(0.22)	BDL(0.18)	BDL(0.19)	BDL(0.21)	BDL(0.2)	BDL(52)	BDL(4.3)	NA
Fluoranthene	960	960	2,500	5,000	2,400	30,000	BDL(0.11)	BDL(0.11)	14	1.1	0.032J	1.4	0.051 J	7	10	76	16	BDL(0.11)	0.42	2.7	4.4	550	150	NA
Naphthalene Benzo[a]anthracene	28	28	28 4	28 52	3.8 1.1	17 21	BDL(0.18) BDL(0.11)	BDL(0.18) BDL(0.11)	0.91 4.8	0.042 J 0.72	BDL(0.2) BDL(0.12)	0.1J 0.60	BDL(0.2) 0.031 J	1.1 3.6	0.88 4.2	15 34	7.8 5.1	BDL(0.18) BDL(0.11)	BDL(0.19) 0.24	0.38 1.2	3.7 1.6	610 170	4.3 57	NA NA
Benzo[a]pyrene	0.7	0.7	0.7	5	0.11	2.1	BDL(0.14)	BDL(0.14)	3.6	0.79	BDL(0.16)	0.46	BDL(0.16)	3.2	2.6	22	4	BDL(0.14)	0.41	0.88	1.4	160	49	NA NA
Benzo[b]fluoranthene	1	1	4	52	1.1	21	BDL(0.11)	BDL(0.11)	4.4	1	BDL(0.12)	0.61	BDL(0.12)	4.5	4.9	36	5.3	BDL(0.11)	0.55	1.3	1.8	170	66	NA
Benzo[k]fluoranthene Chrysene	12 120	12 120	36 360	520 5,200	11 110	210 2,100	BDL(0.11) BDL(0.11)	BDL(0.11) BDL(0.11)	1.4 4.6	0.36	BDL(0.12) BDL(0.12)	0.22	BDL(0.12) 0.027 J	1.3 3.4	1.6 4.4	11 32	1.9 4.8	BDL(0.11) BDL(0.11)	0.24	0.38	0.52 1.5	62 140	22 47	NA NA
Acenaphthylene	490	490	490	490	3,600	45,000	BDL(0.11)	BDL(0.11)	2.7	0.7	BDL(0.12)	0.30	BDL(0.16)	0.74	1	2	2.8	BDL(0.11)	0.28	0.48	1.5	190	12	NA NA
Anthracene	1,000	1,000	2,500	5,000	18,000	23,000	BDL(0.11)	BDL(0.11)	3.8	0.16	BDL(0.16)	0.29	BDL(0.12)	1.4	1.7	18	3.8	BDL(0.11)	0.12	0.55	1.6	180	25	NA
Benzo(g,h,i)perylene	NS	NS	NS	NS	NS	NS	BDL(0.14)	BDL(0.14)	2.2	0.46	BDL(0.16)	0.29	BDL(0.16)	2.6	1.6	14	2.5	BDL(0.14)	0.37	0.59	0.85	76	28	NA
Fluorene Phenanthrene	77 NS	77 NS	77 NS	77 NS	2,400 NS	30,000 NS	BDL(0.18) BDL(0.11)	BDL(0.18) BDL(0.11)	3.9 17	0.036 J 0.36	BDL(0.2) 0.032J	0.23J 1.60	BDL(0.2) 0.053 J	0.58 4.7	0.46 3.8	11 63	4.3	BDL(0.18) BDL(0.11)	0.028J 0.12	0.49 3.5	1.8 6.6	230 770	10 68	NA NA
Dibenzo[a,h]anthracene	0.7	0.7	0.7	5	0.11	2.1	BDL(0.11)	BDL(0.11)	0.54	0.30	BDL(0.12)	0.073J	BDL(0.12)	0.56	0.48	4	0.62	BDL(0.11)	0.061J	0.15	0.19	16J	6.9	NA NA
Indeno[1,2,3-cd]pyrene	1	1	4	52	1.1	21	BDL(0.14)	BDL(0.14)	2.3	0.54	BDL(0.16)	0.31	BDL(0.16)	2.8	2	16	2.6	BDL(0.14)	0.38	0.61	0.90	88	32	NA
Pyrene 1 Methylpophthologo	720 NS	720 NS	2,500 NS	5,000 NS	1,800 18	23,000 730	BDL(0.11) BDL(0.18)	BDL(0.11) BDL(0.18)	14	0.98 BDL(0.19)	0.026J	1.20 0.1J	0.039 J BDL(0.2)	5.1	8.4	47	13	BDL(0.11) BDL(0.18)	0.42 BDL(0.19)	2.1 0.39	3.5	450 210	110	NA NA
1-Methylnaphthalene 2-Methylnaphthalene	96	96	100	100	18 240	3,000	BDL(0.18) BDL(0.22)	BDL(0.18) BDL(0.22)	2.6 1.9	BDL(0.19) BDL(0.23)	BDL(0.2) BDL(0.24)	0.1J 0.082J	BDL(0.2) BDL(0.24)	0.53 0.56	0.38	6	3.5 4.4	BDL(0.18) BDL(0.22)	BDL(0.19) BDL(0.23)	0.39	1.2	290	1.6 J 2.2 J	NA NA
Total Cyanide (mg/kg)		0				-,	.()	-()	1	-()	-(')		(/					-()	(/				•	···
Cyanide (mg/kg)	22	22	100	200	23	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DF		•			-				1										***					
TPH-DRO	10,000	10,000	10,000	10,000	NS	NS	BDL(33.8)	BDL(35)	306	23.6 J	44.3	190	19.3 J	565	222	2,610	1,750	NA	NA	NA	NA	21,500	6,430	NA
Metals (mg/kg)	,		, , , , , , ,	. , , , , , , , , , , , , , , , , , , ,	-		,	V/			-						,							
Antimony	9	9	74	74	31	470	NA	NA	NA	NA	NA	NA	0.912 J	0.668 J	0.768 J	0.603 J	0.911 J	NA	NA	NA	NA	NA	NA	NA
Arsenic	11	11	11	47	0.68	3	NA	NA	NA	NA	NA	NA	2.1	5.5	6.18	8.5	4.78	NA	NA	NA	NA	NA	NA	NA
Beryllium	12	12	89	100	160	2,300	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.173 J	0.171 J	0.094 J	0.205 J	0.209 J	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Cadmium Chromium, Total	33 130*	33 130*	280 130*	280 130*	71 0.3	980 6.3	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.13 J 5.79	2.55 10.9	1.36 6.33	1.25 6.69	0.134 J 7.66	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Copper	NS	NS	NS	NS	3,100	47,000	NA	NA	NA	NA	NA	NA	4.22	122	67.2	119	4.85	NA	NA NA	NA	NA	NA	NA	NA NA
Lead	400	400	400	400	400	800	NA	NA	NA	NA	NA	NA	3.48	150	97.6	78.2	3.74	NA	NA	NA	NA	NA	NA	NA
Mercury Nickel	7 400	7 400	52 2,500	52 3,100	11 820	46 11,000	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	BDL(0.077) 3.95	0.161 10.6	0.114 7.44	9.99) BDL(0.085)) NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Selenium	180	180	1,600	1,600	390	5,800	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.403 J	0.356 J	0.219 J	0.488 J	3.9 0.488 J	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Silver	89	89	690	690	390	5,800	NA	NA	NA	NA	NA	NA	BDL(0.48)	0.153 J) BDL(0.536)		NA	NA	NA	NA	NA	NA
Thallium	10	10	10	10	0.78	12	NA	NA	NA	NA	NA	NA	BDL(0.96)) BDL(1.07)		NA	NA	NA	NA	NA	NA NA
Zinc	1,000	1,000	2,500	5,000	23,000	350,000	NA	NA	NA	NA	NA	NA	13	266	164	114	13.3	NA	NA	NA	NA	NA	NA	NA

 Legend:

 AOC - Area of Concern (identified in report text)
 bgs = Below Ground Surface

 mg/kg = milligrams per kilogram
 NS = No Standard

 BDL() = Below laboratory detection limit shown in parenthesis
 NA = Not Analyzed

 J = estimated concentration detected above laboratory detection limit, but below laboratory reporting li blue shaded = finger printed sample

NOTES:

1 - NH DES Env-Or 600 Soil Remediation Standards, updated September 1, 2018.

2 - NHDES Risk Characterization and Management Policy (RCMP) standards were updated September 2018.

3 - US EPA Regional Screening Levels, updated November 2018, Total Hazard Quotient = 1.

4 - Bold type font and boxed value indicates concentration exceeds the NH DES SRS.

5 - Xylenes SRS listed are for total xylenes (mixed isomers). Total chromium SRS shown is for "worst case" hexavalent chromium.

6 - Concentration values shaded orange indicate RCMP Method 1, NH S-3 standard is exceeded.

7 - Highlighted blue is TPH instead of TPH-DRO

8 - Supplemental Phase II ESA Area of Concern:

Tetrachloroethylene (PCE) Impacts to Groundwater = Further Investigation of Cadmium. Cyanide, and PCE Impacts =

Tetrachloroethylene (PCE) Impacts to Groundwater = Further Investigation of Cadmium, Cyanide, and PCE Impacts = Delineation of PAHs in Soil / Further Investigation of Petroleum in Groundwater =



TABLE 3. GROUNDWATER ELEVATION AND SELECTED FIELD PARAMETERS W. W. Cross Property
Jaffrey, New Hampshire

		Reference	Depth to Water from	Ground	Depth to Water from	Ground Water			Dissolved	ORP	Specific	
Monitoring Well I.D.	Date	Elevation (feet)	Ref. Elev. (feet)	Elevation (feet)	Grade (feet)	Elevation (feet)	Temp. (C)	pH (S.U.)	Oxygen (mg/L)	(mv)	Conductivity (mS/cm)	Notes
MW101	6-Sep-18 29-Aug-19	105.01	8.12 8.48	105.34	8.45 8.81	96.89 96.53	17.57 ns	6.08 ns	6.13 ns	143 ns	3.847 ns	
MW102	6-Sep-18 13-Sep-18 29-Aug-19	105.45	8.65 8.69 9.20	105.70	8.90 8.94 9.45	96.80 96.76 96.25	18.56 nm nm	6.82 5.50 nm	3.24 7.26 nm	214.4 nm nm	0.949 1.909 nm	Slow Recharge Ran dry, sampled recharge
MW103	6-Sep-18 29-Aug-19	100.12	9.29 9.31	100.44	9.61 9.63	90.83 90.81	19.56 ns	6.63 ns	5.54 ns	177.4 ns	0.192 ns	
MW104	6-Sep-18 13-Sep-18 29-Aug-19	105.15	10.62 10.60 11.17	105.53	11.00 10.98 11.55	94.53 94.55 93.98	17.34 nm nm	6.34 6.36 nm	5.76 2.66 nm	119.2 nm nm	0.951 1.099 nm	Slow Recharge Ran dry, sampled recharge
MW105	6-Sep-18 29-Aug-19	101.87	4.19 3.92	102.28	4.60 4.33	97.68 97.95	20.84 ns	7.63 ns	0.45 ns	-116 ns	0.453 ns	
MW106	6-Sep-18 29-Aug-19	101.36	2.86 2.44	101.58	3.08 2.66	98.50 98.92	23.57 ns	5.80 ns	0.22 ns	111 ns	0.323 ns	
MW107	6-Sep-18 29-Aug-19	101.22	5.79 6.71	101.59	6.16 7.08	95.43 94.51	21.85 ns	5.19 ns	2.24 ns	275 ns	2.071 ns	
MW108	6-Sep-18 29-Aug-19	101.35	4.65 4.73	101.71	5.01 5.09	96.70 96.62	24.03 24.51	6.29 6.12	0.21 0.25	-50.4 88.7	0.246 0.401	Pavement, sunny
MW14	6-Sep-18 29-Aug-19	99.76	20.04 nm	99.94	20.22 nm	79.72 nm	nm ns	nm ns	nm ns	nm ns	nm ns	
MW201	29-Aug-19	104.98	8.95	105.62	9.59	96.03	15.14	5.54	2.66	231.60	0.475	
MW203 MW204	29-Aug-19 29-Aug-19	105.10 104.67	8.56 8.04	105.38 105.29	8.84 8.66	96.54 96.63	16.58 16.00	5.86 5.82	0.87 5.23	182.10 284.80	0.441 0.047	Ran dry, sampled recharge

NOTES: nm = not measured; ns = not sampled

Project 141.05051.010 Ransom Consulting, Inc.

^{1 -} Reference elevation is the highest point of the PVC riser pipe at each location, relative to an assumed datum of 100 feet for a nail set in a telephone pole (adjacent to MW3) and to top of PVC for Loureiro MW14 (99.76 feet).

^{2 -} Depth to ground water measured using an electronic water level indicator.

^{3 -} For pH, S.U. = Standard Units.

^{4 -} For Dissolved Oxygen, ppm = parts per million.

^{5 -} For Specific Conductivity, mS/cm = milliSiemens per centimeter.

	Jaffrey, New Hampshi														
		NH DES Ambient Groundwater Quality	RCMP GW-	US EPA Maximum Contaminan											
LOCATION	SAMPLING DATE	Standards	2 Standard	t Levels	MW101	MW102	MW103	MW104	MW105	MW106	MW107	MW108	MW201	MW203	MW204
Volatile Organic Compounds (VOCs) (μg/	L) 9/6/2018	6,000	NS	NS	2.3 J	28	BDL(5.0)	BDL(5.0)	BDL(5.0)	BDL(5.0)	BDL(5.0)	BDL(5.0)	NI	NI	NI
Acetone	9/29/2019	0,000	INO	NO	ns	2.1 J	ns	BDL(5.0)	ns	ns	ns	BDL(5.0)	BDL(5.0)	BDL(5.0)	1.7 J
Benzene	9/6/2018 9/29/2019	5	2,900	5	BDL(0.50) ns	0.23 J BDL(0.50)	BDL(0.50) ns	BDL(0.50) BDL(0.50)	0.3 J ns	BDL(0.50) ns	BDL(0.50) ns	BDL(0.50) BDL(0.50)	NI BDI (0.50)	NI BDL(0.50)	NI BDI (0.50)
t-Butyl alcohol (TBA)	9/6/2018	40	NS	NS	BDL(10)	2.6 J	BDL(10)	BDL(10)	BDL(10)	BDL(10)	BDL(10)	BDL(10)	NI	NI	NI
	9/29/2019				ns	BDL(10)	ns BDL(0.50)	BDL(10)	ns	ns	ns	BDL(10)	BDL(10) NI	BDL(10)	BDL(10)
Carbon Disulfide	9/6/2018 9/29/2019	70	NS	NS	BDL(0.50) ns	0.45 J BDL(5.0)	ns	0.45 J BDL(5.0)	BDL(5.0)	BDL(5.0) ns	BDL(5.0)	BDL(5.0) BDL(5.0)	BDL(5.0)	BDL(5.0)	BDL(5.0)
Chlorobenzene (Monochlorobenzene)	9/6/2018 9/29/2019	100	1,500	100	BDL(0.50) ns	BDL(0.50) BDL(0.50)	BDL(0.50)	BDL(0.50) BDL(0.50)		BDL(0.50)	BDL(0.50)	BDL(0.50)	NI PDI (0.50)	NI BDL(0.50)	NI PDI (0.50)
Chloroform (Trichloromethane)	9/6/2018	70 ⁽¹⁾	70 ⁽¹⁾	80 ⁽¹⁾	BDL(0.75)	BDL(0.30)	BDL(0.75)		BDL(0.75)		BDL(0.75)		NI	NI	NI
,	9/29/2019		-		ns	BDL(0.75)	ns	BDL(0.75)		ns	ns	` '	BDL(0.75)	0.50 J	BDL(0.75)
Chloromethane (Methyl Chloride)	9/6/2018 9/29/2019	30	NS	NS	BDL(3.0) ns	0.43 J BDL(2.5)	BDL(2.5) ns	BDL(2.5) BDL(2.5)	BDL(2.5)	BDL(2.5) ns	BDL(2.5) ns	BDL(2.5) BDL(2.5)	NI BDL(2.5)	0.53 J	NI BDL(2.5)
1,2-Dichlorobenzene	9/6/2018	600	14,000	600	BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)	120	0.31 J	BDL(2.5)	BDL(2.5)	NI DDL (0.5)	NI DDL (0.5)	NI NI
1,3-Dichlorobenzene	9/29/2019 9/6/2018	600	NS	NS	ns BDL(2.5)	BDL(2.5)	ns BDL(2.5)	BDL(2.5)	ns 6.7	ns BDL(2.5)	ns BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)
1,0 Bidillorebetizette	9/29/2019	000	110		ns	BDL(2.5)	ns	BDL(2.5)	ns	ns	ns	BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)
1,4-Dichlorobenzene	9/6/2018 9/29/2019	75	80	75	BDL(2.5)	BDL(2.5) BDL(2.5)	BDL(2.5)	BDL(2.5) BDL(2.5)	9.6 ns	BDL(2.5)	BDL(2.5)	BDL(2.5) BDL(2.5)	NI BDL(2.5)	NI BDL(2.5)	NI BDL(2.5)
cis-1,2-Dichloroethene	9/6/2018	70	NS	70	BDL(0.50)	0.22 J	BDL(0.50)	BDL(0.50)	0.49 J	1.7	BDL(0.50)	0.5 J	NI	NI	NI
Ethyl ether (Diethyl ether)	9/29/2019	1,400	NS	NS	ns BDL(3.0)	BDL(0.50)	ns BDL(2.5)	BDL(0.50) BDL(2.5)	ns BDL(2.5)	ns BDL(2.5)	ns BDL(2.5)	2 BDL(2.5)	2.2 NI	BDL(0.50)	BDL(0.50)
	9/29/2019				ns	0.93 J	ns	BDL(2.5)	ns	ns	ns	BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)
Ethylbenzene	9/6/2018 9/29/2019	700	1,500	700	BDL(0.50)	BDL(0.50) BDL(0.50)	BDL(0.50) ns	BDL(0.50) BDL(0.50)		BDL(0.50)	BDL(0.50) ns	BDL(0.50) BDL(0.50)	NI BDL(0.50)	NI BDL(0.50)	NI BDL(0.50)
p-lsopropyltoluene	9/6/2018	260	NS	NS	BDL(0.50)	BDL(0.50)	BDL(0.50)	BDL(0.50)		BDL(0.50)	_ , ,	BDL(0.50)	NI DDI (0.50)	NI DDI (0.50)	NI DDI (0.50)
Methyl ethyl ketone (2-Butanone)	9/29/2019	4,000	50,000	NS	ns BDL(0.50)	BDL(0.50) 5.7	ns BDL(5.0)	BDL(0.50) BDL(5.0)	BDL(5.0)	ns BDL(5.0)	ns BDL(5.0)	BDL(0.50)	BDL(0.50) NI	BDL(0.50)	BDL(0.50)
	9/29/2019	,	•		ns	BDL(5.0)	ns	BDL(5.0)	ns	ns	ns	BDL(5.0)	BDL(5.0)	BDL(5.0)	BDL(5.0)
Methyl isobutyl ketone (4-Methyl-2-pentar	9/6/2018 9/29/2019	2,000	50,000	NS	BDL(0.50) ns	0.57 J BDL(5.0)	BDL(5.0) ns	BDL(5.0) BDL(5.0)	BDL(5.0) ns	BDL(5.0) ns	BDL(5.0) ns	BDL(5.0) BDL(5.0)	NI BDL(5.0)	NI BDL(5.0)	NI BDL(5.0)
Naphthalene	9/6/2018	100	1,700	NS	BDL(2.5)	16	BDL(2.5)	BDL(2.5)	30	0.54 J	1.1 J	180	NI	NI	NI
- Daniella	9/29/2019	000	NO	NO	ns BDL(0.50)	0.42 J BDL(0.50)	ns BDL(0.50)	BDL(2.5)	ns 0.19 J	ns BDL(0.50)	ns BDL(0.50)	19 BDL(0.50)	1 J NI	BDL(2.5)	BDL(2.5)
n-Propylbenzene	9/29/2019	260	NS	NS	ns	BDL(0.50)	ns	BDL(0.50)		ns	ns			BDL(0.50)	
Tetrachloroethene (PCE)	9/6/2018 9/29/2019	5	240	5	2.6 ns	5.8 3.6	0.94 ns	8.6 5.8	BDL(0.50) ns	1.4 ns	BDL(0.50)	BDL(0.50) 0.43 J	NI 2.6	NI 1.8	NI BDL(0.50)
Toluene	9/6/2018	1,000	50,000	1,000	BDL(0.75)	BDL(0.75)	BDL(0.75)	BDL(0.75)	_		BDL(0.75)		NI	NI	NI
10100110	9/29/2019	•	•	ĺ	ns	BDL(0.75)	ns	BDL(0.75)	ns	ns	ns	BDL(0.75)	BDL(0.75)	BDL(0.75)	BDL(0.75)
Trichloroethene	9/6/2018 9/29/2019	5	20	5	BDL(0.50)	0.67 0.19 J	BDL(0.50)	0.22 J BDL(0.50)	1 ns	BDL(0.50)	BDL(0.50) ns	0.33 J 1.4	NI 1.2	NI BDL(0.50)	NI BDL(0.50)
1,2,4-Trimethylbenzene	9/6/2018	330	1,300	NS	BDL(2.5)	0.26 J	BDL(2.5)	BDL(2.5)	5.6	BDL(2.5)	BDL(2.5)	1 J	NI	NI	NI
1,3,5-Trimethylbenzene	9/29/2019	330	NS	NS	ns BDL(2.5)	BDL(2.5) 0.22 J	ns BDL(2.5)	BDL(2.5)	ns 1 J	ns BDL(2.5)	ns BDL(2.5)	0.38 J	BDL(2.5)	BDL(2.5)	BDL(2.5)
1,5,5-Trimetryiberizerie	9/29/2019	330	NO	NO	ns	BDL(2.5)	ns	BDL(2.5)	ns	ns	ns	BDL(2.5)	BDL(2.5)	BDL(2.5)	BDL(2.5)
o-Xylene	9/6/2018 9/29/2019	10,000 (1)	17,000 ⁽¹⁾	10,000 (1)	BDL(1.0) ns	BDL(1.0) BDL(1.0)	BDL(1.0) ns	BDL(1.0) BDL(1.0)	0.66 J ns	BDL(1.0) ns	BDL(1.0) ns	BDL(1.0) BDL(1.0)	NI BDL(1.0)	NI BDL(1.0)	NI BDL(1.0)
p/m-Xylene	9/6/2018	10,000 (1)	17,000 (1)	10,000 (1)	BDL(1.0)	BDL(1.0)	BDL(1.0)	BDL(1.0)	0.71 J	BDL(1.0)	BDL(1.0)	BDL(1.0)	NI	NI	NI
T	9/29/2019	(1)	(1)	(1)	ns	BDL(1.0)	ns	BDL(1.0)	ns	ns	ns	BDL(1.0)	BDL(1.0)	BDL(1.0)	BDL(1.0)
Total Xylene	9/6/2018 9/29/2019	10,000 ⁽¹⁾	17,000 (1)	10,000 (1)	BDL(1.0) ns	BDL(1.0) BDL(1.0)	BDL(1.0) ns	BDL(1.0) BDL(1.0)	1.4 J ns	BDL(1.0) ns	BDL(1.0) ns	BDL(1.0)	NI BDL(1.0)	NI BDL(1.0)	NI BDL(1.0)
															-
Polynuclear Aromatic Hydrocarbons (PAI	-ls) (μg/L)	II													
Polynuclear Aromatic Hydrocarbons (PAI Acenaphthene Fluoranthene	9/6/2018 & 9/13/2018	420 280	NS NS	NS NS	BDL(0.1) BDL(0.1)	0.12 BDL(0.1)	BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1)	4.5 0.39	BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1)	3.8 2.6	NI NI	NI NI	NI NI
Acenaphthene Fluoranthene Naphthalene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100	NS 1,700	NS NS	BDL(0.1) BDL(0.1)	BDL(0.1) 4.6	BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1)	0.39 5	BDL(0.1) 0.1	BDL(0.1) BDL(0.1)	2.6 BDL(0.1)	NI NI	NI NI	NI NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1	NS 1,700 NS NS	NS NS NS NS	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	0.39 5 0.02 J BDL(0.1)	BDL(0.1) 0.1 BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J	NI NI NI	NI NI NI	NI NI NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420	NS 1,700 NS NS NS NS	NS NS NS NS NS	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5	NI NI NI NI NI	NI NI NI NI NI	NI NI NI NI NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5	NS 1,700 NS NS NS NS NS	NS NS NS NS	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8	NI NI NI NI	NI NI NI NI NI NI	NI NI NI NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 280 210	NS 1,700 NS NS NS NS NS NS	NS	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J	BDL(0.1)	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1)	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10	NI NI NI NI NI NI NI	NI NI NI NI NI NI NI	NI NI NI NI NI NI NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 5 420 2,100 280 210 210 160	NS 1,700 NS NS NS NS NS NS NS	NS NS NS NS NS NS NS NS NS	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 280 210 210	NS 1,700 NS NS NS NS NS NS NS	NS NS NS NS NS NS NS NS	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 280 0.32	NS 1,700 NS NS NS NS NS NS NS NS NS NS NS NS NS	NS NS NS NS NS NS NS NS NS NS NS NS NS	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 1.6 BDL(0.1) 0.3 7.3 3.2) ns	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144)	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fitoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF) Perfluorobutanoic Acid (PFBA) Perfluoropentanoic Acid (PFPAA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 210 210 160 280 0.32	NS 1,700 NS N	NS NS NS NS NS NS NS NS NS NS NS NS NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139)	BDL(0.1)	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.08 J BDL(0.144)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144)	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 260 280 0.32	NS 1,700 NS N	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00219	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1)	0.39 5 0.02 J BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns	BDL(0.1) 0.1 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.08 J 0.05 J BDL(0.144) NA NA	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 1.9 SBDL(0.144) NA NA NA	NI N	NI N	
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorohexanoic Acid (PFHXA) Perfluoroheptanoic Acid (PFHXA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32	NS 1,700 NS N	NS	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139)	BDL(0.1)	BDL(0.1) BDL(0.144	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns	BDL(0.1) 0.1 BDL(0.1) AUDITION OF THE STREET OF	BDL(0.1) NA NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144)	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4, Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFHxS)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS	NS 1,700 NS N	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00219 0.00204 0.00046	BDL(0.1)	BDL(0.1) BDL(0.144	0.39 5 0.02 J BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns	BDL(0.1) 0.1 BDL(0.1) A BDL(0.1)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA NA NA NA NA	NI N	NI N	
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 160 0.32 NS NS NS NS NS NS NS	NS 1,700 NS N	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00234 J 0.00219 0.00204 0.00646	BDL(0.1) BOL(0.1) BOL	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA NA NA	BDL(0.1) 0.1 BDL(0.1) O.08 J BDL(0.144) NA NA NA NA NA	BDL(0.1) NA NA NA NA NA NA NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA NA NA NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanesulfonic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorohexanoic Acid (PFHXA) Perfluorohexanoic Acid (PFHXA) Perfluorohexanoic Acid (PFHXA) Perfluoronenoic Acid (PFOA) Perfluorocationic Acid (PFOA) Perfluorocationic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluorocationic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluorocationic Acid (PFNA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 3280 0.32 NS	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00134 J 0.00219 0.00204 0.00646 0.00646 0.00643 0.000449 J 0.0013	BDL(0.1) BDL	BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA NA NA NA NA NA	BDL(0.1) 0.1 BDL(0.1) O.08 J O.05 J BDL(0.144) NA	BDL(0.1) ANA NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBS) Perfluorobutanesulfonic Acid (PFBS) Perfluorobetanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAA) Perfluoroctanoic Acid (PFOA) Perfluorononanoic Acid (PFOA) Perfluorooctanoic Acid (PFOA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 328 NS	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00214 0.00646 0.00623 0.000449 J	BDL(0.1) BDL(0.00327 0.00117 J 0.00393 0.00225 0.000925 J 0.0004	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA NA NA NA	BDL(0.1) 0.1 BDL(0.1) A BDL(0.1) BDL(0.1) A BDL(0.144) NA	BDL(0.1) ANA NA NA NA NA NA NA NA NA NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA NA NA NA NA NA NA NA	NI N	NI N	
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobenoic Acid (PFBA) Perfluorohexanesulfonic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFNAS) Perfluorononanoic Acid (PFOA) Perfluoroncanoic Acid (PFOA) Perfluoroncane sulfonic Acid (PFNAS) Perfluorohexanesulfonic Acid (PFNAS) Perfluoroncane sulfonic Acid (PFNAS) Perfluoroncane sulfonic Acid (PFNAS) Perfluoroctane sulfonate (PFOS) Total Cyanide (µg/L) Cyanide	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS	NS 1,700 NS	NS N	BDL(0.1) BDL(0.144)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00219 0.00204 0.00623 0.00646 0.00623 0.000449 J 0.013 512 746	BDL(0.1) BDL	BDL(0.1) BDL(0.144	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHXA) Perfluorobenesunic Acid (PFHXA) Perfluorohexanoic Acid (PFHXA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorocanoic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluorocanoic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluorocanoic Acid (PFNA) Perfluoronanoic Acid (PFNA) Perfluorocane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 3280 0.32 NS	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00246 0.00623 0.00646 0.00623 0.000449 J 0.013 512 746	BDL(0.1) BDL	BDL(0.1) BDL(0.144	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA NA NA NA NA NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobenoic Acid (PFBA) Perfluorohexanesulfonic Acid (PFHAA) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFHAS) Perfluorohexanesulfonic Acid (PFNAS) Perfluorononanoic Acid (PFOA) Perfluoroncanoic Acid (PFOA) Perfluoroncane sulfonic Acid (PFNAS) Perfluorohexanesulfonic Acid (PFNAS) Perfluoroncane sulfonic Acid (PFNAS) Perfluoroncane sulfonic Acid (PFNAS) Perfluoroctane sulfonate (PFOS) Total Cyanide (µg/L) Cyanide	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00214 0.00646 0.00623 0.000449 J 0.013 512 746 CC BDL(4)	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1)	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobenoic Acid (PFBA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFOA) Perfluorononanoic Acid (PFOA) Perfluoroctanoic Acid (PFOA) Perfluoroctanoic Acid (PFOA) Perfluorohexanesulfonic Acid (PFNA) Perfluoroctanoic Acid (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS O.070 (1) 200	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00219 0.00204 0.00623 0.00649 J 0.013 0.013 0.00623 0.00449 J 0.013	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1)	BDL(0.1) NA	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFDA) Perfluorobetanesulfonic Acid (PFHAA) Perfluorobetanesulfonic Acid (PFDA) Perfluorooctanoic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS O.070 (1) SS 0.070 (1) 100 100 100 100 100 100 100 100 100 1	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00249 0.00646 0.00646 0.00646 0.00646 0.00646 0.00648 J 0.00246 0.00640	BDL(0.1) BDL	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1)	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4, Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobenanoic Acid (PFBS) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctane sulfonate (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS NS NS NS NS NS NS NS O.070 (1) S S S S S S S S S S S S S S S S S S S	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG BDL(4) NA	BDL(0.1) BDL	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(0.144) NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFDA) Perfluorobetanesulfonic Acid (PFHAA) Perfluorobetanesulfonic Acid (PFDA) Perfluorooctanoic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS O.070 (1) SS 0.070 (1) 100 100 100 100 100 100 100 100 100 1	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00219 0.00246 0.00646 0.00646 0.00647 0.00191 CC BDL(0.139)	BDL(0.1) BDL	BDL(0.1) BDL(0.144	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFHXA) Perfluorobutanesulfonic Acid (PFHXA) Perfluorobexanoic Acid (PFHXA) Perfluorohexanoic Acid (PFHXA) Perfluorohexanesulfonic Acid (PFHXA) Perfluorohexanesulfonic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 10 200 500,000	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 C: 37,000 Cr BDL(4) NA 2 J NA BDL(5) NA	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI NI NI NI NI NI NI NA NI NI NI NA NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBS) Perfluorobutanesulfonic Acid (PFBS) Perfluorobetanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFDA) Perfluoronexanesulfonic Acid (PFHxS) Perfluoronexanesulfonic Acid (PFDA) Perfluoronexanesulfonic Acid (PFDA) Perfluorooctanoic Acid (PFOA) Perfluorooctanoic Acid (PFOA) Perfluorooctanes ulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 200 500,000	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.0014 0.00191 0.00246 0.00191 0.00246 0.00623 0.000449 J 0.013 512 746 CG 37,000 CG BDL(4) NA BDL(5) NA BDL(5) NA	BDL(0.1) BDL	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.09 J 0.09 J 0.09 J 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFHXA) Perfluorobutanesulfonic Acid (PFHXA) Perfluorobexanoic Acid (PFHXA) Perfluorohexanoic Acid (PFHXA) Perfluorohexanesulfonic Acid (PFHXA) Perfluorohexanesulfonic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 10 200 500,000	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00646 0.00649 J 0.013 512 746 CC 37,000 CC BDL(4) NA 2 J NA BDL(5) NA BDL(10)	BDL(0.1) BDL	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(0.144) NA	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobenoic Acid (PFBA) Perfluorobenoic Acid (PFBA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAS) Perfluorohexanoic Acid (PFHAS) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFOA) Perfluorononanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluorobexanesulfonic Acid (PFNA) Perfluorobexanoic Acid (PFNA) Perfluorobexan	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 200 500,000	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00249 0.00646 0.00623 0.000449 J 0.13 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10)	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(10) RS BDL(10) RS	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI NI NI NI NI NA NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4, Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHxA) Perfluorobexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFNA) Perfluorochexanoic Acid (PFNA) Perfluorochexanesulfonic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluorobexanesulfonic Acid (PFNA) Perfluorobexanoic Acid (PFNA) Perfluorochexanoic Acid (PFNA) Perfluorobexanoic Acid (PFNA) Perfluorobe	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 4 5 100 1,300	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA	BDL(0.1) BDL(10)	BDL(0.1) BDL	0.39 5 0.02 J 5 0.02 J BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(10) RS BDL(10) RS	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 S 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHxA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctanoic Acid (PFNA) Perfluoroctane sulfonate (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018	280 100 0.1 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS NS NS NS NS NS NS NS NS 10.070 (1) 100 100 1,300	NS 1,700 NS	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00249 0.00646 0.00623 0.000449 J 0.13 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10)	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J 8DL(0.1) 8DL(0.1) 4.4 0.14 1.6 8DL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(5) RS BDL(10) RS BDL(10) RS	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 S 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHxA) Perfluorobexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFDA) Perfluorohexanoic Acid (PFDA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorooctanoic Acid (PFNA) Perfluorooctanoic Acid (PFNA) Perfluorooctanoic Acid (PFNA) Perfluorooctane sulfonic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Sulfate Dissolved Metals Antimony Arsenic Cadmium Chromium Copper Lead	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS 0.070 (1) NS 0.070 (1) 4 5 100 1,300	NS 1,700 NS	NS N	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.20) BDL(0.20) BDL(0.20)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.0013 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 Cr 37,000 Cr BDL(4) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(10) NA BDL(10) NA BDL(0.20) NA BDL(25)	BDL(0.1)	BDL(0.1) BDL(0.20)	0.39 5 0.02 J 8DL(0.1) 8DL(0.1) 4.4 0.14 1.6 8DL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(0.144) NA	BDL(0.1) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(0.20) BDL(0.20) BDL(0.20) BDL(0.20)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 S 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4-Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFDA) Perfluorobetanesulfonic Acid (PFHAA) Perfluorobetanesulfonic Acid (PFDA) Perfluorobetanesulfonic Acid (PFOA) Perfluoroaneanic Acid (PFOA) Perfluoroaneanic Acid (PFOA) Perfluorootane sulfonate (PFOS) Total Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium Copper Lead Mercury	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 160 280 0.32 NS NS NS NS NS NS NS 100,070 10 200 500,000 6 10 1,300 1,300	NS 1,700 NS	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.0013 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG 37,000 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(10) NA	BDL(0.1) BDL	BDL(0.1) BDL	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 S 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobetanoic Acid (PFHAA) Perfluorohexanoic Acid (PFHAS) Perfluorohexanoic Acid (PFHAS) Perfluorohexanoic Acid (PFHAS) Perfluorohexanoic Acid (PFNAS) Perfluorohexanoic Acid (PFOA) Perfluorononanoic Acid (PFOA) Perfluorocatenoic Acid (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium Choper Lead Mercury Nickel Selenium	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 210 3280 0.32 NS NS NS NS NS NS NS NS NS 10.070 (1) NS 0.070 (1) 100 1,300 15 20 100	NS 1,700 NS N	NS N	BDL(0.1) BDL	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 C: 37,000 C: BDL(4) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(10) NA BDL(10) NA BDL(25) NA BDL(25) NA	BDL(0.1) BDL(10) BDL(10) BDL(10) BDL(10) BBDL(10) BBDL(10) BBDL(20) BBDL(5) BBDL(10) BBDL(10) BBDL(10) BBDL(10) BBDL(10) BBDL(10) BBDL(20) BBDL(25) BBDL(25) BBDL(25) BBDL(25)	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.1) BDL(0.20) BDL(0.1) BDL(0.20) BDL(0.1) BDL(0.20) BDL(0.1)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(0.144) NA	BDL(0.1) BDL(10) BBDL(10) BBDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 J 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF) Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFHAA) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFHAA) Perfluorobetanoic Acid (PFDA) Perfluorobetanoic Acid (PFDA) Perfluorobetanoic Acid (PFOA) Perfluorobetanesulfonic Acid (PFNA) Perfluoroctanoic Acid (PFOA) Perfluoroctanes sulfonate (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium Chromium Chromium Nickel	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 210 3280 0.32 NS NS NS NS NS NS NS NS NS 10.070 (1) NS 0.070 (1) 100 1,300 15 20 100	NS 1,700 NS N	NS N	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.20) BDL(10) BDL(10) BBDL(10)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.04 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 C: 37,000 C: BDL(4) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(10) NA BDL(1025) NA	BDL(0.1)	BDL(0.1) BDL(0.144 NA	0.39 5 0.02 J 8DL(0.1) 8DL(0.1) 4.4 0.14 1.6 8DL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) ANA NA	BDL(0.1) BDL(10) BBDL(10)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 J 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI N
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFOA) Perfluorononanoic Acid (PFOA) Perfluoroctanoic Acid (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium Copper Lead Mercury Nickel Selenium	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 5 420 2,100 280 210 210 210 210 3280 0.32 NS NS NS NS NS NS NS NS NS 10.070 (1) NS 0.070 (1) 100 1,300 15 20 100	NS 1,700 NS N	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(0.20) NA BDL(25) NA BDL(7) NA BDL(7) NA BDL(7) NA BDL(5.50)	BDL(0.1)	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(0.20) BDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(0.50)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 J 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4, Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFNA)	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS NS NS NS NS NS NS 10070 (1) 100 100 1,300 100 100	NS 1,700 NS	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(0.20) NA BDL(7) NA BDL(7) NA BDL(7) NA BDL(550) NA	BDL(0.1) BDL	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.50)	0.39 5 0.02 J 8DL(0.1) 8DL(0.1) 4.4 0.14 1.6 8DL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(0.20) BDL(10) BDL(0.20) BDL(0.50)	BDL(0.1) BDL	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 J 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI
Acenaphthene Fluoranthene Naphthalene Benzo[a]anthracene Benzo[b]fluoranthene Chrysene Acenaphthylene Anthracene Fluorene Phenanthrene Pyrene 1-Methylnaphthalene 2-Methylnaphthalene 1-4,Dioxane Per- and Polyfluoroalkyl Substances (PF/ Perfluorobutanoic Acid (PFBA) Perfluorobutanoic Acid (PFBA) Perfluorobutanesulfonic Acid (PFBS) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxA) Perfluorohexanoic Acid (PFHxS) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorohexanoic Acid (PFNA) Perfluorobexanoic Acid (PFNA) Perfluorooctanoic Acid (PFNA) Perfluorooctane sulfonate (PFOS) Total Cyanide (µg/L) Cyanide Total Sulfate Sulfate Dissolved Metals Antimony Arsenic Berylium Cadmium Chromium Chromium Silver	9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 & 9/13/2018 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019 9/6/2018 9/29/2019	280 100 0.1 0.1 0.1 5 420 2,100 280 210 210 160 280 0.32 NS NS NS NS NS NS NS 100 200 500,000 100 1,300	NS 1,700 NS	NS N	BDL(0.1)	BDL(0.1) 4.6 BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) BDL(0.1) 0.39 0.08 J 0.02 J BDL(0.1) 0.99 0.51 BDL(0.139) 0.00246 0.00191 0.00134 J 0.00219 0.00204 0.00646 0.00623 0.000449 J 0.013 512 746 CG BDL(4) NA BDL(5) NA BDL(5) NA BDL(10) NA BDL(10) NA BDL(0.20) NA BDL(25) NA BDL(7) NA BDL(7) NA BDL(7) NA BDL(5.50)	BDL(0.1)	BDL(0.1) BDL(0.20) BDL(0.20) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50) BDL(0.50)	0.39 5 0.02 J BDL(0.1) BDL(0.1) 4.4 0.14 1.6 BDL(0.1) 0.3 7.3 3.2) ns NA	BDL(0.1) 0.1 BDL(0.1) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(10) BDL(0.20) BDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(10) BBDL(0.20) BBDL(0.50)	BDL(0.1)	2.6 BDL(0.1) 0.09 J 0.02 J 0.09 J 3.5 1.8 10 12 1.9 11 2.6 BDL(0.144) NA	NI N	NI N	NI

Legend: NS=No Standard

QA/QC = quality assurance/quality control sample
J = estimated concentration detected above laboratory detection limit, but below laboratory reporting limit ns = not sampled µg/L = micrograms per liter NA=No Analyzed BDL() = Below laboratory detection limit shown in parenthesis

- 1 AGQS is for total xylenes (mixed isomers); AGQS is for total PFOA and PFOS; AGQS for Total Trihalomethanes (bromoform, bromodichloromethane, dibromochloromethane and chloroform(trichloromethane)), and for groundwater contaminated by 2 MCL not established; value listed in table is the National Secondary Drinking Water Regulation (pertaining to cosmetic or aesthetic effects in drinking water).
 3 NH DES Env-Or 600 Ambient Groundwater Quality Standards (AGQSs), updated September 1, 2018.
 4 US EPA Maximum Contaminant Levels (MCLs), updated November 2018. Standards for silver and zinc are from National Secondary Drinking Water Regulations.
 5 **Bold** type font and boxed value indicates concentration exceeds the NH DES AGQS. Yellow shaded AGQS: AGQS lower than the detection limit.

TABLE 5. SUMMARY OF DUPLICATE SOIL SAMPLE ANALYTICAL RESULTS W.W. Cross Property Jaffrey, New Hampshire

Area of Concern		•	amples		
			B103-S2	DUP2	Relative Percent Difference
Sample Location		DUP3 0.0-0.5			Relative Percent Difference
Sample Depth (feet bgs)		0.0-0.5	2.0-4.0	2.0-4.0	
Sample Date	6/18/2019	6/18/2019	6/19/2019	6/19/2019	
Volatile Organic Compounds (VOCs) (mg/kg)				%
Benzene	1.4J	BDL (1.4)			NC
p/m-Xylene	7.3J	7.1J			NC
o-Xylene	4.7J	4.8J			NC
Xylenes, Total	12J	12J			NC
Styrene	3.8J	4.1J			NC
Naphthalene	1,700	1,600			6
1,3,5-Trimethylbenzene	4.9J	5.7J			NC
1,2,4-Trimethylbenzene	13J	15J			NC
Polynuclear Aromatic Hydrocarbons (PAHs) (ma/ka	1)			%
Acenaphthene	45	39			NC
Fluoranthene	550	450			20
Naphthalene	610	540			12
Benzo[a]anthracene	170	140			19
Benzo[a]pyrene	160	140			13
Benzo[b]fluoranthene	170	140			19
Benzo[k]fluoranthene	62	49			NC
Chrysene	140	110			24
Acenaphthylene	190	180			5
Anthracene	180	160			12
Benzo(g,h,i)perylene	76	62			NC
Fluorene	230	210			9
Phenanthrene	770	650			17
Dibenzo[a,h]anthracene	16J	12J			NC
Indeno[1,2,3-cd]pyrene	88	70			NC
Pyrene	450	370			20
1-Methylnaphthalene	210	180			15
2-Methylnaphthalene	290	260			11
Total Cyanide (mg/kg)	l.	U	•		%
Cyanide			BDL (1)	BDL (1)	NC
Total Petroleum Hydrocarbons-Diesel	Pango Organ	ice (TDU DDC	` '	552 (1)	%
TPH-DRO	21,500	49,990	, (ilig/kg)		80
Metals (mg/kg)	,	-,	1		%
Antimony			0.21J	BDL (2.11)	NC
Arsenic			4.86	4.53	7
Beryllium			0.354	0.329	NC
Cadmium			BDL (0.421)	0.076J	NC NC
Chromium, Total			7.66	11.2	38
Copper			7.54	7.29	3
Lead			2.86	2.94	NC
Mercury			BDL (0.069)	BDL (0.069)	NC NC
Nickel			4.50	5.14	NC NC
Selenium			BDL (0.842)	BDL (0.844)	NC
Silver			BDL (0.421)	BDL (0.422)	NC NC
Thallium			BDL (0.421)	BDL (0.422)	NC NC
Zinc			18.8	19.9	6
LIIIU			10.0	13.3	U

Notes:

- 1 mg/kg = milligrams per kilogram.
- $\ensuremath{\mathsf{BDL}}($) = Below method detection limit shown in parenthesis.
- 2 J = estimated concentration detected above laboratory detection limit, but below laboratory reporting limit.
- 3 Relative percent difference not calculated if the detected concentration is less than 5x the laboratory reporting limit (not calculated: NC).

141.05051.010 Ransom Consulting, Inc.

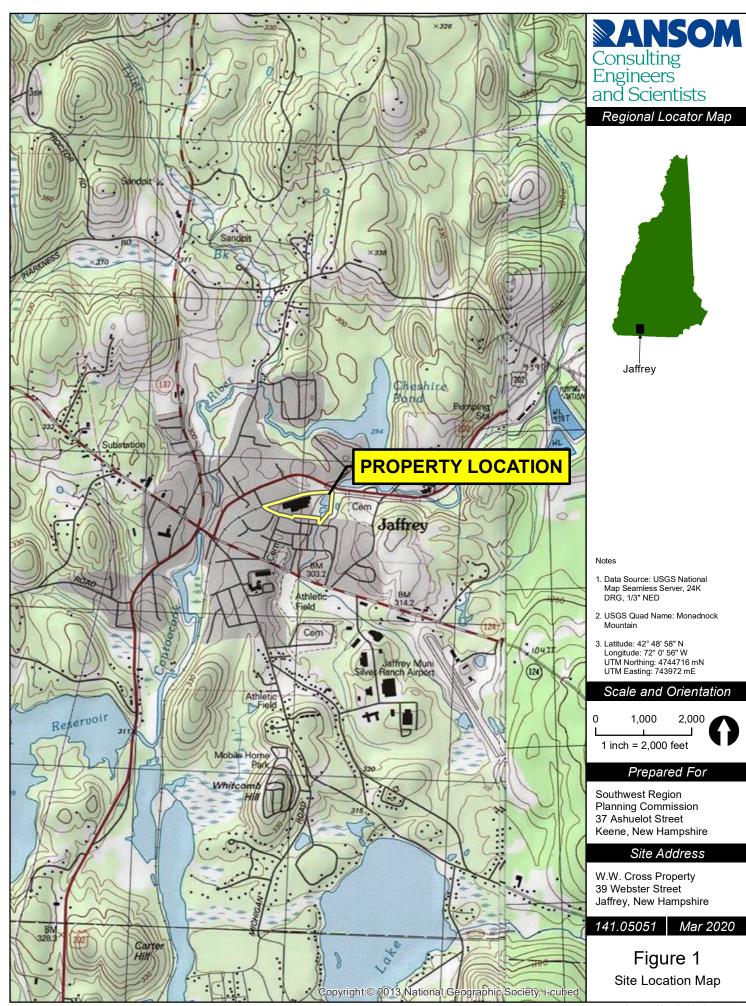
TABLE 6. SUMMARY OF DUPLICATE GROUNDWATER SAMPLE ANALYTICAL RESULTS W.W. Cross Property Jaffrey, New Hampshire

LOCATION Sampling Date	MW108 9/20/2019	DUP-1 9/20/2019	MW203 9/20/2019	DUP-2 9/20/2019	Relative Percent Difference
Volatile Organic Compounds (VOCs) (μg/L)					%
cis-1,2-Dichloroethene	2	1.8			NC
Acetone	BDL (5)	1.6J			NC
Naphthalene	19	17			11
Tetrachloroethene (PCE)	0.43J	0.4J			NC
Trichloroethene	1.4	1.5			NC
Total Cyanide (µg/L)					%
Cyanide			BDL(5)	BDL(5)	NC
Dissolved Metals (µg/L)					%
Nickel			8J	8J	NC
Thallium			0.19J	nd (0.5)	NC
Zinc			9J	8J	NC

Notes:

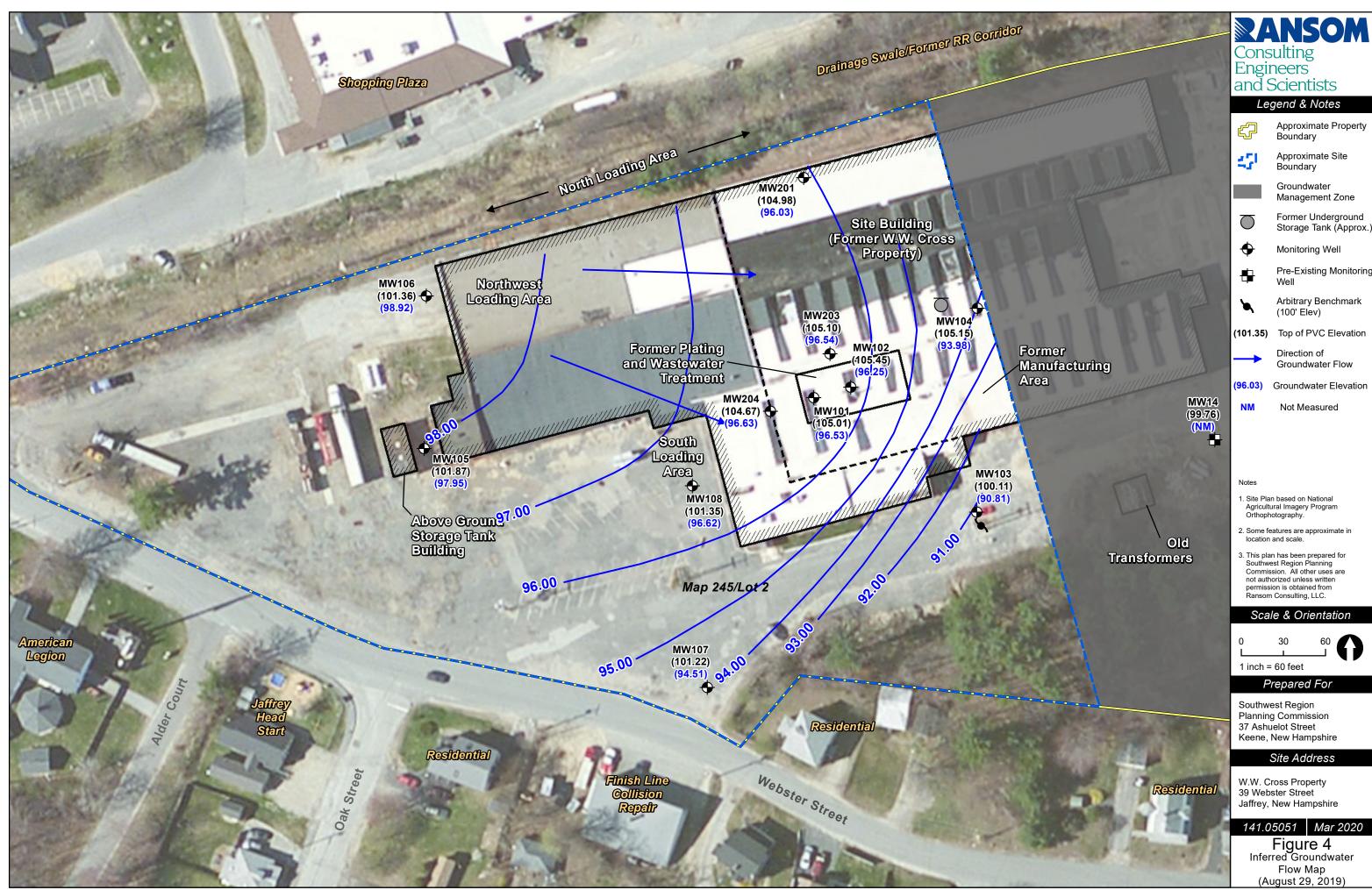
- 1 μ g/L = micrograms per liter.
- 2 BDL() = Below laboratory detection limit shown in parenthesis.
 3 Relative percent difference not calculated if the detected concentration is less than 5x the laboratory reporting limit (not calculted: NC).

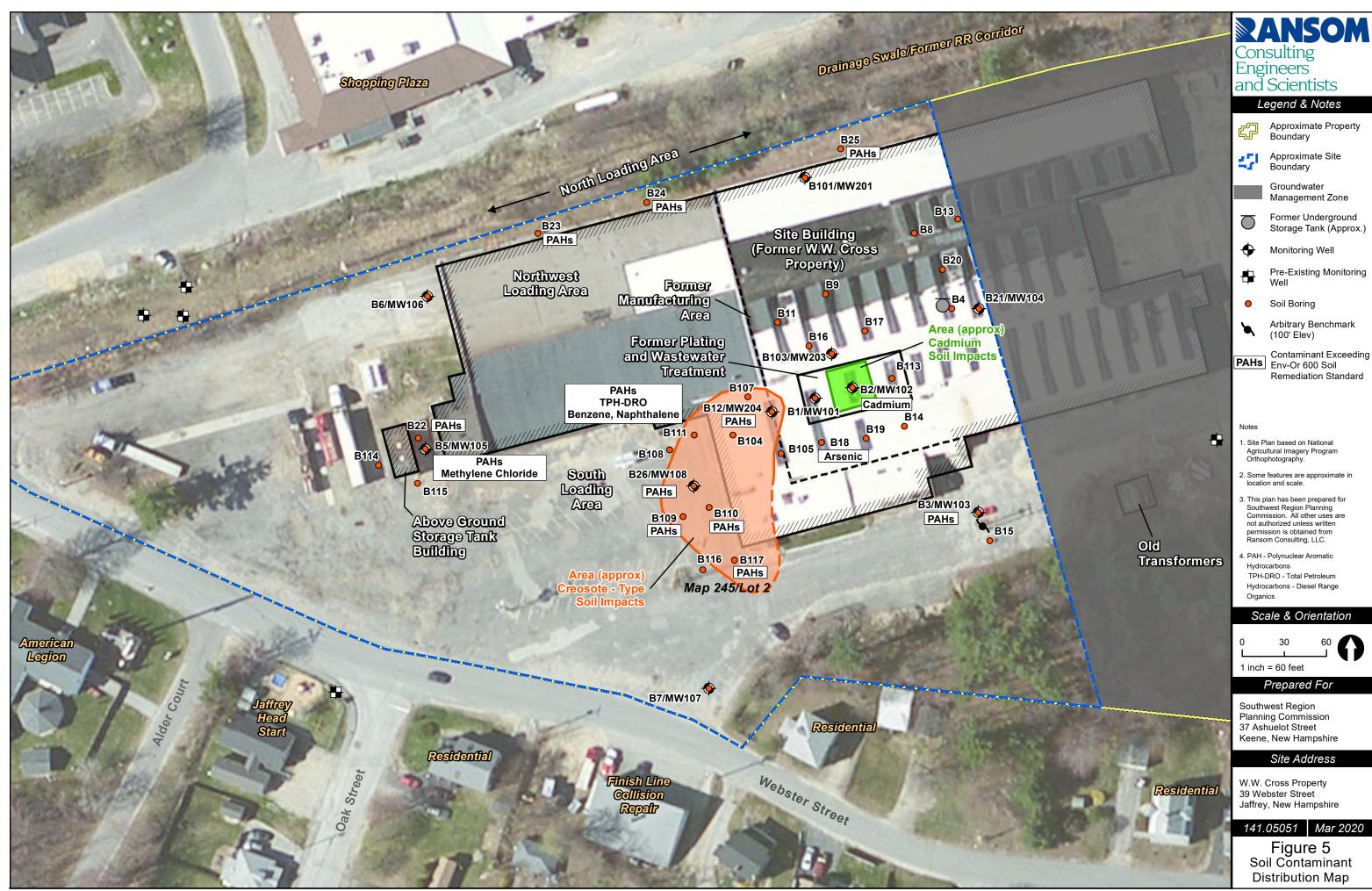
141.05051.010 Ransom Consulting, Inc.

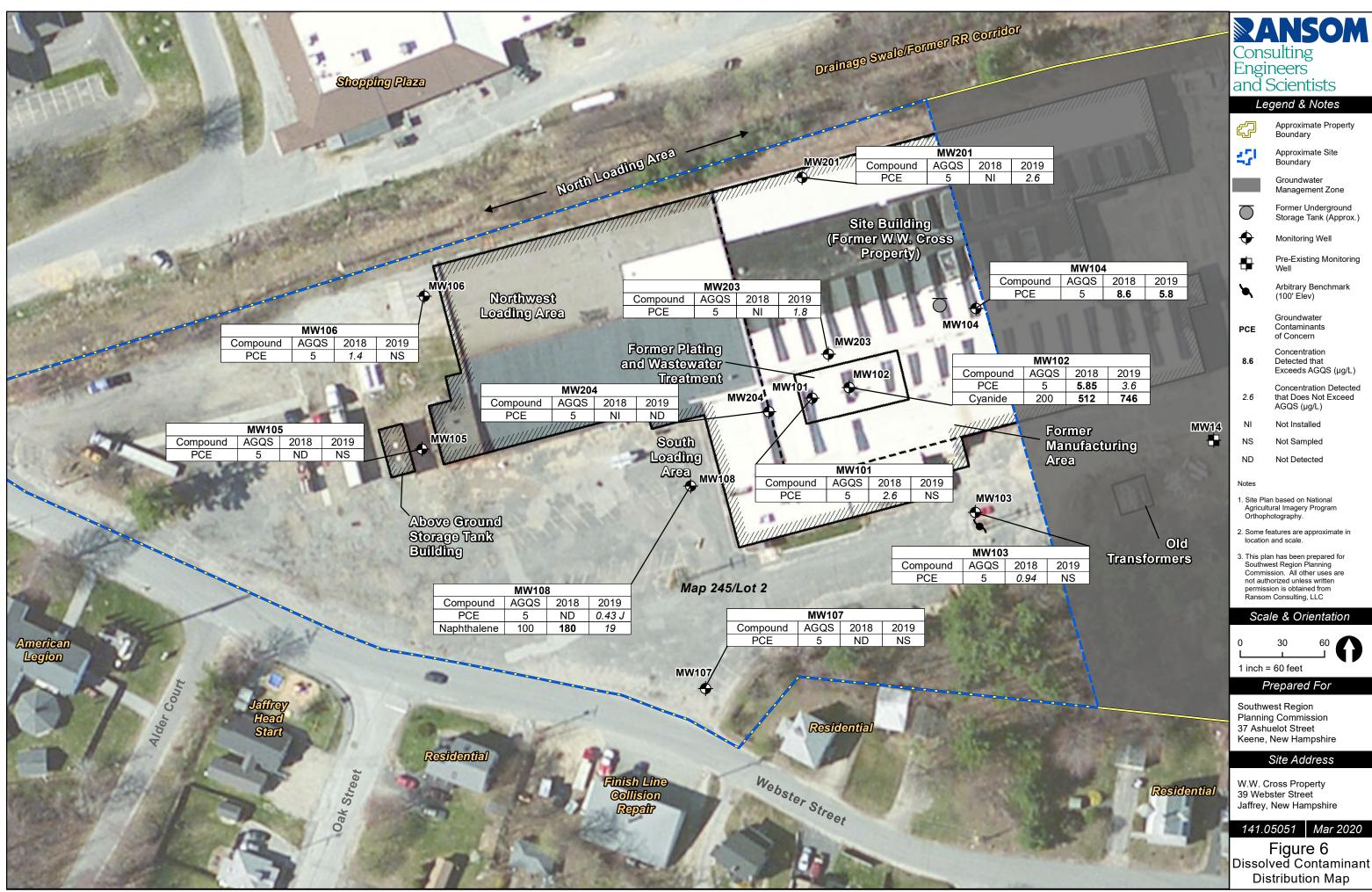












APPENDIX A

Soil Boring/Monitoring Well Logs and Groundwater Sampling Logs

Supplemental Phase II Environmental Site Assessment W. W. Cross Property 39 Webster Street Jaffrey, New Hampshire Borings Advanced June 17, 2019 to June 19, 2019 By New England Boring Contractors

BORING AND MONITORING WELL LOG: B101/MW201 Reviewed by: Total Depth: 13.7 Feet Logged By: DAF **Engineers** Date Reviewed: 12/16/19 **Boring Diameter:** 3 Inches Date Drilled: 6/18/19 to 6/19/19 and Scientists GW Observed at: ~8 Feet Well Stickup: Flush Driller: **NEBC** PENETRATION/ RECOVERY BLOW COUNTS (per 6 inches) CONSTRUCTION SAMPLE NUMBER **DEPTH** DESCRIPTION SAMPLE DEPTH (Based on a modified Burmister Soil Classification System) MELI 5.5" CONCRETE. S1 (0.5-2") 2" Tan fine to coarse SAND, little gravel, trace silt, moist. 3-3-6 18/2 1.5 S2 (2-4') 8" Tan fine to coarse SAND, little gravel, trace silt, red and dark brown staining towards bottom, moist. 6-6-6-S2 24/8 1.3 1.3 S3 (4-6') 3" Tan fine to coarse SAND, little gravel, trace silt, moist, over 4" gray fine to medium SAND, little silt, thin layer of dark brown/black, moist, over 4" 14-9tan fine to medium SAND, trace silt, orange and red staining, moist. 5 **S3** 24/11 1.5 14-43 1.5 S4 (6-8') 9" Brown fine to coarse SAND, little gravel, trace silt, over 15" tan fine to coarse SAND, trace gravel, moist to wet at very bottom. 75-54-**S4** 24/24 1.4 50-41 Drive and wash to 9' (overhead clearance issue). 45-S5 (9-9.7') 3" Gray fine to coarse SAND, little gravel, little silt, over 1" gray S5 8/4 1.2 COBBLE FRAGMENTS. 100/2" 10-Drive and wash to 11'. S6 (11-12.9') 3" Tan fine to coarse SAND, some Gravel, trace silt, over 12" tan 65-75fine to coarse SAND, little gravel, trace silt, trace red staining. **S6** 62-23/15 1.2 100/5" Drive and wash. Refusal, presumed top of bedrock, end of boring 13.7'. 15 LEGEND: //// = = 10 Native Fill **Bentonite Grout PVC Screen** Filter Sand Bentonite Concrete Solid PVC Riser CLIENT: NOTES: **SWRPC** 1. Boring advanced using drive and wash techniques. 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene. W. W. Cross Property 3. Sample designated with solid fill submitted for laboratory analysis. 4. Boring completed as 2" PVC monitoring well with flush-mounted roadbox. 39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

1

Page:

5. NA = Not applicable.

100	RANSOM	BORING	AND MC	NITOR	ING W	/EI	LL L	.OG	:	B10:	3/MV	V203
	Consulting	Reviewed by:	SER	Tota	l Depth:		12.3 F	eet	Logged E	Ву:		DAF
E	Engineers and Scientists	Date Reviewed:	12/16/19	Bori	ng Diamete	er:	3 Inc	hes	Date Dril	ed: 6/	19/19 t	o 6/19/19
2	and Scientists	GW Observed at	: NA	Feet Well	Stickup:		Flus		Driller:		NEBC	
ОЕРТН		DESCRIPTION ed Burmister Soil Cl		tem)		SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID	ОЕРТН	WELL
	5.5" CONCRETE. S1 (0.5-2') 5" Brown fine to to coarse SAND, little grave	el, moist.	-		ine		S1	8-14- 21	18/7	<1		
	S2 (2-4') 14" Tan fine to coa	arse SAND, little gra	vei, trace siit, m	OIST.			S2	31-28- 26-31		1.0	= =	
5-	S3 (4-4.6') 3" Brown fine to Drive and wash to 6'.	coarse SAND, little	gravel, trace silt	, moist.	×	×	S 3	44- 100/1'	7/3	<1	5-	
	S4 (6-6.4') 3" Tan fine to co and black staining, dry COB	arse SAND, little gra BBLE FRAGMENTS	ivel, little silt, tra at very bottom.	ce red, brown	8	8	S4	100/5"	5/3	<1		
	Drive and wash. S5 (8-8.5') 5" Tan fine to co.		vel, trace silt.		8	Ø	S5	100- 20/0"	6/5	<1	_	
10	Drive and wash (slow progre Split spoon refusal, zero rec				_			62/0"	0/0	NA	10	
	Drive and wash.											
	Refusal, end of boring 12.3'.										15	
LEGE		ve Fill Be	ntonite I	Bentonite Gro	ut (<u>∓</u> Conc	= crete	Р	VC Scree	n So	 olid PVC	Riser
2. Soil	ng advanced using drive and s field screened with MiniRA		CLIENT: SWRPC SITE:									
4. Bori	ple designated with solid fill	Il submitted for laboratory analysis. onitoring well with flush-mounted roadbox.				W. W. Cross Property						
					Projec	ct N	o.: 1	41.050	51.010	Pag	e:	1

BORING LOG: B104 RANSOM SFR Reviewed By: Total Depth: 4.2 Feet Logged By: DAF 12 16 19 **Engineers** Date Drilled: Date Reviewed: Boring Diameter: 3 Inches 6/18/19 to 6/18/19 and Scientists **NE Feet** Flush Driller: GW Observed at: Well Stickup: **NEBC** BLOW COUNTS (per 6 inches) PENETRATION/ RECOVERY SAMPLE NUMBER DEPTH DESCRIPTION DEPTH (Based on a modified Burmister Soil Classification System) 문 5.5" CONCRETE. S1 (0.5-2') 2" Brown fine to coarse SAND, little gravel, trace silt, moist. S1 2-3-4 18/2 <1 S2 (2-4') 2" Brown fine to coarse SAND, little gravel, trace silt, moist. 17-3-2-S2 24/2 <1 S3 100/2" 2/2 <1 S3 (4-4.2') 2" Tan/gray fine to coarse SAND, trace gravel, trace silt, trace gray metal fragments; weathered concrete in split spoon tip. Refusal, presumed old foundation, end of boring 4.2'. 10 10 15 15 CLIENT: NOTES: **SWRPC** 1. Boring advanced using drive and wash techniques. 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene. W. W. Cross Property 3. Sample designated with solid fill submitted for laboratory analysis. 39 Webster Street 4. NA = Not applicable; NE = Not Encountered. Jaffrey, NH Project No.: 141.05051.010 Page: 1

	RANSOM	BORING	LOG:							B105	
	Consulting	Reviewed By:	SPE	Total Dept	th:	2.5 F	eet	Logged E	Ву:		DAF
	Consulting Engineers and Scientists	Date Reviewed:	12/16/19	Boring Dia	meter:	3 Inc	hes	Date Drill	led: 6/	18/19 to	6/18/19
·	and Scienusts	GW Observed at:	NE Feet	Well Stick	up:	Flus		Driller:		NEBC	
DEPTH	D (Based on a modified	ESCRIPTION Burmister Soil Cla			SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	DIA		DЕРТН
	5.5" CONCRETE. S1 (0.5-2.5') 3" Tan fine to co fragments in split spoon tip. Refusal, end of boring 2.5'.	arse SAND, little gi	ravel, trace silt, moist;	concrete		S1	1-3-6 30		<1		
											5 —
										-	
											- 15
 Soi isobuty Sar 	ring advanced using drive and value is field screened with MiniRAE	2000 PID calibrate ubmitted for laborate	ated with 100 ppm	S S V 3	9 Web affrey,	Cross oster S	Street		Pag	e:	1

BORING LOG: B107 RANSOM Reviewed By: Total Depth: 4 Feet Logged By: DAF Engineers Date Reviewed: **Boring Diameter:** 3 Inches Date Drilled: 6/18/19 to 6/18/19 and Scientists GW Observed at: **NE Feet** Well Stickup: Flush Driller: **NEBC** BLOW COUNTS (per 6 inches) PENETRATION/ RECOVERY DEPTH SAMPLE NUMBER **DESCRIPTION** SAMPLE (Based on a modified Burmister Soil Classification System) 읊 5.5" CONCRETE. S1 (0.5-2') 10" Tan fine to coarse SAND, trace gravel, trace silt, moist. S1 18/10 1-1-1 <1 S2 (2-4') 6" Tan fine to coarse SAND, trace gravel, trace silt, moist, over 2" gray CONCRETE FRAGMENTS, dry. 2-10-S2 24/8 <1 20-21 60/0" 0/0 NA Split spoon refusal, zero recovery. Refusal, presumed old foundation, end of boring 4'. 5 10-10 15 15 CLIENT: NOTES: **SWRPC** 1. Boring advanced using drive and wash techniques. 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm SITE: isobutylene. W. W. Cross Property 3. Sample designated with solid fill submitted for laboratory analysis. 39 Webster Street 4. NA = Not applicable; NE = Not Encountered. Jaffrey, NH Project No.: 141.05051.010 Page:

Consulting
Engineers
and Scientists

BORING LOG					B108
Reviewed By:	(s, , , ,	Total Depth:	12 Feet	Logged By:	DAF
Date Reviewed: 12 16	119	Boring Diameter:	2.75 Inches	Date Drilled:	6/17/19 to 6/17/19
GW Observed at:	~4 Feet	Well Stickup:	Flush	Driller:	NEBC

	OW OBSCIVED U. TI COL WOLLD	nonup.		ı ıu		Dillier.		MEDO		
DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)		SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID		1	DEP IH
	S1 (0-2') 2" ASPHALT, over 9" tan fine to coarse SAND, little gravel, trace silt, moist.			S1	8-10- 11-8	24/11	<1			-
	S2 (2-4') 10" Tan fine to coarse SAND, little gravel, trace silt, trace orange staining, moist.			S2	8-7-5- 7	24/10	<1			=
5—	S3 (4-6') 7" Tan fine to coarse SAND, little gravel, trace silt, trace asphalt, over 4" black SILT, little fine sand, trace clay, trace roots, over 1" gray fine to coarse SAND, trace gravel, trace silt, trace brown staining, wet.		***	\$3	3-3-1- 3	24/12	<1 <1 <1		5	-
	S4 (6-8') 6" Tan fine to coarse SAND, little gravel, trace silt, over 10" gray fine to medium SAND, brown staining at transition, wet.			S 4	11-11- 12-11	24/16	<1 <1		=	
	S5 (8-10') 13" Gray fine to medium SAND, over 10" Tan/gray fine to medium SAND, trace thin layers of grey silt and brown fine sand, wet.			S5	2-6-7- 7	24/23	<1 <1		-	-
—10— — —	S6 (10-12') 24" Gray fine to coarse SAND, trace thin gray silt/clay layers, wet.			S6	9-7-9- 11	24/24	<1		— 10 —)—
	End of boring 12'.	5	88							
								į		-
—15— — —									— 15 –	
× -									_	-

NOTES:

- 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection.
- 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene.
- 3. Sample designated with solid fill submitted for laboratory analysis.
- 4. NA = Not applicable.

CLIENT: SWRPC

SITE

W. W. Cross Property 39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

Page:

1

BORING LOG: B109 RANSOM Reviewed By: Total Depth: 12 Feet Logged By: DAF **Engineers** Date Reviewed: Boring Diameter: 2.75 Inches Date Drilled: 6/17/19 to 6/17/19 and Scientists ~4 Feet Well Stickup: Driller: GW Observed at: Flush **NEBC** PENETRATION/ RECOVERY BLOW COUNTS (per 6 inches) DEPTH SAMPLE NUMBER DESCRIPTION (Based on a modified Burmister Soil Classification System) 吕 Auger through ASPHALT (3"). S1 (0.5-2') 9" Tan fine to coarse SAND, little gravel, trace silt, moist. S₁ 5-7-11 18/9 <1 S2 (2-4') 3" Tan fine to coarse SAND, little gravel, trace silt, moist. 4-3-2-S2 24/3 <1 S3 (4-6') 4" Tan fine to coarse SAND, little gravel, trace silt, wet. WOH-S3 24/4 5 <1 WOH-S4 (6-8') 3" Tan fine to coarse SAND, little gravel, trace silt, over 11" gray medium to coarse SAND, trace red staining, thin black layer at 3", wet. 4-8-12-**S4** 24/14 <1 16 S5 (8-10') 24" Gray medium to coarse SAND, little gravel, red mottling, wet. 14-19-**S**5 24/24 <1 17-31 10 10 S6 (10-12') 24" Gray medium to coarse SAND, little gravel, red mottling, wet. 26-24-S6 24/24 <1 35-32 End of boring 12'. 15 15 CLIENT: NOTES: **SWRPC** 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection. 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm W. W. Cross Property isobutylene. 3. Sample designated with solid fill submitted for laboratory analysis. 39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

Page:

1

4. NA = Not applicable; WOH = Weight of Hammer.



BORING LOG:					B110
Reviewed By:		Total Depth:	10 Feet	Logged By:	DAF
Date Reviewed: 12 16	(19	Boring Diameter:	2.75 Inches	Date Drilled:	6/17/19 to 6/17/19
GW Observed at:	~4 Feet	Well Stickup:	Flush	Driller:	NEBC

	OW Observed at. 41 det Well ollokup	•	1 14		Dillier.		NEDC	
DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID		DEPTH
	Augered through ASPHALT (3"); immediate foul tar/creosote odor.							
	S1 (0.5-2') 5" Tan fine to coarse SAND, little gravel, trace silt, moist, tar/creosote odor.		S1	6-10- 11	18/5	<1		-
F 7	S2 (2-4') 3" Tan fine to coarse SAND, little gravel, trace silt, moist.							-
-			S 2	6-3-3- 2	24/3	<1		
	S3 (4-6') 9" Tan fine to coarse SAND, 1/2" gray fine to coarse sand layer at 2",	XX						- =
5-	wet.	À.	S3	1-1-3- 8	24/9	<1		- 5 -
	S4 (6-8') 19" Gray medium to coarse SAND, wet.	××					-	
	34 (0-6) 19 Gray medium to coarse SAND, wet.		S4	8-8-10- 16	24/19	<1		
L J		\otimes						_
	S5 (8-10') 24" Gray medium to coarse SAND, wet.							
			S5	4-27- 30-42	24/24	<1		- -
10	End of boring 10'.							- 10-
							-	
F -								-
							[
15								15
							-	k 1-
							-	
								-

NOTES:

- 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection.
- 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene.
- 3. Sample designated with solid fill submitted for laboratory analysis.
- 4. NA = Not applicable.

CLIENT: SWRPC

SITE

W. W. Cross Property

39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

Page:

1

ZANSOM Engineers and Scientists

BORING LOG					B111
Reviewed By:	ζ,	Total Depth:	12 Feet	Logged By:	DAF
Date Reviewed: 12 6	119	Boring Diameter:	2.75 Inches	Date Drilled:	6/17/19 to 6/17/19
GW Observed at:	~4 Feet	Well Stickup:	Flush	Driller:	NEBC
			NTS	Ž	

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID		DEPTH
	(0-0.5') Auger through asphalt; 3" ASPHALT over 3" black fine to coarse SAND, little gravel, sticky, tar/creosote odor, moist. S2 (0.5-2') No recover, clogged split spoon tip.		S 1	NA 3-1-1	NA 0/18	22 NA		
	S3 (2-4') 3" Tan fine to coarse SAND, trace organics, trace asphalt/tar (possible fall-in), moist.		S2	2-2-1- 1	24/3	1.5		
5-	S4 (4-6') 2" Black fine to coarse SAND, sticky, tar/creosote odor (possible fall-in), over 6" tan fine to coarse SAND, wet.		S 3	WOH- 2-9-9	24/8	7.8		_ 5 -
	S5 (6-8') 17" Tan fine to coarse SAND, trace thin gray silt/clay layers, trace orange staining, wet.		S4	8-7-11- 14	24/17	<1		
	S6 (8-10') 12" Tan medium to coarse SAND, wet.		S 5	6-8-8- 16	24/12	<1	_	
-10-	S7 (10-12') 22" Tan medium to coarse SAND, trace orange staining, wet.		S6	8-7-9- 13	24/22	<1		— 10 —
	End of boring 12'.							
 15								
								_
								-

NOTES:

- 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection.
- 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene.
- 3. Sample designated with solid fill submitted for laboratory analysis.
- 4. NA = Not applicable; WOH = Weight of Hammer.

CLIENT: SWRPC

SITE:

W. W. Cross Property 39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010 Page:

1

Consulting
Engineers
and Scientists

BORING LO	3:				B114
Reviewed By:	2	Total Depth:	12 Feet	Logged By:	DAF
Date Reviewed: Z	16 19	Boring Diameter:	2.75 Inches	Date Drilled:	6/17/19 to 6/17/19
GW Observed at:	~4.5 Feet	Well Stickup:	Flush	Driller:	NEBC
			က	Ž	

DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID	рертн
	Augered through ASPHALT (2"). S1 (0.5-2') 6" Tan fine to coarse SAND, little gravel, trace silt, over 2" brown fine to coarse SAND, little brick & concrete, trace silt, moist.		S1	4-11-6	18/8	<1 <1	
	S2 (2-4') 5" Brown fine to coarse SAND, little silt, trace gravel, trace brick & concrete, moist.		S2	4-8-5- 6	24/5	<1	
5—	S3 (4-6') 2" Tan fine to coarse SAND, some Gravel, moist, over 2" dark gray fine to coarse SAND, little silt, trace gravel, trace roots, wet, over 2" white ROCK FRAGMENTS, dry, over 2" gray fine to medium SAND, little silt, wet.	***	S 3	9-3-1- 7	24/8	<1	- 5
	S4 (6-8') 1" Gray fine to medium SAND, over 2" dark gray fine to medium SAND, little silt, trace roots, over 6" fine to coarse SAND, some Gravel, wet.		S4	21-26- 14-6	24/9	<1	-
	S5 (8-10') 7" Tan fine to coarse SAND, trace thin silt layers, trace red staining, over 3" gray fine to medium SAND, trace gravel, over 2" tan fine to coarse SAND, trace gravel, wet.		S 5	9-9-9- 22	24/12	<1	
10	S6 (10-12') 8" Tan fine to coarse SAND, trace gravel, trace silt, wet.		S6	12-16- 15-12	24/8	<1	10 —
	End of boring 12'.						-
15							— 15 — -
							= ==

NOTES:

- 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection.
- 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene.
- 3. Sample designated with solid fill submitted for laboratory analysis.
- 4. NA ≃ Not applicable.

CLIENT: SWRPC

SITE

W. W. Cross Property

39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

Page:

Consulting
Engineers
and Scientists

BORING LOG:					B115
Reviewed By: SFC		Total Depth:	12 Feet	Logged By:	DAF
Date Reviewed: 12 16	9	Boring Diameter:	2.75 Inches	Date Drilled:	6/17/19 to 6/17/19
GW Observed at:	~5 Feet	Well Stickup:	Flush	Driller:	NEBC

				1				
DEPTH	DESCRIPTION (Based on a modified Burmister Soil Classification System)	SAMPLE	SAMPLE NUMBER	BLOW COUNTS (per 6 inches)	PENETRATION/ RECOVERY	PID		DEPTH
	Augered through asphalt; 3" ASPHALT, over 9" tan fine to coarse SAND, little cobbles, moist.							
	S1 (1-3') 7" Brown fine to coarse SAND, little gravel, little silt, over 3" white & black ROCK FRAGMENTS, over 1" brown fine to coarse SAND, little gravel, little silt, moist.		S1	3-10- 21-10	24/11	<1		
	S2 (3-5') 3" Brown fine to coarse SAND, some Gravel, trace organics, moist, wet at very bottom.		S2	1-1-8- 4	24/3	<1		
- 5 -	S3 (5-7') 1" Brown fine to coarse SAND, little gravel, trace brick, over 4" dark gray fine to coarse SAND, some Silt, some Organics (wood fragment, roots, bark), over 5" white ROCK FRAGMENTS (weathered), wet.		S 3	WOR- 2-39- 23	24/10	<1		- 5 -
	S4 (7-9') 2" White ROCK FRAGMENTS (weathered), over 9" gray fine to medium SAND, trace silt, wet.		S4	10-10- 13-13	24/11	<1		-
10	S5 (9-10') 5" Gray fine to medium SAND, little silt, wet.		S5	10-13	12/5	<1		_ 10 —
- 10	S6 (10-12') 4" Gray fine to medium SAND, little silt, trace gravel, over 5" tan ROCK FRAGMENTS (weathered), wet.		S6	12-62- 24-12	24/9	<1		- 10
- +	End of boring 12'.							€ ;∂
								2 2=
- 4								
-15-								15 —
								-
								. –
							1	. ,
- 1-								

NOTES:

- 1. Boring advanced using augers; 140-lb auto-hammer split spoon sample collection.
- 2. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppm isobutylene.
- 3. Sample designated with solid fill submitted for laboratory analysis.
- 4. NA = Not applicable; WOR = Weight of Rods.

CLIENT: SWRPC

SITE:

W. W. Cross Property

39 Webster Street

Jaffrey, NH

Project No.: 141.05051.010

Page:

Borings Advanced August 12, 2019 By Eastern Analytical, Inc.



BORING AND MONITORING WELL LOG B105A

Consume, inc.										
Project Number: 141.05051.010	Drilling Company: EAI				Total De	pth: 14	Feet			
Project: WW Cross Property	Drilling Method: Track-me	ounted p	ush-pro	be	Start Dat	te: 8/12/	19			
Site Location: 39 Webster Avenue	Well Stick Up: NA Date Completed: 8/12/19									
Jaffrey, New Hampshire	Boring Diameter: 2 1/2 In	ches			Logged I	y: BAB		1		
Client: SWRPC	Groundwater Observed:				Reviewe	Reviewed by: SAZ 12				
DESCRIPTION Based on USCS and Modified Burmister Soil	Classification System	SAMPLE	SAMPLE	BLOWS (PER 6")	PENETRATION / RECOVERY	PID/FID (PPM)	ОЕРТН (FT.)	WELL		
Advanced to 2.5'; see B105 log for soil detail.							1	NA		
S1 (2.5-5') 2" COBBLE, over 9" gray/brown to bro little fine to medium gravel, trace silt, 2" dark brow			S1	NA	30/11	<1	2 3 4			
62 (5-8') Gray/brown, fine to medium SAND, little race silt, few red mottles at 7-8', moist.		S2	NA	36/30	<1	— 5 — — 6 — — 7 —				
Refusal, end of boring 8'.							8 —			
telusar, end of borning of							— 9 —			
							10-			
							—11—			
							—12—			
							— 13 <i>—</i>			
							— 14 <i>—</i>			
							— 15 —			
							— 16 —			
							— 17—			
							18—			
							19—			
otes: 1. Soils field screened with MiniRAE 2000 PID	Well Legend:		11001101			Н				
alibrated with 100 ppmv isobutylene. 2. Sample esignated with solid fill submitted for laboratory nalysis.	NA=not applicable; NM=not m	Filter Sand	Native Fill	Bentonite	Bentonite grout	Concrete	PVC Screen			
	Tot applicable, NW-10th		IIOL	Unicountere						



BORING AND MONITORING WELL LOG B113

Based on USCS and Modified Burnister Soli Classification System Was a second of the	CONSUMING, ITIC.				5113				
Site Location: 39 Webster Avenue Joffrey, New Hampshire Boring Diameter: 2 1/2 Inches Client: SWRPC DESCRIPTION Based on USCS and Modified Burmister Soil Classification System DESCRIPTION Based on USCS and Modified Burmister Soil Classification System S1 & S2 (0-4) 4" CONCRETE, over 28" brown/gray, fine to medium SAND, some to little, fine to medium gravel, trace sitl, moist. S2 S3 & S4 (4-8) Brown/gray, fine to medium SAND, little fine to medium gravel, trace sitl, weathered rock at 5 1/2; 6" cobbile at 7", moist. S3 & S4 (4-8) Brown/gray, fine to medium SAND, little fine to medium gravel, trace sitl, weathered rock at 5 1/2; 6" cobbile at 7", moist. S4 S4 S4 S5	Project Number: 141.05051.010					Total De	pth: 8 Fe	eet	
Justifiery, New Hampshire Boffing Diameter: 2 1/2 Inches Cligate Dys BAB Client: SWRPC Groundwater Observed: NA Reviewed by:									
Client: SWRPC DESCRIPTION Based on USCS and Modified Burmister Soil Classification System S1 & S2 (0-4) 4" CONCRETE, over 28" brown/gray, fine to medium SAND, some to little, fine to medium gravel, trace silt, moist. S2 S3 & S4 (4-8) Brown/gray, fine to medium SAND, little fine to medium gravel, trace silt, moist. S3 & S4 (4-8) Brown/gray, fine to medium SAND, little fine to medium gravel, trace silt, moist. S4 S6 S7 S8 S8 S9								8/12/19	
DESCRIPTION Based on USCS and Modified Burmister Soil Classification System If a suppose the street of the stree									1
S1 & S2 (0-4') 4" CONCRETE, over 28" brown/gray, fine to medium SAND, some to little, fine to medium gravel, trace silt, moist. S2 NA 80/28 -2 -2	Client: SWRPC	Groundwater Observed:	NA	_	-		d by: 🚅	TC 2	1 66 1 7 1
S1 & S2 (0-4') 4" CONCRETE, over 28" brown/gray, fine to medium SAND, some to little, fine to medium gravel, trace silt, moist. S2 NA 80/28 -2 -2		DESCRIPTION Based on USCS and Modified Burmister Soil Classification System Based on USCS and Modified Burmister Soil Classification System Based on USCS and Modified Burmister Soil Classification System Based on USCS and Modified Burmister Soil Classification System						ОЕРТН (FT.)	WELL
S4 S4 S4 S4 S4 S4 S4 S4	some to little, fine to medium gravel, trace silt, mo	ist.		S1	NA		<1	1 2 3 4	NA
Notes: 1. Solis field screened with MiniRAE 2000 PID Pilot			*****	S 4	NA	36/28	<1		
- 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 10 11 12 13 14 15 16 17 18 19 - 1	Refusal, end of boring 8'.							- 8 −	
calibrated with 100 ppmv isobutylene. 2. Sample designated with solid fill submitted for laboratory								— 10— — 11— — 12— — 13— — 14— — 15— — 16— — 17— — 18—	
nalysis. NA=not applicable; NM=not measured; NE=not encountered	alibrated with 100 ppmv isobutylene. 2. Sample esignated with solid fill submitted for laboratory		Filter Sand	Native Fill	Bentonite	Bentonite grout		PVC Screen	



BORING AND MONITORING WELL LOG B116

Project Number: 141.05051.010										
	Drilling Company: EAI				Total De	epth: 4 Fe	eet			
Project: WW Cross Property	Drilling Method: Track-r	nounted p	oush-pro	be	Start Da	te: 8/12/	19			
Site Location: 39 Webster Avenue	Well Stick Up: NA				Date Co	Date Completed: 8/12/19				
Jaffrey, New Hampshire	Boring Diameter: 2 1/2	Inches				by: BAB		. 7		
Client: SWRPC	Groundwater Observed:	NA			Reviewe	ed by: Sd	FR 12	416/19		
DESCRIPTION Based on USCS and Modified Burmister Soil	Classification System	SAMPLE	SAMPLE NUMBER	BLOWS (PER 6")	PENETRATION / RECOVERY	PID/FID (PPM)	DЕРТН (FT.)	WELL		
S1 & S2 (0-4') 4" ASPHALT, over 22" brown/gray little fine to medium gravel, trace silt, dry to moist			S1 S2	NA	48/26	<1	- 1 - 2 - 3 - 4 - 4	NA		
End of boring 4'.							- 5 - 6 7 - 8 10 11 12 13 14 15 16 17 18 19 18 19 - 19			
	Well Legend:	\Box	111111111							



BORING AND MONITORING WELL LOG B117

COristiurig, Iric.	787			DII/				
Project Number: 141.05051.010	Drilling Company: EAI				Total De	pth: 4 Fe	eet	
Project: WW Cross Property	Drilling Method: Track-m	ounted p	oush-pro	be	Start Da	te: 8/12/	19	
Site Location: 39 Webster Avenue	Well Stick Up: NA				Date Co	mpleted:	8/12/19	
Jaffrey, New Hampshire	Boring Diameter: 2 1/2 Ir	ches			Logged			
Client: SWRPC	Groundwater Observed:	NA			Reviewe	d by: 🦋	R 121	6/19
DESCRIPTION Based on USCS and Modified Burmister Soil (Classification System	SAMPLE	SAMPLE	BLOWS (PER 6")	PENETRATION / RECOVERY	PID/FID (PPM)	БЕРТН (FT.)	WELL
S1 (0-2') 4" ASPHALT, over 6" brown, fine to med medium gravel, trace silt, lens of black at 0.5' and like odor, dry to moist. S2 (2-4') 10" Brown, fine to medium SAND, little fi	2' (estimated), creosote		S 1	NA	48/20	<1	— 1 — — 2 —	NA
silt, moist.	ne to medium graver, trace		S2			<1	3	
End of boring 4'.							_ 5 _	
							— 6 —	
							— 7 —	
							- 8 -	
							— 9 —	
							— 10—	
							—11—	
							— 12—	
							— 13—	
							14	
							— 15— 40	
							—16— —17—	
							18	
							— 19—	
Notes: 1. Soils field screened with MiniRAE 2000 PID calibrated with 100 ppmv isobutylene. 2. Sample designated with solid fill submitted for laboratory	Well Legend:	Filter Sand	Fill	Bentonite I	grout	Concrete	PVC Screen	
analysis.	NA=not applicable; NM=not m	neasured;	NE=not	encountere	d			

APPENDIX B

Laboratory Analytical Results

Supplemental Phase II Environmental Site Assessment W. W. Cross Property 39 Webster Street Jaffrey, New Hampshire



ANALYTICAL REPORT

Lab Number: L1926197

Client: Ransom Consulting, Inc.

112 Corporate Drive

Pease International Tradeport

Portsmouth, NH 03801

ATTN: John Ouellette Phone: (603) 436-1490

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Report Date: 07/10/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197 **Report Date:** 07/10/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1926197-01	B108-S2	SOIL	JAFFREY, NH	06/17/19 08:10	06/18/19
L1926197-02	B108-S3	SOIL	JAFFREY, NH	06/17/19 08:20	06/18/19
L1926197-03	B109-S3	SOIL	JAFFREY, NH	06/17/19 10:50	06/18/19
L1926197-04	B109-S4	SOIL	JAFFREY, NH	06/17/19 11:00	06/18/19
L1926197-05	B110-S3	SOIL	JAFFREY, NH	06/17/19 10:05	06/18/19
L1926197-06	B111-S3	SOIL	JAFFREY, NH	06/17/19 09:15	06/18/19
L1926197-07	B114-S3	SOIL	JAFFREY, NH	06/17/19 13:30	06/18/19
L1926197-08	B114-S4	SOIL	JAFFREY, NH	06/17/19 13:40	06/18/19
L1926197-09	B115-S3	SOIL	JAFFREY, NH	06/17/19 12:50	06/18/19
L1926197-10	B111-0.5'	SOIL	JAFFREY, NH	06/17/19 09:45	06/18/19
L1926197-11	TRIP BLANK	SOIL	JAFFREY, NH	06/17/19 00:00	06/18/19



L1926197

Lab Number:

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 **Report Date:** 07/10/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1926197-11: The Trip Blank has results for acetone and tert-butyl alcohol present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Semivolatile Organics

L1926197-10: The sample has elevated detection limits due to the limited sample volume utilized during extraction and due to the dilution required by the sample matrix.

L1926197-10: The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Reextraction was not required; therefore, the results of the original analysis are reported.

Petroleum Hydrocarbon Identification by GC-FID

L1926197-10: The sample was extracted and then analyzed using a gas chromatograph equipped with a flame ionization detector (GC/FID). The temperature program and associated experimental conditions were optimized to obtain maximum resolution in an eighty minute chromatographic run representative of hydrocarbons in the n-Octane (C8) to n-Tetracontane (C40) range. Qualitative evaluation of the sample was conducted by reviewing the sample chromatogram in conjunction with a chromatogram of a normal alkane series generated with the same chromatographic conditions. Chromatograms of hydrocarbon reference materials obtained from our library of 82 reference standards were also utilized to provide the best possible sample match. Quantitative determination of the sample's hydrocarbon concentration was performed in accordance with EPA Method 8015M. The sample's total hydrocarbon concentration and all associated quality control data are included in the report.



Project Name:WW CROSS PROPERTYLab Number:L1926197Project Number:141.05051.010Report Date:07/10/19

Case Narrative (continued)

The following qualitative information is based on a tentative interpretation of chromatographic pattern recognition and boiling point ranges:

Total Petroleum Hydrocarbon Identification

L1926197-10 contains hydrocarbons eluting in the range of n-Nonane (C9) to after the elution of n-Tetracontane (C40).

Based on the data generated, L1926197-10 contains material eluting in the low to heavy molecular weight ranges of the chromatogram. The material appears to be similar to a coal tar/creosote.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/10/19

600, Sew on Kelly Stenstrom

ORGANICS



VOLATILES



06/17/19 08:20

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-02

Client ID: B108-S3 Sample Location: JAFFREY, NH Date Received: 06/18/19 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 06/27/19 22:50

Analyst: NLK 85% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - We	estborough Lab					
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.55	0.21	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-02 Date Collected: 06/17/19 08:20

Client ID: B108-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	ow - Westborough Lab					
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	0.73	J	ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	72		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
Tetrahydrofuran	ND		ug/kg	4.4	1.7	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.2	0.19	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
n-Propylbenzene	ND		ug/kg	1.1	0.19	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-02 Date Collected: 06/17/19 08:20

Client ID: B108-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low	/ - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	 1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1	
Ethyl ether	1.6	J	ug/kg	2.2	0.37	1	
Isopropyl Ether	ND		ug/kg	2.2	0.23	1	
Tert-Butyl Alcohol	22		ug/kg	22	5.6	1	
Ethyl-Tert-Butyl-Ether	0.17	J	ug/kg	2.2	0.14	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.2	0.19	1	
1,4-Dioxane	ND		ug/kg	87	38.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	113	70-130	
Toluene-d8	105	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	103	70-130	

06/17/19 11:00

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-04

Client ID: B109-S4 Sample Location: JAFFREY, NH Date Received: 06/18/19 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C 06/27/19 23:16

Analytical Date: Analyst: NLK

80% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	estborough Lab					
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.12	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.86	1
Bromomethane	ND		ug/kg	1.8	0.54	1
Vinyl chloride	ND		ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-04 Date Collected: 06/17/19 11:00

Client ID: B109-S4 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lov	v - Westborough Lab					
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	0.61	J	ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.52	1
o-Xylene	ND		ug/kg	0.92	0.27	1
Xylenes, Total	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	0.29	J	ug/kg	0.92	0.16	1
1,2-Dichloroethene, Total	0.29	J	ug/kg	0.92	0.13	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
Styrene	ND		ug/kg	0.92	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	62		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	10		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
Tetrahydrofuran	ND		ug/kg	3.7	1.5	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.8	0.16	1
o-Chlorotoluene	ND		ug/kg	1.8	0.18	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	1.6	J	ug/kg	3.7	0.60	1
n-Propylbenzene	ND		ug/kg	0.92	0.16	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-04 Date Collected: 06/17/19 11:00

Client ID: B109-S4 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - We	stborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1
Ethyl ether	1.4	J	ug/kg	1.8	0.31	1
Isopropyl Ether	ND		ug/kg	1.8	0.20	1
Tert-Butyl Alcohol	17	J	ug/kg	18	4.7	1
Ethyl-Tert-Butyl-Ether	0.13	J	ug/kg	1.8	0.12	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.8	0.16	1
1,4-Dioxane	ND		ug/kg	74	32.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	111	70-130
Dibromofluoromethane	102	70-130

06/17/19 10:05

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Date Collected:

Lab ID: L1926197-05

> Date Received: B110-S3

Client ID: 06/18/19 Field Prep: Sample Location: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 06/28/19 01:52

Analyst: NLK 84% Percent Solids:

Volatile Organics by EPA 5035 High - Westborough Lab Methylene chloride ND 1,1-Dichloroethane ND Chloroform ND Carbon tetrachloride ND 1,2-Dichloropropane ND Dibromochloromethane ND 1,1,2-Trichloroethane ND Tetrachloroethene 70 Chlorobenzene ND Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND trans-1,3-Dichloropropene ND	ug/kg ug/kg ug/kg	300 60	140	1
1,1-Dichloroethane ND Chloroform ND Carbon tetrachloride ND 1,2-Dichloropropane ND Dibromochloromethane ND 1,1,2-Trichloroethane ND Tetrachloroethene 70 Chlorobenzene ND Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND	ug/kg		140	1
Chloroform ND Carbon tetrachloride ND 1,2-Dichloropropane ND Dibromochloromethane ND 1,1,2-Trichloroethane ND Tetrachloroethene 70 Chlorobenzene ND Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND	ug/kg	60		
Carbon tetrachloride ND 1,2-Dichloropropane ND Dibromochloromethane ND 1,1,2-Trichloroethane ND Tetrachloroethene 70 Chlorobenzene ND Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND			8.6	1
1,2-DichloropropaneNDDibromochloromethaneND1,1,2-TrichloroethaneNDTetrachloroethene70ChlorobenzeneNDTrichlorofluoromethaneND1,2-DichloroethaneND1,1,1-TrichloroethaneNDBromodichloromethaneND		89	8.3	1
DibromochloromethaneND1,1,2-TrichloroethaneNDTetrachloroethene70ChlorobenzeneNDTrichlorofluoromethaneND1,2-DichloroethaneND1,1,1-TrichloroethaneNDBromodichloromethaneND	ug/kg	60	14.	1
1,1,2-TrichloroethaneNDTetrachloroethene70ChlorobenzeneNDTrichlorofluoromethaneND1,2-DichloroethaneND1,1,1-TrichloroethaneNDBromodichloromethaneND	ug/kg	60	7.4	1
Tetrachloroethene 70 Chlorobenzene ND Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND	ug/kg	60	8.3	1
ChlorobenzeneNDTrichlorofluoromethaneND1,2-DichloroethaneND1,1,1-TrichloroethaneNDBromodichloromethaneND	ug/kg	60	16.	1
Trichlorofluoromethane ND 1,2-Dichloroethane ND 1,1,1-Trichloroethane ND Bromodichloromethane ND	ug/kg	30	12.	1
1,2-DichloroethaneND1,1,1-TrichloroethaneNDBromodichloromethaneND	ug/kg	30	7.6	1
1,1,1-Trichloroethane ND Bromodichloromethane ND	ug/kg	240	41.	1
Bromodichloromethane ND	ug/kg	60	15.	1
	ug/kg	30	9.9	1
trans-1,3-Dichloropropene ND	ug/kg	30	6.5	1
, , ,	ug/kg	60	16.	1
cis-1,3-Dichloropropene ND	ug/kg	30	9.4	1
1,3-Dichloropropene, Total ND	ug/kg	30	9.4	1
1,1-Dichloropropene ND	ug/kg	30	9.5	1
Bromoform ND	ug/kg	240	15.	1
1,1,2,2-Tetrachloroethane ND	ug/kg	30	9.9	1
Benzene ND	ug/kg	30	9.9	1
Toluene ND	ug/kg	60	32.	1
Ethylbenzene ND	ug/kg	60	8.4	1
Chloromethane ND	ug/kg	240	56.	1
Bromomethane ND	ug/kg	120	35.	1
Vinyl chloride ND	ug/kg	60	20.	1
Chloroethane ND	ug/kg	120	27.	1
1,1-Dichloroethene ND	ug/ng			
trans-1,2-Dichloroethene ND	ug/kg	60	14.	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-05 Date Collected: 06/17/19 10:05

Client ID: B110-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High -	Westborough Lab					
Trichloroethene	ND		ug/kg	30	8.2	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.6	1
1,3-Dichlorobenzene	ND		ug/kg	120	8.8	1
1,4-Dichlorobenzene	ND		ug/kg	120	10.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	ND		ug/kg	120	33.	1
o-Xylene	22	J	ug/kg	60	17.	1
Xylenes, Total	22	J	ug/kg	60	17.	1
cis-1,2-Dichloroethene	ND		ug/kg	60	10.	1
1,2-Dichloroethene, Total	ND		ug/kg	60	8.2	1
Dibromomethane	ND		ug/kg	120	14.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.6	1
Styrene	20	J	ug/kg	60	12.	1
Dichlorodifluoromethane	ND		ug/kg	600	54.	1
Acetone	ND		ug/kg	600	290	1
Carbon disulfide	ND		ug/kg	600	270	1
2-Butanone	ND		ug/kg	600	130	1
4-Methyl-2-pentanone	ND		ug/kg	600	76.	1
2-Hexanone	ND		ug/kg	600	70.	1
Bromochloromethane	ND		ug/kg	120	12.	1
Tetrahydrofuran	ND		ug/kg	240	95.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	60	17.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	30	7.9	1
Bromobenzene	ND		ug/kg	120	8.6	1
n-Butylbenzene	ND		ug/kg	60	9.9	1
sec-Butylbenzene	ND		ug/kg	60	8.7	1
tert-Butylbenzene	ND		ug/kg	120	7.0	1
1,3,5-Trichlorobenzene	ND		ug/kg	120	10.	1
o-Chlorotoluene	ND		ug/kg	120	11.	1
p-Chlorotoluene	ND		ug/kg	120	6.4	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	59.	1
Hexachlorobutadiene	ND		ug/kg	240	10.	1
Isopropylbenzene	ND		ug/kg	60	6.5	1
p-Isopropyltoluene	ND		ug/kg	60	6.5	1
Naphthalene	14000		ug/kg	240	39.	1
n-Propylbenzene	ND		ug/kg	60	10.	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-05 Date Collected: 06/17/19 10:05

Client ID: B110-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - We	estborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	120	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	16.	1
1,3,5-Trimethylbenzene	30	J	ug/kg	120	11.	1
1,2,4-Trimethylbenzene	76	J	ug/kg	120	20.	1
Ethyl ether	ND		ug/kg	120	20.	1
Isopropyl Ether	ND		ug/kg	120	13.	1
Tert-Butyl Alcohol	ND		ug/kg	1200	310	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	120	7.6	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	120	10.	1
1,4-Dioxane	ND		ug/kg	4800	2100	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	104	70-130	
Dibromofluoromethane	101	70-130	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-07

Client ID: B114-S3 JAFFREY, NH

Field Prep:

Date Collected:

06/17/19 13:30

Sample Location:

Date Received:

06/18/19 Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

06/28/19 08:51

Analytical Date: Analyst:

MV

82% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	stborough Lab					
Methylene chloride	ND		ug/kg	3.7	1.7	1
1,1-Dichloroethane	ND		ug/kg	0.74	0.11	1
Chloroform	ND		ug/kg	1.1	0.10	1
Carbon tetrachloride	ND		ug/kg	0.74	0.17	1
1,2-Dichloropropane	ND		ug/kg	0.74	0.09	1
Dibromochloromethane	ND		ug/kg	0.74	0.10	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	0.20	1
Tetrachloroethene	ND		ug/kg	0.37	0.14	1
Chlorobenzene	ND		ug/kg	0.37	0.09	1
Trichlorofluoromethane	ND		ug/kg	3.0	0.51	1
1,2-Dichloroethane	ND		ug/kg	0.74	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	0.12	1
Bromodichloromethane	ND		ug/kg	0.37	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.37	0.12	1
Bromoform	ND		ug/kg	3.0	0.18	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	0.12	1
Benzene	ND		ug/kg	0.37	0.12	1
Toluene	ND		ug/kg	0.74	0.40	1
Ethylbenzene	ND		ug/kg	0.74	0.10	1
Chloromethane	ND		ug/kg	3.0	0.69	1
Bromomethane	ND		ug/kg	1.5	0.43	1
Vinyl chloride	ND		ug/kg	0.74	0.25	1
Chloroethane	ND		ug/kg	1.5	0.33	1
1,1-Dichloroethene	ND		ug/kg	0.74	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	0.10	1



06/17/19 13:30

Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-07 Date Collected:

Client ID: B114-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
Trichloroethene	ND		ug/kg	0.37	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	0.32	J	ug/kg	1.5	0.15	1
p/m-Xylene	ND		ug/kg	1.5	0.41	1
o-Xylene	ND		ug/kg	0.74	0.22	1
Xylenes, Total	ND		ug/kg	0.74	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	0.13	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.09	1
Styrene	ND		ug/kg	0.74	0.14	1
Dichlorodifluoromethane	ND		ug/kg	7.4	0.68	1
Acetone	38		ug/kg	7.4	3.6	1
Carbon disulfide	ND		ug/kg	7.4	3.4	1
2-Butanone	3.4	J	ug/kg	7.4	1.6	1
4-Methyl-2-pentanone	ND		ug/kg	7.4	0.95	1
2-Hexanone	ND		ug/kg	7.4	0.87	1
Bromochloromethane	ND		ug/kg	1.5	0.15	1
Tetrahydrofuran	ND		ug/kg	3.0	1.2	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.15	1
1,2-Dibromoethane	ND		ug/kg	0.74	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	ND		ug/kg	0.74	0.12	1
sec-Butylbenzene	ND		ug/kg	0.74	0.11	1
tert-Butylbenzene	ND		ug/kg	1.5	0.09	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.5	0.13	1
o-Chlorotoluene	ND		ug/kg	1.5	0.14	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	0.74	1
Hexachlorobutadiene	ND		ug/kg	3.0	0.12	1
Isopropylbenzene	ND		ug/kg	0.74	0.08	1
p-Isopropyltoluene	ND		ug/kg	0.74	0.08	1
Naphthalene	ND		ug/kg	3.0	0.48	1
n-Propylbenzene	ND		ug/kg	0.74	0.13	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-07 Date Collected: 06/17/19 13:30

Client ID: B114-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Volatile Organics by EPA 5035 Low - Wes	/olatile Organics by EPA 5035 Low - Westborough Lab									
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.24	1				
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.20	1				
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	0.14	1				
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	0.25	1				
Ethyl ether	1.4	J	ug/kg	1.5	0.25	1				
Isopropyl Ether	ND		ug/kg	1.5	0.16	1				
Tert-Butyl Alcohol	23		ug/kg	15	3.8	1				
Ethyl-Tert-Butyl-Ether	0.13	J	ug/kg	1.5	0.10	1				
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.5	0.13	1				
1,4-Dioxane	ND		ug/kg	59	26.	1				

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	109	70-130	
4-Bromofluorobenzene	120	70-130	
Dibromofluoromethane	101	70-130	

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-09 Date Collected: 06/17/19 12:50

Client ID: Date Received: 06/18/19 B115-S3 Field Prep: Sample Location: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 06/28/19 00:08

Analyst: NLK 66% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low -	Westborough Lab					
Methylene chloride	ND		ug/kg	6.0	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.23	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.83	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.65	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.69	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-09 Date Collected: 06/17/19 12:50

Client ID: B115-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - V	Vestborough Lab					
Triablessethers	ND			0.00	0.40	4
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene			ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	0.73	J	ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.67	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	0.61	J	ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	0.61	J	ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	110		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	10	J	ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
Tetrahydrofuran	ND		ug/kg	4.8	1.9	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.4	0.21	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	0.84	J	ug/kg	4.8	0.77	1
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
.,						



Project Name: WW CROSS PROPERTY **Lab Number:** L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-09 Date Collected: 06/17/19 12:50

Client ID: B115-S3 Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low - W	estborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1	
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1	
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1	
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1	
Ethyl ether	1.7	J	ug/kg	2.4	0.41	1	
Isopropyl Ether	ND		ug/kg	2.4	0.25	1	
Tert-Butyl Alcohol	25		ug/kg	24	6.1	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.4	0.15	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.4	0.21	1	
1,4-Dioxane	ND		ug/kg	95	42.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	120	70-130	
Toluene-d8	112	70-130	
4-Bromofluorobenzene	124	70-130	
Dibromofluoromethane	105	70-130	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: D L1926197-10

Client ID: B111-0.5' Sample Location: JAFFREY, NH

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 06/28/19 02:18

Analyst: NLK 97% Percent Solids:

Date Collected:	06/17/19 09:45

Date Received: 06/18/19 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Hi	gh - Westborough Lab					
Methylene chloride	ND		ug/kg	42000	19000	200
1,1-Dichloroethane	ND		ug/kg	8300	1200	200
Chloroform	ND		ug/kg	12000	1200	200
Carbon tetrachloride	ND		ug/kg	8300	1900	200
1,2-Dichloropropane	ND		ug/kg	8300	1000	200
Dibromochloromethane	ND		ug/kg	8300	1200	200
1,1,2-Trichloroethane	ND		ug/kg	8300	2200	200
Tetrachloroethene	ND		ug/kg	4200	1600	200
Chlorobenzene	ND		ug/kg	4200	1000	200
Trichlorofluoromethane	ND		ug/kg	33000	5800	200
1,2-Dichloroethane	ND		ug/kg	8300	2100	200
1,1,1-Trichloroethane	ND		ug/kg	4200	1400	200
Bromodichloromethane	ND		ug/kg	4200	910	200
trans-1,3-Dichloropropene	ND		ug/kg	8300	2300	200
cis-1,3-Dichloropropene	ND		ug/kg	4200	1300	200
1,3-Dichloropropene, Total	ND		ug/kg	4200	1300	200
1,1-Dichloropropene	ND		ug/kg	4200	1300	200
Bromoform	ND		ug/kg	33000	2000	200
1,1,2,2-Tetrachloroethane	ND		ug/kg	4200	1400	200
Benzene	1400	J	ug/kg	4200	1400	200
Toluene	ND		ug/kg	8300	4500	200
Ethylbenzene	ND		ug/kg	8300	1200	200
Chloromethane	ND		ug/kg	33000	7800	200
Bromomethane	ND		ug/kg	17000	4800	200
Vinyl chloride	ND		ug/kg	8300	2800	200
Chloroethane	ND		ug/kg	17000	3800	200
1,1-Dichloroethene	ND		ug/kg	8300	2000	200
trans-1,2-Dichloroethene	ND		ug/kg	12000	1100	200



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-10 D Date Collected: 06/17/19 09:45

Client ID: B111-0.5' Date Received: 06/18/19
Sample Location: JAFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 High	- Westborough Lab						
Trichloroethene	ND		ug/kg	4200	1100	200	
1,2-Dichlorobenzene	ND		ug/kg	17000	1200	200	
1,3-Dichlorobenzene	ND		ug/kg	17000	1200	200	
1,4-Dichlorobenzene	ND		ug/kg	17000	1400	200	
Methyl tert butyl ether	ND		ug/kg	17000	1700	200	
p/m-Xylene	7300	J	ug/kg	17000	4700	200	
o-Xylene	4700	J	ug/kg	8300	2400	200	
Xylenes, Total	12000	J	ug/kg	8300	2400	200	
cis-1,2-Dichloroethene	ND		ug/kg	8300	1400	200	
1,2-Dichloroethene, Total	ND		ug/kg	8300	1100	200	
Dibromomethane	ND		ug/kg	17000	2000	200	
1,2,3-Trichloropropane	ND		ug/kg	17000	1000	200	
Styrene	3800	J	ug/kg	8300	1600	200	
Dichlorodifluoromethane	ND		ug/kg	83000	7600	200	
Acetone	ND		ug/kg	83000	40000	200	
Carbon disulfide	ND		ug/kg	83000	38000	200	
2-Butanone	ND		ug/kg	83000	18000	200	
4-Methyl-2-pentanone	ND		ug/kg	83000	11000	200	
2-Hexanone	ND		ug/kg	83000	9800	200	
Bromochloromethane	ND		ug/kg	17000	1700	200	
Tetrahydrofuran	ND		ug/kg	33000	13000	200	
2,2-Dichloropropane	ND		ug/kg	17000	1700	200	
1,2-Dibromoethane	ND		ug/kg	8300	2300	200	
1,1,1,2-Tetrachloroethane	ND		ug/kg	4200	1100	200	
Bromobenzene	ND		ug/kg	17000	1200	200	
n-Butylbenzene	ND		ug/kg	8300	1400	200	
sec-Butylbenzene	ND		ug/kg	8300	1200	200	
tert-Butylbenzene	ND		ug/kg	17000	980	200	
1,3,5-Trichlorobenzene	ND		ug/kg	17000	1400	200	
o-Chlorotoluene	ND		ug/kg	17000	1600	200	
p-Chlorotoluene	ND		ug/kg	17000	900	200	
1,2-Dibromo-3-chloropropane	ND		ug/kg	25000	8300	200	
Hexachlorobutadiene	ND		ug/kg	33000	1400	200	
Isopropylbenzene	ND		ug/kg	8300	910	200	
p-Isopropyltoluene	ND		ug/kg	8300	910	200	
Naphthalene	1700000		ug/kg	33000	5400	200	
n-Propylbenzene	ND		ug/kg	8300	1400	200	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-10 D Date Collected: 06/17/19 09:45

Client ID: B111-0.5' Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Volatile Organics by EPA 5035 High - Westborough Lab									
1,2,3-Trichlorobenzene	ND		ug/kg	17000	2700	200			
1,2,4-Trichlorobenzene	ND		ug/kg	17000	2300	200			
1,3,5-Trimethylbenzene	4900	J	ug/kg	17000	1600	200			
1,2,4-Trimethylbenzene	13000	J	ug/kg	17000	2800	200			
Ethyl ether	ND		ug/kg	17000	2800	200			
Isopropyl Ether	ND		ug/kg	17000	1800	200			
Tert-Butyl Alcohol	ND		ug/kg	170000	43000	200			
Ethyl-Tert-Butyl-Ether	ND		ug/kg	17000	1100	200			
Tertiary-Amyl Methyl Ether	ND		ug/kg	17000	1500	200			
1,4-Dioxane	ND		ug/kg	670000	290000	200			

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	113	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	104	70-130	
Dibromofluoromethane	100	70-130	



L1926197

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number:

Report Date: 07/10/19

Lab ID: Date Collected: 06/17/19 00:00 L1926197-11

Date Received: Client ID: TRIP BLANK 06/18/19 Sample Location: Field Prep: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 06/28/19 00:34

Analyst: NLK

Results reported on an 'AS RECEIVED' basis. Percent Solids:

	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	estborough Lab					
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-11 Date Collected: 06/17/19 00:00

Client ID: TRIP BLANK Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	ow - Westborough Lab					
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	19		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	4.0	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-11 Date Collected: 06/17/19 00:00

Client ID: TRIP BLANK Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	tborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	1.6	J	ug/kg	2.0	0.34	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	24		ug/kg	20	5.1	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	1
1,4-Dioxane	ND		ug/kg	80	35.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	116	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	104	70-130	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-11 Date Collected: 06/17/19 00:00

Client ID: TRIP BLANK Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/28/19 01:00

Analyst: NLK

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Volatile Organics by EPA 5035 High - Westboro Methylene chloride 1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene Chlorobenzene	ND N	ug/kg ug/kg ug/kg ug/kg ug/kg	250 50 75 50	110 7.2 7.0 12.	1 1 1
1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene	ND ND ND ND ND ND ND	ug/kg ug/kg ug/kg ug/kg	50 75 50	7.2 7.0	1
Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene	ND ND ND ND ND	ug/kg ug/kg ug/kg ug/kg	75 50	7.0	
Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene	ND ND ND	ug/kg ug/kg	50		1
1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene	ND ND ND	ug/kg		12.	
Dibromochloromethane 1,1,2-Trichloroethane Tetrachloroethene	ND ND				1
1,1,2-Trichloroethane Tetrachloroethene	ND		50	6.2	1
Tetrachloroethene		ug/kg	50	7.0	1
	ND	ug/kg	50	13.	1
Chlorohenzene		ug/kg	25	9.8	1
Chloroberizerie	ND	ug/kg	25	6.4	1
Trichlorofluoromethane	ND	ug/kg	200	35.	1
1,2-Dichloroethane	ND	ug/kg	50	13.	1
1,1,1-Trichloroethane	ND	ug/kg	25	8.4	1
Bromodichloromethane	ND	ug/kg	25	5.4	1
trans-1,3-Dichloropropene	ND	ug/kg	50	14.	1
cis-1,3-Dichloropropene	ND	ug/kg	25	7.9	1
1,3-Dichloropropene, Total	ND	ug/kg	25	7.9	1
1,1-Dichloropropene	ND	ug/kg	25	8.0	1
Bromoform	ND	ug/kg	200	12.	1
1,1,2,2-Tetrachloroethane	ND	ug/kg	25	8.3	1
Benzene	ND	ug/kg	25	8.3	1
Toluene	ND	ug/kg	50	27.	1
Ethylbenzene	ND	ug/kg	50	7.0	1
Chloromethane	ND	ug/kg	200	47.	1
Bromomethane	ND	ug/kg	100	29.	1
Vinyl chloride	ND	ug/kg	50	17.	1
Chloroethane	ND	ug/kg	100	23.	1
1,1-Dichloroethene	ND	ug/kg	50	12.	1
trans-1,2-Dichloroethene	ND	ug/kg	75	6.8	1



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-11 Date Collected: 06/17/19 00:00

Client ID: TRIP BLANK Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High -	Westborough Lab					
Trichloroothono	ND			25	6.0	1
Trichloroethene	ND		ug/kg	25	6.8	1
1,2-Dichlorobenzene	ND ND		ug/kg	100	7.2	1
1,3-Dichlorobenzene			ug/kg	100	7.4	1
1,4-Dichlorobenzene	ND		ug/kg	100	8.6	1
Methyl tert butyl ether	ND		ug/kg	100	10.	1
p/m-Xylene	ND		ug/kg	100	28.	1
o-Xylene	ND		ug/kg	50	14.	1
Xylenes, Total	ND		ug/kg	50	14.	1
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8	1
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8	1
Dibromomethane	ND		ug/kg	100	12.	1
1,2,3-Trichloropropane	ND		ug/kg	100	6.4	1
Styrene	ND		ug/kg	50	9.8	1
Dichlorodifluoromethane	ND		ug/kg	500	46.	1
Acetone	ND		ug/kg	500	240	1
Carbon disulfide	ND		ug/kg	500	230	1
2-Butanone	ND		ug/kg	500	110	1
4-Methyl-2-pentanone	ND		ug/kg	500	64.	1
2-Hexanone	ND		ug/kg	500	59.	1
Bromochloromethane	ND		ug/kg	100	10.	1
Tetrahydrofuran	ND		ug/kg	200	80.	1
2,2-Dichloropropane	ND		ug/kg	100	10.	1
1,2-Dibromoethane	ND		ug/kg	50	14.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6	1
Bromobenzene	ND		ug/kg	100	7.2	1
n-Butylbenzene	ND		ug/kg	50	8.4	1
sec-Butylbenzene	ND		ug/kg	50	7.3	1
tert-Butylbenzene	ND		ug/kg	100	5.9	1
1,3,5-Trichlorobenzene	ND		ug/kg	100	8.6	1
o-Chlorotoluene	ND		ug/kg	100	9.6	1
p-Chlorotoluene	ND		ug/kg	100	5.4	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.	1
Hexachlorobutadiene	ND		ug/kg	200	8.4	1
Isopropylbenzene	ND		ug/kg	50	5.4	1
p-Isopropyltoluene	ND		ug/kg	50	5.4	1
Naphthalene	ND		ug/kg	200	32.	1
n-Propylbenzene	ND		ug/kg	50	8.6	1
.,						



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-11 Date Collected: 06/17/19 00:00

Client ID: TRIP BLANK Date Received: 06/18/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 High - Westl	borough Lab)					
400 T: U. J.	ND			400	40	,	
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.	1	
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6	1	
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.	1	
Ethyl ether	ND		ug/kg	100	17.	1	
Isopropyl Ether	ND		ug/kg	100	11.	1	
Tert-Butyl Alcohol	ND		ug/kg	1000	260	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	6.4	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	8.8	1	
1,4-Dioxane	ND		ug/kg	4000	1800	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	113	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	99	70-130	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

arameter	Result	Qualifier	Units	RL	MDL	
olatile Organics by EPA 5035	High - Westbor	ough Lab fo	or sample(s):	05,10-11	Batch:	WG1254373-5
Methylene chloride	ND		ug/kg	250	110	
1,1-Dichloroethane	ND		ug/kg	50	7.2	
Chloroform	ND		ug/kg	75	7.0	
Carbon tetrachloride	ND		ug/kg	50	12.	
1,2-Dichloropropane	ND		ug/kg	50	6.2	
Dibromochloromethane	ND		ug/kg	50	7.0	
1,1,2-Trichloroethane	ND		ug/kg	50	13.	
Tetrachloroethene	ND		ug/kg	25	9.8	
Chlorobenzene	ND		ug/kg	25	6.4	
Trichlorofluoromethane	ND		ug/kg	200	35.	
1,2-Dichloroethane	ND		ug/kg	50	13.	
1,1,1-Trichloroethane	ND		ug/kg	25	8.4	
Bromodichloromethane	ND		ug/kg	25	5.4	
trans-1,3-Dichloropropene	ND		ug/kg	50	14.	
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9	
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9	
1,1-Dichloropropene	ND		ug/kg	25	8.0	
Bromoform	ND		ug/kg	200	12.	
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3	
Benzene	ND		ug/kg	25	8.3	
Toluene	ND		ug/kg	50	27.	
Ethylbenzene	ND		ug/kg	50	7.0	
Chloromethane	ND		ug/kg	200	47.	
Bromomethane	ND		ug/kg	100	29.	
Vinyl chloride	ND		ug/kg	50	17.	
Chloroethane	ND		ug/kg	100	23.	
1,1-Dichloroethene	ND		ug/kg	50	12.	
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8	
Trichloroethene	ND		ug/kg	25	6.8	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by EPA 5035 Hig	h - Westbor	ough Lab fo	or sample(s):	05,10-11	Batch:	WG1254373-5
1,2-Dichlorobenzene	ND		ug/kg	100	7.2	
1,3-Dichlorobenzene	ND		ug/kg	100	7.4	
1,4-Dichlorobenzene	ND		ug/kg	100	8.6	
Methyl tert butyl ether	11	J	ug/kg	100	10.	
p/m-Xylene	ND		ug/kg	100	28.	
o-Xylene	ND		ug/kg	50	14.	
Xylenes, Total	ND		ug/kg	50	14.	
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8	
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8	
Dibromomethane	ND		ug/kg	100	12.	
1,2,3-Trichloropropane	ND		ug/kg	100	6.4	
Styrene	ND		ug/kg	50	9.8	
Dichlorodifluoromethane	ND		ug/kg	500	46.	
Acetone	ND		ug/kg	500	240	
Carbon disulfide	ND		ug/kg	500	230	
2-Butanone	ND		ug/kg	500	110	
4-Methyl-2-pentanone	ND		ug/kg	500	64.	
2-Hexanone	ND		ug/kg	500	59.	
Bromochloromethane	ND		ug/kg	100	10.	
Tetrahydrofuran	ND		ug/kg	200	80.	
2,2-Dichloropropane	ND		ug/kg	100	10.	
1,2-Dibromoethane	ND		ug/kg	50	14.	
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6	
Bromobenzene	ND		ug/kg	100	7.2	
n-Butylbenzene	ND		ug/kg	50	8.4	
sec-Butylbenzene	ND		ug/kg	50	7.3	
tert-Butylbenzene	ND		ug/kg	100	5.9	
1,3,5-Trichlorobenzene	ND		ug/kg	100	8.6	
o-Chlorotoluene	ND		ug/kg	100	9.6	



L1926197

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by EPA 5035 High	- Westbor	ough Lab fo	or sample(s):	05,10-11	Batch:	WG1254373-5
p-Chlorotoluene	ND		ug/kg	100	5.4	
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.	
Hexachlorobutadiene	ND		ug/kg	200	8.4	
Isopropylbenzene	ND		ug/kg	50	5.4	
p-Isopropyltoluene	ND		ug/kg	50	5.4	
Naphthalene	ND		ug/kg	200	32.	
n-Propylbenzene	ND		ug/kg	50	8.6	
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.	
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.	
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6	
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.	
Ethyl ether	ND		ug/kg	100	17.	
Isopropyl Ether	ND		ug/kg	100	11.	
Tert-Butyl Alcohol	ND		ug/kg	1000	260	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	6.4	
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	8.8	
1,4-Dioxane	ND		ug/kg	4000	1800	

		Acceptance		
Surrogate	%Recovery Quali	fier Criteria		
1,2-Dichloroethane-d4	112	70-130		
Toluene-d8	106	70-130		
4-Bromofluorobenzene	106	70-130		
Dibromofluoromethane	99	70-130		



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

arameter	Result	Qualifier Units	RL	MDL	
olatile Organics by GC/MS - V	Vestborough La	b for sample(s):	02,04,09,11	Batch: WG1254376-	5
Methylene chloride	ND	ug/kg	5.0	2.3	
1,1-Dichloroethane	ND	ug/ko	g 1.0	0.14	
Chloroform	ND	ug/kç	g 1.5	0.14	
Carbon tetrachloride	ND	ug/kç	g 1.0	0.23	
1,2-Dichloropropane	ND	ug/kç	g 1.0	0.12	
Dibromochloromethane	ND	ug/kç	g 1.0	0.14	
1,1,2-Trichloroethane	ND	ug/kç	g 1.0	0.27	
Tetrachloroethene	ND	ug/kç	0.50	0.20	
Chlorobenzene	ND	ug/kç	0.50	0.13	
Trichlorofluoromethane	ND	ug/ko	9 4.0	0.70	
1,2-Dichloroethane	ND	ug/ko	1.0	0.26	
1,1,1-Trichloroethane	ND	ug/ko	0.50	0.17	
Bromodichloromethane	ND	ug/ko	0.50	0.11	
trans-1,3-Dichloropropene	ND	ug/ko	1.0	0.27	
cis-1,3-Dichloropropene	ND	ug/kç	0.50	0.16	
1,3-Dichloropropene, Total	ND	ug/kç	0.50	0.16	
1,1-Dichloropropene	ND	ug/ko	0.50	0.16	
Bromoform	ND	ug/ko	9 4.0	0.25	
1,1,2,2-Tetrachloroethane	ND	ug/ko	0.50	0.17	
Benzene	ND	ug/ko	0.50	0.17	
Toluene	ND	ug/ko	1.0	0.54	
Ethylbenzene	ND	ug/ko	1.0	0.14	
Chloromethane	ND	ug/kç	9 4.0	0.93	
Bromomethane	ND	ug/kç	2.0	0.58	
Vinyl chloride	ND	ug/kç	1.0	0.34	
Chloroethane	ND	ug/kç	2.0	0.45	
1,1-Dichloroethene	ND	ug/kç	1.0	0.24	
trans-1,2-Dichloroethene	ND	ug/kç	g 1.5	0.14	
Trichloroethene	ND	ug/ko	0.50	0.14	



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by GC/MS	- Westborough La	b for sampl	e(s):	02,04,09,11	Batch:	WG1254376-5
1,2-Dichlorobenzene	ND		ug/kg	2.0		0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0		0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0		0.17
Methyl tert butyl ether	0.22	J	ug/kg	2.0		0.20
p/m-Xylene	ND		ug/kg	2.0		0.56
o-Xylene	ND		ug/kg	1.0		0.29
Xylenes, Total	ND		ug/kg	1.0		0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0		0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0		0.14
Dibromomethane	ND		ug/kg	2.0		0.24
1,2,3-Trichloropropane	ND		ug/kg	2.0		0.13
Styrene	ND		ug/kg	1.0		0.20
Dichlorodifluoromethane	ND		ug/kg	10		0.92
Acetone	ND		ug/kg	10		4.8
Carbon disulfide	ND		ug/kg	10		4.6
2-Butanone	ND		ug/kg	10		2.2
4-Methyl-2-pentanone	ND		ug/kg	10		1.3
2-Hexanone	ND		ug/kg	10		1.2
Bromochloromethane	ND		ug/kg	2.0		0.20
Tetrahydrofuran	ND		ug/kg	4.0		1.6
2,2-Dichloropropane	ND		ug/kg	2.0		0.20
1,2-Dibromoethane	ND		ug/kg	1.0		0.28
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50		0.13
Bromobenzene	ND		ug/kg	2.0		0.14
n-Butylbenzene	ND		ug/kg	1.0		0.17
sec-Butylbenzene	ND		ug/kg	1.0		0.15
tert-Butylbenzene	ND		ug/kg	2.0		0.12
1,3,5-Trichlorobenzene	ND		ug/kg	2.0		0.17
o-Chlorotoluene	ND		ug/kg	2.0		0.19



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/27/19 19:22

Analyst: AD

Parameter	Result	Qualifier Uni	its RI	L M	IDL
Volatile Organics by GC/MS - Wes	tborough La	b for sample(s)	: 02,04,09,1	1 Batch:	WG1254376-5
p-Chlorotoluene	ND	ug	/kg 2.0	0 (0.11
1,2-Dibromo-3-chloropropane	ND	ug,	/kg 3.0	0	1.0
Hexachlorobutadiene	ND	ug,	/kg 4.	0 (0.17
Isopropylbenzene	ND	ug	/kg 1.0	0 (0.11
p-Isopropyltoluene	ND	ug	/kg 1.0	0 (0.11
Naphthalene	ND	ug	/kg 4.0	0 (0.65
n-Propylbenzene	ND	ug	/kg 1.0	0 (0.17
1,2,3-Trichlorobenzene	ND	ug	/kg 2.0	0 (0.32
1,2,4-Trichlorobenzene	ND	ug	/kg 2.0	0 (0.27
1,3,5-Trimethylbenzene	ND	ug	/kg 2.0	0 (0.19
1,2,4-Trimethylbenzene	ND	ug	/kg 2.0	0 (0.33
Ethyl ether	ND	ug	/kg 2.0	0 (0.34
Isopropyl Ether	ND	ug	/kg 2.0	0 (0.21
Tert-Butyl Alcohol	ND	ug	/kg 20)	5.1
Ethyl-Tert-Butyl-Ether	ND	ug,	/kg 2.0	0 (0.13
Tertiary-Amyl Methyl Ether	ND	ug,	/kg 2.0	0 (0.18
1,4-Dioxane	ND	ug,	/kg 80)	35.

	Acceptance				
Surrogate	%Recovery	Qualifier Criteria	_		
1,2-Dichloroethane-d4	112	70-130			
Toluene-d8	106	70-130			
4-Bromofluorobenzene	106	70-130			
Dibromofluoromethane	99	70-130			



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/28/19 07:06

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035 Low	v - Westbord	ough Lab fo	r sample(s):	07	Batch:	WG1254417-5
Methylene chloride	ND		ug/kg	5.0		2.3
1,1-Dichloroethane	ND		ug/kg	1.0		0.14
Chloroform	ND		ug/kg	1.5		0.14
Carbon tetrachloride	ND		ug/kg	1.0		0.23
1,2-Dichloropropane	ND		ug/kg	1.0		0.12
Dibromochloromethane	ND		ug/kg	1.0		0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0		0.27
Tetrachloroethene	ND		ug/kg	0.50		0.20
Chlorobenzene	ND		ug/kg	0.50		0.13
Trichlorofluoromethane	ND		ug/kg	4.0		0.70
1,2-Dichloroethane	ND		ug/kg	1.0		0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50		0.17
Bromodichloromethane	ND		ug/kg	0.50		0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0		0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50		0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50		0.16
1,1-Dichloropropene	ND		ug/kg	0.50		0.16
Bromoform	ND		ug/kg	4.0		0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50		0.17
Benzene	ND		ug/kg	0.50		0.17
Toluene	ND		ug/kg	1.0		0.54
Ethylbenzene	ND		ug/kg	1.0		0.14
Chloromethane	ND		ug/kg	4.0		0.93
Bromomethane	ND		ug/kg	2.0		0.58
Vinyl chloride	ND		ug/kg	1.0		0.34
Chloroethane	ND		ug/kg	2.0		0.45
1,1-Dichloroethene	ND		ug/kg	1.0		0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5		0.14
Trichloroethene	ND		ug/kg	0.50		0.14



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/28/19 07:06

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035 L	.ow - Westbord	ugh Lab fo	r sample(s):	07	Batch:	WG1254417-5
1,2-Dichlorobenzene	ND		ug/kg	2.0		0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0		0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0		0.17
Methyl tert butyl ether	0.22	J	ug/kg	2.0		0.20
p/m-Xylene	ND		ug/kg	2.0		0.56
o-Xylene	ND		ug/kg	1.0		0.29
Xylenes, Total	ND		ug/kg	1.0		0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0		0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0		0.14
Dibromomethane	ND		ug/kg	2.0		0.24
1,2,3-Trichloropropane	ND		ug/kg	2.0		0.13
Styrene	ND		ug/kg	1.0		0.20
Dichlorodifluoromethane	ND		ug/kg	10		0.92
Acetone	ND		ug/kg	10		4.8
Carbon disulfide	ND		ug/kg	10		4.6
2-Butanone	ND		ug/kg	10		2.2
4-Methyl-2-pentanone	ND		ug/kg	10		1.3
2-Hexanone	ND		ug/kg	10		1.2
Bromochloromethane	ND		ug/kg	2.0		0.20
Tetrahydrofuran	ND		ug/kg	4.0		1.6
2,2-Dichloropropane	ND		ug/kg	2.0		0.20
1,2-Dibromoethane	ND		ug/kg	1.0		0.28
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50		0.13
Bromobenzene	ND		ug/kg	2.0		0.14
n-Butylbenzene	ND		ug/kg	1.0		0.17
sec-Butylbenzene	ND		ug/kg	1.0		0.15
tert-Butylbenzene	ND		ug/kg	2.0		0.12
1,3,5-Trichlorobenzene	ND		ug/kg	2.0		0.17
o-Chlorotoluene	ND		ug/kg	2.0		0.19



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/28/19 07:06

Analyst: MV

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 Low	- Westbord	ough Lab fo	r sample(s):	07	Batch:	WG1254417-5
p-Chlorotoluene	ND		ug/kg	2.0		0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0		1.0
Hexachlorobutadiene	ND		ug/kg	4.0		0.17
Isopropylbenzene	ND		ug/kg	1.0		0.11
p-Isopropyltoluene	ND		ug/kg	1.0		0.11
Naphthalene	ND		ug/kg	4.0		0.65
n-Propylbenzene	ND		ug/kg	1.0		0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0		0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0		0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0		0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0		0.33
Ethyl ether	ND		ug/kg	2.0		0.34
Isopropyl Ether	ND		ug/kg	2.0		0.21
Tert-Butyl Alcohol	ND		ug/kg	20		5.1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0		0.13
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0		0.18
1,4-Dioxane	ND		ug/kg	80		35.

	Acceptance				
Surrogate	%Recovery	Qualifier Criteria			
1,2-Dichloroethane-d4	110	70-130			
Toluene-d8	103	70-130			
4-Bromofluorobenzene	106	70-130			
Dibromofluoromethane	99	70-130			



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by EPA 5035 High - Westb	orough Lab Ass	ociated sample((s): 05,10-11	Batch:	WG1254373-3	WG1254373-4		
Methylene chloride	111		111		70-130	0		30
1,1-Dichloroethane	121		122		70-130	1		30
Chloroform	115		111		70-130	4		30
Carbon tetrachloride	99		99		70-130	0		30
1,2-Dichloropropane	117		118		70-130	1		30
Dibromochloromethane	104		106		70-130	2		30
1,1,2-Trichloroethane	113		117		70-130	3		30
Tetrachloroethene	101		101		70-130	0		30
Chlorobenzene	106		106		70-130	0		30
Trichlorofluoromethane	85		84		70-139	1		30
1,2-Dichloroethane	115		118		70-130	3		30
1,1,1-Trichloroethane	109		110		70-130	1		30
Bromodichloromethane	108		110		70-130	2		30
trans-1,3-Dichloropropene	116		118		70-130	2		30
cis-1,3-Dichloropropene	108		110		70-130	2		30
1,1-Dichloropropene	112		112		70-130	0		30
Bromoform	98		102		70-130	4		30
1,1,2,2-Tetrachloroethane	116		120		70-130	3		30
Benzene	110		110		70-130	0		30
Toluene	111		111		70-130	0		30
Ethylbenzene	112		110		70-130	2		30
Chloromethane	148	Q	138	Q	52-130	7		30
Bromomethane	90		86		57-147	5		30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by EPA 5035 High - Westb	orough Lab As	sociated sample	(s): 05,10-11	Batch:	WG1254373-3	WG1254373-4		
Vinyl chloride	120		117		67-130	3		30
Chloroethane	107		104		50-151	3		30
1,1-Dichloroethene	113		110		65-135	3		30
trans-1,2-Dichloroethene	110		107		70-130	3		30
Trichloroethene	106		106		70-130	0		30
1,2-Dichlorobenzene	104		103		70-130	1		30
1,3-Dichlorobenzene	106		103		70-130	3		30
1,4-Dichlorobenzene	104		103		70-130	1		30
Methyl tert butyl ether	107		111		66-130	4		30
p/m-Xylene	108		105		70-130	3		30
o-Xylene	106		105		70-130	1		30
cis-1,2-Dichloroethene	106		106		70-130	0		30
Dibromomethane	103		106		70-130	3		30
1,2,3-Trichloropropane	117		120		68-130	3		30
Styrene	106		105		70-130	1		30
Dichlorodifluoromethane	108		104		30-146	4		30
Acetone	145	Q	153	Q	54-140	5		30
Carbon disulfide	111		108		59-130	3		30
2-Butanone	130		135	Q	70-130	4		30
4-Methyl-2-pentanone	115		124		70-130	8		30
2-Hexanone	119		132	Q	70-130	10		30
Bromochloromethane	101		103		70-130	2		30
Tetrahydrofuran	125		134	Q	66-130	7		30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date:

07/10/19

arameter	LCS %Recovery Qu	LCSD al %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High	- Westborough Lab Associate	ed sample(s): 05,10-11	Batch: We	G1254373-3 WG	1254373-4	
2,2-Dichloropropane	115	114		70-130	1	30
1,2-Dibromoethane	103	106		70-130	3	30
1,1,1,2-Tetrachloroethane	106	106		70-130	0	30
Bromobenzene	103	102		70-130	1	30
n-Butylbenzene	118	116		70-130	2	30
sec-Butylbenzene	114	113		70-130	1	30
tert-Butylbenzene	109	107		70-130	2	30
1,3,5-Trichlorobenzene	100	98		70-139	2	30
o-Chlorotoluene	116	115		70-130	1	30
p-Chlorotoluene	114	112		70-130	2	30
1,2-Dibromo-3-chloropropane	93	94		68-130	1	30
Hexachlorobutadiene	101	100		67-130	1	30
Isopropylbenzene	112	109		70-130	3	30
p-Isopropyltoluene	110	108		70-130	2	30
Naphthalene	100	102		70-130	2	30
n-Propylbenzene	118	115		70-130	3	30
1,2,3-Trichlorobenzene	100	100		70-130	0	30
1,2,4-Trichlorobenzene	99	96		70-130	3	30
1,3,5-Trimethylbenzene	111	110		70-130	1	30
1,2,4-Trimethylbenzene	111	110		70-130	1	30
Ethyl ether	96	98		67-130	2	30
Isopropyl Ether	130	132	Q	66-130	2	30
Tert-Butyl Alcohol	127	130		70-130	2	30



Project Name: WW CROSS PROPERTY

Lab Number:

L1926197

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual %l	LCSD Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by EPA 5035 High - Wes	borough Lab Asso	ciated sample(s):	05,10-11	Batch:	WG1254373-3	WG1254373-4			
Ethyl-Tert-Butyl-Ether	117		119		70-130	2		30	
Tertiary-Amyl Methyl Ether	107		110		70-130	3		30	
1,4-Dioxane	117		106		65-136	10		30	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qua	l %Recovery Qual	Criteria
1,2-Dichloroethane-d4	110	113	70-130
Toluene-d8	106	105	70-130
4-Bromofluorobenzene	107	105	70-130
Dibromofluoromethane	100	99	70-130

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
/olatile Organics by GC/MS - West	tborough Lab Associated	sample(s):	02,04,09,11 Ba	tch: WG12	254376-3 WG1254	376-4	
Methylene chloride	111		111		70-130	0	30
1,1-Dichloroethane	121		122		70-130	1	30
Chloroform	115		111		70-130	4	30
Carbon tetrachloride	99		99		70-130	0	30
1,2-Dichloropropane	117		118		70-130	1	30
Dibromochloromethane	104		106		70-130	2	30
1,1,2-Trichloroethane	113		117		70-130	3	30
Tetrachloroethene	101		101		70-130	0	30
Chlorobenzene	106		106		70-130	0	30
Trichlorofluoromethane	85		84		70-139	1	30
1,2-Dichloroethane	115		118		70-130	3	30
1,1,1-Trichloroethane	109		110		70-130	1	30
Bromodichloromethane	108		110		70-130	2	30
trans-1,3-Dichloropropene	116		118		70-130	2	30
cis-1,3-Dichloropropene	108		110		70-130	2	30
1,1-Dichloropropene	112		112		70-130	0	30
Bromoform	98		102		70-130	4	30
1,1,2,2-Tetrachloroethane	116		120		70-130	3	30
Benzene	110		110		70-130	0	30
Toluene	111		111		70-130	0	30
Ethylbenzene	112		110		70-130	2	30
Chloromethane	148	Q	138	Q	52-130	7	30
Bromomethane	90		86		57-147	5	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westborough L	_ab Associated	sample(s):	02,04,09,11 Ba	atch: WG125	54376-3 WG1254	1376-4	
Vinyl chloride	120		117		67-130	3	30
Chloroethane	107		104		50-151	3	30
1,1-Dichloroethene	113		110		65-135	3	30
trans-1,2-Dichloroethene	110		107		70-130	3	30
Trichloroethene	106		106		70-130	0	30
1,2-Dichlorobenzene	104		103		70-130	1	30
1,3-Dichlorobenzene	106		103		70-130	3	30
1,4-Dichlorobenzene	104		103		70-130	1	30
Methyl tert butyl ether	107		111		66-130	4	30
p/m-Xylene	108		105		70-130	3	30
o-Xylene	106		105		70-130	1	30
cis-1,2-Dichloroethene	106		106		70-130	0	30
Dibromomethane	103		106		70-130	3	30
1,2,3-Trichloropropane	117		120		68-130	3	30
Styrene	106		105		70-130	1	30
Dichlorodifluoromethane	108		104		30-146	4	30
Acetone	145	Q	153	Q	54-140	5	30
Carbon disulfide	111		108		59-130	3	30
2-Butanone	130		135	Q	70-130	4	30
4-Methyl-2-pentanone	115		124		70-130	8	30
2-Hexanone	119		132	Q	70-130	10	30
Bromochloromethane	101		103		70-130	2	30
Tetrahydrofuran	125		134	Q	66-130	7	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westbo	orough Lab Associated	sample(s):	02,04,09,11 Ba	tch: WG12	54376-3 WG1254	1376-4	
2,2-Dichloropropane	115		114		70-130	1	30
1,2-Dibromoethane	103		106		70-130	3	30
1,1,1,2-Tetrachloroethane	106		106		70-130	0	30
Bromobenzene	103		102		70-130	1	30
n-Butylbenzene	118		116		70-130	2	30
sec-Butylbenzene	114		113		70-130	1	30
tert-Butylbenzene	109		107		70-130	2	30
1,3,5-Trichlorobenzene	100		98		70-139	2	30
o-Chlorotoluene	116		115		70-130	1	30
p-Chlorotoluene	114		112		70-130	2	30
1,2-Dibromo-3-chloropropane	93		94		68-130	1	30
Hexachlorobutadiene	101		100		67-130	1	30
Isopropylbenzene	112		109		70-130	3	30
p-Isopropyltoluene	110		108		70-130	2	30
Naphthalene	100		102		70-130	2	30
n-Propylbenzene	118		115		70-130	3	30
1,2,3-Trichlorobenzene	100		100		70-130	0	30
1,2,4-Trichlorobenzene	99		96		70-130	3	30
1,3,5-Trimethylbenzene	111		110		70-130	1	30
1,2,4-Trimethylbenzene	111		110		70-130	1	30
Ethyl ether	96		98		67-130	2	30
Isopropyl Ether	130		132	Q	66-130	2	30
Tert-Butyl Alcohol	127		130		70-130	2	30



Project Name: WW CROSS PROPERTY

Lab Number:

L1926197

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough I	_ab Associated	sample(s):	02,04,09,11 Bat	ch: WG125	54376-3 WG12543	376-4		
Ethyl-Tert-Butyl-Ether	117		119		70-130	2		30
Tertiary-Amyl Methyl Ether	107		110		70-130	3		30
1,4-Dioxane	117		106		65-136	10		30

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qua	l %Recovery Qual	Criteria
1,2-Dichloroethane-d4	110	113	70-130
Toluene-d8	106	105	70-130
4-Bromofluorobenzene	107	105	70-130
Dibromofluoromethane	100	99	70-130

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westh	oorough Lab Ass	ociated sample(s): 07 Batch:	WG1254417-3 WG125441	7-4	
Methylene chloride	105		99	70-130	6	30
1,1-Dichloroethane	115		107	70-130	7	30
Chloroform	110		102	70-130	8	30
Carbon tetrachloride	97		92	70-130	5	30
1,2-Dichloropropane	111		104	70-130	7	30
Dibromochloromethane	100		96	70-130	4	30
1,1,2-Trichloroethane	107		105	70-130	2	30
Tetrachloroethene	102		96	70-130	6	30
Chlorobenzene	102		96	70-130	6	30
Trichlorofluoromethane	89		83	70-139	7	30
1,2-Dichloroethane	107		102	70-130	5	30
1,1,1-Trichloroethane	107		99	70-130	8	30
Bromodichloromethane	101		98	70-130	3	30
trans-1,3-Dichloropropene	111		106	70-130	5	30
cis-1,3-Dichloropropene	104		98	70-130	6	30
1,1-Dichloropropene	111		100	70-130	10	30
Bromoform	95		92	70-130	3	30
1,1,2,2-Tetrachloroethane	110		106	70-130	4	30
Benzene	105		98	70-130	7	30
Toluene	107		101	70-130	6	30
Ethylbenzene	108		101	70-130	7	30
Chloromethane	133	Q	120	52-130	10	30
Bromomethane	81		79	57-147	3	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	LCSD Qual %Recover	%Recovery ry Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - West	borough Lab Assoc	ciated sample(s): 07 B	atch: WG1254417-3 WG1254	1417-4	
Vinyl chloride	113	104	67-130	8	30
Chloroethane	103	98	50-151	5	30
1,1-Dichloroethene	111	104	65-135	7	30
trans-1,2-Dichloroethene	106	100	70-130	6	30
Trichloroethene	102	95	70-130	7	30
1,2-Dichlorobenzene	99	94	70-130	5	30
1,3-Dichlorobenzene	101	95	70-130	6	30
1,4-Dichlorobenzene	100	94	70-130	6	30
Methyl tert butyl ether	104	99	66-130	5	30
p/m-Xylene	103	96	70-130	7	30
o-Xylene	102	95	70-130	7	30
cis-1,2-Dichloroethene	102	97	70-130	5	30
Dibromomethane	97	93	70-130	4	30
1,2,3-Trichloropropane	108	105	68-130	3	30
Styrene	100	95	70-130	5	30
Dichlorodifluoromethane	107	96	30-146	11	30
Acetone	119	110	54-140	8	30
Carbon disulfide	108	99	59-130	9	30
2-Butanone	114	112	70-130	2	30
4-Methyl-2-pentanone	110	106	70-130	4	30
2-Hexanone	114	108	70-130	5	30
Bromochloromethane	97	94	70-130	3	30
Tetrahydrofuran	114	116	66-130	2	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L19

L1926197

Parameter	LCS %Recovery	LCSD Qual %Recove	, ,	RPD	RPD Qual Limits
/olatile Organics by EPA 5035 Low - We	estborough Lab Asso	ociated sample(s): 07	Batch: WG1254417-3 WG125	4417-4	
2,2-Dichloropropane	113	102	70-130	10	30
1,2-Dibromoethane	100	98	70-130	2	30
1,1,1,2-Tetrachloroethane	103	96	70-130	7	30
Bromobenzene	101	96	70-130	5	30
n-Butylbenzene	114	106	70-130	7	30
sec-Butylbenzene	111	105	70-130	6	30
tert-Butylbenzene	106	100	70-130	6	30
1,3,5-Trichlorobenzene	98	91	70-139	7	30
o-Chlorotoluene	110	103	70-130	7	30
p-Chlorotoluene	109	102	70-130	7	30
1,2-Dibromo-3-chloropropane	84	83	68-130	1	30
Hexachlorobutadiene	101	93	67-130	8	30
Isopropylbenzene	109	102	70-130	7	30
p-Isopropyltoluene	106	100	70-130	6	30
Naphthalene	97	94	70-130	3	30
n-Propylbenzene	114	106	70-130	7	30
1,2,3-Trichlorobenzene	96	91	70-130	5	30
1,2,4-Trichlorobenzene	95	90	70-130	5	30
1,3,5-Trimethylbenzene	108	102	70-130	6	30
1,2,4-Trimethylbenzene	107	101	70-130	6	30
Ethyl ether	91	92	67-130	1	30
Isopropyl Ether	123	115	66-130	7	30
Tert-Butyl Alcohol	111	112	70-130	1	30



Project Name: WW CROSS PROPERTY

Lab Number:

L1926197

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - West	tborough Lab Assoc	ciated sample	e(s): 07 Batch	: WG1254417-3 WG12544	17-4	
Ethyl-Tert-Butyl-Ether	112		106	70-130	6	30
Tertiary-Amyl Methyl Ether	104		99	70-130	5	30
1,4-Dioxane	91		93	65-136	2	30

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qua	I %Recovery Qual	Criteria	_
1,2-Dichloroethane-d4	106	105	70-130	
Toluene-d8	106	105	70-130	
4-Bromofluorobenzene	107	106	70-130	
Dibromofluoromethane	97	98	70-130	

SEMIVOLATILES



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-02

Client ID: L1926197-02

Sample Location: L1926197-02

B108-S3

SAFFREY, NH

Date Collected: 06/17/19 08:20
Date Received: 06/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/04/19 09:09

Analyst: JG Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS	G - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1	
2-Chloronaphthalene	ND		ug/kg	190	19.	1	
Fluoranthene	420		ug/kg	110	22.	1	
Naphthalene	ND		ug/kg	190	23.	1	
Benzo(a)anthracene	240		ug/kg	110	21.	1	
Benzo(a)pyrene	410		ug/kg	150	46.	1	
Benzo(b)fluoranthene	550		ug/kg	110	32.	1	
Benzo(k)fluoranthene	240		ug/kg	110	30.	1	
Chrysene	280		ug/kg	110	20.	1	
Acenaphthylene	470		ug/kg	150	29.	1	
Anthracene	120		ug/kg	110	37.	1	
Benzo(ghi)perylene	370		ug/kg	150	22.	1	
Fluorene	28	J	ug/kg	190	18.	1	
Phenanthrene	120		ug/kg	110	23.	1	
Dibenzo(a,h)anthracene	61	J	ug/kg	110	22.	1	
Indeno(1,2,3-cd)pyrene	380		ug/kg	150	26.	1	
Pyrene	420		ug/kg	110	19.	1	
1-Methylnaphthalene	ND		ug/kg	190	22.	1	
2-Methylnaphthalene	ND		ug/kg	230	23.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	72		23-120	
2-Fluorobiphenyl	67		30-120	
4-Terphenyl-d14	46		18-120	



06/17/19 11:00

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: L1926197-04 Client ID: B109-S4

 ${\sf JAFFREY},\,{\sf NH}$ Sample Location:

Date Received: 06/18/19 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/05/19 16:54

Analyst: CB 80% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - Wes	stborough Lab						
Acenaphthene	140	J	ug/kg	160	21.	1	
2-Chloronaphthalene	ND		ug/kg	210	20.	1	
Fluoranthene	2700		ug/kg	120	24.	1	
Naphthalene	380		ug/kg	210	25.	1	
Benzo(a)anthracene	1200		ug/kg	120	23.	1	
Benzo(a)pyrene	880		ug/kg	160	50.	1	
Benzo(b)fluoranthene	1300		ug/kg	120	35.	1	
Benzo(k)fluoranthene	380		ug/kg	120	33.	1	
Chrysene	1000		ug/kg	120	21.	1	
Acenaphthylene	480		ug/kg	160	32.	1	
Anthracene	550		ug/kg	120	40.	1	
Benzo(ghi)perylene	590		ug/kg	160	24.	1	
Fluorene	490		ug/kg	210	20.	1	
Phenanthrene	3500		ug/kg	120	25.	1	
Dibenzo(a,h)anthracene	150		ug/kg	120	24.	1	
Indeno(1,2,3-cd)pyrene	610		ug/kg	160	29.	1	
Pyrene	2100		ug/kg	120	20.	1	
1-Methylnaphthalene	390		ug/kg	210	24.	1	
2-Methylnaphthalene	410		ug/kg	250	25.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	55		23-120	
2-Fluorobiphenyl	70		30-120	
4-Terphenyl-d14	46		18-120	



L1926197

06/17/19 10:05

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Report Date: 07/10/19

Lab Number:

Date Collected:

Lab ID: L1926197-05 Client ID: B110-S3 JAFFREY, NH Sample Location:

Date Received: 06/18/19 Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8270D

07/05/19 17:19 Analytical Date:

Analyst: CB 84% Percent Solids:

Extraction Method: EPA 3546

Extraction Date: 06/30/19 09:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Acenaphthene	330		ug/kg	160	20.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
Fluoranthene	4400		ug/kg	120	23.	1
Naphthalene	3700		ug/kg	200	24.	1
Benzo(a)anthracene	1600		ug/kg	120	22.	1
Benzo(a)pyrene	1400		ug/kg	160	48.	1
Benzo(b)fluoranthene	1800		ug/kg	120	33.	1
Benzo(k)fluoranthene	520		ug/kg	120	32.	1
Chrysene	1500		ug/kg	120	20.	1
Acenaphthylene	1500		ug/kg	160	30.	1
Anthracene	1600		ug/kg	120	38.	1
Benzo(ghi)perylene	850		ug/kg	160	23.	1
Fluorene	1800		ug/kg	200	19.	1
Phenanthrene	6600		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	190		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	900		ug/kg	160	28.	1
Pyrene	3500		ug/kg	120	20.	1
1-Methylnaphthalene	1200		ug/kg	200	23.	1
2-Methylnaphthalene	1600		ug/kg	240	24.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	68		23-120	
2-Fluorobiphenyl	84		30-120	
4-Terphenyl-d14	69		18-120	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

L1926197

Lab Number:

Report Date: 07/10/19

Lab ID: L1926197-07

Client ID: B114-S3 Sample Location: JAFFREY, NH Date Collected: 06/17/19 13:30 Date Received: 06/18/19 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/05/19 17:43

Analyst: CB 82% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Acenaphthene	ND		ug/kg	160	21.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
Fluoranthene	32	J	ug/kg	120	23.	1
Naphthalene	ND		ug/kg	200	24.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	32	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	26	J	ug/kg	120	20.	1
1-Methylnaphthalene	ND		ug/kg	200	23.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	49		23-120	
2-Fluorobiphenyl	68		30-120	
4-Terphenyl-d14	74		18-120	



L1926197

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number:

Report Date: 07/10/19

Lab ID: L1926197-09

Client ID: B115-S3 Sample Location: JAFFREY, NH Date Collected: 06/17/19 12:50 Date Received: 06/18/19 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/05/19 18:07

Analyst: CB 66% Percent Solids:

		Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - West	orough Lab					
Acenaphthene	57	J	ug/kg	200	25.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
Fluoranthene	1400		ug/kg	150	28.	1
Naphthalene	100	J	ug/kg	240	30.	1
Benzo(a)anthracene	600		ug/kg	150	28.	1
Benzo(a)pyrene	460		ug/kg	200	60.	1
Benzo(b)fluoranthene	610		ug/kg	150	41.	1
Benzo(k)fluoranthene	220		ug/kg	150	39.	1
Chrysene	560		ug/kg	150	25.	1
Acenaphthylene	240		ug/kg	200	38.	1
Anthracene	290		ug/kg	150	48.	1
Benzo(ghi)perylene	290		ug/kg	200	29.	1
Fluorene	230	J	ug/kg	240	24.	1
Phenanthrene	1600		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	73	J	ug/kg	150	28.	1
Indeno(1,2,3-cd)pyrene	310		ug/kg	200	34.	1
Pyrene	1200		ug/kg	150	24.	1
1-Methylnaphthalene	100	J	ug/kg	240	28.	1
2-Methylnaphthalene	82	J	ug/kg	290	30.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	75		23-120	
2-Fluorobiphenyl	78		30-120	
4-Terphenyl-d14	49		18-120	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1926197

Report Date: 07/10/19

Lab ID: D L1926197-10

Client ID: B111-0.5' Sample Location: JAFFREY, NH Date Collected: 06/17/19 09:45 Date Received: 06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/10/19 00:37

Analyst: ΕK 97% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/M	S - Westborough Lab						
Acenaphthene	45000		ug/kg	41000	5300	100	
2-Chloronaphthalene	ND		ug/kg	52000	5100	100	
Fluoranthene	550000		ug/kg	31000	5900	100	
Naphthalene	610000		ug/kg	52000	6300	100	
Benzo(a)anthracene	170000		ug/kg	31000	5800	100	
Benzo(a)pyrene	160000		ug/kg	41000	12000	100	
Benzo(b)fluoranthene	170000		ug/kg	31000	8700	100	
Benzo(k)fluoranthene	62000		ug/kg	31000	8200	100	
Chrysene	140000		ug/kg	31000	5400	100	
Acenaphthylene	190000		ug/kg	41000	8000	100	
Anthracene	180000		ug/kg	31000	10000	100	
Benzo(ghi)perylene	76000		ug/kg	41000	6000	100	
Fluorene	230000		ug/kg	52000	5000	100	
Phenanthrene	770000		ug/kg	31000	6300	100	
Dibenzo(a,h)anthracene	16000	J	ug/kg	31000	6000	100	
Indeno(1,2,3-cd)pyrene	88000		ug/kg	41000	7200	100	
Pyrene	450000		ug/kg	31000	5100	100	
1-Methylnaphthalene	210000		ug/kg	52000	6000	100	
2-Methylnaphthalene	290000		ug/kg	62000	6200	100	

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	0	Q	23-120
2-Fluorobiphenyl	0	Q	30-120
4-Terphenyl-d14	0	Q	18-120



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 Lab Number:

L1926197

Report Date: 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/03/19 20:51

Analyst: SZ

Extraction Method: EPA 3546 06/30/19 09:24 **Extraction Date:**

Qualifier MDL Result Units RL**Parameter**

Semivolatile Organics by GC/MS - WG1254970-1	Westborough La	b for sample(s):	02,04-05,07	7,09-10 Batch:	
Acenaphthene	ND	ug/kg	130	17.	
2-Chloronaphthalene	ND	ug/kg	160	16.	
Fluoranthene	ND	ug/kg	97	18.	
Naphthalene	ND	ug/kg	160	20.	
Benzo(a)anthracene	ND	ug/kg	97	18.	
Benzo(a)pyrene	ND	ug/kg	130	39.	
Benzo(b)fluoranthene	ND	ug/kg	97	27.	
Benzo(k)fluoranthene	ND	ug/kg	97	26.	
Chrysene	ND	ug/kg	97	17.	
Acenaphthylene	ND	ug/kg	130	25.	
Anthracene	ND	ug/kg	97	32.	
Benzo(ghi)perylene	ND	ug/kg	130	19.	
Fluorene	ND	ug/kg	160	16.	
Phenanthrene	ND	ug/kg	97	20.	
Dibenzo(a,h)anthracene	ND	ug/kg	97	19.	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	130	22.	
Pyrene	ND	ug/kg	97	16.	
1-Methylnaphthalene	ND	ug/kg	160	19.	
2-Methylnaphthalene	ND	ug/kg	190	20.	

		Acceptance
Surrogate	%Recovery (Qualifier Criteria
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	77	30-120
4-Terphenyl-d14	80	18-120



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1926197

Parameter	LCS %Recovery	Qual	LCSD %Recovery G	%Recovery Jual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westbor	rough Lab Assoc	iated sample(s):	: 02,04-05,07,09-10	Batch: WG1254970-2	WG125497	0-3
Acenaphthene	83		87	31-137	5	50
2-Chloronaphthalene	85		88	40-140	3	50
Fluoranthene	91		95	40-140	4	50
Naphthalene	79		81	40-140	3	50
Benzo(a)anthracene	92		96	40-140	4	50
Benzo(a)pyrene	90		96	40-140	6	50
Benzo(b)fluoranthene	91		98	40-140	7	50
Benzo(k)fluoranthene	91		91	40-140	0	50
Chrysene	85		89	40-140	5	50
Acenaphthylene	90		92	40-140	2	50
Anthracene	88		92	40-140	4	50
Benzo(ghi)perylene	90		92	40-140	2	50
Fluorene	87		90	40-140	3	50
Phenanthrene	85		90	40-140	6	50
Dibenzo(a,h)anthracene	99		102	40-140	3	50
Indeno(1,2,3-cd)pyrene	84		85	40-140	1	50
Pyrene	90		95	35-142	5	50
1-Methylnaphthalene	86		86	26-130	0	50
2-Methylnaphthalene	84		86	40-140	2	50



Project Name: WW CROSS PROPERTY

Lab Number:

L1926197

Project Number: 141.05051.010

Report Date:

07/10/19

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-05,07,09-10 Batch: WG1254970-2 WG1254970-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
Nitrobenzene-d5	86	88	23-120
2-Fluorobiphenyl	87	88	30-120
4-Terphenyl-d14	90	92	18-120

PETROLEUM HYDROCARBONS



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID:L1926197-07Date Collected:06/17/19 13:30Client ID:B114-S3Date Received:06/18/19Sample Location:JAFFREY, NHField Prep:Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8015D(M) Extraction Date: 06/30/19 10:35
Analytical Date: 07/01/19 04:32

Analyst: MEO Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation	on - Westborough Lab					
ТРН	44300		ug/kg	39100	4490	1
Surrogate			% Recovery	Qualifier		eptance riteria
o-Terphenyl			54		4	40-140



Project Name: Lab Number: WW CROSS PROPERTY L1926197

Project Number: Report Date: 141.05051.010 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-09 Date Collected: 06/17/19 12:50 Date Received: Client ID: B115-S3 06/18/19

 ${\sf JAFFREY},\,{\sf NH}$ Sample Location: Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil

Extraction Date: 06/30/19 10:35 Analytical Method: 1,8015D(M) Analytical Date: 07/01/19 05:04

Analyst: MEO 66% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quan	titation - Westborough Lab					
ТРН	190000		ug/kg	49200	5660	1
Surrogate			% Recovery	Qualifier		ptance iteria
o-Terphenyl			94		4	0-140



L1926197

07/10/19

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010

SAMPLE RESULTS

Report Date:

 Lab ID:
 L1926197-10
 Date Collected:
 06/17/19 09:45

 Client ID:
 B111-0.5'
 Date Received:
 06/18/19

 Sample Location:
 JAFFREY, NH
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil Extraction Method: ALPHA OP-013

Analytical Method: 1,8015D(M) Extraction Date: 07/01/19 11:59
Analytical Date: 07/02/19 23:19

Analyst: WR Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Identification I	oy GC-FID - Mans	sfield Lab				
Total Petroleum Hydrocarbons (C9-C44)	47200		mg/kg	582	291.	1
Surrogate			% Recovery	Qualifier		eptance riteria
o-Terphenyl			102		ŧ	50-130
d50-Tetracosane			118		į	50-130



06/30/19 10:35

Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

 Lab ID:
 L1926197-10
 D
 Date Collected:
 06/17/19 09:45

 Client ID:
 B111-0.5'
 Date Received:
 06/18/19

 Sample Location:
 JAFFREY, NH
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8015D(M) Extraction Date:

Analytical Date: 07/01/19 06:10

Analyst: MEO Percent Solids: 97%

Parameter	Result	Qualifier Un	its	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quar	ntitation - Westborough Lab					
ТРН	21500000	ug/l	kg	1010000	116000	10
Surrogate		% Re	ecovery	Qualifier		otance teria
o-Terphenyl			65		40)-140

Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M) Analytical Date: 06/30/19 19:29

Analyst: MEO

Parameter	Result	Qualifier	Units	RL	MDL	
Petroleum Hydrocarbon Quantitation	n - Westbor	ough Lab fo	or sample(s):	07,09-10	Batch:	WG1254914-
ТРН	ND		ug/kg	31900	3670	

		Acceptance
Surrogate	%Recovery Qualifier	Criteria
o-Terphenyl	88	40-140



Project Name: WW CROSS PROPERTY Lab Number: L1926197

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M) Extraction Method: ALPHA OP-013
Analytical Date: 07/02/19 17:26 Extraction Date: 07/01/19 11:59

Analyst: WR

Parameter	Result	Qualifier	Units	RL		MDL
Petroleum Hydrocarbon Identificatio WG1255235-1	n by GC-FII	D - Mansfie	eld Lab for s	sample(s):	10	Batch:
Total Petroleum Hydrocarbons (C9-C44)	ND		mg/kg	2.20		1.10

		Acceptance
Surrogate	%Recovery Qualifie	r Criteria
o-Terphenyl	94	50-130
d50-Tetracosane	95	50-130



Project Name: WW CROSS PROPERTY

Lab Number:

L1926197

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Petroleum Hydrocarbon Quantitation - V	Vestborough Lab Asso	ociated sample	le(s): 07,09-10	Batch:	WG1254914-2				
TPH	95		-		40-140	-		40	

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qual	%Recovery Q	ual Criteria
o-Terphenyl	74		40-140

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date:

07/10/19

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
etroleum Hydrocarbon Identification by GC-l	FID - Mansfield	Lab Associa	ated sample(s): 10	Batch:	WG1255235-2	WG1255235-3		
Nonane (C9)	63		68		50-130	8		30
Decane (C10)	67		73		50-130	9		30
Dodecane (C12)	71		77		50-130	8		30
Tetradecane (C14)	72		78		50-130	8		30
Hexadecane (C16)	82		89		50-130	8		30
Octadecane (C18)	88		95		50-130	8		30
Nonadecane (C19)	80		87		50-130	8		30
Eicosane (C20)	80		87		50-130	8		30
Docosane (C22)	80		88		50-130	10		30
Tetracosane (C24)	82		90		50-130	9		30
Hexacosane (C26)	88		97		50-130	10		30
Octacosane (C28)	91		100		50-130	9		30
Triacontane (C30)	93		101		50-130	8		30
Hexatriacontane (C36)	91		98		50-130	7		30

Surrogate	LCS	LCSD	Acceptance
	%Recovery	Qual %Recovery	Qual Criteria
o-Terphenyl	98	99	50-130
d50-Tetracosane	101	103	50-130



INORGANICS & MISCELLANEOUS



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date: 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-02

Client ID: B108-S3
Sample Location: JAFFREY, NH

Date Collected:

06/17/19 08:20

Date Received:

06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result Qual	ifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab								
Solids, Total	85.4	%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date:

07/10/19

SAMPLE RESULTS

Lab ID: L1

L1926197-04

Client ID: B109-S4
Sample Location: JAFFREY, NH

Date Collected:

06/17/19 11:00

Date Received:

06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab)								
Solids, Total	80.3		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date: 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-05

Client ID: B110-S3
Sample Location: JAFFREY, NH

Date Collected:

06/17/19 10:05

Date Received:

06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab)								
Solids, Total	83.6		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date:

07/10/19

SAMPLE RESULTS

Lab ID: L1926197-07

Client ID: B114-S3
Sample Location: JAFFREY, NH

Date Collected:

06/17/19 13:30

Date Received:

06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab)								
Solids, Total	82.4		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date: 07/10/19

SAMPLE RESULTS

Lab ID: L1926197-09

Client ID: B115-S3
Sample Location: JAFFREY, NH

Date Collected:

06/17/19 12:50

Date Received:

06/18/19

Field Prep:

Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab									
Solids, Total	66.3		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1926197

Report Date:

07/10/19

SAMPLE RESULTS

Lab ID: L1926197-10

Client ID: B111-0.5' Sample Location: JAFFREY, NH

Date Collected:

06/17/19 09:45

Date Received: Field Prep:

06/18/19 Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Solids, Total	96.5		%	0.100	NA	1	-	06/29/19 10:52	121,2540G	RI



Lab Number: L1926197

Report Date: 07/10/19

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Container Information

Cooler Custody Seal

A Absent

Container Information		rmation		Initial	Final	Temp			Frozen	
	Container ID	Container Type	Cooler	рН	pН	-	Pres	Seal	Date/Time	Analysis(*)
	L1926197-01A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		HOLD-8260HLW(14)
	L1926197-01B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-01C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-01D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		HOLD-WETCHEM()
	L1926197-01E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),HOLD-PHI(),HOLD-8270(14)
	L1926197-02A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-02B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-02C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-02D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
	L1926197-02E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),8270TCL-PAH(14),HOLD-PHI()
	L1926197-03A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		HOLD-8260HLW(14)
	L1926197-03B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-03C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-03D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		HOLD-WETCHEM()
	L1926197-04A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-04B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-04C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-04D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
	L1926197-04E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),8270TCL-PAH(14),HOLD-PHI()
	L1926197-05A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-05B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-05C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)



Lab Number: L1926197

Report Date: 07/10/19

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Container Information		rmation		Initial	Final	Temp			Frozen	
	Container ID	Container Type	Cooler	рН	рН	•	Pres	Seal	Date/Time	Analysis(*)
	L1926197-05D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
	L1926197-05E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),8270TCL-PAH(14),HOLD-PHI()
	L1926197-06A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		HOLD-8260HLW(14)
	L1926197-06B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-06C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-06D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		HOLD-WETCHEM()
	L1926197-06E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),HOLD-PHI(),HOLD-8270(14)
	L1926197-07A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-07B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-07C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-07D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
	L1926197-07E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		8270TCL-PAH(14),TPH-DRO-D(14)
	L1926197-08A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		HOLD-8260HLW(14)
	L1926197-08B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-08C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	HOLD-8260HLW(14)
	L1926197-08D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		HOLD-WETCHEM()
	L1926197-08E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		HOLD-PETRO(14),HOLD-8270(14)
	L1926197-09A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-09B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-09C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-09D	Plastic 2oz unpreserved for TS	Α	NA		3.8	Υ	Absent		TS(7)
	L1926197-09E	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		8270TCL-PAH(14),TPH-DRO-D(14)
	L1926197-10A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260HLW-NH(14)
	L1926197-10B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-10C	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260HLW-NH(14)
	L1926197-10D	Glass 250ml/8oz unpreserved	Α	NA		3.8	Υ	Absent		8270TCL-PAH(14),TS(7),TPH-DRO-D(14)
	L1926197-10X	Glass 120ml unpreserved split	Α	NA		3.8	Υ	Absent		A2-PHI(14)
	L1926197-11A	Vial MeOH preserved	Α	NA		3.8	Υ	Absent		8260H-NH(14),8260HLW-NH(14)



Lab Number: L1926197

Report Date: 07/10/19

Project Name: WW CROSS PROPERTY **Project Number:** 141.05051.010

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1926197-11B	Vial water preserved	Α	NA		3.8	Υ	Absent	19-JUN-19 00:20	8260H-NH(14),8260HLW-NH(14)



Project Name: WW CROSS PROPERTY Lab Number: L1926197
Project Number: 141.05051.010 Report Date: 07/10/19

GLOSSARY

Acronyms

EDL

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name:WW CROSS PROPERTYLab Number:L1926197Project Number:141.05051.010Report Date:07/10/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

1

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- $ND \qquad \text{-Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.} \\$
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: WW CROSS PROPERTY Lab Number: L1926197
Project Number: 141.05051.010 Report Date: 07/10/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 12

Published Date: 10/9/2018 4:58:19 PM

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

AUPHA	CHAIN	OF CUSTODY	PAGE !	or <u>2</u>	Date Ree'd in Lei	6/18/9	ALPHA JOD# 1/926191
6 Walkup Drive	320 Forbes Wind	Project Information			Report Informa	ition - Data Deliverables	Billing Information
Westboro, MA 0 Tet 508-898-92	720 Tel: 508-822-9300	Project Name: WW (pl.ADEx	Service Control of the Control of th	□ Same as Client into PO #: 1764
Client Informatio		Project Location: Ja 19	rey NH			quirements & Project In	
	Consulter the	Project #. 141, 05	051,010		D Yes Z No Mair	MCP Analytical Methods ix Spike Required on this SDG?	© Yes © No CT RCP Analytical Methods (Required for MCP Inogganics)
	meante be	Project Manager. 564	un areller	te	CI YES OF NO GW	Standards (Info Required for #4	etale & EPN with Targeta)
PONTA	oral, NH	ALPHA Quate It.			D Other State Fe	1 Standards (Info Required for ## DES RGP of Program NRDES +US	Citiento Per SSOAPP
Phone: 603-5	136-1400	Turn-Around Time				2 2 2 3	1/8/1/1
Emalk /	delidie	TalStandard □ RL	SH (only construent it pro-		0//	Circo 15 Circo 15 Circo 15 Pro Cirly	SAMPLE INFO
Jour litere	YONGAMBHY, LOM	Date Dua:	OCT (MACENAMER DA-		MLPSH Class	Rang Rang	3 / / / 3
Aguittonal P	reject information:					Chico is Chica is Chi	SAMPLE INFO
Low-last S	MI VOC ROMOLOS	must be frozen	pon rece	Hon,	A 10 0	1 2 2 2 2	Filtretien Di Field Di Lab to do
HOLD AN SOL	waster Dondons a	mad from Rans	don't		C ABW	A China	Q Lab to do
110000001 200	"/" " "				C ABIN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Preservation Cl Lab to do
ALPHA Lab ID (Lab Use Only)	Sample 40	Collection Date	n Sample Time Matrix	Sampler Initiate	POC: X 8	FPP: Chinama & Taylor 14 Chico 15 VPP: Chinama & Taylor Chicago Chicag	Sample Comments :
26197-01	B108-52	6-17-19 8	10 Sort	DAG	XX	XX	5
02	Bi08-53	1 8	100		XX	XX	5
03	B109-53	id	150	1	X		4
Ois	B109-54	31	200		XX	XX	Ş ²
0.5	B110-53	31	2:05		XX	XX	5
06	Bill - 53		2/5		XX	XX	5
M	8114-53		3,30		XX	X	5
OS	8114-54		5,40		XX	X	5
09	B115-53		1:50		XX	X	5
10	B111-0.5'		:45	9	XX	XX	poronital creaser 4
Container Type P= Plause	Preservative			tainer Type	VA	A A	
A* Amborgans V= Vial G= Gims	Be Hitl Ga MNOs		F	reservative	S/O A	A A	
9= Sactoral cup C= Cube O= Other	OP HISO, EV ROOH S= NBOH	Relinquished By:	Đ;	ita/Tima	Repo	elved By: Date	Time All and all all and all all all and all all all all all all all all all al
S= Bosone D= Bolib Beltle	GH Mark Sch H = Mar (2,05) SE Assorblic Assid	and so	6/16	19 10	MY TELL	AAL 6/12	All samples submitted are subject to more and Conditions.
	J = 164aCi Ka Zn Assista O+ Other	Varia A	N W/19/	19/19/10	leace	tolul	Bae paverse side, FORM NO: 01401 (rev. 12-Mar-2012)

Дирна	CHAI	OF CUSTO	DY M	¥ 2 .	.2	Date Rec	Ad in Lab:	6/1	3/19	AL	PHA Job#:	L1926197
8 Walkup Dive	320 Forbes Blvd	Project Informa	ition		47 F. S	Report	Informat	on - Data	Deliverabl	les Bi	lling Informat	ion
Westboro, MA Ter 508-898-9	1681 Munifield, MA 02048	Psoject Name: "M	IW Cross			ADE		EMAIL		D.S	iame as Client ir	16 PO#: 11764
Client Information	n	Project Locations	aftery.	N#							nation Requir	
Client: Rawkin	· Confidence	Project #. 141	3505LO	10		C Yes C	No MA MI	CP Analytica Stake Regu	Methods red on this:	SDG7 (Re	☐ Yes ¥ No C quired for MCP	T RCP Analytical Methods (narganics)
	morate Drace	Project Manager.	Solun Ox	Katho		O Yes O	No GW1	Stendards (1	nto Require	for Metals	& EPH with Ta	njets)
	naith Not	ALPHA Guote #:				Q Yes (I)	No NPDE State /Fed	S RGP Program 🚺	IH DES/	USEPA	& EPH with ta Bighth Hald Criteria	por Salati
	436-1490	Turn-Around 1	ime	The last			/ /			77	111	
	Tel vansomore	Det	The Real Property lies	Or Parish		1		Page 1	S Out	11	111.	
co those for	Le Cavausan and	Silve	D RUSH (04) or			85	0//	2/0/2	1	lui/ot		
Additional P	roject Information	Date Due:				ANALYSIS	Dan.	80	10/1	Delingerprion	1///	SAMPLEINFO
Low level So	or vice senaples	nood to be from Re	n when n	corred		ANALYSIS	Q Q	10 1	B /	5//	111	Filtration
HOLD all	somples poud	ng anall from R	wedne				3 0	S .	Courses Only	11)		☐ Field ☐ Leb to do
	1	,				Seza Seza	5 5	5 8 8	0	111	111	Preservation Lab to do
ALPHA Lab ID	Sample	F) -	Section		Sampler	VOC. A STED	METALS: CACP 13	SPH: DROUGHS DROUGHS DROUGHS VPH: UND.	C PCB COPEST THOUSE CINAMBOR OF	11	111	
(Lab Use Only)	1	Date	Time	Matrior	injusis	2 0	4/4	@ Z	4 2	+	H	Sample Comments
2497-11	Try Blocks					^		\rightarrow	-	-		
										4		
				1.00								
								$\neg \neg$				
	_							- 1 - 1		++-		
			-1	-								
										+-		
Container Type	Preservative					1/		\rightarrow	++			
Pri Plesio An Amber glass Vs. Viet	Ar Mone 6 = MCt C= HMC.		\vdash		er Type	0		-	-			
G= Grass S= Sactoria cup	D=1USO, E= NeOH	Relinquished By:		Date		1	Donaid	ed Duc	-	Date/Time		
On Other En Encome	G= NanSO. H = Na ₂ S ₂ O ₃	Mention	-	6/10/10	E 1044	11	10	~ 1	41 6	113/10	All samp	oles submitted are subject to
D= 900 Bolds	I= Ascerbic Acid J = ni+1.01 N= Zn Acesate	follow AA	1,	\$/15	19	Oka	سي	LAHE	y ce-1	\$ 16/19	ZS See rev	erse side.
	7= MaOH G= NahSO+ H = Na ₂ S ₂ O ₃ I= Asterble Acid J = M+LOI	Ten Sh	16	6/19/19 8/15/	1049	Office	Becela	AR	4 ce-1	lizia Hulla	All same Alpha's See rev	Terms and Conditions.

Дена	CHAIN O	F CUSTO	Y PAGE_) of 2	Date Rec'd in	Lab: 6/18/	ALPHA	A Job#: 4926197
8 Walkup Drive	320 Forbes Blvd	Project Informati		17 18 18	Report Info	rmation - Data D	The same of the sa	Information
Westboro, MA 01 Tel: 508-898-92	1581 Mansfield, MA 02048 20 Tel: 508-822-9300	Project Name: WV	1 Cross		ADEX	DEMAIL	□ Same	as Client info PO #: 11764
Client Information	n.	Project Location: Jo	effrey, Not		Martin Control of the	to preside a comment of the feet of	& Project Information	NAME OF TAXABLE PARTY O
Client: Landon	Consulting the	Project #: 141. (05051 010	V.	Yes No No	MA MCP Analytical I Matrix Spike Require	ed on this SDG? (Required	s of No CT RCP Analytical Methods d for MCP Inorganics)
Address: 112 61	Porate by	Project Manager: 5	ohn welle	arte	Yes A No C	GW1 Standards (Inf	o Required for Metals & EF	PH with Targets)
	aroth Not	ALPHA Quote #:			☐ Other State	/Fed Program N	+DES +US ENT B	Criteria per SSQAPP
Phone: 603-4	36-1490	Turn-Around Tin	ne			/ / 2 / 2 / 3		
Jovellette @ Additional Pr	roject Information:	Date Due:	RUSH (only continued if		ANALYSIS 1824 DS242	CIMCP 14 CIRCP 15 CI RORAS CIPP 13 Nets CI Ranges Co.	JFINGERPINE	SAMPLE INFO Filtration
HOLD AN SOM	pal VOC Scriptos v paplos pordong em		a Som.		VOC. Kêzeo D 62 SVOC. D ABN METALS	METALS: DMCP13 DMCP14 DRCP15 EPH: DRanges & Targets D Ranges O.	TPH. DQuant Only DFingerprint PCTONESST PEU FINGERPRINT	Preservation
(Lab Use Only)	Sample ID	Date	Time Mat	#55.50 The Property of the Pro	ME SV VO	A SO SO	DE TO	Sample Comments
26197-01	B108-52	6-17-19	8:10 So:	1 DAF	XX		XX	5
02	B108-53		8:20		XX		XX	5
03	B109-53		10.50		X			4
04	B109-54		11200	4	XX		XX	5
05	B110 - 53		10:05		XX		XX	5
06	Bill - 53		9215		XX		XX	5
	B114-53		13,30		XX		X	5
07	B114-54		13,40		XX		X	5
08			12:50		NA			5
09	B115-53		1	- W	NN			potential creasure 4
10	B111-0.5'		9:45	SANDARA CARANTA	2 4			10
Container Type P= Plastic A= Amber glass	Preservative A= None B= HCl			ontainer Type	de A		AA	
V= Vial G= Glass B= Bacteria cup	C= HNO ₃ D= H ₂ SO ₄ E= NaOH	Della sulata de C		Preservative	70		Parto (Time	
C= Cube O= Other E= Encore D= BOD Bottle Page 88 of 96	E= NeOH F= MeOH G= NaHSO4 H = Na ₂ S ₂ O3 I= Ascorbic Acid J = NiH ₂ CI K= Zn Acetate C= Cities	Relinquished By:	- 6/	Date/Time	ne de	Received By:	Date/Time 6/13/16/10 0-19-15/16/39	AlL samples submitted are subject to Alpha's Terms and Conditions. See reverse side. FORM NO: 01-01 (rev. 12-Mar-2012)

ΔLPHA	CHAIN O	Samuel Con	described the last	No.		OF	1112000	TERMINATURA	in Lab		6/1	0111	10000		NAME OF TAXABLE PARTY.		MANAGEMENT OF THE PARTY OF THE	192619
8 Walkup Drive Westboro, MA	320 Forbes Blvd		Informat					(2)	nforma			Delive	rables			Inform		117/
Tel: 508-898-9	1220 Tel: 508-822-9300			W CVO35			The state of	ADEx		Ø(EI	Corner.			and the same		as Clien	marie de	PO#:)176
lient Informatio	The second second	Project L	ocation:	ffrey	NH				ory Red to MA N					t Info			uireme	nus P Analytical Me
	n Consularing	Project #	1910	5051,0	10		□ Ye	es 🗘 N	lo Matri	x Spike	Requ	ired on	this SD	10000000	equired	for MC	P Inorga	inics)
Idress: U) Q	orporate Drave			John a	aleto		O Y	es UN	lo GW1	Stand ES RG	ards (NIO Rec	ulred to	SEPA	Bio	PH with '	Targets)	SSEAR
ione: 603-	marth Not	ALPHA		02/17/13			⊅ To	ther St	ate /Fed	Prog	ram_	A K PP	1	1 7	c	Criteria _	por	T DEWAIT
	-436-1490	Turn-A	round Tir	ne	niphai			-/-		CP 45	13	Ajuro 1		/ /		//	//	/ /
Additional Powlevel St	Che ransomanican Che Cansomanican Project Information: Al VOX Samples need Semples pending a	Date D		when the		COLUMN TO STATE OF THE PARTY OF	ANALVO	2: 0 ARM 0 524,2	METALS: DMCP 13	EPH: DR. DRCRAS DRCP 14 DI	VPH; CIR.	D PCB D PEST	tonly OFinger		//	//		SAMPLE IN Filtration Field Lab to do
			Name of	Section of the section of			1 :	2/3	141	0/	6 /	0/0	6	1 7		/	1 1	Preservation
LPHA Lab ID ab Use Only)	Sample ID		Colle	ection	Sample Matrix	Sampler	Voc.	SVOC: D	METALS: C	EPH: DP	VPH: CIP.	D PCB D	Cowan	//		//	/	Preservatio
LPHA Lab ID ab Use Only)	5 2 2				Sample		X Noc.	SVOC: D	METALS: C	EPH: CD.	VPH: CIP.	D PCB D	- Couant Only	<u>//</u>	<u>/</u>	//	/ s	
LPHA Lab ID ab Use Only)	Sample ID		Colle	ection	Sample	Sampler	X	8VOC: 0.1	METALS: L	EPH: DE	VPH: CR.	D PCB D	- D Quan	<u>//</u>			/ s	☐ Lab to do
LPHA Lab ID ab Use Only)	Sample ID		Colle	ection	Sample	Sampler	X X	SVOC: 0.1	METALS: L	EPH. OP	VPH: CIR.	D PCB	Couse	//			S	☐ Lab to do
LPHA Lab ID ab Use Only)	Sample ID		Colle	ection	Sample	Sampler	X	SVOC: D.	METALS: C	EPH: DE	Cald Hdv	D POB D	Coust				S	☐ Lab to do
LPHA Lab ID ab Use Only)	Sample ID		Colle	ection	Sample	Sampler	X	SVOC: 0.1	METALS; L	EPH: DE	Cald Hdy	D PCB	Country				S	☐ Lab to do
ALPHA Lab ID Ab Use Only)	Preservative A= None		Colle	ection	Sample Matrix	Sampler	X	SVOC: 0.1		EPH: DE	CAD'HdA	D PCB	, Course				S	☐ Lab to do
LPHA Lab ID ab Use Only)	Sample ID Trap Blank Preservative		Colle	ection	Sample Matrix	Sampler Initials	X	SVOC: 0.1		EPH: CP	and Hay	D PCB	C Course				S	☐ Lab to do

GC-FID Chromatogram

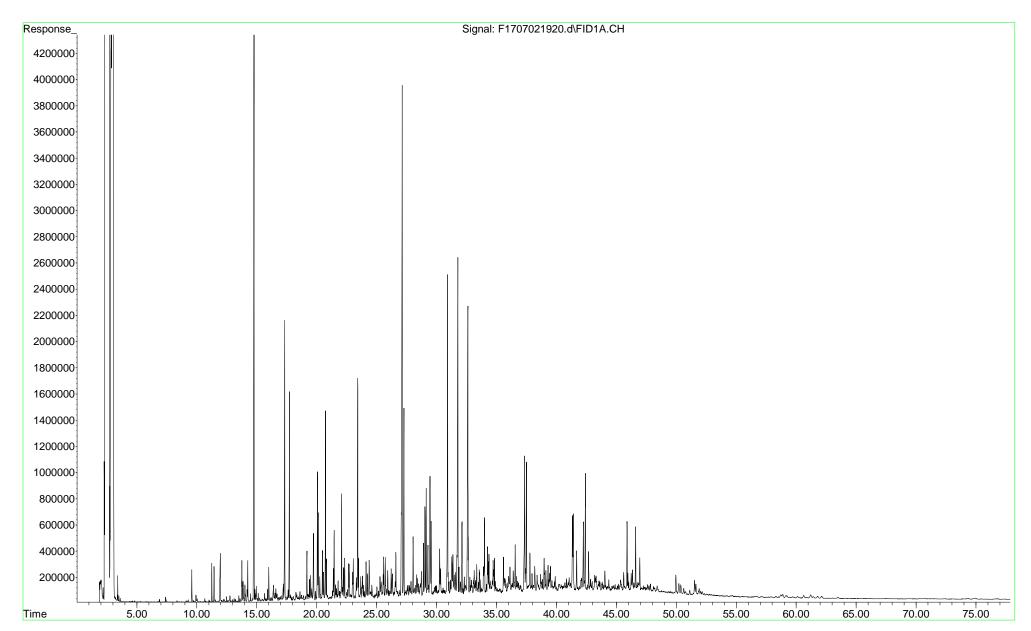
File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021920.d

Operator : FID17:WR

Acquired : 02 Jul 2019 11:19 pm using AcqMethod FID17.M

Instrument : FID17
Sample Name: L1926197-10

Misc Info : WG1255847, WG1255235, ICAL15688



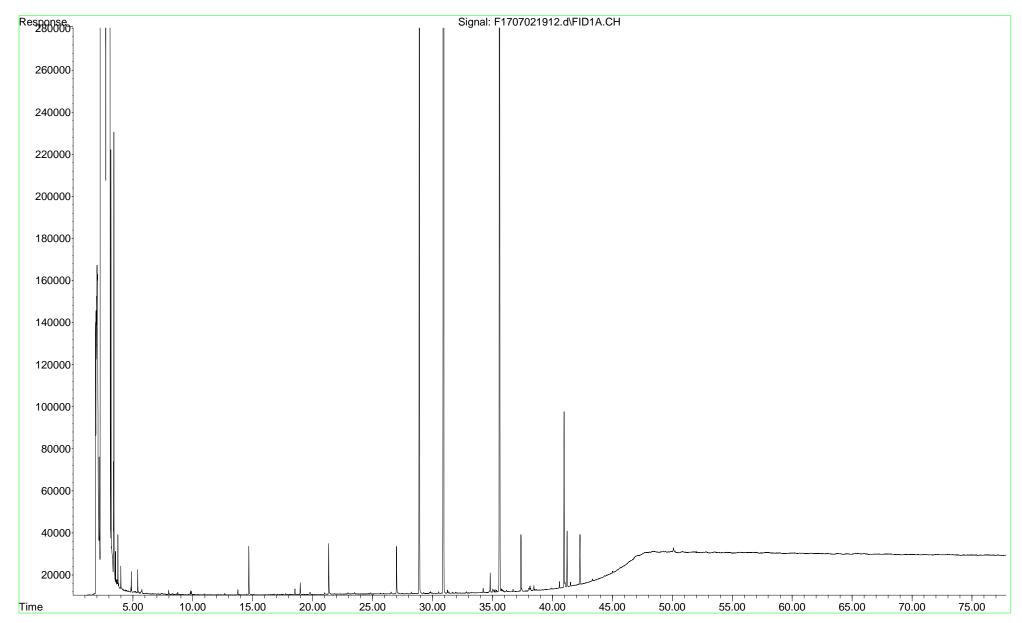
File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021912.d

Operator : FID17:WR

Acquired : 02 Jul 2019 5:26 pm using AcqMethod FID17.M

Instrument: FID17

Sample Name: WG1255235-1 (Method Blank)
Misc Info : WG1255847, WG1255235, ICAL15688



File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021914.d

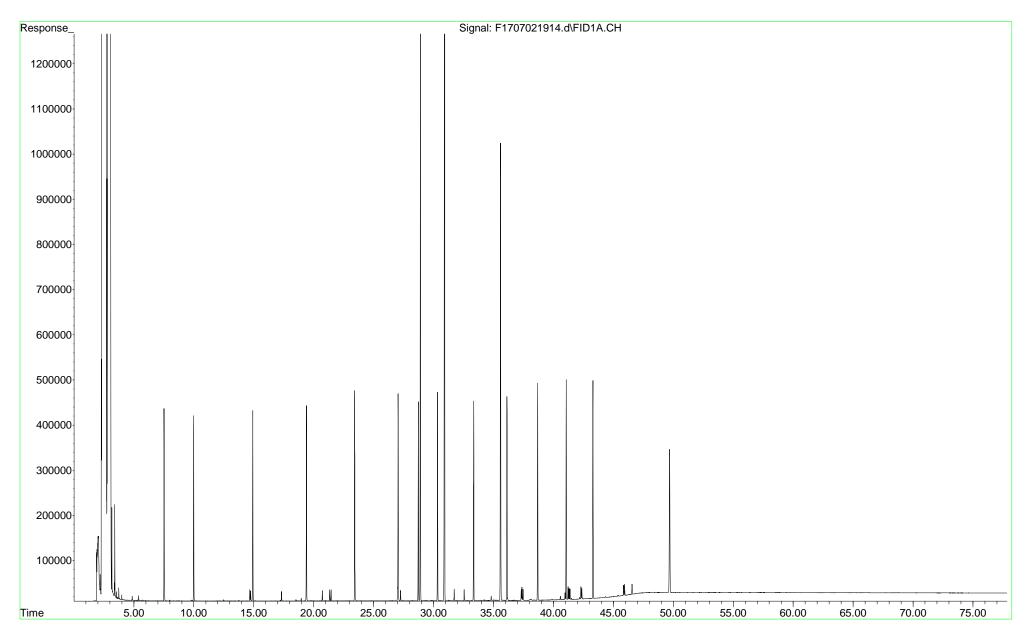
Operator : FID17:WR

Acquired : 02 Jul 2019 6:54 pm using AcqMethod FID17.M

Instrument : FID17

Sample Name: WG1255235-2 (Laboratory Control Sample)

Misc Info : WG1255847, WG1255235, ICAL15688



Petroleum Reference Standards

File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021924.d

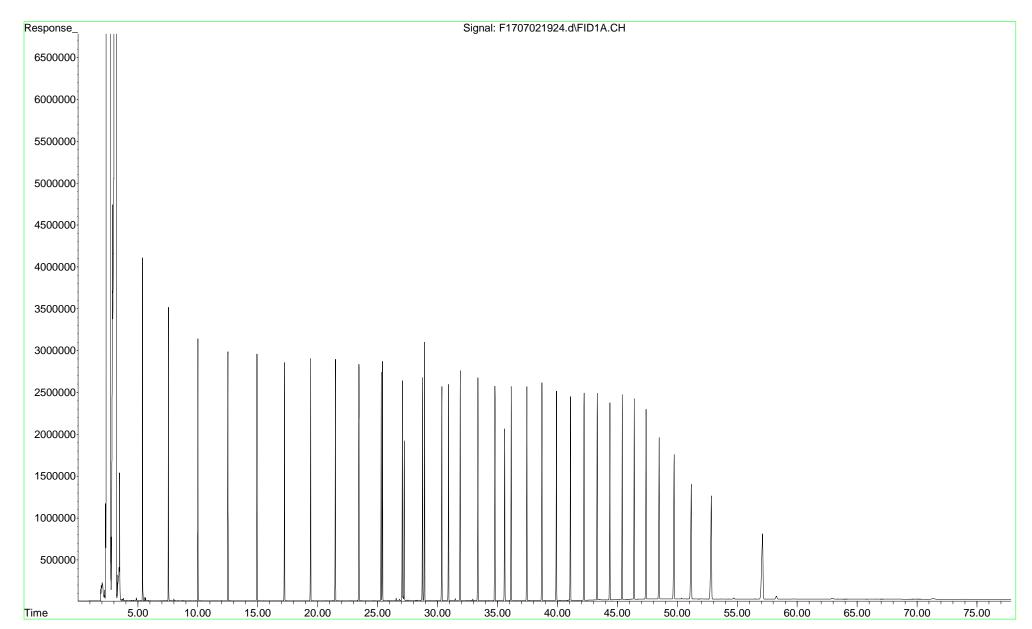
Operator : FID17:WR

Acquired : 03 Jul 2019 2:15 am using AcqMethod FID17.M

Instrument : FID17

Sample Name: WG1255847-2 (Alkane Reference Standard)

Misc Info : WG1255847,FRBB06,ICAL15688



File :0:\Forensics\Data\LIBRARY\Hydrocarbon Reference Standards\Co

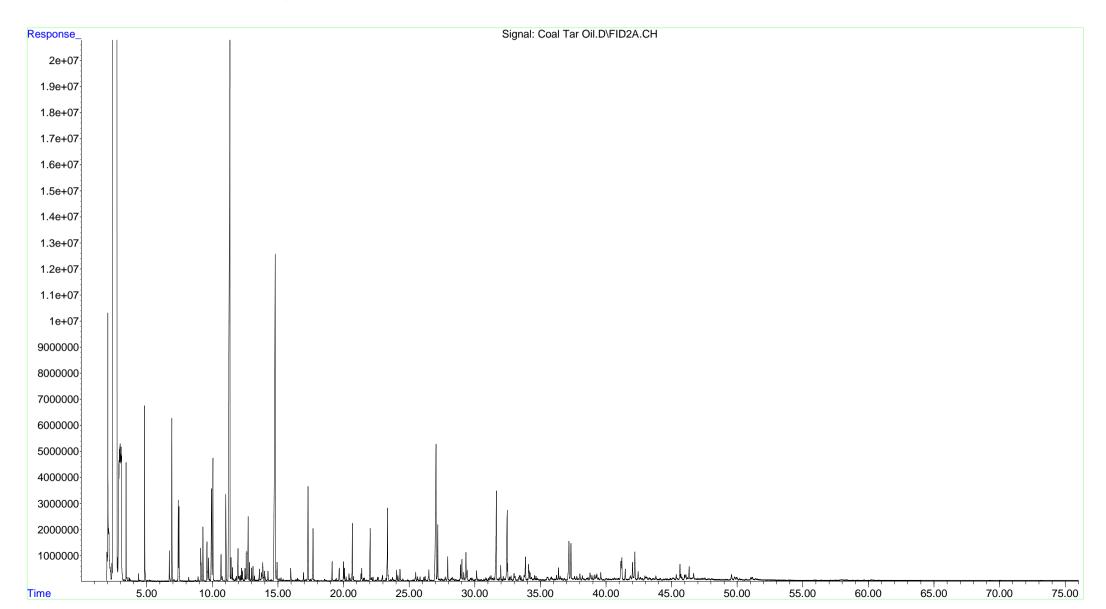
... al Tar Oil.D

Operator : DMP
Instrument : PAH2

Acquired : 08 Aug 2013 6:49 pm using AcqMethod FRNC2A.M

Sample : Coal Tar Oil

Misc Info : Chem Service Pz-123 (F031908K)





ANALYTICAL REPORT

Lab Number: L1926634

Client: Ransom Consulting, Inc.

112 Corporate Drive

141.05051.010

Pease International Tradeport

Portsmouth, NH 03801

ATTN: John Ouellette
Phone: (603) 436-1490
Project Name: WW CROSS

.,...

Report Date: 07/09/19

Project Number:

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: WW CROSS **Project Number:** 141.05051.010

Lab Number: Report Date: L1926634

ort Date: 07/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1926634-01	B101-S1	SOIL	JAFFREY, NH	06/18/19 13:00	06/19/19
L1926634-02	B104-S3	SOIL	JAFFREY, NH	06/18/19 09:40	06/19/19
L1926634-03	B105-S1	SOIL	JAFFREY, NH	06/18/19 11:10	06/19/19
L1926634-04	B107-S2	SOIL	JAFFREY, NH	06/18/19 10:30	06/19/19
L1926634-05	DUP1	SOIL	JAFFREY, NH	06/18/19 10:30	06/19/19
L1926634-06	TRIP BLANK	SOIL	JAFFREY, NH	06/18/19 00:00	06/19/19



Project Name:WW CROSSLab Number:L1926634Project Number:141.05051.010Report Date:07/09/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



 Project Name:
 WW CROSS
 Lab Number:
 L1926634

 Project Number:
 141.05051.010
 Report Date:
 07/09/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1926634-06: The Trip Blank has results for acetone and tert butyl alcohol present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/09/19

Melissa Sturgis Melissa Sturgis

ORGANICS



VOLATILES



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-01 Date Collected: 06/18/19 13:00

Client ID: B101-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C

Analytical Date: 06/30/19 14:47

Analyst: JC Percent Solids: 95%

1,1-Dichloroethane ND ug/kg 0.86 0.12 1 Chloroform ND ug/kg 1.3 0.12 1 Carbon eterachloride ND ug/kg 0.86 0.20 1 1,2-Dichloropropane ND ug/kg 0.86 0.11 1 Dibromochloromethane ND ug/kg 0.86 0.12 1 1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 Tetrachloroethane ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichloroflucromethane ND ug/kg 0.43 0.11 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1-1-Trichloroethane ND ug/kg 0.86 0.22 1 1,1-1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,1-Dichloroethane ND ug/kg 0.86 0.12 1 Chloroform ND ug/kg 1.3 0.12 1 Carbon tetrachloride ND ug/kg 0.86 0.20 1 1,2-Dichloropropane ND ug/kg 0.86 0.11 1 Dibromochloromethane ND ug/kg 0.86 0.12 1 1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 Tetrachloroethane ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichlorofluoromethane ND ug/kg 0.43 0.11 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1-Dichloromethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.43<	Volatile Organics by EPA 5035 Lo	w - Westborough Lab					
1,1-Dichloroethane ND ug/kg 0.86 0.12 1 Chloroform ND ug/kg 1.3 0.12 1 Carbon tetrachloride ND ug/kg 0.86 0.20 1 1,2-Dichloropropane ND ug/kg 0.86 0.11 1 Dibromochloromethane ND ug/kg 0.86 0.12 1 1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 Tetrachloroethane ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichlorofubromethane ND ug/kg 0.43 0.11 1 1,1-1-Trichloroethane ND ug/kg 0.86 0.22 1 Bromodichloromethane ND ug/kg 0.43 0.04 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 Itans-1,3-Dichloropropene ND ug/kg 0.	Methylene chloride	ND		ug/kg	4.3	2.0	1
Chloroform ND ug/kg 1.3 0.12 1 Carbon tetrachloride ND ug/kg 0.86 0.20 1 1,2-Dichloropropane ND ug/kg 0.86 0.11 1 Dibromochloromethane ND ug/kg 0.86 0.12 1 1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 1,1,2-Trichloroethane ND ug/kg 0.43 0.17 1 1-Trichloroethane ND ug/kg 0.43 0.11 1 1,1-Trichloroethane ND ug/kg 0.43 0.11 1 1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 1,1-S-Dichloropropene ND ug/kg	1,1-Dichloroethane	ND			0.86	0.12	1
1,2-Dichloropropane ND	Chloroform	ND		ug/kg	1.3	0.12	1
Dibromochloromethane ND ug/kg 0.86 0.12 1 1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 Tetrachloroethane ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichlorofluoromethane ND ug/kg 3.4 0.60 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 Bromodichloropropene ND ug/kg 0.86 0.24 1 vis-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 1,1,1,2,2-Tetrachloroethane ND ug/kg	Carbon tetrachloride	ND		ug/kg	0.86	0.20	1
1,1,2-Trichloroethane ND ug/kg 0.86 0.23 1 Tetrachloroethane ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichloroftuoromethane ND ug/kg 3.4 0.60 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.14 1 Bromodichloropropene ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 sis-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg	1,2-Dichloropropane	ND		ug/kg	0.86	0.11	1
Tetrachloroethene ND ug/kg 0.43 0.17 1 Chlorobenzene ND ug/kg 0.43 0.11 1 Trichlorofluoromethane ND ug/kg 3.4 0.60 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,1-Dichloropropene, Total ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg 0.43 0.14 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg	Dibromochloromethane	ND		ug/kg	0.86	0.12	1
ND	1,1,2-Trichloroethane	ND		ug/kg	0.86	0.23	1
Trichlorofluoromethane ND ug/kg 3.4 0.60 1 1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.86 0.24 1 sci-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 Bromoferthane ND ug/kg </td <td>Tetrachloroethene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>0.43</td> <td>0.17</td> <td>1</td>	Tetrachloroethene	ND		ug/kg	0.43	0.17	1
1,2-Dichloroethane ND ug/kg 0.86 0.22 1 1,1,1-Trichloroethane ND ug/kg 0.43 0.14 1 Bromodichloromethane ND ug/kg 0.43 0.09 1 trans-1,3-Dichloropropene ND ug/kg 0.86 0.24 1 cis-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene, Total ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg 0.43 0.14 1 1,1-2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.43 0.14 1 Ethylbenzene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 3.4	Chlorobenzene	ND		ug/kg	0.43	0.11	1
ND	Trichlorofluoromethane	ND		ug/kg	3.4	0.60	1
Bromodichloromethane ND	1,2-Dichloroethane	ND		ug/kg	0.86	0.22	1
trans-1,3-Dichloropropene ND ug/kg 0.86 0.24 1 cis-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 1,1-2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 1,10ene ND ug/kg 0.43 0.14 1 1 Coluene ND ug/kg 0.43 0.14 1 1 Chloromethane ND ug/kg 0.86 0.47 1 1 Chloromethane ND ug/kg 0.86 0.12 1 1 Chloromethane ND ug/kg 0.86 0.12 1 1 Chloromethane ND ug/kg 0.86 0.12 1 1 Chloromethane ND ug/kg 1.7 0.50 1 1 Chloroethane ND ug/kg 0.86 0.29 1 1 Chloroethane ND ug/kg 0.86 0.29 1 1 Chloroethane ND ug/kg 0.86 0.29 1 1 Chloroethane ND ug/kg 0.86 0.20 1	1,1,1-Trichloroethane	ND		ug/kg	0.43	0.14	1
cis-1,3-Dichloropropene ND ug/kg 0.43 0.14 1 1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg 3.4 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 0.86 0.20 1	Bromodichloromethane	ND		ug/kg	0.43	0.09	1
1,3-Dichloropropene, Total ND ug/kg 0.43 0.14 1 1,1-Dichloropropene ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg 3.4 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	trans-1,3-Dichloropropene	ND		ug/kg	0.86	0.24	1
1,1-Dichloropropene ND ug/kg 0.43 0.14 1 Bromoform ND ug/kg 3.4 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	cis-1,3-Dichloropropene	ND		ug/kg	0.43	0.14	1
Bromoform ND ug/kg 3.4 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	1,3-Dichloropropene, Total	ND		ug/kg	0.43	0.14	1
1,1,2,2-Tetrachloroethane ND ug/kg 0.43 0.14 1 Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	1,1-Dichloropropene	ND		ug/kg	0.43	0.14	1
Benzene ND ug/kg 0.43 0.14 1 Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Bromoform	ND		ug/kg	3.4	0.21	1
Toluene ND ug/kg 0.86 0.47 1 Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	1,1,2,2-Tetrachloroethane	ND		ug/kg	0.43	0.14	1
Ethylbenzene ND ug/kg 0.86 0.12 1 Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Benzene	ND		ug/kg	0.43	0.14	1
Chloromethane ND ug/kg 3.4 0.80 1 Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Toluene	ND		ug/kg	0.86	0.47	1
Bromomethane ND ug/kg 1.7 0.50 1 Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Ethylbenzene	ND		ug/kg	0.86	0.12	1
Vinyl chloride ND ug/kg 0.86 0.29 1 Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Chloromethane	ND		ug/kg	3.4	0.80	1
Chloroethane ND ug/kg 1.7 0.39 1 1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Bromomethane	ND		ug/kg	1.7	0.50	1
1,1-Dichloroethene ND ug/kg 0.86 0.20 1	Vinyl chloride	ND		ug/kg	0.86	0.29	1
-9.19	Chloroethane	ND		ug/kg	1.7	0.39	1
trans-1,2-Dichloroethene ND ug/kg 1.3 0.12 1	1,1-Dichloroethene	ND		ug/kg	0.86	0.20	1
	trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-01 Date Collected: 06/18/19 13:00

Client ID: B101-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - '	Westborough Lab					
Trichloroethene	ND		ua/ka	0.43	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	0.15	1
	0.47	J	ug/kg	1.7	0.13	1
Methyl tert butyl ether		J	ug/kg			
p/m-Xylene	ND		ug/kg	1.7	0.48	1
o-Xylene	ND		ug/kg	0.86	0.25	1
Xylenes, Total	ND		ug/kg	0.86	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.86	0.12	1
Dibromomethane	ND		ug/kg	1.7	0.20	1
1,2,3-Trichloropropane	ND		ug/kg	1.7	0.11	1
Styrene	ND		ug/kg	0.86	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.6	0.79	1
Acetone	14		ug/kg	8.6	4.2	1
Carbon disulfide	ND		ug/kg	8.6	3.9	1
2-Butanone	ND		ug/kg	8.6	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	1.1	1
2-Hexanone	ND		ug/kg	8.6	1.0	1
Bromochloromethane	ND		ug/kg	1.7	0.18	1
Tetrahydrofuran	ND		ug/kg	3.4	1.4	1
2,2-Dichloropropane	ND		ug/kg	1.7	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.86	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.43	0.11	1
Bromobenzene	ND		ug/kg	1.7	0.12	1
n-Butylbenzene	ND		ug/kg	0.86	0.14	1
sec-Butylbenzene	ND		ug/kg	0.86	0.13	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.7	0.15	1
o-Chlorotoluene	ND		ug/kg	1.7	0.16	1
p-Chlorotoluene	ND		ug/kg	1.7	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.86	1
Hexachlorobutadiene	ND		ug/kg	3.4	0.15	1
Isopropylbenzene	ND		ug/kg	0.86	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.09	1
Naphthalene	ND		ug/kg	3.4	0.56	1
n-Propylbenzene	ND		ug/kg	0.86	0.15	1



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-01 Date Collected: 06/18/19 13:00

Client ID: B101-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	stborough Lab					
4.2.2 Triablarahanzana	ND			1.7	0.28	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.20	
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.29	1
Ethyl ether	1.1	J	ug/kg	1.7	0.29	1
Isopropyl Ether	ND		ug/kg	1.7	0.18	1
Tert-Butyl Alcohol	ND		ug/kg	17	4.4	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.7	0.11	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.7	0.15	1
1,4-Dioxane	ND		ug/kg	69	30.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	106		70-130	
Toluene-d8	100		70-130	
4-Bromofluorobenzene	95		70-130	
Dibromofluoromethane	103		70-130	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-03 Date Collected: 06/18/19 11:10

Client ID: B105-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/30/19 15:14

Analyst: JC Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Lov	w - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1	
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1	
Chloroform	ND		ug/kg	1.5	0.14	1	
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1	
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1	
Dibromochloromethane	ND		ug/kg	0.98	0.14	1	
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1	
Tetrachloroethene	ND		ug/kg	0.49	0.19	1	
Chlorobenzene	ND		ug/kg	0.49	0.12	1	
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1	
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1	
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1	
Bromodichloromethane	ND		ug/kg	0.49	0.11	1	
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1	
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1	
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1	
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1	
Bromoform	ND		ug/kg	3.9	0.24	1	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1	
Benzene	ND		ug/kg	0.49	0.16	1	
Toluene	ND		ug/kg	0.98	0.53	1	
Ethylbenzene	ND		ug/kg	0.98	0.14	1	
Chloromethane	ND		ug/kg	3.9	0.91	1	
Bromomethane	ND		ug/kg	2.0	0.57	1	
Vinyl chloride	ND		ug/kg	0.98	0.33	1	
Chloroethane	ND		ug/kg	2.0	0.44	1	
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1	
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-03 Date Collected: 06/18/19 11:10

Client ID: B105-S1 Date Received: 06/19/19
Sample Location: JAFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - 1	Westborough Lab					
Trichloroethene	ND		ua/lea	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
Methyl tert butyl ether	0.67	J	ug/kg	2.0	0.17	1
		J	ug/kg			
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	
Acetone	46		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	3.9	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
.,						



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-03 Date Collected: 06/18/19 11:10

Client ID: B105-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	estborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	2.0		ug/kg	2.0	0.33	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	16	J	ug/kg	20	5.0	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.12	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.17	1
1,4-Dioxane	ND		ug/kg	78	34.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	94	70-130	
Dibromofluoromethane	102	70-130	

Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-04 Date Collected: 06/18/19 10:30

Client ID: B107-S2 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/30/19 15:40

Analyst: JC Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Lov	w - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1	
1,1-Dichloroethane	ND		ug/kg	0.91	0.13	1	
Chloroform	ND		ug/kg	1.4	0.13	1	
Carbon tetrachloride	ND		ug/kg	0.91	0.21	1	
1,2-Dichloropropane	ND		ug/kg	0.91	0.11	1	
Dibromochloromethane	ND		ug/kg	0.91	0.13	1	
1,1,2-Trichloroethane	ND		ug/kg	0.91	0.24	1	
Tetrachloroethene	ND		ug/kg	0.46	0.18	1	
Chlorobenzene	ND		ug/kg	0.46	0.12	1	
Trichlorofluoromethane	ND		ug/kg	3.6	0.63	1	
1,2-Dichloroethane	ND		ug/kg	0.91	0.23	1	
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1	
Bromodichloromethane	ND		ug/kg	0.46	0.10	1	
trans-1,3-Dichloropropene	ND		ug/kg	0.91	0.25	1	
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1	
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.14	1	
1,1-Dichloropropene	ND		ug/kg	0.46	0.14	1	
Bromoform	ND		ug/kg	3.6	0.22	1	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1	
Benzene	ND		ug/kg	0.46	0.15	1	
Toluene	ND		ug/kg	0.91	0.50	1	
Ethylbenzene	ND		ug/kg	0.91	0.13	1	
Chloromethane	ND		ug/kg	3.6	0.85	1	
Bromomethane	ND		ug/kg	1.8	0.53	1	
Vinyl chloride	ND		ug/kg	0.91	0.30	1	
Chloroethane	ND		ug/kg	1.8	0.41	1	
1,1-Dichloroethene	ND		ug/kg	0.91	0.22	1	
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-04 Date Collected: 06/18/19 10:30

Client ID: B107-S2 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - We	stborough Lab					
Trichloroethene	ND		ua/ka	0.46	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.12	1
1,3-Dichlorobenzene	ND ND		ug/kg ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	0.52	J	ug/kg	1.8	0.18	1
p/m-Xylene	ND	J		1.8	0.10	1
o-Xylene	ND ND		ug/kg ug/kg	0.91	0.26	1
Xylenes, Total	ND		ug/kg	0.91	0.26	1
cis-1,2-Dichloroethene	ND ND			0.91	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg ug/kg	0.91	0.10	1
Dibromomethane	ND ND			1.8	0.12	1
1,2,3-Trichloropropane	ND ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.91	0.12	1
Dichlorodifluoromethane	ND		ug/kg	9.1	0.18	1
Acetone	19		ug/kg	9.1		1
			ug/kg		4.4	
Carbon disulfide	ND		ug/kg	9.1	4.2	1
2-Butanone	ND		ug/kg	9.1	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.1	1.2	1
2-Hexanone	ND		ug/kg	9.1	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
Tetrahydrofuran	ND		ug/kg	3.6	1.4	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.91	0.25	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.91	0.15	1
sec-Butylbenzene	ND		ug/kg	0.91	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.8	0.16	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.91	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.91	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.91	0.10	1
Naphthalene	ND		ug/kg	3.6	0.59	1
n-Propylbenzene	ND		ug/kg	0.91	0.16	1



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-04 Date Collected: 06/18/19 10:30

Client ID: B107-S2 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low - V	Vestborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1	
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1	
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1	
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1	
Ethyl ether	1.9		ug/kg	1.8	0.31	1	
Isopropyl Ether	ND		ug/kg	1.8	0.19	1	
Tert-Butyl Alcohol	18		ug/kg	18	4.7	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.8	0.12	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.8	0.16	1	
1,4-Dioxane	ND		ug/kg	73	32.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	108	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	98	70-130	
Dibromofluoromethane	104	70-130	

Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-06 Date Collected: 06/18/19 00:00

Client ID: TRIP BLANK Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/30/19 13:02

Analyst: JC

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Volatile Organics by EPA 5035 Low - Westb	orough Lab				
Methylene chloride	ND	ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND	ug/kg	1.0	0.14	1
Chloroform	ND	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND	ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND	ug/kg	1.0	0.12	1
Dibromochloromethane	ND	ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.27	1
Tetrachloroethene	ND	ug/kg	0.50	0.20	1
Chlorobenzene	ND	ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND	ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND	ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17	1
Bromodichloromethane	ND	ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND	ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND	ug/kg	0.50	0.16	1
Bromoform	ND	ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.17	1
Benzene	ND	ug/kg	0.50	0.17	1
Toluene	ND	ug/kg	1.0	0.54	1
Ethylbenzene	ND	ug/kg	1.0	0.14	1
Chloromethane	ND	ug/kg	4.0	0.93	1
Bromomethane	ND	ug/kg	2.0	0.58	1
Vinyl chloride	ND	ug/kg	1.0	0.34	1
Chloroethane	ND	ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND	ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14	1



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-06 Date Collected: 06/18/19 00:00

Client ID: TRIP BLANK Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	v - Westborough Lab					
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	11		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	4.0	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-06 Date Collected: 06/18/19 00:00

Client ID: TRIP BLANK Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	tborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	1.7	J	ug/kg	2.0	0.34	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	24		ug/kg	20	5.1	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	1
1,4-Dioxane	ND		ug/kg	80	35.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	94	70-130	
Dibromofluoromethane	103	70-130	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Analyst: AD

Volatile Organics by EPA 5035 Low - V WG1255119-5 Methylene chloride 1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane 1,1,2-Trichloroethane	esult	Qualifier	Units	RL	MDL
1,1-Dichloroethane Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	Vestborou	igh Lab for	sample(s):	01,03-04,06	Batch:
Chloroform Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	ND		ug/kg	5.0	2.3
Carbon tetrachloride 1,2-Dichloropropane Dibromochloromethane	ND		ug/kg	1.0	0.14
1,2-Dichloropropane Dibromochloromethane	ND		ug/kg	1.5	0.14
Dibromochloromethane	ND		ug/kg	1.0	0.23
	ND		ug/kg	1.0	0.12
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.14
	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		-99		



 Project Name:
 WW CROSS
 Lab Number:
 L1926634

 Project Number:
 141.05051.010
 Report Date:
 07/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low WG1255119-5	- Westbord	ough Lab fo	r sample(s):	01,03-04,06	Batch:
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
Tetrahydrofuran	ND		ug/kg	4.0	1.6
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: Lab Number: WW CROSS L1926634 **Project Number:** 141.05051.010

Report Date: 07/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Analyst: AD

olatile Organics by EPA 5035 Low /G1255119-5 p-Chlorotoluene 1,2-Dibromo-3-chloropropane	v - Westbord ND ND	ough Lab fo	r sample(s):	01,03-04,06	Batch:
<u> </u>			ua/ka		
1 2-Dibromo-3-chloropropage	ND		ug/ng	2.0	0.11
1,2 Dibromo o chioropropane			ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Ethyl ether	ND		ug/kg	2.0	0.34
Isopropyl Ether	ND		ug/kg	2.0	0.21
Tert-Butyl Alcohol	ND		ug/kg	20	5.1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18
1,4-Dioxane	ND		ug/kg	80	35.

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130
Dibromofluoromethane	98	70-130



Project Name: WW CROSS

Lab Number:

L1926634

Project Number: 141.05051.010

Report Date:

07/09/19

Methylene chloride	Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
1,1-Dichloroethane 97 96 70-130 1 30 Chloroform 102 102 70-130 0 30 Carbon tetrachloride 110 109 70-130 1 30 1,2-Dichloropropane 93 93 70-130 0 30 Dibromochloromethane 105 107 70-130 2 30 1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethane 110 111 70-130 2 30 Chlorobenzene 1103 103 70-130 1 30 Chlorobenzene 103 103 70-130 0 30 Trichlorofthoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Irans-1,3-Dichloropropene 105 107 70-130 2 30 Irans-1,3-Dichloropropene 104 104 70-130	Volatile Organics by EPA 5035 Low - West	borough Lab Ass	ociated sample(s): 01,03-04,06	Batch:	WG1255119-3	WG1255119-4	
Chloroform 102 102 70-130 0 30 Carbon tetrachloride 110 109 70-130 1 30 1,2-Dichloropropane 93 93 93 70-130 0 30 Dibromochloromethane 105 107 70-130 2 30 1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethene 110 111 70-130 1 30 Chlorobenzene 103 103 70-130 1 30 Tichlorofluoromethane 105 105 70-130 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 dis-1,3-Dichloropropene 108 109	Methylene chloride	86		84		70-130	2	30
Carbon tetrachloride 110 109 70-130 1 30 1,2-Dichloropropane 93 93 70-130 0 30 Dibromochloromethane 105 107 70-130 2 30 1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethane 110 111 70-130 1 30 Chlorobenzene 103 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 trans-1,3-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109	1,1-Dichloroethane	97		96		70-130	1	30
1,2-Dichloropropane 93 93 70-130 0 30 Dibromochloromethane 105 107 70-130 2 30 1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethane 110 111 70-130 1 30 Chlorobenzene 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 trans-1,3-Dichloropropene 104 104 70-130 0 30 cis-1,3-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 Benzene 100 99 70-130	Chloroform	102		102		70-130	0	30
Dibromochloromethane 105 107 70-130 2 30 1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethene 110 111 70-130 1 30 Chlorobenzene 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 Bromoform 108 108 70-130 0 30 Bromoform 108 109 70-130	Carbon tetrachloride	110		109		70-130	1	30
1,1,2-Trichloroethane 103 101 70-130 2 30 Tetrachloroethene 110 111 70-130 1 30 Chlorobenzene 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 2 30 cis-1,3-Dichloropropene 108 108 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 Benzene 100 99 70-130 1 30 Benzene 103 103 70-130 1	1,2-Dichloropropane	93		93		70-130	0	30
Tetrachloroethene 110 111 70-130 1 30 Chlorobenzene 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 Benzene 100 99 70-130 1 30 Benzene 103 103 70-130 1	Dibromochloromethane	105		107		70-130	2	30
Chlorobenzene 103 103 70-130 0 30 Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 1 30 Ethylbenzene 105 106 70-130 5	1,1,2-Trichloroethane	103		101		70-130	2	30
Trichlorofluoromethane 105 105 70-139 0 30 1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 1 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Tetrachloroethene	110		111		70-130	1	30
1,2-Dichloroethane 92 95 70-130 3 30 1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Chlorobenzene	103		103		70-130	0	30
1,1,1-Trichloroethane 110 108 70-130 2 30 Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Trichlorofluoromethane	105		105		70-139	0	30
Bromodichloromethane 102 104 70-130 2 30 trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	1,2-Dichloroethane	92		95		70-130	3	30
trans-1,3-Dichloropropene 105 107 70-130 2 30 cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	1,1,1-Trichloroethane	110		108		70-130	2	30
cis-1,3-Dichloropropene 104 104 70-130 0 30 1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Bromodichloromethane	102		104		70-130	2	30
1,1-Dichloropropene 108 108 70-130 0 30 Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	trans-1,3-Dichloropropene	105		107		70-130	2	30
Bromoform 108 109 70-130 1 30 1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	cis-1,3-Dichloropropene	104		104		70-130	0	30
1,1,2,2-Tetrachloroethane 99 98 70-130 1 30 Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	1,1-Dichloropropene	108		108		70-130	0	30
Benzene 100 99 70-130 1 30 Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Bromoform	108		109		70-130	1	30
Toluene 103 103 70-130 0 30 Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	1,1,2,2-Tetrachloroethane	99		98		70-130	1	30
Ethylbenzene 105 106 70-130 1 30 Chloromethane 83 79 52-130 5 30	Benzene	100		99		70-130	1	30
Chloromethane 83 79 52-130 5 30	Toluene	103		103		70-130	0	30
	Ethylbenzene	105		106		70-130	1	30
Bromomethane 100 100 57-147 0 30	Chloromethane	83		79		52-130	5	30
	Bromomethane	100		100		57-147	0	30



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926634

Report Date: 07/09/19

arameter	LCS %Recovery	Qual %	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westbo	orough Lab Ass	sociated sample(s): 01,03-04,06	Batch:	WG1255119-3	WG1255119-4	
Vinyl chloride	95		94		67-130	1	30
Chloroethane	104		102		50-151	2	30
1,1-Dichloroethene	106		105		65-135	1	30
trans-1,2-Dichloroethene	104		102		70-130	2	30
Trichloroethene	103		106		70-130	3	30
1,2-Dichlorobenzene	103		101		70-130	2	30
1,3-Dichlorobenzene	104		103		70-130	1	30
1,4-Dichlorobenzene	104		102		70-130	2	30
Methyl tert butyl ether	98		97		66-130	1	30
p/m-Xylene	109		109		70-130	0	30
o-Xylene	107		108		70-130	1	30
cis-1,2-Dichloroethene	103		101		70-130	2	30
Dibromomethane	100		101		70-130	1	30
1,2,3-Trichloropropane	96		97		68-130	1	30
Styrene	108		109		70-130	1	30
Dichlorodifluoromethane	96		94		30-146	2	30
Acetone	72		73		54-140	1	30
Carbon disulfide	100		99		59-130	1	30
2-Butanone	69	Q	84		70-130	20	30
4-Methyl-2-pentanone	90		90		70-130	0	30
2-Hexanone	78		77		70-130	1	30
Bromochloromethane	105		108		70-130	3	30
Tetrahydrofuran	84		85		66-130	1	30



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926634

Report Date: 07/09/19

Parameter	LCS %Recovery	Qual %	LCSD 6Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westl	borough Lab Ass	ociated sample(s)	: 01,03-04,06	Batch:	WG1255119-3	WG1255119-4	
2,2-Dichloropropane	108		107		70-130	1	30
1,2-Dibromoethane	103		105		70-130	2	30
1,1,1,2-Tetrachloroethane	105		109		70-130	4	30
Bromobenzene	104		101		70-130	3	30
n-Butylbenzene	106		103		70-130	3	30
sec-Butylbenzene	106		105		70-130	1	30
tert-Butylbenzene	107		104		70-130	3	30
1,3,5-Trichlorobenzene	108		107		70-139	1	30
o-Chlorotoluene	86		84		70-130	2	30
p-Chlorotoluene	104		102		70-130	2	30
1,2-Dibromo-3-chloropropane	93		99		68-130	6	30
Hexachlorobutadiene	111		108		67-130	3	30
Isopropylbenzene	108		105		70-130	3	30
p-Isopropyltoluene	108		106		70-130	2	30
Naphthalene	103		102		70-130	1	30
n-Propylbenzene	106		103		70-130	3	30
1,2,3-Trichlorobenzene	103		106		70-130	3	30
1,2,4-Trichlorobenzene	109		109		70-130	0	30
1,3,5-Trimethylbenzene	107		106		70-130	1	30
1,2,4-Trimethylbenzene	107		105		70-130	2	30
Ethyl ether	96		101		67-130	5	30
Isopropyl Ether	84		82		66-130	2	30
Tert-Butyl Alcohol	90		91		70-130	1	30



Project Name: WW CROSS

Lab Number:

L1926634

Project Number: 141.05051.010

Report Date:

07/09/19

Parameter	LCS %Recovery		-CSD ecovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Wes	stborough Lab Associa	ated sample(s):	01,03-04,06	Batch:	WG1255119-3	WG1255119-4		
Ethyl-Tert-Butyl-Ether	93		93		70-130	0		30
Tertiary-Amyl Methyl Ether	97		100		70-130	3		30
1,4-Dioxane	94		94		65-136	0		30

0	LCS	LCSD	Acceptance Criteria
Surrogate	%Recovery Qual	%Recovery Qual	
1,2-Dichloroethane-d4	97	99	70-130
Toluene-d8	99	101	70-130
4-Bromofluorobenzene	96	94	70-130
Dibromofluoromethane	100	101	70-130

SEMIVOLATILES



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-02 Date Collected: 06/18/19 09:40

Client ID: B104-S3 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/30/19 09:24

Analyst: JG Percent Solids: 86%

07/04/19 08:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - Wes	stborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1	
2-Chloronaphthalene	ND		ug/kg	190	19.	1	
Fluoranthene	650		ug/kg	120	22.	1	
Naphthalene	ND		ug/kg	190	24.	1	
Benzo(a)anthracene	270		ug/kg	120	22.	1	
Benzo(a)pyrene	190		ug/kg	160	47.	1	
Benzo(b)fluoranthene	240		ug/kg	120	33.	1	
Benzo(k)fluoranthene	110	J	ug/kg	120	31.	1	
Chrysene	260		ug/kg	120	20.	1	
Acenaphthylene	86	J	ug/kg	160	30.	1	
Anthracene	92	J	ug/kg	120	38.	1	
Benzo(ghi)perylene	120	J	ug/kg	160	23.	1	
Fluorene	25	J	ug/kg	190	19.	1	
Phenanthrene	440		ug/kg	120	24.	1	
Dibenzo(a,h)anthracene	22	J	ug/kg	120	22.	1	
Indeno(1,2,3-cd)pyrene	120	J	ug/kg	160	27.	1	
Pyrene	590		ug/kg	120	19.	1	
1-Methylnaphthalene	ND		ug/kg	190	22.	1	
2-Methylnaphthalene	ND		ug/kg	230	23.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	76		23-120	
2-Fluorobiphenyl	76		30-120	
4-Terphenyl-d14	62		18-120	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-03 Date Collected: 06/18/19 11:10

Client ID: B105-S1 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Percent Solids:

96%

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/30/19 09:24

Analytical Date: 07/04/19 08:15
Analyst: JG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1	
2-Chloronaphthalene	ND		ug/kg	170	17.	1	
Fluoranthene	170		ug/kg	100	20.	1	
Naphthalene	ND		ug/kg	170	21.	1	
Benzo(a)anthracene	87	J	ug/kg	100	20.	1	
Benzo(a)pyrene	57	J	ug/kg	140	42.	1	
Benzo(b)fluoranthene	88	J	ug/kg	100	29.	1	
Benzo(k)fluoranthene	45	J	ug/kg	100	28.	1	
Chrysene	83	J	ug/kg	100	18.	1	
Acenaphthylene	ND		ug/kg	140	27.	1	
Anthracene	ND		ug/kg	100	34.	1	
Benzo(ghi)perylene	46	J	ug/kg	140	20.	1	
Fluorene	ND		ug/kg	170	17.	1	
Phenanthrene	120		ug/kg	100	21.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1	
Indeno(1,2,3-cd)pyrene	46	J	ug/kg	140	24.	1	
Pyrene	140		ug/kg	100	17.	1	
1-Methylnaphthalene	ND		ug/kg	170	20.	1	
2-Methylnaphthalene	ND		ug/kg	210	21.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	65		23-120	
2-Fluorobiphenyl	72		30-120	
4-Terphenyl-d14	73		18-120	



Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

SAMPLE RESULTS

Lab ID: L1926634-04 Date Collected: 06/18/19 10:30

Client ID: B107-S2 Date Received: 06/19/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/30/19 09:24

Analytical Date: 07/04/19 07:21

Analyst: JG

Percent Solids: 95%

Result	Qualifier	Units	RL	MDL	Dilution Factor
orough Lab					
ND		ug/kg	140	18.	1
ND		ug/kg	170	17.	1
ND		ug/kg	100	20.	1
ND		ug/kg	170	21.	1
ND		ug/kg	100	20.	1
ND		ug/kg	140	42.	1
ND		ug/kg	100	29.	1
ND		ug/kg	100	28.	1
ND		ug/kg	100	18.	1
ND		ug/kg	140	27.	1
ND		ug/kg	100	34.	1
ND		ug/kg	140	20.	1
ND		ug/kg	170	17.	1
ND		ug/kg	100	21.	1
ND		ug/kg	100	20.	1
ND		ug/kg	140	24.	1
ND		ug/kg	100	17.	1
ND		ug/kg	170	20.	1
ND		ug/kg	210	21.	1
	ND N	ND N	ND ug/kg ND ug/kg	ND ug/kg 140 ND ug/kg 170 ND ug/kg 100 ND ug/kg 140 ND ug/kg 100 ND ug/kg 170 ND ug/kg 140 ND ug/kg 170 ND ug/kg 100 ND ug/kg 100	Dorough Lab ND ug/kg 140 18. ND ug/kg 170 17. ND ug/kg 100 20. ND ug/kg 170 21. ND ug/kg 100 20. ND ug/kg 140 42. ND ug/kg 100 29. ND ug/kg 100 28. ND ug/kg 100 18. ND ug/kg 140 27. ND ug/kg 140 27. ND ug/kg 140 20. ND ug/kg 170 17. ND ug/kg 100 21. ND ug/kg 100 20. ND ug/kg 140 24. ND ug/kg 140 24. ND ug/kg 100 17. ND ug/kg 100 17. ND ug/kg 100 17. ND ug/kg <t< td=""></t<>

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	82		23-120	
2-Fluorobiphenyl	83		30-120	
4-Terphenyl-d14	80		18-120	



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number:

L1926634

Report Date: 07/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/03/19 20:51

Analyst: SZ

Extraction Method: EPA 3546 Extraction Date: 06/30/19 09:24

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/	MS - Westboroug	h Lab for s	sample(s):	02-04	Batch:	WG1254970-1
Acenaphthene	ND		ug/kg	130		17.
2-Chloronaphthalene	ND		ug/kg	160		16.
Fluoranthene	ND		ug/kg	97		18.
Naphthalene	ND		ug/kg	160		20.
Benzo(a)anthracene	ND		ug/kg	97		18.
Benzo(a)pyrene	ND		ug/kg	130		39.
Benzo(b)fluoranthene	ND		ug/kg	97		27.
Benzo(k)fluoranthene	ND		ug/kg	97		26.
Chrysene	ND		ug/kg	97		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	97		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	97		20.
Dibenzo(a,h)anthracene	ND		ug/kg	97		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		22.
Pyrene	ND		ug/kg	97		16.
1-Methylnaphthalene	ND		ug/kg	160		19.
2-Methylnaphthalene	ND		ug/kg	190		20.

		Acceptance
Surrogate	%Recovery Qualifie	er Criteria
Nitrohanzana dE	74	22 420
Nitrobenzene-d5	74	23-120
2-Fluorobiphenyl	77	30-120
4-Terphenyl-d14	80	18-120



Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number: L1926634

Report Date:

07/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	PD mits
Semivolatile Organics by GC/MS - Westb	orough Lab Associ	ated sample(s):	02-04 Batc	h: WG12549	70-2 WG12549	70-3	
Acenaphthene	83		87		31-137	5	50
2-Chloronaphthalene	85		88		40-140	3	50
Fluoranthene	91		95		40-140	4	50
Naphthalene	79		81		40-140	3	50
Benzo(a)anthracene	92		96		40-140	4	50
Benzo(a)pyrene	90		96		40-140	6	50
Benzo(b)fluoranthene	91		98		40-140	7	50
Benzo(k)fluoranthene	91		91		40-140	0	50
Chrysene	85		89		40-140	5	50
Acenaphthylene	90		92		40-140	2	50
Anthracene	88		92		40-140	4	50
Benzo(ghi)perylene	90		92		40-140	2	50
Fluorene	87		90		40-140	3	50
Phenanthrene	85		90		40-140	6	50
Dibenzo(a,h)anthracene	99		102		40-140	3	50
Indeno(1,2,3-cd)pyrene	84		85		40-140	1	50
Pyrene	90		95		35-142	5	50
1-Methylnaphthalene	86		86		26-130	0	50
2-Methylnaphthalene	84		86		40-140	2	50



Project Name: WW CROSS

Lab Number:

L1926634

Project Number: 141.05051.010

Report Date:

07/09/19

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG1254970-2 WG1254970-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
Nitrobenzene-d5	86	88	23-120
2-Fluorobiphenyl	87	88	30-120
4-Terphenyl-d14	90	92	18-120



PETROLEUM HYDROCARBONS



Project Name: Lab Number: WW CROSS L1926634

Project Number: Report Date: 141.05051.010 07/09/19

SAMPLE RESULTS

Lab ID: Date Collected: 06/18/19 10:30 L1926634-04

Client ID: Date Received: B107-S2 06/19/19 JAFFREY, NH Sample Location: Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil

Extraction Date: 06/30/19 10:35 Analytical Method: 1,8015D(M) Analytical Date: 07/01/19 05:37

Analyst: MEO 95% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quantitation - Westb	orough Lab					
ТРН	5570	J	ug/kg	34200	3930	1
Surrogate			% Recovery	Qualifier		ptance iteria

<u> </u>	3370	J	ug/kg	34200	3930	<u> </u>
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
o-Terphenyl			85		40-140	

Project Name: WW CROSS Lab Number: L1926634

Project Number: 141.05051.010 **Report Date:** 07/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8015D(M) Analytical Date: 06/30/19 19:29

Analyst: MEO

Extraction Method: EPA 3546 Extraction Date: 06/29/19 20:01

 Parameter
 Result
 Qualifier
 Units
 RL
 MDL

 Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s):
 04 Batch:
 WG1254914-1

 TPH
 ND
 ug/kg
 31900
 3670

Surrogate %Recovery Qualifier Criteria

o-Terphenyl 88 40-140



Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number:

L1926634

Report Date:

07/09/19

Parameter	LCS %Recovery Q	LCSD ual %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbon Quantitation - We	estborough Lab Associat	ted sample(s): 04 Batc	h: WG1254914-2			
ТРН	95	-	40-140	-		40

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qual	%Recovery Q	ual Criteria
o-Terphenyl	74		40-140

INORGANICS & MISCELLANEOUS



Project Name: Lab Number: WW CROSS L1926634 **Project Number:** 141.05051.010

Report Date: 07/09/19

SAMPLE RESULTS

Lab ID: Date Collected: L1926634-01 06/18/19 13:00 Client ID: B101-S1 Date Received: 06/19/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	94.8		%	0.100	NA	1	-	06/27/19 14:19	121,2540G	RI



Project Name: Lab Number: WW CROSS L1926634 **Project Number:** 141.05051.010

Report Date: 07/09/19

SAMPLE RESULTS

Lab ID: Date Collected: L1926634-02 06/18/19 09:40 Client ID: B104-S3 Date Received: 06/19/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	85.5		%	0.100	NA	1	-	06/27/19 14:19	121,2540G	RI



Project Name: Lab Number: **WW CROSS** L1926634 **Project Number:** 141.05051.010

Report Date: 07/09/19

SAMPLE RESULTS

Lab ID: Date Collected: L1926634-03 06/18/19 11:10 Client ID: B105-S1 Date Received: 06/19/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab)								
Solids, Total	95.9		%	0.100	NA	1	-	06/27/19 14:19	121,2540G	RI



Project Name: Lab Number: **WW CROSS** L1926634 **Project Number:** 141.05051.010

Report Date: 07/09/19

SAMPLE RESULTS

Lab ID: Date Collected: L1926634-04 06/18/19 10:30 Client ID: B107-S2 Date Received: 06/19/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	94.9		%	0.100	NA	1	-	06/27/19 14:19	121,2540G	RI



Lab Duplicate Analysis Batch Quality Control

Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number:

L1926634

Report Date:

07/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated	d sample(s): 01-04 QC B	satch ID: WG1253941-1	QC Sample:	L1926634-01	Client ID:	B101-S1
Solids, Total	94.8	94.7	%	0		20



Lab Number: L1926634

Report Date: 07/09/19

Project Number: 141.05051.010 Sample Receipt and Container Information

Were project specific reporting limits specified?

WW CROSS

Cooler Information

Container Information

Project Name:

Cooler Custody Seal

A Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рH	рН		Pres	Seal	Date/Time	Analysis(*)
L1926634-01A	Vial MeOH preserved	Α	NA		3.2	Υ	Absent		8260HLW-NH(14)
L1926634-01B	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	8260HLW-NH(14)
L1926634-01C	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	8260HLW-NH(14)
L1926634-01D	Plastic 2oz unpreserved for TS	Α	NA		3.2	Υ	Absent		TS(7)
L1926634-02A	Glass 250ml/8oz unpreserved	Α	NA		3.2	Υ	Absent		HOLD-PETRO(14),8270TCL- PAH(14),TS(7),HOLD-PHI()
L1926634-03A	Vial MeOH preserved	Α	NA		3.2	Υ	Absent		8260HLW-NH(14)
L1926634-03B	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	8260HLW-NH(14)
L1926634-03C	Vial water preserved	Α	NA		3.2	Υ	Absent	20-JUN-19 09:05	8260HLW-NH(14)
L1926634-03D	Plastic 2oz unpreserved for TS	Α	NA		3.2	Υ	Absent		TS(7)
L1926634-03E	Glass 250ml/8oz unpreserved	Α	NA		3.2	Υ	Absent		HOLD-PETRO(14),8270TCL-PAH(14),HOLD-PHI()
L1926634-04A	Vial MeOH preserved	Α	NA		3.2	Υ	Absent		8260HLW-NH(14)
L1926634-04B	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	8260HLW-NH(14)
L1926634-04C	Vial water preserved	Α	NA		3.2	Υ	Absent	20-JUN-19 09:17	8260HLW-NH(14)
L1926634-04D	Plastic 2oz unpreserved for TS	Α	NA		3.2	Υ	Absent		TS(7)
L1926634-04E	Glass 250ml/8oz unpreserved	Α	NA		3.2	Υ	Absent		8270TCL-PAH(14),HOLD-PHI(),TPH-DRO- D(14)
L1926634-05A	Vial MeOH preserved	Α	NA		3.2	Υ	Absent		HOLD-8260HLW(14)
L1926634-05B	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	HOLD-8260HLW(14)
L1926634-05C	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	HOLD-8260HLW(14)
L1926634-05D	Glass 250ml/8oz unpreserved	Α	NA		3.2	Υ	Absent		HOLD-PETRO(14),HOLD-WETCHEM(),HOLD-PHI(),HOLD-8270(14)
L1926634-05E	Glass 250ml/8oz unpreserved	Α	NA		3.2	Υ	Absent		-
L1926634-06A	Vial MeOH preserved	Α	NA		3.2	Υ	Absent		8260HLW-NH(14)
L1926634-06B	Vial water preserved	Α	NA		3.2	Υ	Absent	19-JUN-19 23:36	8260HLW-NH(14)
	Container ID L1926634-01A L1926634-01B L1926634-01C L1926634-01D L1926634-02A L1926634-03B L1926634-03C L1926634-03E L1926634-04A L1926634-04B L1926634-04D L1926634-04B L1926634-05B L1926634-05B L1926634-05D L1926634-05E L1926634-05E	Container ID Container Type L1926634-01A Vial MeOH preserved L1926634-01B Vial water preserved L1926634-01C Vial water preserved L1926634-01D Plastic 2oz unpreserved for TS L1926634-02A Glass 250ml/8oz unpreserved L1926634-03A Vial MeOH preserved L1926634-03B Vial water preserved L1926634-03C Vial water preserved L1926634-03D Plastic 2oz unpreserved for TS L1926634-03E Glass 250ml/8oz unpreserved L1926634-04A Vial MeOH preserved L1926634-04B Vial water preserved L1926634-04C Vial water preserved L1926634-04B Glass 250ml/8oz unpreserved L1926634-05A Vial MeOH preserved L1926634-05B Vial water preserved L1926634-05C Vial water preserved L1926634-05D Glass 250ml/8oz unpreserved L1926634-05E Glass 250ml/8oz unpreserved L1926634-05A Vial MeOH preserved	Container ID Container Type Cooler L1926634-01A Vial MeOH preserved A L1926634-01B Vial water preserved A L1926634-01C Vial water preserved A L1926634-01D Plastic 2oz unpreserved for TS A L1926634-02A Glass 250ml/8oz unpreserved A L1926634-03A Vial MeOH preserved A L1926634-03B Vial water preserved A L1926634-03C Vial water preserved A L1926634-03D Plastic 2oz unpreserved for TS A L1926634-03E Glass 250ml/8oz unpreserved A L1926634-04A Vial MeOH preserved A L1926634-04B Vial water preserved A L1926634-04C Vial water preserved A L1926634-04B Glass 250ml/8oz unpreserved A L1926634-05A Vial MeOH preserved A L1926634-05B Vial water preserved A L1926634-05C Vial water preserved A L1926634-05D Glass 250ml/8oz unpreserved A <td>Container ID Container Type Cooler PH L1926634-01A Vial MeOH preserved A NA L1926634-01B Vial water preserved A NA L1926634-01C Vial water preserved A NA L1926634-01D Plastic 2oz unpreserved for TS A NA L1926634-02A Glass 250ml/8oz unpreserved A NA L1926634-03A Vial MeOH preserved A NA L1926634-03B Vial water preserved A NA L1926634-03B Vial water preserved A NA L1926634-03C Vial water preserved A NA L1926634-03D Plastic 2oz unpreserved for TS A NA L1926634-04B Vial MeOH preserved A NA L1926634-04B Vial water preserved A NA L1926634-04C Vial water preserved A NA L1926634-05A Vial MeOH preserved A NA L1926634-05B Vial water preserved A NA L1</td> <td>Container ID Container Type Cooler PH PH L1926634-01A Vial MeOH preserved A NA L1926634-01B Vial water preserved A NA L1926634-01C Vial water preserved A NA L1926634-01D Plastic 2oz unpreserved for TS A NA L1926634-02A Glass 250ml/8oz unpreserved A NA L1926634-03A Vial MeOH preserved A NA L1926634-03B Vial water preserved A NA L1926634-03B Vial water preserved A NA L1926634-03D Plastic 2oz unpreserved for TS A NA L1926634-03E Glass 250ml/8oz unpreserved A NA L1926634-04A Vial MeOH preserved A NA L1926634-04B Vial water preserved A NA L1926634-04C Vial water preserved A NA L1926634-05A Vial MeOH preserved A NA L1926634-05B Vial water preserved A NA <!--</td--><td>Container ID Container Type Cooler pH Timel PH deg C L1926634-01A Vial MeOH preserved A NA 3.2 L1926634-01B Vial water preserved A NA 3.2 L1926634-01C Vial water preserved A NA 3.2 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 L1926634-03A Vial MeOH preserved A NA 3.2 L1926634-03B Vial water preserved A NA 3.2 L1926634-03C Vial water preserved A NA 3.2 L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 L1926634-04A Vial water preserved A NA 3.2 L1926634-04B Vial water preserved A NA 3.2 L1926634-04C Vial water preserved<td>Container ID Container Type Cooler pH PH deg C Pres L1926634-01A Vial MeOH preserved A NA 3.2 Y L1926634-01B Vial water preserved A NA 3.2 Y L1926634-01C Vial water preserved A NA 3.2 Y L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03A Vial MeOH preserved A NA 3.2 Y L1926634-03B Vial water preserved A NA 3.2 Y L1926634-03C Vial water preserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-04A Vial MeOH preserved A NA 3.2 Y</td><td>Container ID Container Type Cooler PH PH PH deg C Pres Seal L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent L1926634-01C Vial water preserved A NA 3.2 Y Absent L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03A Vial MeOH preserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03C Vial water preserved A NA 3.2 Y Absent L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-04A Vial MeOH preserved A NA 3.2 Y Absent L1926634-04B Vial water preserved A NA 3.2 Y Absent L1926634-04D Plastic 2oz unpreserved A NA</td><td>Container ID Container Type Cooler pH PH deg C Pres Seal Date/Time L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01C Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-03C Vial water preserved A NA 3.2 Y Absent 20-JUN-19 09:05 L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y Absent</td></td></td>	Container ID Container Type Cooler PH L1926634-01A Vial MeOH preserved A NA L1926634-01B Vial water preserved A NA L1926634-01C Vial water preserved A NA L1926634-01D Plastic 2oz unpreserved for TS A NA L1926634-02A Glass 250ml/8oz unpreserved A NA L1926634-03A Vial MeOH preserved A NA L1926634-03B Vial water preserved A NA L1926634-03B Vial water preserved A NA L1926634-03C Vial water preserved A NA L1926634-03D Plastic 2oz unpreserved for TS A NA L1926634-04B Vial MeOH preserved A NA L1926634-04B Vial water preserved A NA L1926634-04C Vial water preserved A NA L1926634-05A Vial MeOH preserved A NA L1926634-05B Vial water preserved A NA L1	Container ID Container Type Cooler PH PH L1926634-01A Vial MeOH preserved A NA L1926634-01B Vial water preserved A NA L1926634-01C Vial water preserved A NA L1926634-01D Plastic 2oz unpreserved for TS A NA L1926634-02A Glass 250ml/8oz unpreserved A NA L1926634-03A Vial MeOH preserved A NA L1926634-03B Vial water preserved A NA L1926634-03B Vial water preserved A NA L1926634-03D Plastic 2oz unpreserved for TS A NA L1926634-03E Glass 250ml/8oz unpreserved A NA L1926634-04A Vial MeOH preserved A NA L1926634-04B Vial water preserved A NA L1926634-04C Vial water preserved A NA L1926634-05A Vial MeOH preserved A NA L1926634-05B Vial water preserved A NA </td <td>Container ID Container Type Cooler pH Timel PH deg C L1926634-01A Vial MeOH preserved A NA 3.2 L1926634-01B Vial water preserved A NA 3.2 L1926634-01C Vial water preserved A NA 3.2 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 L1926634-03A Vial MeOH preserved A NA 3.2 L1926634-03B Vial water preserved A NA 3.2 L1926634-03C Vial water preserved A NA 3.2 L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 L1926634-04A Vial water preserved A NA 3.2 L1926634-04B Vial water preserved A NA 3.2 L1926634-04C Vial water preserved<td>Container ID Container Type Cooler pH PH deg C Pres L1926634-01A Vial MeOH preserved A NA 3.2 Y L1926634-01B Vial water preserved A NA 3.2 Y L1926634-01C Vial water preserved A NA 3.2 Y L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03A Vial MeOH preserved A NA 3.2 Y L1926634-03B Vial water preserved A NA 3.2 Y L1926634-03C Vial water preserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-04A Vial MeOH preserved A NA 3.2 Y</td><td>Container ID Container Type Cooler PH PH PH deg C Pres Seal L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent L1926634-01C Vial water preserved A NA 3.2 Y Absent L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03A Vial MeOH preserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03C Vial water preserved A NA 3.2 Y Absent L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-04A Vial MeOH preserved A NA 3.2 Y Absent L1926634-04B Vial water preserved A NA 3.2 Y Absent L1926634-04D Plastic 2oz unpreserved A NA</td><td>Container ID Container Type Cooler pH PH deg C Pres Seal Date/Time L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01C Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-03C Vial water preserved A NA 3.2 Y Absent 20-JUN-19 09:05 L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y Absent</td></td>	Container ID Container Type Cooler pH Timel PH deg C L1926634-01A Vial MeOH preserved A NA 3.2 L1926634-01B Vial water preserved A NA 3.2 L1926634-01C Vial water preserved A NA 3.2 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 L1926634-03A Vial MeOH preserved A NA 3.2 L1926634-03B Vial water preserved A NA 3.2 L1926634-03C Vial water preserved A NA 3.2 L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 L1926634-04A Vial water preserved A NA 3.2 L1926634-04B Vial water preserved A NA 3.2 L1926634-04C Vial water preserved <td>Container ID Container Type Cooler pH PH deg C Pres L1926634-01A Vial MeOH preserved A NA 3.2 Y L1926634-01B Vial water preserved A NA 3.2 Y L1926634-01C Vial water preserved A NA 3.2 Y L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03A Vial MeOH preserved A NA 3.2 Y L1926634-03B Vial water preserved A NA 3.2 Y L1926634-03C Vial water preserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-04A Vial MeOH preserved A NA 3.2 Y</td> <td>Container ID Container Type Cooler PH PH PH deg C Pres Seal L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent L1926634-01C Vial water preserved A NA 3.2 Y Absent L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03A Vial MeOH preserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03C Vial water preserved A NA 3.2 Y Absent L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-04A Vial MeOH preserved A NA 3.2 Y Absent L1926634-04B Vial water preserved A NA 3.2 Y Absent L1926634-04D Plastic 2oz unpreserved A NA</td> <td>Container ID Container Type Cooler pH PH deg C Pres Seal Date/Time L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01C Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-03C Vial water preserved A NA 3.2 Y Absent 20-JUN-19 09:05 L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y Absent</td>	Container ID Container Type Cooler pH PH deg C Pres L1926634-01A Vial MeOH preserved A NA 3.2 Y L1926634-01B Vial water preserved A NA 3.2 Y L1926634-01C Vial water preserved A NA 3.2 Y L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03A Vial MeOH preserved A NA 3.2 Y L1926634-03B Vial water preserved A NA 3.2 Y L1926634-03C Vial water preserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y L1926634-04A Vial MeOH preserved A NA 3.2 Y	Container ID Container Type Cooler PH PH PH deg C Pres Seal L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent L1926634-01C Vial water preserved A NA 3.2 Y Absent L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03A Vial MeOH preserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03C Vial water preserved A NA 3.2 Y Absent L1926634-03D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-04A Vial MeOH preserved A NA 3.2 Y Absent L1926634-04B Vial water preserved A NA 3.2 Y Absent L1926634-04D Plastic 2oz unpreserved A NA	Container ID Container Type Cooler pH PH deg C Pres Seal Date/Time L1926634-01A Vial MeOH preserved A NA 3.2 Y Absent L1926634-01B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01C Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-01D Plastic 2oz unpreserved for TS A NA 3.2 Y Absent L1926634-02A Glass 250ml/8oz unpreserved A NA 3.2 Y Absent L1926634-03B Vial water preserved A NA 3.2 Y Absent 19-JUN-19 23:36 L1926634-03C Vial water preserved A NA 3.2 Y Absent 20-JUN-19 09:05 L1926634-03B Vial water preserved A NA 3.2 Y Absent L1926634-03E Glass 250ml/8oz unpreserved A NA 3.2 Y Absent



Lab Number: L1926634

Report Date: 07/09/19

Container Information Initial Final Temp Frozen

Container ID Container Type Cooler pH pH deg C Pres Seal Date/Time Analysis(*)



Project Name:

WW CROSS

Project Number: 141.05051.010

Project Name:WW CROSSLab Number:L1926634Project Number:141.05051.010Report Date:07/09/19

GLOSSARY

Acronyms

EDL

LOQ

MS

NP

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 WW CROSS
 Lab Number:
 L1926634

 Project Number:
 141.05051.010
 Report Date:
 07/09/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a "Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 WW CROSS
 Lab Number:
 L1926634

 Project Number:
 141.05051.010
 Report Date:
 07/09/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 12

Page 1 of 1

Published Date: 10/9/2018 4:58:19 PM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

Δерна	CHAIN O	F CUST	ODY "	AGE	GF	Dai	n Rec'd l	in Lab: 6	/19/19	 	ALP	HA Job #;	L192 <i>663</i> 4	
S Washup Drive	320 Forbes Blvd	Project Inform	nation	1	To all	Re	port infe	ormation	Data De	liverabl	STREET, SQUARE,	ng informati		1
Yestore, MA 02 Tel: 508-998-522	581 Marisfield, MA 02048 D Tel: 508-922-9300	Project Name:	WWCn	385		di	AD£x.	ďέ	MAIL		☐ Sar	ne as Client in	10 PO# 11764	D
Client Information		Project Location			-	Re	gulatory	y Requirer	neitis	Proj		ition Requir	The state of the s	VI-S
Client Pon San	Consulsing	Project # 14				BY	es (1 No	MA MCPA	netylical h	feithods	EDG2 Monus	Yes Q No C ired for MCP (T RCP Analytical Meth	abo
Address: 112 (ar		Project Manager	Why F	play	00.	01	es D No	GW1 Slam	न रहपूर्णक स्थापन (सार्थ	Require	for Metals &	EPK WITH TO	Meje) Meje)	
Consmo	UK NH	ALPHA Quote i	i:	and the same			Mes II No Ther StatK	NPOES RO		PBS +	(15 FFA)	EPK with Tel	per 55 QMP	
Phone: 603-4	36-1490	Turn-Around	Time	Marine		Г	1			1.1	11	JI	111	100
Email: Pare (let	the @ rousdander w	A				1		ORCe.	0 PP 1	8	111		17	
ca. From find	gera sanoncian oject Information:	Date Due:	© RUSH (Mark)	ateriform of all page app	(Novembry	AMAIN	15 Sed 2	72	0 8	Ranges Only	Number of St.	///		7 5
			,	-		3	/0/	AND SALE	2 Q	08		111	SAMPLE INF	T Q
LOW ICVOSO	d VOCsamples nus	a be from	on until	n 48h	P	4	8 6	Y 2 2	18/2			1//	Filtration ☐ Field	Á
LAN Dall	Samples will pend	-/ Sum 2/-	Grown Da	dan			TABLE DEL	RCA	2 2	O PRET	201	111	Lab lo do	В
	Sandard Cont. Losio	CALIBRA	A DAYS IMDA	parn,		/3		9 8		200	13	111	Preservation D Lab to do	0
AUPHA Lab ID (Lab Use Only)	Sample ID	Det	Collection Tane	Sample Watrix	Sampler	1/8	300g	WETHER DROP IN DAMES IN	VPSK-D Ranges & Yarges D. H.	TPM DQuenion	3	11	Secretary Description	L L
26634-01	R101-51	6-18-1	The latest terminal	Sm/	DAP	X						+	Sample Commen	Is 5
	B104-53	V 10. 3	9:40	SUN	7 (4)	-	X			×	X		low volume[-30	20
-03V	B105-51		11210			N	N	+			X		the formalf and	A T
	B107-52		10130			1	7			42	9 - 3	1		
-05/	DUPL		-			1	~	+	\vdash	×	X	+++		5
			10:30		-	gK_	X	+		P	X			3
-06	Trip Blank					X		-						×
		-			-	-		-			4-1-4			
			+		-			-			1			
			-											
Container Type P= Phasec A= Amber class	Preseyvative A - Name B = HO			Conte	siner Type	V	A				A.			
V= V(q) G= G(pp) B+ Bockeris cup	C= HNO, D= H ₂ SO, E= NaOH			Pn	eservative	80	A-			A	A			
C= Oube O= Other E= Encore	F# Medid	Relinguished 8	y:	- 7:1	e/Time		11	Repealed B	m		Date/Time	All.samo	ilos submilted are subj	iect In
0=800 Solbe	H = Ne ₂ S ₂ O ₃ In Accepta Autu J = MHLC)	100-19	FAL-	6/11	1/15/6	F F	6	arta	1717	9	1919	> Apha's	Ferms and Conditions.	
	K* Zn Acetaje Ox Other	phere	246	6/18	1830		Gis	-	7	10/	18/19/182		01-01 (rest 12-Mps-2012)	

ALPHA	CHAIN O	F CUS	STOI	OY PA	GE	OF_	Dat	te Rec	d in l	Lab: 6	5/19	119	l		AL	.PHA	A Job	#: LIC	126634	
8 Walkup Drive	320 Forbes Blvd	Project	Informat	ion	directly		Re	port	Infor	matio	n - Dat	a Del	iveral	oles	of Real	5900 mm	Inform	10000		
Westboro, MA (Tel: 508-898-9	01581 Mansfield, MA 02048	Project Na	me: W	W Crt	785		de	ADE	(Ø	EMAIL	8			0.5	Same	as Clier	nt info	PO#: 11764	2
Client Information	nne	Project Lo	cation:	allney	· WH	-	Re	gula	tory F	Requir	emen	s &	Pro	oject			_	uireme		
Client: Ran Son	n Consularing	Project #:	141.6	5051.	010						Analyt							CT RC P Inorga	P Analytical Meth anics)	ods
	rAgase DF	Project Ma		ohn a		ve												Targets)		
Romsmo	risk NH	ALPHA Q					1	other	No N State /	Fed P	ogram	NHI) E>	103	VI P	Dia (Criteria_	per	55 QAPP	
Phone: 603-6	136-1490	Turn-Ar	ound Tir	ne				90	/ /	/	27 2	./*	/_/	7	7	/,	1		/ /	20
	tite @ rousdman. d	Ø∕Standa	und D	DUEL	00200026040	vones.	1	-		1	CPP13	0 sa	lo si	/	/	777	P/	//		A.S
ce. Frew. for	As @ van som on which wan roject Information:	Date Du		RUSH (anly a	antimed if pre-ay	pproved!)	ANALL	8	324.2 4H	14	48	Ranges Only	Range	D Fingerprint	/	(Lindage)	1	//	1	T
		8500000000		,			NA NA	1/6	PAH	DMCP 14	RCR.	2/5	?/	Finge	/	1	11	/ /	SAMPLE INF	OA
Low levels	of VOCsamples mu	so be f	rozor	works	n 48h	5.	4	7624	DX.	2	Targe	Targe	/_/	0		/	/ /	11	/ Filtration □ Field	#
HO(Dall	samples until peno	lang eme	2/ fm	m Dm	Spa		/	#8260 D 624	ABN	RCP INCP	Ses &	908 G	PES	PH-DOC	1	/ /		//	☐ Lab to do	В
110000	sangles out porto	any come	W1 110	, loon	orny		/3	3 / C	1 3	18:0	ORan	Ran	Doma	#	1	/	/ /	/ /	Preservation Lab to do	O T T
ALPHA Lab ID (Lab Use Only)	Sample ID		Colle Date	ection Time	Sample Matrix	Sampler Initials	800	SVOC	METALS: C.S.	METALS: DRCP 13 DMCP 14	VPL. ORanges & Targas	C PCB	TPH: DQuant	Ha	rema	/	/-/	- 8	Sample Commen	ts s
26634-01,	B101-51	6	5-18-19	13:00	Sol	DAF	X													4
-020	B104-53			9:40		8 8 111		X						XX				low	volume(-30	21
-03 V	B105-51			11:10			K	X					1	XX						5
-04 V	B107-52			10130			K	K					1	Ka						5
-05/	DUP1			W:30			K	X						XO						41
-06	Trip Blank			00.70			N				+		7	1						2
	1 19 Punk						-			+	+	\vdash	+	+	+			-		-
											+			+	+			_		
									-				1	+	+					
													-	+	+					
Container Type	Preservative			Г	Cart	alnor Tono	1/			+	+-	H		4 A	7			1		+-
P= Plastic A= Amber glass V= Vial	A= None B= HCI			-	Villa	eservative	80	A					_	A A	77			+		
G= Glass B= Bacteria cup C= Cube	C= HNO ₃ D= H ₃ SO ₄ E= NaOH	Relinguis	shed Bv:			e/Time	40	A	Re	pep/ed	By	208		-	e/Tim	e				
O= Other E= Encore D= BOD Bottle	F= MeOH G= NaHSO ₄ H = Na ₂ S ₂ O ₃	W	20		-71	9/1510		1	10		A	R	,	5/10	7/14	15			ubmitted are subj	ect to
	I= Ascorbic Acid J = NH4Cl K= Zn Acetate	Where	44	2_	6/11	2/14		1	MA	Mu	AA	4	6	4.9	111111111111111111111111111111111111111	15	See r	everse s	ide.	
age 50 of 50	O= Other	principe	AA	0	6118	6830		41	1	_	2	_	_4	//9/	7/8	2	FORM	NO: 01-01	(rev. 12-Mar-2012)	PHI SO



ANALYTICAL REPORT

Lab Number: L1926969

Client: Ransom Consulting, Inc.

112 Corporate Drive

141.05051.010

Pease International Tradeport

Portsmouth, NH 03801

ATTN: John Ouellette
Phone: (603) 436-1490
Project Name: WW CROSS

,

Report Date: 07/10/19

Project Number:

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: WW CROSS Project Number: 141.05051.010

Lab Number: L1926969 Report Date: 07/10/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1926969-01	B103-S2	SOIL	JAFFREY, NH	06/19/19 09:40	06/20/19
L1926969-02	B103-S4	SOIL	JAFFREY, NH	06/19/19 10:30	06/20/19
L1926969-03	DUP2	SOIL	JAFFREY, NH	06/19/19 09:40	06/20/19
L1926969-04	DUP3	SOIL	JAFFREY, NH	06/19/19 14:10	06/20/19
L1926969-05	TRIP BLANK	SOIL	JAFFREY, NH	06/19/19 00:00	06/20/19



Project Name:WW CROSSLab Number:L1926969Project Number:141.05051.010Report Date:07/10/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name:WW CROSSLab Number:L1926969Project Number:141.05051.010Report Date:07/10/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1926969-05: The Trip Blank has results for acetone, ethyl ether, and tert butyl alcohol present above the reporting limits. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Semivolatile Organics

L1926969-04: The sample has elevated detection limits due to the dilution required by the sample matrix. L1926969-04: The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Reextraction was not required; therefore, the results of the original analysis are reported.

Petroleum Hydrocarbon Quantitation

L1926969-04: The surrogate recovery is below the acceptance criteria for o-terphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Petroleum Hydrocarbon Identification by GC-FID

L1926969-04: The sample was extracted and then analyzed using a gas chromatograph equipped with a flame ionization detector (GC/FID). The temperature program and associated experimental conditions were optimized to obtain maximum resolution in an eighty minute chromatographic run representative of hydrocarbons in the n-Octane (C8) to n-Tetracontane (C40) range. Qualitative evaluation of the sample was conducted by reviewing the sample chromatogram in conjunction with a chromatogram of a normal alkane series generated with the same chromatographic conditions. Chromatograms of hydrocarbon reference materials obtained from



Project Name:WW CROSSLab Number:L1926969Project Number:141.05051.010Report Date:07/10/19

Case Narrative (continued)

our library of 82 reference standards were also utilized to provide the best possible sample match. Quantitative determination of the sample's hydrocarbon concentration was performed in accordance with EPA Method 8015M. The sample's total hydrocarbon concentration and all associated quality control data are included in the report.

The following qualitative information is based on a tentative interpretation of chromatographic pattern recognition and boiling point ranges:

Total Petroleum Hydrocarbon Identification

L1926969-04 contains hydrocarbons eluting in the range of n-Nonane (C9) to after the elution of n-Tetracontane (C40).

Based on the data generated, L1926969-04 contains material eluting in the low to heavy molecular weight ranges of the chromatogram. The material appears to be similar to a coal tar/creosote.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/10/19

600, Sew on Kelly Stenstrom

ORGANICS



VOLATILES



L1926969

Project Name: WW CROSS

B103-S2

JAFFREY, NH

Project Number: 141.05051.010

SAMPLE RESULTS

Report Date. 07/10/19

Lab Number:

Report Date: 07/10/19

OAIIII EE NEGO

L1926969-01 Date Collected: 06/19/19 09:40

Date Received: 06/20/19
Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 06/30/19 16:06

Analyst: JC Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	1.4		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-01 Date Collected: 06/19/19 09:40

Client ID: B103-S2 Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	w - Westborough Lab					
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	0.68	J	ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	22		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	4.0	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-01 Date Collected: 06/19/19 09:40

Client ID: B103-S2 Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	tborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	2.0		ug/kg	2.0	0.34	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	17	J	ug/kg	20	5.1	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	1
1,4-Dioxane	ND		ug/kg	80	35.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	109	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	94	70-130	
Dibromofluoromethane	105	70-130	



Project Name: Lab Number: **WW CROSS** L1926969

Project Number: Report Date: 141.05051.010 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-04 D Date Collected: 06/19/19 14:10

Client ID: DUP3

Date Received: 06/20/19 Sample Location: Field Prep: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/01/19 10:29

JC Analyst: 97% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Hig	h - Westborough Lab						
Methylene chloride	ND		ug/kg	42000	19000	200	
1,1-Dichloroethane	ND		ug/kg	8500	1200	200	
Chloroform	ND		ug/kg	13000	1200	200	
Carbon tetrachloride	ND		ug/kg	8500	1900	200	
1,2-Dichloropropane	ND		ug/kg	8500	1000	200	
Dibromochloromethane	ND		ug/kg	8500	1200	200	
1,1,2-Trichloroethane	ND		ug/kg	8500	2300	200	
Tetrachloroethene	ND		ug/kg	4200	1700	200	
Chlorobenzene	ND		ug/kg	4200	1100	200	
Trichlorofluoromethane	ND		ug/kg	34000	5900	200	
1,2-Dichloroethane	ND		ug/kg	8500	2200	200	
1,1,1-Trichloroethane	ND		ug/kg	4200	1400	200	
Bromodichloromethane	ND		ug/kg	4200	920	200	
trans-1,3-Dichloropropene	ND		ug/kg	8500	2300	200	
cis-1,3-Dichloropropene	ND		ug/kg	4200	1300	200	
1,3-Dichloropropene, Total	ND		ug/kg	4200	1300	200	
1,1-Dichloropropene	ND		ug/kg	4200	1300	200	
Bromoform	ND		ug/kg	34000	2100	200	
1,1,2,2-Tetrachloroethane	ND		ug/kg	4200	1400	200	
Benzene	ND		ug/kg	4200	1400	200	
Toluene	ND		ug/kg	8500	4600	200	
Ethylbenzene	ND		ug/kg	8500	1200	200	
Chloromethane	ND		ug/kg	34000	7900	200	
Bromomethane	ND		ug/kg	17000	4900	200	
Vinyl chloride	ND		ug/kg	8500	2800	200	
Chloroethane	ND		ug/kg	17000	3800	200	
1,1-Dichloroethene	ND		ug/kg	8500	2000	200	
trans-1,2-Dichloroethene	ND		ug/kg	13000	1200	200	



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-04 D Date Collected: 06/19/19 14:10

Client ID: DUP3 Date Received: 06/20/19

Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 High	- Westborough Lab						
Trichloroethene	ND		ug/kg	4200	1200	200	
1,2-Dichlorobenzene	ND		ug/kg	17000	1200	200	
1,3-Dichlorobenzene	ND		ug/kg	17000	1200	200	
1,4-Dichlorobenzene	ND		ug/kg	17000	1400	200	
Methyl tert butyl ether	ND		ug/kg	17000	1700	200	
p/m-Xylene	7100	J	ug/kg	17000	4700	200	
o-Xylene	4800	J	ug/kg	8500	2500	200	
Xylenes, Total	12000	J	ug/kg	8500	2500	200	
cis-1,2-Dichloroethene	ND		ug/kg	8500	1500	200	
1,2-Dichloroethene, Total	ND		ug/kg	8500	1200	200	
Dibromomethane	ND		ug/kg	17000	2000	200	
1,2,3-Trichloropropane	ND		ug/kg	17000	1100	200	
Styrene	4100	J	ug/kg	8500	1700	200	
Dichlorodifluoromethane	ND		ug/kg	85000	7800	200	
Acetone	ND		ug/kg	85000	41000	200	
Carbon disulfide	ND		ug/kg	85000	38000	200	
2-Butanone	ND		ug/kg	85000	19000	200	
4-Methyl-2-pentanone	ND		ug/kg	85000	11000	200	
2-Hexanone	ND		ug/kg	85000	10000	200	
Bromochloromethane	ND		ug/kg	17000	1700	200	
Tetrahydrofuran	ND		ug/kg	34000	13000	200	
2,2-Dichloropropane	ND		ug/kg	17000	1700	200	
1,2-Dibromoethane	ND		ug/kg	8500	2400	200	
1,1,1,2-Tetrachloroethane	ND		ug/kg	4200	1100	200	
Bromobenzene	ND		ug/kg	17000	1200	200	
n-Butylbenzene	ND		ug/kg	8500	1400	200	
sec-Butylbenzene	ND		ug/kg	8500	1200	200	
tert-Butylbenzene	ND		ug/kg	17000	1000	200	
1,3,5-Trichlorobenzene	ND		ug/kg	17000	1500	200	
o-Chlorotoluene	ND		ug/kg	17000	1600	200	
p-Chlorotoluene	ND		ug/kg	17000	910	200	
1,2-Dibromo-3-chloropropane	ND		ug/kg	25000	8400	200	
Hexachlorobutadiene	ND		ug/kg	34000	1400	200	
Isopropylbenzene	ND		ug/kg	8500	920	200	
p-Isopropyltoluene	ND		ug/kg	8500	920	200	
Naphthalene	1600000		ug/kg	34000	5500	200	
n-Propylbenzene	ND		ug/kg	8500	1400	200	



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-04 D Date Collected: 06/19/19 14:10

Client ID: DUP3 Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Hig	h - Westborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	17000	2700	200	
1,2,4-Trichlorobenzene	ND		ug/kg	17000	2300	200	
1,3,5-Trimethylbenzene	5700	J	ug/kg	17000	1600	200	
1,2,4-Trimethylbenzene	15000	J	ug/kg	17000	2800	200	
Ethyl ether	ND		ug/kg	17000	2900	200	
Isopropyl Ether	ND		ug/kg	17000	1800	200	
Tert-Butyl Alcohol	ND		ug/kg	170000	44000	200	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	17000	1100	200	
Tertiary-Amyl Methyl Ether	ND		ug/kg	17000	1500	200	
1,4-Dioxane	ND		ug/kg	680000	300000	200	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	96	70-130	
4-Bromofluorobenzene	92	70-130	
Dibromofluoromethane	105	70-130	

Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/30/19 12:10

Analyst: JC

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Hig	h - Westborough Lab					
Methylene chloride	ND		ug/kg	250	110	1
1,1-Dichloroethane	ND		ug/kg	50	7.2	1
Chloroform	ND		ug/kg	75	7.0	1
Carbon tetrachloride	ND		ug/kg	50	12.	1
1,2-Dichloropropane	ND		ug/kg	50	6.2	1
Dibromochloromethane	ND		ug/kg	50	7.0	1
1,1,2-Trichloroethane	ND		ug/kg	50	13.	1
Tetrachloroethene	ND		ug/kg	25	9.8	1
Chlorobenzene	ND		ug/kg	25	6.4	1
Trichlorofluoromethane	ND		ug/kg	200	35.	1
1,2-Dichloroethane	ND		ug/kg	50	13.	1
1,1,1-Trichloroethane	ND		ug/kg	25	8.4	1
Bromodichloromethane	ND		ug/kg	25	5.4	1
trans-1,3-Dichloropropene	ND		ug/kg	50	14.	1
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	25	8.0	1
Bromoform	ND		ug/kg	200	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3	1
Benzene	ND		ug/kg	25	8.3	1
Toluene	ND		ug/kg	50	27.	1
Ethylbenzene	ND		ug/kg	50	7.0	1
Chloromethane	ND		ug/kg	200	47.	1
Bromomethane	ND		ug/kg	100	29.	1
Vinyl chloride	ND		ug/kg	50	17.	1
Chloroethane	ND		ug/kg	100	23.	1
1,1-Dichloroethene	ND		ug/kg	50	12.	1
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8	1



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High -	Westborough Lab					
Trichloroothono	ND			25	6.0	4
Trichloroethene	ND		ug/kg	25	6.8	1
1,2-Dichlorobenzene	ND ND		ug/kg	100	7.2	1
1,3-Dichlorobenzene			ug/kg	100	7.4	1
1,4-Dichlorobenzene	ND		ug/kg	100	8.6	1
Methyl tert butyl ether	ND		ug/kg	100	10.	1
p/m-Xylene	ND		ug/kg	100	28.	1
o-Xylene	ND		ug/kg	50	14.	
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	100	12.	1
1,2,3-Trichloropropane	ND		ug/kg	100	6.4	1
Styrene	ND		ug/kg	50	9.8	1
Dichlorodifluoromethane	ND		ug/kg	500	46.	1
Acetone	ND		ug/kg	500	240	1
Carbon disulfide	ND		ug/kg	500	230	1
2-Butanone	ND		ug/kg	500	110	1
4-Methyl-2-pentanone	ND		ug/kg	500	64.	1
2-Hexanone	ND		ug/kg	500	59.	1
Bromochloromethane	ND		ug/kg	100	10.	1
Tetrahydrofuran	ND		ug/kg	200	80.	1
2,2-Dichloropropane	ND		ug/kg	100	10.	1
1,2-Dibromoethane	ND		ug/kg	50	14.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6	1
Bromobenzene	ND		ug/kg	100	7.2	1
n-Butylbenzene	ND		ug/kg	50	8.4	1
sec-Butylbenzene	ND		ug/kg	50	7.3	1
tert-Butylbenzene	ND		ug/kg	100	5.9	1
1,3,5-Trichlorobenzene	ND		ug/kg	100	8.6	1
o-Chlorotoluene	ND		ug/kg	100	9.6	1
p-Chlorotoluene	ND		ug/kg	100	5.4	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.	1
Hexachlorobutadiene	ND		ug/kg	200	8.4	1
Isopropylbenzene	ND		ug/kg	50	5.4	1
p-Isopropyltoluene	ND		ug/kg	50	5.4	1
Naphthalene	ND		ug/kg	200	32.	1
n-Propylbenzene	ND		ug/kg	50	8.6	1
• • •						



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 High - W	estborough Lab)					
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.	1	
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6	1	
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.	1	
Ethyl ether	ND		ug/kg	100	17.	1	
Isopropyl Ether	ND		ug/kg	100	11.	1	
Tert-Butyl Alcohol	ND		ug/kg	1000	260	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	6.4	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	8.8	1	
1,4-Dioxane	ND		ug/kg	4000	1800	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	91	70-130	
Dibromofluoromethane	101	70-130	

Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/30/19 12:36

Analyst: JC

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - \	Westborough Lab					
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	tborough Lab					
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	17		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	4.0	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-05 Date Collected: 06/19/19 00:00

Client ID: TRIP BLANK Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	/estborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	2.1		ug/kg	2.0	0.34	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	31		ug/kg	20	5.1	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	1
1,4-Dioxane	ND		ug/kg	80	35.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	95	70-130	
Dibromofluoromethane	105	70-130	

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

arameter	Result	Qualifier U	nits	RL	М	DL
olatile Organics by EPA 5035 Lov	v - Westbord	ough Lab for sa	ample(s):	01,05	Batch:	WG1255119-5
Methylene chloride	ND	u	g/kg	5.0		2.3
1,1-Dichloroethane	ND	u	g/kg	1.0	().14
Chloroform	ND	u	g/kg	1.5	().14
Carbon tetrachloride	ND	u	g/kg	1.0	(0.23
1,2-Dichloropropane	ND	u	g/kg	1.0	().12
Dibromochloromethane	ND	u	g/kg	1.0	().14
1,1,2-Trichloroethane	ND	u	g/kg	1.0	().27
Tetrachloroethene	ND	u	g/kg	0.50	(0.20
Chlorobenzene	ND	u	g/kg	0.50	().13
Trichlorofluoromethane	ND	u	g/kg	4.0	().70
1,2-Dichloroethane	ND	u	g/kg	1.0	(0.26
1,1,1-Trichloroethane	ND	u	g/kg	0.50	().17
Bromodichloromethane	ND	u	g/kg	0.50	().11
trans-1,3-Dichloropropene	ND	u	g/kg	1.0	C).27
cis-1,3-Dichloropropene	ND	u	g/kg	0.50	C).16
1,3-Dichloropropene, Total	ND	u	g/kg	0.50	C).16
1,1-Dichloropropene	ND	u	g/kg	0.50	C).16
Bromoform	ND	u	g/kg	4.0	C).25
1,1,2,2-Tetrachloroethane	ND	u	g/kg	0.50	().17
Benzene	ND	u	g/kg	0.50	C).17
Toluene	ND	u	g/kg	1.0	().54
Ethylbenzene	ND	u	g/kg	1.0	().14
Chloromethane	ND	u	g/kg	4.0	().93
Bromomethane	ND	u	g/kg	2.0	().58
Vinyl chloride	ND	u	g/kg	1.0	().34
Chloroethane	ND	u	g/kg	2.0	C).45
1,1-Dichloroethene	ND	u	g/kg	1.0	C).24
trans-1,2-Dichloroethene	ND	u	g/kg	1.5	C).14
Trichloroethene	ND	u	g/kg	0.50	().14



Project Name: Lab Number: WW CROSS L1926969 **Project Number:** 141.05051.010

Report Date: 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Analyst: AD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by EPA 5035 L	ow - Westbord	ough Lab for sample(s):	01,05	Batch: WG1255119-5
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND	ug/kg	2.0	0.17
Methyl tert butyl ether	ND	ug/kg	2.0	0.20
p/m-Xylene	ND	ug/kg	2.0	0.56
o-Xylene	ND	ug/kg	1.0	0.29
Xylenes, Total	ND	ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND	ug/kg	1.0	0.14
Dibromomethane	ND	ug/kg	2.0	0.24
1,2,3-Trichloropropane	ND	ug/kg	2.0	0.13
Styrene	ND	ug/kg	1.0	0.20
Dichlorodifluoromethane	ND	ug/kg	10	0.92
Acetone	ND	ug/kg	10	4.8
Carbon disulfide	ND	ug/kg	10	4.6
2-Butanone	ND	ug/kg	10	2.2
4-Methyl-2-pentanone	ND	ug/kg	10	1.3
2-Hexanone	ND	ug/kg	10	1.2
Bromochloromethane	ND	ug/kg	2.0	0.20
Tetrahydrofuran	ND	ug/kg	4.0	1.6
2,2-Dichloropropane	ND	ug/kg	2.0	0.20
1,2-Dibromoethane	ND	ug/kg	1.0	0.28
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.50	0.13
Bromobenzene	ND	ug/kg	2.0	0.14
n-Butylbenzene	ND	ug/kg	1.0	0.17
sec-Butylbenzene	ND	ug/kg	1.0	0.15
tert-Butylbenzene	ND	ug/kg	2.0	0.12
1,3,5-Trichlorobenzene	ND	ug/kg	2.0	0.17
o-Chlorotoluene	ND	ug/kg	2.0	0.19



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	01,05	Batch: WG1255119-5
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Ethyl ether	ND		ug/kg	2.0	0.34
Isopropyl Ether	ND		ug/kg	2.0	0.21
Tert-Butyl Alcohol	ND		ug/kg	20	5.1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18
1,4-Dioxane	ND		ug/kg	80	35.

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
1,2-Dichloroethane-d4	98	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	94	70-130	
Dibromofluoromethane	98	70-130	



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/01/19 08:18

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035	High - Westbor	ough Lab fo	or sample(s):	04	Batch:	WG1255765-5
Methylene chloride	ND		ug/kg	250		110
1,1-Dichloroethane	ND		ug/kg	50		7.2
Chloroform	ND		ug/kg	75		7.0
Carbon tetrachloride	ND		ug/kg	50		12.
1,2-Dichloropropane	ND		ug/kg	50		6.2
Dibromochloromethane	ND		ug/kg	50		7.0
1,1,2-Trichloroethane	ND		ug/kg	50		13.
Tetrachloroethene	ND		ug/kg	25		9.8
Chlorobenzene	ND		ug/kg	25		6.4
Trichlorofluoromethane	ND		ug/kg	200		35.
1,2-Dichloroethane	ND		ug/kg	50		13.
1,1,1-Trichloroethane	ND		ug/kg	25		8.4
Bromodichloromethane	ND		ug/kg	25		5.4
trans-1,3-Dichloropropene	ND		ug/kg	50		14.
cis-1,3-Dichloropropene	ND		ug/kg	25		7.9
1,3-Dichloropropene, Total	ND		ug/kg	25		7.9
1,1-Dichloropropene	ND		ug/kg	25		8.0
Bromoform	ND		ug/kg	200		12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25		8.3
Benzene	ND		ug/kg	25		8.3
Toluene	ND		ug/kg	50		27.
Ethylbenzene	ND		ug/kg	50		7.0
Chloromethane	ND		ug/kg	200		47.
Bromomethane	ND		ug/kg	100		29.
Vinyl chloride	ND		ug/kg	50		17.
Chloroethane	ND		ug/kg	100		23.
1,1-Dichloroethene	ND		ug/kg	50		12.
trans-1,2-Dichloroethene	ND		ug/kg	75		6.8
Trichloroethene	ND		ug/kg	25		6.8



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/01/19 08:18

Analyst: MV

Parameter	Result	Qualifier	Units	RL		MDL	
Volatile Organics by EPA 5035 Higl	n - Westbord	ough Lab fo	or sample(s):	04	Batch:	WG1255765-5	
1,2-Dichlorobenzene	ND		ug/kg	100		7.2	
1,3-Dichlorobenzene	ND		ug/kg	100		7.4	
1,4-Dichlorobenzene	ND		ug/kg	100		8.6	
Methyl tert butyl ether	ND		ug/kg	100		10.	
p/m-Xylene	ND		ug/kg	100		28.	
o-Xylene	ND		ug/kg	50		14.	
Xylenes, Total	ND		ug/kg	50		14.	
cis-1,2-Dichloroethene	ND		ug/kg	50		8.8	
1,2-Dichloroethene, Total	ND		ug/kg	50		6.8	
Dibromomethane	ND		ug/kg	100		12.	
1,2,3-Trichloropropane	ND		ug/kg	100		6.4	
Styrene	ND		ug/kg	50		9.8	
Dichlorodifluoromethane	ND		ug/kg	500		46.	
Acetone	ND		ug/kg	500		240	
Carbon disulfide	ND		ug/kg	500		230	
2-Butanone	ND		ug/kg	500		110	
4-Methyl-2-pentanone	ND		ug/kg	500		64.	
2-Hexanone	ND		ug/kg	500		59.	
Bromochloromethane	ND		ug/kg	100		10.	
Tetrahydrofuran	ND		ug/kg	200		80.	
2,2-Dichloropropane	ND		ug/kg	100		10.	
1,2-Dibromoethane	ND		ug/kg	50		14.	
1,1,1,2-Tetrachloroethane	ND		ug/kg	25		6.6	
Bromobenzene	ND		ug/kg	100		7.2	
n-Butylbenzene	ND		ug/kg	50		8.4	
sec-Butylbenzene	ND		ug/kg	50		7.3	
tert-Butylbenzene	ND		ug/kg	100		5.9	
1,3,5-Trichlorobenzene	ND		ug/kg	100		8.6	
o-Chlorotoluene	ND		ug/kg	100		9.6	



Project Name: Lab Number: WW CROSS L1926969 **Project Number:** 141.05051.010

Report Date: 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/01/19 08:18

Analyst: MV

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 High	- Westboro	ough Lab fo	r sample(s):	04	Batch:	WG1255765-5
p-Chlorotoluene	ND		ug/kg	100		5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150		50.
Hexachlorobutadiene	ND		ug/kg	200		8.4
Isopropylbenzene	ND		ug/kg	50		5.4
p-Isopropyltoluene	ND		ug/kg	50		5.4
Naphthalene	ND		ug/kg	200		32.
n-Propylbenzene	ND		ug/kg	50		8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100		16.
1,2,4-Trichlorobenzene	ND		ug/kg	100		14.
1,3,5-Trimethylbenzene	ND		ug/kg	100		9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100		17.
Ethyl ether	ND		ug/kg	100		17.
Isopropyl Ether	ND		ug/kg	100		11.
Tert-Butyl Alcohol	ND		ug/kg	1000		260
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100		6.4
Tertiary-Amyl Methyl Ether	ND		ug/kg	100		8.8
1,4-Dioxane	ND		ug/kg	4000		1800

		Acceptance	
Surrogate	%Recovery 0	Qualifier Criteria	
1.2-Dichloroethane-d4	108	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	92	70-130	
Dibromofluoromethane	103	70-130	



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035	High - Westbord	ough Lab fo	r sample(s):	05	Batch:	WG1257404-5
Methylene chloride	ND		ug/kg	250		110
1,1-Dichloroethane	ND		ug/kg	50		7.2
Chloroform	ND		ug/kg	75		7.0
Carbon tetrachloride	ND		ug/kg	50		12.
1,2-Dichloropropane	ND		ug/kg	50		6.2
Dibromochloromethane	ND		ug/kg	50		7.0
1,1,2-Trichloroethane	ND		ug/kg	50		13.
Tetrachloroethene	ND		ug/kg	25		9.8
Chlorobenzene	ND		ug/kg	25		6.4
Trichlorofluoromethane	ND		ug/kg	200		35.
1,2-Dichloroethane	ND		ug/kg	50		13.
1,1,1-Trichloroethane	ND		ug/kg	25		8.4
Bromodichloromethane	ND		ug/kg	25		5.4
trans-1,3-Dichloropropene	ND		ug/kg	50		14.
cis-1,3-Dichloropropene	ND		ug/kg	25		7.9
1,3-Dichloropropene, Total	ND		ug/kg	25		7.9
1,1-Dichloropropene	ND		ug/kg	25		8.0
Bromoform	ND		ug/kg	200		12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25		8.3
Benzene	ND		ug/kg	25		8.3
Toluene	ND		ug/kg	50		27.
Ethylbenzene	ND		ug/kg	50		7.0
Chloromethane	ND		ug/kg	200		47.
Bromomethane	ND		ug/kg	100		29.
Vinyl chloride	ND		ug/kg	50		17.
Chloroethane	ND		ug/kg	100		23.
1,1-Dichloroethene	ND		ug/kg	50		12.
trans-1,2-Dichloroethene	ND		ug/kg	75		6.8
Trichloroethene	ND		ug/kg	25		6.8



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 503	5 High - Westbord	ough Lab for	sample(s):	05	Batch:	WG1257404-5
1,2-Dichlorobenzene	ND		ug/kg	100		7.2
1,3-Dichlorobenzene	ND		ug/kg	100		7.4
1,4-Dichlorobenzene	ND		ug/kg	100		8.6
Methyl tert butyl ether	ND		ug/kg	100		10.
p/m-Xylene	ND		ug/kg	100		28.
o-Xylene	ND		ug/kg	50		14.
Xylenes, Total	ND		ug/kg	50		14.
cis-1,2-Dichloroethene	ND		ug/kg	50		8.8
1,2-Dichloroethene, Total	ND		ug/kg	50		6.8
Dibromomethane	ND		ug/kg	100		12.
1,2,3-Trichloropropane	ND		ug/kg	100		6.4
Styrene	ND		ug/kg	50		9.8
Dichlorodifluoromethane	ND		ug/kg	500		46.
Acetone	ND		ug/kg	500		240
Carbon disulfide	ND		ug/kg	500		230
2-Butanone	ND		ug/kg	500		110
4-Methyl-2-pentanone	ND		ug/kg	500		64.
2-Hexanone	ND		ug/kg	500		59.
Bromochloromethane	ND		ug/kg	100		10.
Tetrahydrofuran	ND		ug/kg	200		80.
2,2-Dichloropropane	ND		ug/kg	100		10.
1,2-Dibromoethane	ND		ug/kg	50		14.
1,1,1,2-Tetrachloroethane	ND		ug/kg	25		6.6
Bromobenzene	ND		ug/kg	100		7.2
n-Butylbenzene	ND		ug/kg	50		8.4
sec-Butylbenzene	ND		ug/kg	50		7.3
tert-Butylbenzene	ND		ug/kg	100		5.9
1,3,5-Trichlorobenzene	ND		ug/kg	100		8.6
o-Chlorotoluene	ND		ug/kg	100		9.6



Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/30/19 09:59

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 High	- Westbord	ough Lab fo	or sample(s):	05	Batch:	WG1257404-5
p-Chlorotoluene	ND		ug/kg	100		5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150		50.
Hexachlorobutadiene	ND		ug/kg	200		8.4
Isopropylbenzene	ND		ug/kg	50		5.4
p-Isopropyltoluene	ND		ug/kg	50		5.4
Naphthalene	ND		ug/kg	200		32.
n-Propylbenzene	ND		ug/kg	50		8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100		16.
1,2,4-Trichlorobenzene	ND		ug/kg	100		14.
1,3,5-Trimethylbenzene	ND		ug/kg	100		9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100		17.
Ethyl ether	ND		ug/kg	100		17.
Isopropyl Ether	ND		ug/kg	100		11.
Tert-Butyl Alcohol	ND		ug/kg	1000		260
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100		6.4
Tertiary-Amyl Methyl Ether	ND		ug/kg	100		8.8
1,4-Dioxane	ND		ug/kg	4000		1800

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
1,2-Dichloroethane-d4	98	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	94	70-130	
Dibromofluoromethane	98	70-130	



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample(s): 01,05 Bato	ch: WG1255119-3 WG125	5119-4	
Methylene chloride	86	84	70-130	2	30
1,1-Dichloroethane	97	96	70-130	1	30
Chloroform	102	102	70-130	0	30
Carbon tetrachloride	110	109	70-130	1	30
1,2-Dichloropropane	93	93	70-130	0	30
Dibromochloromethane	105	107	70-130	2	30
1,1,2-Trichloroethane	103	101	70-130	2	30
Tetrachloroethene	110	111	70-130	1	30
Chlorobenzene	103	103	70-130	0	30
Trichlorofluoromethane	105	105	70-139	0	30
1,2-Dichloroethane	92	95	70-130	3	30
1,1,1-Trichloroethane	110	108	70-130	2	30
Bromodichloromethane	102	104	70-130	2	30
trans-1,3-Dichloropropene	105	107	70-130	2	30
cis-1,3-Dichloropropene	104	104	70-130	0	30
1,1-Dichloropropene	108	108	70-130	0	30
Bromoform	108	109	70-130	1	30
1,1,2,2-Tetrachloroethane	99	98	70-130	1	30
Benzene	100	99	70-130	1	30
Toluene	103	103	70-130	0	30
Ethylbenzene	105	106	70-130	1	30
Chloromethane	83	79	52-130	5	30
Bromomethane	100	100	57-147	0	30



Project Name: WW CROSS **Project Number:**

141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - Westb	oorough Lab Ass	ociated sample(s	s): 01,05 Ba	tch: WG1255119-3 WG125	55119-4	
Vinyl chloride	95		94	67-130	1	30
Chloroethane	104		102	50-151	2	30
1,1-Dichloroethene	106		105	65-135	1	30
trans-1,2-Dichloroethene	104		102	70-130	2	30
Trichloroethene	103		106	70-130	3	30
1,2-Dichlorobenzene	103		101	70-130	2	30
1,3-Dichlorobenzene	104		103	70-130	1	30
1,4-Dichlorobenzene	104		102	70-130	2	30
Methyl tert butyl ether	98		97	66-130	1	30
p/m-Xylene	109		109	70-130	0	30
o-Xylene	107		108	70-130	1	30
cis-1,2-Dichloroethene	103		101	70-130	2	30
Dibromomethane	100		101	70-130	1	30
1,2,3-Trichloropropane	96		97	68-130	1	30
Styrene	108		109	70-130	1	30
Dichlorodifluoromethane	96		94	30-146	2	30
Acetone	72		73	54-140	1	30
Carbon disulfide	100		99	59-130	1	30
2-Butanone	69	Q	84	70-130	20	30
4-Methyl-2-pentanone	90		90	70-130	0	30
2-Hexanone	78		77	70-130	1	30
Bromochloromethane	105		108	70-130	3	30
Tetrahydrofuran	84		85	66-130	1	30



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 Low - West	borough Lab Asso	ociated sample(s): 01,05 Ba	tch: WG1255119-3 WG125	5119-4	
2,2-Dichloropropane	108	107	70-130	1	30
1,2-Dibromoethane	103	105	70-130	2	30
1,1,1,2-Tetrachloroethane	105	109	70-130	4	30
Bromobenzene	104	101	70-130	3	30
n-Butylbenzene	106	103	70-130	3	30
sec-Butylbenzene	106	105	70-130	1	30
tert-Butylbenzene	107	104	70-130	3	30
1,3,5-Trichlorobenzene	108	107	70-139	1	30
o-Chlorotoluene	86	84	70-130	2	30
p-Chlorotoluene	104	102	70-130	2	30
1,2-Dibromo-3-chloropropane	93	99	68-130	6	30
Hexachlorobutadiene	111	108	67-130	3	30
Isopropylbenzene	108	105	70-130	3	30
p-Isopropyltoluene	108	106	70-130	2	30
Naphthalene	103	102	70-130	1	30
n-Propylbenzene	106	103	70-130	3	30
1,2,3-Trichlorobenzene	103	106	70-130	3	30
1,2,4-Trichlorobenzene	109	109	70-130	0	30
1,3,5-Trimethylbenzene	107	106	70-130	1	30
1,2,4-Trimethylbenzene	107	105	70-130	2	30
Ethyl ether	96	101	67-130	5	30
Isopropyl Ether	84	82	66-130	2	30
Tert-Butyl Alcohol	90	91	70-130	1	30



Project Name: WW CROSS

Lab Number:

L1926969

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by EPA 5035 Low - Westbo	rough Lab Asso	ociated sample	(s): 01,05 Ba	atch: WG12	55119-3 WG1255	5119-4			
Ethyl-Tert-Butyl-Ether	93		93		70-130	0		30	
Tertiary-Amyl Methyl Ether	97		100		70-130	3		30	
1,4-Dioxane	94		94		65-136	0		30	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qu	ual %Recovery Qual	Criteria
1,2-Dichloroethane-d4	97	99	70-130
Toluene-d8	99	101	70-130
4-Bromofluorobenzene	96	94	70-130
Dibromofluoromethane	100	101	70-130



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

arameter	LCS %Recovery Qua	LCSD al %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
platile Organics by EPA 5035 High - We	estborough Lab Associated	d sample(s): 04 Batch:	: WG1255765-3 WG12557	65-4	
Methylene chloride	77	74	70-130	4	30
1,1-Dichloroethane	91	88	70-130	3	30
Chloroform	101	97	70-130	4	30
Carbon tetrachloride	118	113	70-130	4	30
1,2-Dichloropropane	86	83	70-130	4	30
Dibromochloromethane	103	99	70-130	4	30
1,1,2-Trichloroethane	92	91	70-130	1	30
Tetrachloroethene	107	104	70-130	3	30
Chlorobenzene	96	92	70-130	4	30
Trichlorofluoromethane	119	112	70-139	6	30
1,2-Dichloroethane	99	96	70-130	3	30
1,1,1-Trichloroethane	115	108	70-130	6	30
Bromodichloromethane	105	100	70-130	5	30
trans-1,3-Dichloropropene	102	98	70-130	4	30
cis-1,3-Dichloropropene	100	96	70-130	4	30
1,1-Dichloropropene	106	102	70-130	4	30
Bromoform	100	97	70-130	3	30
1,1,2,2-Tetrachloroethane	86	82	70-130	5	30
Benzene	93	88	70-130	6	30
Toluene	94	90	70-130	4	30
Ethylbenzene	98	95	70-130	3	30
Chloromethane	75	72	52-130	4	30
Bromomethane	99	96	57-147	3	30



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	LCSE Qual %Recov	,		RPD Qual Limits	
Volatile Organics by EPA 5035 High - Wes	tborough Lab Ass	ociated sample(s): 04	Batch: WG1255765-3 WG	G1255765-4		
Vinyl chloride	92	88	67-130	4	30	
Chloroethane	103	96	50-151	7	30	
1,1-Dichloroethene	98	95	65-135	3	30	
trans-1,2-Dichloroethene	97	93	70-130	4	30	
Trichloroethene	103	98	70-130	5	30	
1,2-Dichlorobenzene	98	93	70-130	5	30	
1,3-Dichlorobenzene	99	94	70-130	5	30	
1,4-Dichlorobenzene	98	94	70-130	4	30	
Methyl tert butyl ether	94	91	66-130	3	30	
p/m-Xylene	102	97	70-130	5	30	
o-Xylene	100	97	70-130	3	30	
cis-1,2-Dichloroethene	98	92	70-130	6	30	
Dibromomethane	101	93	70-130	8	30	
1,2,3-Trichloropropane	92	88	68-130	4	30	
Styrene	100	98	70-130	2	30	
Dichlorodifluoromethane	104	99	30-146	5	30	
Acetone	79	69	54-140	14	30	
Carbon disulfide	92	88	59-130	4	30	
2-Butanone	99	93	70-130	6	30	
4-Methyl-2-pentanone	83	79	70-130	5	30	
2-Hexanone	70	70	70-130	0	30	
Bromochloromethane	101	98	70-130	3	30	
Tetrahydrofuran	77	70	66-130	10	30	



Project Name: WW CROSS

Project Number:

141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	LCSD Qual %Recove		RPD	RPD Qual Limits
Volatile Organics by EPA 5035 High - W	estborough Lab Ass	sociated sample(s): 04	Batch: WG1255765-3 WG125	55765-4	
2,2-Dichloropropane	111	104	70-130	7	30
1,2-Dibromoethane	96	92	70-130	4	30
1,1,1,2-Tetrachloroethane	104	100	70-130	4	30
Bromobenzene	98	93	70-130	5	30
n-Butylbenzene	102	96	70-130	6	30
sec-Butylbenzene	101	95	70-130	6	30
tert-Butylbenzene	102	97	70-130	5	30
1,3,5-Trichlorobenzene	105	96	70-139	9	30
o-Chlorotoluene	80	76	70-130	5	30
p-Chlorotoluene	99	92	70-130	7	30
1,2-Dibromo-3-chloropropane	88	90	68-130	2	30
Hexachlorobutadiene	113	104	67-130	8	30
Isopropylbenzene	101	95	70-130	6	30
p-Isopropyltoluene	104	97	70-130	7	30
Naphthalene	94	90	70-130	4	30
n-Propylbenzene	98	93	70-130	5	30
1,2,3-Trichlorobenzene	100	94	70-130	6	30
1,2,4-Trichlorobenzene	103	98	70-130	5	30
1,3,5-Trimethylbenzene	102	96	70-130	6	30
1,2,4-Trimethylbenzene	102	96	70-130	6	30
Ethyl ether	89	83	67-130	7	30
Isopropyl Ether	78	75	66-130	4	30
Tert-Butyl Alcohol	83	81	70-130	2	30



Project Name: WW CROSS

Lab Number:

L1926969

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westbo	orough Lab Ass	ociated sample	(s): 04 Bat	ch: WG1255	5765-3 WG125576	65-4		
Ethyl-Tert-Butyl-Ether	89		86		70-130	3		30
Tertiary-Amyl Methyl Ether	95		92		70-130	3		30
1,4-Dioxane	82		86		65-136	5		30

Surrogate	LCS %Recovery Qua	LCSD I %Recovery Qual	Acceptance Criteria
Surrogate	/#Necovery Qua	Mecovery Quar	
1,2-Dichloroethane-d4	112	110	70-130
Toluene-d8	97	98	70-130
4-Bromofluorobenzene	96	94	70-130
Dibromofluoromethane	106	105	70-130

Project Name: WW CROSS

Project Number:

141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by EPA 5035 High - West	borough Lab Ass	ociated sample	(s): 05 Batch	: WG1257404-3 WG12574	04-4	
Methylene chloride	86		84	70-130	2	30
1,1-Dichloroethane	97		96	70-130	1	30
Chloroform	102		102	70-130	0	30
Carbon tetrachloride	110		109	70-130	1	30
1,2-Dichloropropane	93		93	70-130	0	30
Dibromochloromethane	105		107	70-130	2	30
1,1,2-Trichloroethane	103		101	70-130	2	30
Tetrachloroethene	110		111	70-130	1	30
Chlorobenzene	103		103	70-130	0	30
Trichlorofluoromethane	105		105	70-139	0	30
1,2-Dichloroethane	92		95	70-130	3	30
1,1,1-Trichloroethane	110		108	70-130	2	30
Bromodichloromethane	102		104	70-130	2	30
trans-1,3-Dichloropropene	105		107	70-130	2	30
cis-1,3-Dichloropropene	104		104	70-130	0	30
1,1-Dichloropropene	108		108	70-130	0	30
Bromoform	108		109	70-130	1	30
1,1,2,2-Tetrachloroethane	99		98	70-130	1	30
Benzene	100		99	70-130	1	30
Toluene	103		103	70-130	0	30
Ethylbenzene	105		106	70-130	1	30
Chloromethane	83		79	52-130	5	30
Bromomethane	100		100	57-147	0	30



Project Name: WW CROSS **Project Number:**

141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High - Westl	oorough Lab Ass	sociated sample	(s): 05 Batch	: WG1257404-3 WG12574	04-4	
Vinyl chloride	95		94	67-130	1	30
Chloroethane	104		102	50-151	2	30
1,1-Dichloroethene	106		105	65-135	1	30
trans-1,2-Dichloroethene	104		102	70-130	2	30
Trichloroethene	103		106	70-130	3	30
1,2-Dichlorobenzene	103		101	70-130	2	30
1,3-Dichlorobenzene	104		103	70-130	1	30
1,4-Dichlorobenzene	104		102	70-130	2	30
Methyl tert butyl ether	98		97	66-130	1	30
p/m-Xylene	109		109	70-130	0	30
o-Xylene	107		108	70-130	1	30
cis-1,2-Dichloroethene	103		101	70-130	2	30
Dibromomethane	100		101	70-130	1	30
1,2,3-Trichloropropane	96		97	68-130	1	30
Styrene	108		109	70-130	1	30
Dichlorodifluoromethane	96		94	30-146	2	30
Acetone	72		73	54-140	1	30
Carbon disulfide	100		99	59-130	1	30
2-Butanone	69	Q	84	70-130	20	30
4-Methyl-2-pentanone	90		90	70-130	0	30
2-Hexanone	78		77	70-130	1	30
Bromochloromethane	105		108	70-130	3	30
Tetrahydrofuran	84		85	66-130	1	30



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

arameter	LCS %Recovery	LCSD Qual %Recove	%Recovery ery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High - W	estborough Lab Ass	ociated sample(s): 05	Batch: WG1257404-3 WG12	57404-4	
2,2-Dichloropropane	108	107	70-130	1	30
1,2-Dibromoethane	103	105	70-130	2	30
1,1,1,2-Tetrachloroethane	105	109	70-130	4	30
Bromobenzene	104	101	70-130	3	30
n-Butylbenzene	106	103	70-130	3	30
sec-Butylbenzene	106	105	70-130	1	30
tert-Butylbenzene	107	104	70-130	3	30
1,3,5-Trichlorobenzene	108	107	70-139	1	30
o-Chlorotoluene	86	84	70-130	2	30
p-Chlorotoluene	104	102	70-130	2	30
1,2-Dibromo-3-chloropropane	93	99	68-130	6	30
Hexachlorobutadiene	111	108	67-130	3	30
Isopropylbenzene	108	105	70-130	3	30
p-Isopropyltoluene	108	106	70-130	2	30
Naphthalene	103	102	70-130	1	30
n-Propylbenzene	106	103	70-130	3	30
1,2,3-Trichlorobenzene	103	106	70-130	3	30
1,2,4-Trichlorobenzene	109	109	70-130	0	30
1,3,5-Trimethylbenzene	107	106	70-130	1	30
1,2,4-Trimethylbenzene	107	105	70-130	2	30
Ethyl ether	96	101	67-130	5	30
Isopropyl Ether	84	82	66-130	2	30
Tert-Butyl Alcohol	90	91	70-130	1	30



Project Name: WW CROSS

Lab Number:

L1926969

Project Number: 141.05051.010

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - W	estborough Lab Assoc	iated sample	e(s): 05 Bato	h: WG1257	404-3 WG125740)4-4		
Ethyl-Tert-Butyl-Ether	93		93		70-130	0		30
Tertiary-Amyl Methyl Ether	97		100		70-130	3		30
1,4-Dioxane	94		94		65-136	0		30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97	99	70-130
Toluene-d8	99	101	70-130
4-Bromofluorobenzene	96	94	70-130
Dibromofluoromethane	100	101	70-130

SEMIVOLATILES



Project Name: Lab Number: WW CROSS L1926969

Project Number: Report Date: 141.05051.010 07/10/19

SAMPLE RESULTS

Lab ID: D Date Collected: 06/19/19 14:10 L1926969-04

Date Received: Client ID: DUP3 06/20/19

Sample Location: Field Prep: JAFFREY, NH Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 07/03/19 12:08 Analytical Method: 1,8270D

Analytical Date: 07/10/19 00:12

Analyst: ΕK 97% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS - Westborough Lab										
Acenaphthene	39000		ug/kg	27000	3500	200				
2-Chloronaphthalene	ND		ug/kg	34000	3300	200				
Fluoranthene	450000		ug/kg	20000	3900	200				
Naphthalene	540000		ug/kg	34000	4100	200				
Benzo(a)anthracene	140000		ug/kg	20000	3800	200				
Benzo(a)pyrene	140000		ug/kg	27000	8200	200				
Benzo(b)fluoranthene	140000		ug/kg	20000	5700	200				
Benzo(k)fluoranthene	49000		ug/kg	20000	5400	200				
Chrysene	110000		ug/kg	20000	3500	200				
Acenaphthylene	180000		ug/kg	27000	5200	200				
Anthracene	160000		ug/kg	20000	6600	200				
Benzo(ghi)perylene	62000		ug/kg	27000	4000	200				
Fluorene	210000		ug/kg	34000	3300	200				
Phenanthrene	650000		ug/kg	20000	4100	200				
Dibenzo(a,h)anthracene	12000	J	ug/kg	20000	3900	200				
Indeno(1,2,3-cd)pyrene	70000		ug/kg	27000	4700	200				
Pyrene	370000		ug/kg	20000	3300	200				
1-Methylnaphthalene	180000		ug/kg	34000	3900	200				
2-Methylnaphthalene	260000		ug/kg	40000	4100	200				

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	0	Q	23-120	
2-Fluorobiphenyl	0	Q	30-120	
4-Terphenyl-d14	0	Q	18-120	



Project Name: WW CROSS

Project Number: 141.05051.010

Lab Number:

L1926969

Report Date: 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/03/19 23:24

Analyst:

SZ

Extraction Method: EPA 3546 Extraction Date: 07/03/19 09:14

arameter	Result	Qualifier	Units	RL	MDL
emivolatile Organics by GC/	MS - Westborough	n Lab for s	ample(s):	04 Batch	: WG1256188-1
Acenaphthene	ND		ug/kg	130	17.
2-Chloronaphthalene	ND		ug/kg	160	16.
Fluoranthene	ND		ug/kg	99	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
1-Methylnaphthalene	ND		ug/kg	160	19.
2-Methylnaphthalene	ND		ug/kg	200	20.

		Acceptance	
Surrogate	%Recovery Qualifie	r Criteria	
Nitrobenzene-d5	75	23-120	
2-Fluorobiphenyl	76	30-120	
4-Terphenyl-d14	77	18-120	



Project Name: WW CROSS

Lab Number:

L1926969

Project Number: 141.05051.010

Report Date: 07/10/19

arameter	LCS %Recovery	Qual		SD covery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	ugh Lab Assoc	iated sample(s):	04	Batch:	WG1256188-2	2 WG1256188-3			
Acenaphthene	72			69		31-137	4		50
2-Chloronaphthalene	76			74		40-140	3		50
Fluoranthene	75			73		40-140	3		50
Naphthalene	72			69		40-140	4		50
Benzo(a)anthracene	77			73		40-140	5		50
Benzo(a)pyrene	76			72		40-140	5		50
Benzo(b)fluoranthene	78			73		40-140	7		50
Benzo(k)fluoranthene	73			70		40-140	4		50
Chrysene	71			68		40-140	4		50
Acenaphthylene	79			75		40-140	5		50
Anthracene	75			72		40-140	4		50
Benzo(ghi)perylene	73			69		40-140	6		50
Fluorene	74			71		40-140	4		50
Phenanthrene	72			70		40-140	3		50
Dibenzo(a,h)anthracene	81			76		40-140	6		50
Indeno(1,2,3-cd)pyrene	69			65		40-140	6		50
Pyrene	74			73		35-142	1		50
1-Methylnaphthalene	77			73		26-130	5		50
2-Methylnaphthalene	75			72		40-140	4		50



Lab Control Sample Analysis

Project Name: WW CROSS

Batch Quality Control

Lab Number:

L1926969

Project Number: 141.05051.010

Report Date:

07/10/19

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1256188-2 WG1256188-3

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
Nitrobenzene-d5	80	77	23-120
2-Fluorobiphenyl	76	72	30-120
4-Terphenyl-d14	73	71	18-120

PETROLEUM HYDROCARBONS



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-04 Date Collected: 06/19/19 14:10

Client ID: DUP3 Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: ALPHA OP-013

Analytical Method: 1,8015D(M) Extraction Date: 07/01/19 11:59
Analytical Date: 07/03/19 00:47

Analyst: WR Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Identification b	y GC-FID - Mans	sfield Lab				
Total Petroleum Hydrocarbons (C9-C44)	49900		mg/kg	603	302.	1
Surrogate			% Recovery	Qualifier		otance teria
o-Terphenyl			105		50	0-130
d50-Tetracosane			128		50	0-130



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-04 D Date Collected: 06/19/19 14:10

Client ID: DUP3 Date Received: 06/20/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8015D(M) Extraction Date: 07/03/19 15:38

Analytical Date: 07/09/19 12:54

Analyst: MEO Percent Solids: 97%

Parameter	Result (Qualifier Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quan	titation - Westborough Lab				
ТРН	27000000	ug/kg	1670000	192000	50
Surrogate		% Recovery	Qualifier		ptance iteria
o-Terphenyl		0	Q	4	l0-140



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M)
Analytical Date: 07/02/19 17:26

Analyst: WR

Extraction Method: ALPHA OP-013
Extraction Date: 07/01/19 11:59

Parameter	Result	Qualifier	Units	RL		MDL	
Petroleum Hydrocarbon Identificatio WG1255235-1	n by GC-FII	D - Mansfi	eld Lab f	or sample(s):	04	Batch:	
Total Petroleum Hydrocarbons (C9-C44)	ND		mg/kg	2.20		1.10	

		Acceptance
Surrogate	%Recovery Qualifier	Criteria
o-Terphenyl	94	50-130
d50-Tetracosane	95	50-130



Project Name: WW CROSS Lab Number: L1926969

Project Number: 141.05051.010 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M) Extraction Method: EPA 3546

Analytical Date: 07/06/19 11:22 Extraction Date: 07/03/19 15:38

Analyst: SR

Parameter	Result	Qualifier	Units	RL		MDL
Petroleum Hydrocarbon Quantitation	- Westbord	ugh Lab fo	r sample(s):	04	Batch:	WG1256376-1
ТРН	ND		ug/kg	31800		3660

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
o-Terphenyl	77	40-140



Project Name: WW CROSS

Project Number:

141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
etroleum Hydrocarbon Identification by GC-	FID - Mansfield	Lab Associ	ated sample(s): 04	Batch:	WG1255235-2	WG1255235-3		
Nonane (C9)	63		68		50-130	8		30
Decane (C10)	67		73		50-130	9		30
Dodecane (C12)	71		77		50-130	8		30
Tetradecane (C14)	72		78		50-130	8		30
Hexadecane (C16)	82		89		50-130	8		30
Octadecane (C18)	88		95		50-130	8		30
Nonadecane (C19)	80		87		50-130	8		30
Eicosane (C20)	80		87		50-130	8		30
Docosane (C22)	80		88		50-130	10		30
Tetracosane (C24)	82		90		50-130	9		30
Hexacosane (C26)	88		97		50-130	10		30
Octacosane (C28)	91		100		50-130	9		30
Triacontane (C30)	93		101		50-130	8		30
Hexatriacontane (C36)	91		98		50-130	7		30

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qua	al %Recovery Qua	al Criteria
o-Terphenyl	98	99	50-130
d50-Tetracosane	101	103	50-130



Project Name: WW CROSS **Project Number:** 141.05051.010

Lab Number:

L1926969

Report Date:

07/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Petroleum Hydrocarbon Quantitation - West	borough Lab Asso	ciated sam	ple(s): 04 Batch:	WG125	6376-2				
ТРН	106		-		40-140	-		40	

Surrogate	LCS %Recovery Qual	LCSD %Recovery	Acceptance Qual Criteria	
o-Terphenyl	75		40-140	

METALS



 Project Name:
 WW CROSS
 Lab Number:
 L1926969

 Project Number:
 141.05051.010
 Report Date:
 07/10/19

SAMPLE RESULTS

Lab ID:L1926969-01Date Collected:06/19/19 09:40Client ID:B103-S2Date Received:06/20/19Sample Location:JAFFREY, NHField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 93%

Prep Dilution Date Date Analytical Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Antimony, Total 0.210 J mg/kg 2.10 0.160 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ Arsenic, Total 4.86 0.421 0.088 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D ΑB mg/kg 1 Beryllium, Total 0.354 mg/kg 0.210 0.014 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ Cadmium, Total ND mg/kg 0.421 0.041 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ Chromium, Total 7.66 0.421 0.040 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ mg/kg 1 Copper, Total 7.54 0.421 0.109 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ mg/kg Lead, Total 2.86 mg/kg 2.10 0.113 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ ND 1 1,7471B Mercury, Total mg/kg 0.069 0.045 07/04/19 10:10 07/08/19 13:56 EPA 7471B GD 1 4.50 0.102 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D Nickel, Total mg/kg 1.05 AΒ 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D Selenium, Total ND mg/kg 0.842 0.109 1 AΒ ND 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D AΒ Silver, Total 0.421 0.119 1 mg/kg ND 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B 1,6010D Thallium, Total mg/kg 0.842 0.133 AΒ 1,6010D Zinc, Total 18.8 mg/kg 2.10 0.123 1 07/03/19 21:40 07/08/19 22:05 EPA 3050B AB



06/19/19 09:40

Date Collected:

Project Name: WW CROSS Lab Number: L1926969 **Project Number: Report Date:** 141.05051.010 07/10/19

SAMPLE RESULTS

Lab ID: L1926969-03

Client ID: DUP2

Date Received: 06/20/19 Field Prep: Sample Location: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil

92% Percent Solids: Dilution **Analytical** Prep

Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Mans	field Lab										
Antimony, Total	ND		mg/kg	2.11	0.160	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Arsenic, Total	4.53		mg/kg	0.422	0.088	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Beryllium, Total	0.329		mg/kg	0.211	0.014	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Cadmium, Total	0.076	J	mg/kg	0.422	0.041	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Chromium, Total	11.2		mg/kg	0.422	0.041	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Copper, Total	7.29		mg/kg	0.422	0.109	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Lead, Total	2.94		mg/kg	2.11	0.113	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.069	0.045	1	07/09/19 06:00	07/09/19 13:17	EPA 7471B	1,7471B	GD
Nickel, Total	5.14		mg/kg	1.06	0.102	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	0.844	0.109	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.422	0.119	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	0.844	0.133	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC
Zinc, Total	19.9		mg/kg	2.11	0.124	1	07/08/19 19:00	07/09/19 00:06	EPA 3050B	1,6010D	LC



Project Name:WW CROSSLab Number:Project Number:141.05051.010Report Date:

Lab Number: L1926969 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfie	ld Lab for sample(s):	01 Batch	n: WG12	256426-	1				
Antimony, Total	ND	mg/kg	2.00	0.152	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Arsenic, Total	ND	mg/kg	0.400	0.083	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Beryllium, Total	ND	mg/kg	0.200	0.013	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Cadmium, Total	ND	mg/kg	0.400	0.039	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Chromium, Total	ND	mg/kg	0.400	0.038	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Nickel, Total	ND	mg/kg	1.00	0.097	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Selenium, Total	ND	mg/kg	0.800	0.103	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Thallium, Total	ND	mg/kg	0.800	0.126	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	07/03/19 21:40	07/08/19 20:57	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mans	field Lab for sample(s):	01 Batch	n: WG12	256548-	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	07/04/19 10:10	07/08/19 11:38	3 1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	l Analyst
Total Metals - Mansfi	ield Lab for sample(s):	03 Batch	n: WG12	257221-	1				
Antimony, Total	ND	mg/kg	2.00	0.152	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Arsenic, Total	ND	mg/kg	0.400	0.083	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Beryllium, Total	ND	mg/kg	0.200	0.013	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Cadmium, Total	ND	mg/kg	0.400	0.039	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC



Project Name:WW CROSSLab Number:Project Number:141.05051.010Report Date:

Lab Number: L1926969 **Report Date:** 07/10/19

Method Blank Analysis Batch Quality Control

Chromium, Total	ND	mg/kg	0.400	0.038	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Copper, Total	ND	mg/kg	0.400	0.103	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Lead, Total	ND	mg/kg	2.00	0.107	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Nickel, Total	ND	mg/kg	1.00	0.097	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Selenium, Total	ND	mg/kg	0.800	0.103	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Silver, Total	ND	mg/kg	0.400	0.113	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Thallium, Total	ND	mg/kg	0.800	0.126	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC
Zinc, Total	ND	mg/kg	2.00	0.117	1	07/08/19 19:00	07/08/19 22:52	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfiel	ld Lab for sample(s):	03 Batch	n: WG12	257360- ⁻	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	07/09/19 06:00	07/09/19 13:13	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B



Project Name: WW CROSS **Project Number:**

Lab Number:

L1926969

141.05051.010

Report Date: 07/10/19

Parameter	LCS %Recovery		_CSD ecovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: \	WG1256426-2	SRM Lot N	lumber: D10	5-540			
Antimony, Total	147		-		19-249	-		
Arsenic, Total	120		-		70-130	-		
Beryllium, Total	109		-		75-125	-		
Cadmium, Total	106		-		75-125	-		
Chromium, Total	104		-		70-130	-		
Copper, Total	104		-		75-125	-		
Lead, Total	107		-		71-128	-		
Nickel, Total	105		-		70-131	-		
Selenium, Total	113		-		63-137	-		
Silver, Total	110		-		69-131	-		
Thallium, Total	103		-		68-132	-		
Zinc, Total	112		-		70-130	-		
Total Metals - Mansfield Lab Associated sample	s): 01 Batch: \	WG1256548-2	SRM Lot N	lumber: D10	5-540			
Mercury, Total	104		-		60-141	-		



Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number: L1926969

Report Date: 07/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample	(s): 03 Batch: WG12	257221-2 SRM Lot Numbe	r: D105-540		
Antimony, Total	150	-	19-249	-	
Arsenic, Total	91	-	70-130	-	
Beryllium, Total	97	-	75-125	-	
Cadmium, Total	99	-	75-125	-	
Chromium, Total	83	-	70-130	-	
Copper, Total	86	-	75-125	-	
Lead, Total	83	-	71-128	-	
Nickel, Total	91	-	70-131	-	
Selenium, Total	91	-	63-137	-	
Silver, Total	84	-	69-131	-	
Thallium, Total	94	-	68-132	-	
Zinc, Total	88	-	70-130	-	
Total Metals - Mansfield Lab Associated sample	(s): 03 Batch: WG12	257360-2 SRM Lot Numbe	r: D105-540		
Mercury, Total	88	-	60-141	-	



Matrix Spike Analysis Batch Quality Control

Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number:

L1926969

Report Date:

07/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qua	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab	Associated sam	nple(s): 03	QC Batch	ID: WG125736	0-3	QC Sample	: L1926969-03	Clien	t ID: DUP2			
Mercury, Total	ND	0.138	0.124	90		-	-		80-120	-		20



Lab Duplicate Analysis Batch Quality Control

Project Name: WW CROSS **Project Number:** 141.05051.010

Lab Number:

L1926969

Report Date:

07/10/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03	QC Batch ID: WG12573	360-4 QC Sample: L	1926969-03	Client ID: DU	IP2	
Mercury, Total	ND	ND	mg/kg	NC		20



INORGANICS & MISCELLANEOUS



 Project Name:
 WW CROSS
 Lab Number:
 L1926969

 Project Number:
 141.05051.010
 Report Date:
 07/10/19

SAMPLE RESULTS

Lab ID:L1926969-01Date Collected:06/19/19 09:40Client ID:B103-S2Date Received:06/20/19Sample Location:JAFFREY, NHField Prep:Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal	b								
Solids, Total	93.2		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.21	1	06/26/19 13:00	06/26/19 15:18	1,9010C/9012B	LH



06/19/19 09:40

Date Collected:

Project Name: Lab Number: **WW CROSS** L1926969 Report Date: **Project Number:** 07/10/19 141.05051.010

SAMPLE RESULTS

Lab ID: L1926969-03

Client ID: DUP2

Date Received: 06/20/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal)								
Solids, Total	92.2		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	06/26/19 13:00	06/26/19 15:19	1,9010C/9012B	LH



Project Name: Lab Number: **WW CROSS** L1926969 Report Date: **Project Number:** 141.05051.010

07/10/19

SAMPLE RESULTS

Lab ID: Date Collected: L1926969-04 06/19/19 14:10

Client ID: DUP3 Date Received: 06/20/19 Not Specified Sample Location: JAFFREY, NH Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Solids, Total	97.2		%	0.100	NA	1	-	06/27/19 13:58	121,2540G	RI



Project Name: Lab Number: WW CROSS L1926969 **Project Number:** 141.05051.010

Report Date: 07/10/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab for sam	ple(s): 01	,03 Bat	tch: W0	G1253231-1				
Cyanide, Total	ND	mg/kg	0.86	0.18	1	06/26/19 13:00	06/26/19 15:13	1,9010C/901	2B LH



Project Name: WW CROSS **Project Number:** 141.05051.010

Lab Number: L1926969

Report Date:

07/10/19

Parameter	LCS %Recovery Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
General Chemistry - Westborough Lab	Associated sample(s): 01,03	Batch: WG12532	231-2 WG	G1253231-3				
Cyanide, Total	90	88		80-120	2		35	



Lab Duplicate Analysis Batch Quality Control

Project Name: WW CROSS
Project Number: 141.05051.010

Lab Number:

L1926969

Report Date:

07/10/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab A	Associated sample(s): 01,03-04	QC Batch ID: WG1253936-1	QC Sample:	L1926969-0	1 Client ID: B103-S2
Solids, Total	93.2	93.6	%	0	20



Project Name: WW CROSS **Lab Number:** L1926969 **Project Number:** 141.05051.010 **Report Date:** 07/10/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Custody Seal Cooler

Α Absent

Container Information			Initial	Final	Temp			Frozen		
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)	
L1926969-01A	Vial MeOH preserved	Α	NA		4.1	Υ	Absent		8260HLW-NH(14)	
L1926969-01B	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	8260HLW-NH(14)	
L1926969-01C	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	8260HLW-NH(14)	
L1926969-01D	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		TCN-9010(14),TS(7)	
L1926969-01E	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		-	
L1926969-01F	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		-	
L1926969-02A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		HOLD-8260HLW(14)	
L1926969-02B	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		HOLD-METAL(180)	
L1926969-02C	Glass 60ml unpreserved split	Α	NA		4.1	Υ	Absent		HOLD-WETCHEM()	
L1926969-02X	Vial MeOH preserved split	Α	NA		4.1	Υ	Absent		HOLD-8260HLW(14)	
L1926969-02Y	Vial Water preserved split	Α	NA		4.1	Υ	Absent		HOLD-8260HLW(14)	
L1926969-02Z	Vial Water preserved split	Α	NA		4.1	Υ	Absent		HOLD-8260HLW(14)	
L1926969-03A	Vial MeOH preserved	Α	NA		4.1	Υ	Absent		HOLD-8260HLW(14)	
L1926969-03B	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	HOLD-8260HLW(14)	
L1926969-03C	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	HOLD-8260HLW(14)	
L1926969-03D	Plastic 2oz unpreserved for TS	Α	NA		4.1	Υ	Absent		TCN-9010(14),TS(7)	
L1926969-03E	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		BE-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB- TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),HG- T(28),CD-TI(180)	
L1926969-03F	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		-	
L1926969-04A	Vial MeOH preserved	Α	NA		4.1	Υ	Absent		8260HLW-NH(14)	
L1926969-04B	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	8260HLW-NH(14)	
L1926969-04C	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	8260HLW-NH(14)	
L1926969-04D	Plastic 2oz unpreserved for TS	Α	NA		4.1	Υ	Absent		TS(7)	



Lab Number: L1926969

Report Date: 07/10/19

Project Name: WW CROSS
Project Number: 141.05051.010

Container Information			Initial I	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	pH deg C	deg C	Pres	Seal	Date/Time	Analysis(*)
L1926969-04E	Glass 250ml/8oz unpreserved	Α	NA		4.1	Υ	Absent		8270TCL-PAH(14),TPH-DRO-D(14)
L1926969-04X	Plastic 120ml unpreserved split	Α	NA		4.1	Υ	Absent		A2-PHI(14)
L1926969-05A	Vial MeOH preserved	Α	NA		4.1	Υ	Absent		8260HLW-NH(14)
L1926969-05B	Vial water preserved	Α	NA		4.1	Υ	Absent	20-JUN-19 23:28	8260HLW-NH(14)



 Project Name:
 WW CROSS
 Lab Number:
 L1926969

 Project Number:
 141.05051.010
 Report Date:
 07/10/19

GLOSSARY

Acronyms

EDL

LOQ

MS

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

 Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

SRM

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 WW CROSS
 Lab Number:
 L1926969

 Project Number:
 141.05051.010
 Report Date:
 07/10/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a "Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Serial_No:07101915:54

 Project Name:
 WW CROSS
 Lab Number:
 L1926969

 Project Number:
 141.05051.010
 Report Date:
 07/10/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial_No:07101915:54

ID No.:17873 Revision 12

Published Date: 10/9/2018 4:58:19 PM

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

ALPHA	CHAIN OF	CUSTO)Y ,,	œ <u>.</u>	OF	Date	Rec'd in	n Lab: 6	120119			ALPHA Jo	b#: LY7	26969	
6 Walkup Drive	320 Forbes Blya	Project Informati	оц	PILE		Re	oort Info	rmation	- Data Del	liverable	98	Billing lafe	umation	THE PARTY	
Wastboro, MA 01581 Tel: 508-698-9220	MatuSirid, NA 97546 Tel: 908-828-0300	Project Name: W	War	235		ph	NDEx.	GR	EMAIL			C) Same as C	llent info F	0# 11764	
Citant Information		Project Location: 5	affre	NA	-							formation R		THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	
	Agrate Dr	Project#: 144.0	5057.	000		O Y	s Mo	Motrix Sp GW1 Sta	ndarda (Info	on this S Required	for Ma	D Yes Q ((Required for stals & EPH w Criter	MCP bronger für Targe(s)	Analytical Mattrods nics)	i.
Phone: 603 - 45	111	Turn-Around Tin	te .	THE REAL PROPERTY.	22.6					7 7	T	1 24		1	
Additional Proje	ect Information:	7 Date Due:	RUSH _{Pay}			AWALYOU	C State 2	. 29	CHCANA KPP13	Mangaes Omb	Company thus	the First	//	SAMPLE INFO	TOTA
HOLDall	A VOC samples of somether parda	ng email from	n Ram	Sarn.		1	ABN CI	METALS: DACP 13	VPH CORNIDOR & TAIRER OF MARRIES OF CONTRACTOR	TANE COUNTY ONLY DE	The De	Tal Collect	///	Filtration Q: Field Q: Lab to do Préservation Q: Lab to do	E BOTT
ALPHA Lab III (Lab I/se Only)	Sample ID	Colle Date	clica Time	Sample Matrix	Sampler Initials	18	SWOC, D	Mary	1 1	E /	100	154	/ \$	ample Comments	LES
26969-01 B	103-52	6-19-19	9,40	Soll	DAF	X		X				X			6
-cz R	103-54		10-30			X		X				X			2
-03	XIP2		9,40			X		X				X			2
-04	DUP3		14.10	1,		V	X		+-	N	V			-	5
-05	Trop Blank	v	1 1 160	-	· · ·	V			+	V			-		3
	Typ During														8
F= Manue glars A=Ambur glars U= Val G= Gaess G= Gaess C= Cube G= Cube G= Cube F= Cube F= Cube F= Cube F= Cube F= Cube	Tre seryphism Ar Morne In High Pr Hydica Pr Hydica Pr Hydica I Hydica And City And City	Relinquis Rad By:	I	Pn	iner Type servative v71me	V 66	A	A Resolved	By:	<i>k</i>	A Date	/ Al	Laraptes su	bmitted are subject	to

ΔLPHA	CHAIN O	F CUSTO	OY PA	GE	OF	Dat	te Rec	'd in Lat	:6/2	2/19			ALF	PHA Job #	LAZ	26969
8 Walkup Drive	320 Forbes Blvd	Project Informat	оп	TO FIXE	1816	Re	port	Informa	tion - D	ata Deliv	erabl	es	Contract of the last	ing Inform	and the second second	TALES
8 Walkup Drive Westboro, MA 01581 Tel: 508-896-9220		Project Name: W	War	055		Ø	ADEx		COLEMA	IL			□ Sa	me as Clien	t info P	0#: 11764
Client Information		Project Location: J				THE OWNER OF THE OWNER OWNER OF THE OWNER OWN	-	The state of the s	Common Common	The Part of the Pa	and the same	ect li	manuscrappy	ation Requ	CONTRACTOR DESCRIPTION	
Porsman	Abrate Dr	Project #: 144.0 Project Manager: ALPHA Quote #:	5051.	010		DY	es 🗹	No Matr	x Spike R Standar	is (Info Re	n this s	for N	(Req	Yes No uired for MC & EPH with N Brown (Criteria	P Inorgan Targets)	Analytical Methodics)
Phone: 603-4 Email: Jovellet Cc: drew, fuc Additional Proj Low level Sc	36-1490 te@ronsomenv.co hs@ronsomenv.co ect Information: Al VOC Samples Somy bes penda	must be fro	RUSH (only o	rhin c		ANAIN	09280	METALS: DMCP 13	EPH: DRanges # DRCRAB LA	UPH: D.Ranges & Targets D. Ranges Only D PCB D PC	IPH: CQuant Only	PH-DR. Fingerprint	Intelled Prof.	al Granite Frience		SAMPLE INFO Filtration Field Lab to do Preservation Lab to do
ALPHA Lab ID (Lab Use Only)	Sample ID	Colle	ection Time	Sample Matrix	Sampler Initials	Voc.	SVOC	METAL	EPH:	THE CO	Hal	70	12	1/	Sa	mple Comments
-02 -03 -04	8103-52 8103-54 DUPZ DUP3 Trop Blank	6-19-19	9:40 10:30 9:40 14:10	Soll	DAF	XXXX	X	XXX			×	(×	XXX			
P= Plastic A= Amber glass /= Vial G= Glass B= Bacteria cup C= Cube D= Other E= Encore D= BOD Bottle	Preservative A* None B= HCI C* HNO ₃ D= H ₂ SO ₄ E= NaOH F* MeOH G= NaHSO ₄ H = Na ₂ S ₂ O ₃ I= Ascorbic Acid J = NH ₄ CI K* Zn Accetate	Relinquished By:		Pro	ainer Type eservative e/Time	V 66	A A	Rece	ved By:	b Me	A A	A	A A Time	15. Aligha	mples sub 's Terms a	emitted are subject and Conditions, le,

GC-FID Chromatogram

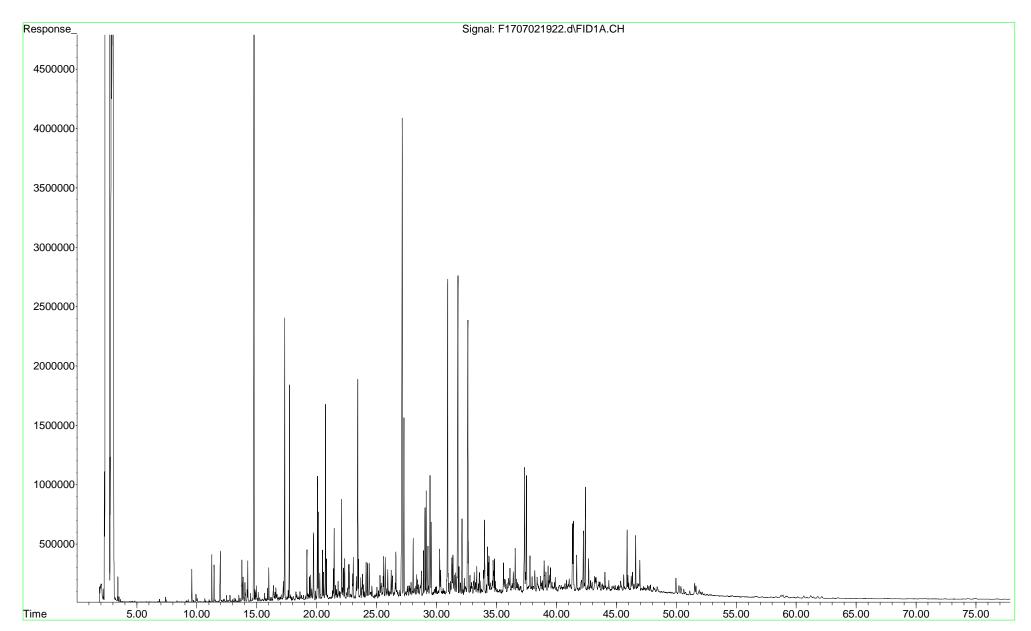
File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021922.d

Operator : FID17:WR

Acquired : 03 Jul 2019 12:47 am using AcqMethod FID17.M

Instrument: FID17 Sample Name: L1926969-04

Misc Info : WG1255847, WG1255235, ICAL15688



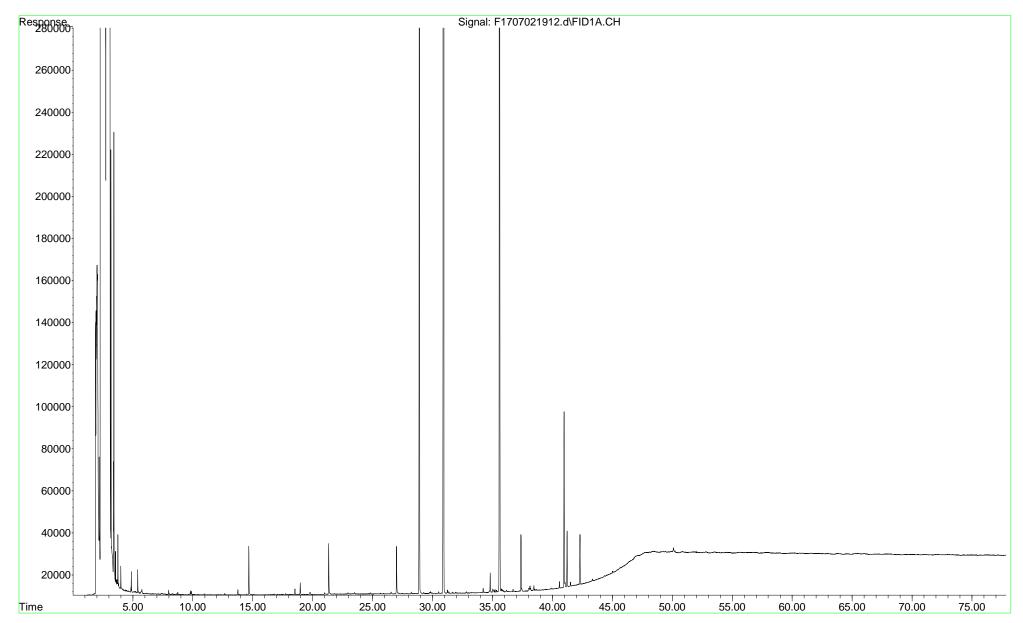
File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021912.d

Operator : FID17:WR

Acquired : 02 Jul 2019 5:26 pm using AcqMethod FID17.M

Instrument: FID17

Sample Name: WG1255235-1 (Method Blank)
Misc Info : WG1255847, WG1255235, ICAL15688



File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021914.d

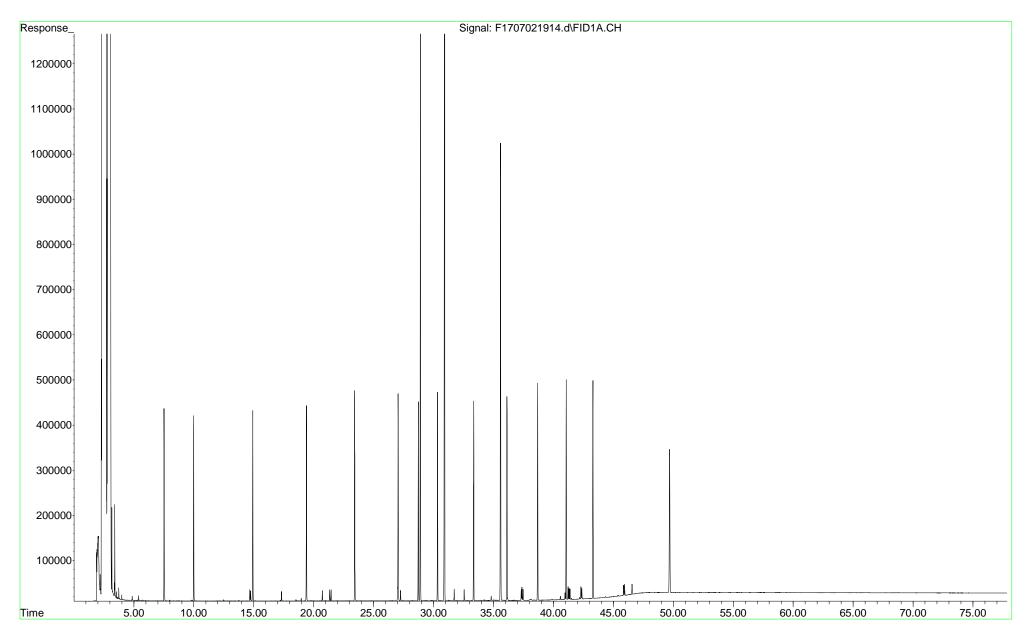
Operator : FID17:WR

Acquired : 02 Jul 2019 6:54 pm using AcqMethod FID17.M

Instrument : FID17

Sample Name: WG1255235-2 (Laboratory Control Sample)

Misc Info : WG1255847, WG1255235, ICAL15688



Petroleum Reference Standards

File :0:\Forensics\Data\FID17\2019\JUL\JUL02\F1707021924.d

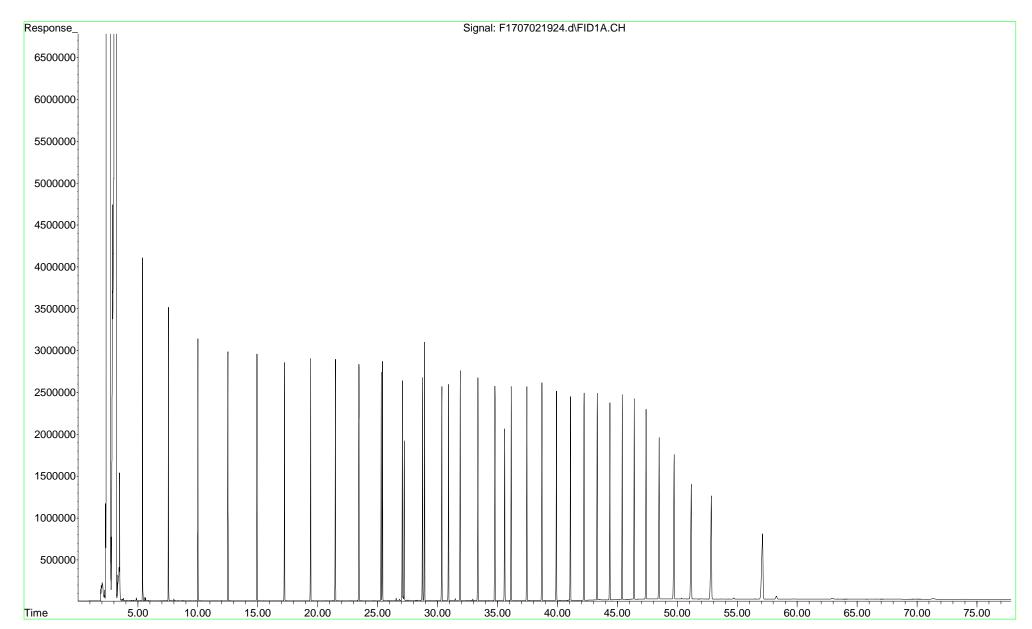
Operator : FID17:WR

Acquired : 03 Jul 2019 2:15 am using AcqMethod FID17.M

Instrument : FID17

Sample Name: WG1255847-2 (Alkane Reference Standard)

Misc Info : WG1255847,FRBB06,ICAL15688



File :0:\Forensics\Data\LIBRARY\Hydrocarbon Reference Standards\Co

... al Tar Oil.D

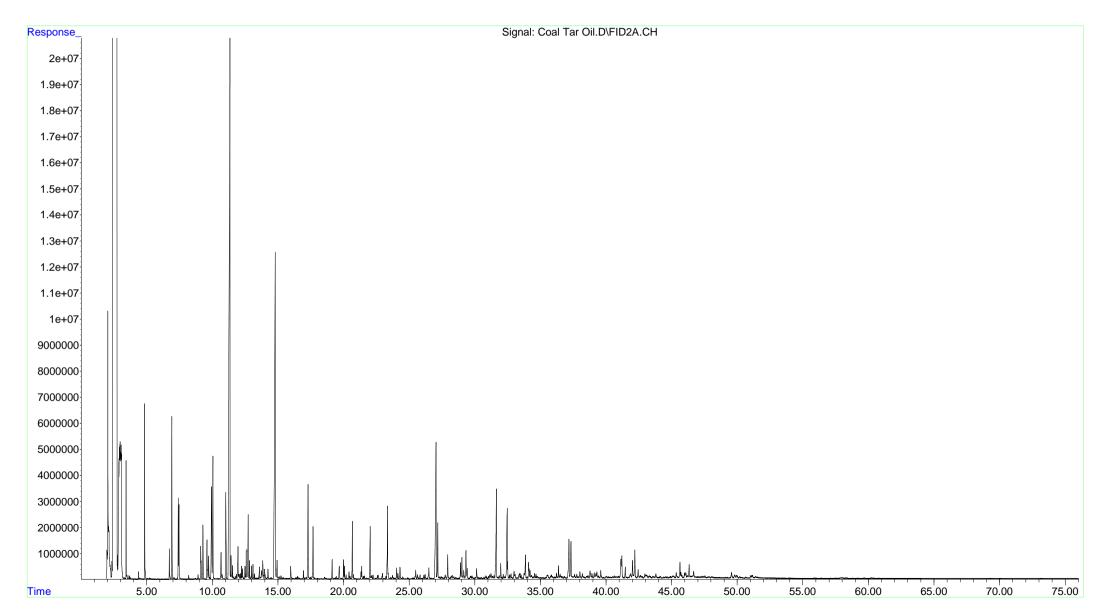
Operator : DMP

Instrument : PAH2

Acquired : 08 Aug 2013 6:49 pm using AcqMethod FRNC2A.M

Sample : Coal Tar Oil

Misc Info : Chem Service Pz-123 (F031908K)





ANALYTICAL REPORT

Lab Number: L1936388

Client: Ransom Consulting, Inc.

112 Corporate Drive

Pease International Tradeport

Portsmouth, NH 03801

ATTN: Steve Rickerich Phone: (603) 436-1490

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Report Date: 08/27/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

 Lab Number:
 L1936388

 Report Date:
 08/27/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1936388-01	B105A-S1	SOIL	JAFFREY, NH	08/12/19 09:40	08/13/19
L1936388-02	B105A-S2	SOIL	JAFFREY, NH	08/12/19 09:50	08/13/19
L1936388-03	B113-S2	SOIL	JAFFREY, NH	08/12/19 12:00	08/13/19
L1936388-04	B113-S4	SOIL	JAFFREY, NH	08/12/19 12:20	08/13/19
L1936388-05	B116-S2	SOIL	JAFFREY, NH	08/12/19 13:50	08/13/19
L1936388-06	B117-S1	SOIL	JAFFREY, NH	08/12/19 14:00	08/13/19
L1936388-07	TRIP BLANK	SOIL	JAFFREY, NH	08/12/19 00:00	08/13/19



L1936388

Lab Number:

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 **Report Date:** 08/27/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name: WW CROSS PROPERTY Lab Number: L1936388
Project Number: 141.05051.010 Report Date: 08/27/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

L1936388-06: The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Reextraction was not required; therefore, the results of the original analysis are reported.

Cyanide, Total

The WG1273690-2/-3 LCS/LCSD recoveries (56%/47%), associated with L1936388-04, are outside our inhouse acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 08/27/19

Melissa Sturgis Melissa Sturgis

ALPHA

ORGANICS



VOLATILES



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1936388

Report Date: 08/27/19

Date Collected:

Lab ID: L1936388-02

Client ID: Date Received: B105A-S2 Field Prep: Sample Location: JAFFREY, NH

08/13/19 Not Specified

08/12/19 09:50

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 08/22/19 00:32

Analyst: NLK 92% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
Methylene chloride	ND		ug/kg	3.2	1.5	1
1,1-Dichloroethane	ND		ug/kg	0.64	0.09	1
Chloroform	ND		ug/kg	0.96	0.09	1
Carbon tetrachloride	ND		ug/kg	0.64	0.15	1
1,2-Dichloropropane	ND		ug/kg	0.64	0.08	1
Dibromochloromethane	ND		ug/kg	0.64	0.09	1
1,1,2-Trichloroethane	ND		ug/kg	0.64	0.17	1
Tetrachloroethene	ND		ug/kg	0.32	0.12	1
Chlorobenzene	ND		ug/kg	0.32	80.0	1
Trichlorofluoromethane	ND		ug/kg	2.6	0.44	1
1,2-Dichloroethane	ND		ug/kg	0.64	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	0.32	0.11	1
Bromodichloromethane	ND		ug/kg	0.32	0.07	1
trans-1,3-Dichloropropene	ND		ug/kg	0.64	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.32	0.10	1
1,3-Dichloropropene, Total	ND		ug/kg	0.32	0.10	1
1,1-Dichloropropene	ND		ug/kg	0.32	0.10	1
Bromoform	ND		ug/kg	2.6	0.16	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.32	0.11	1
Benzene	ND		ug/kg	0.32	0.11	1
Toluene	ND		ug/kg	0.64	0.35	1
Ethylbenzene	ND		ug/kg	0.64	0.09	1
Chloromethane	ND		ug/kg	2.6	0.60	1
Bromomethane	ND		ug/kg	1.3	0.37	1
Vinyl chloride	ND		ug/kg	0.64	0.21	1
Chloroethane	ND		ug/kg	1.3	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.64	0.15	1
trans-1,2-Dichloroethene	ND		ug/kg	0.96	0.09	1



L1936388

Project Name: WW CROSS PROPERTY

L1936388-02

JAFFREY, NH

B105A-S2

Project Number: 141.05051.010

SAMPLE RESULTS

. 33,2.7.13

Report Date: 08/27/19

Lab Number:

Date Collected: 08/12/19 09:50
Date Received: 08/13/19

Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - West	borough Lab					
Trichloroethene	ND		ug/kg	0.32	0.09	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	0.09	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	0.10	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	0.11	1
Methyl tert butyl ether	ND		ug/kg	1.3	0.13	1
p/m-Xylene	ND		ug/kg	1.3	0.36	1
o-Xylene	ND		ug/kg	0.64	0.19	1
Xylenes, Total	ND		ug/kg	0.64	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	0.64	0.11	1
1,2-Dichloroethene, Total	ND		ug/kg	0.64	0.09	1
Dibromomethane	ND		ug/kg	1.3	0.15	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	0.08	1
Styrene	ND		ug/kg	0.64	0.12	1
Dichlorodifluoromethane	ND		ug/kg	6.4	0.58	1
Acetone	ND		ug/kg	6.4	3.1	1
Carbon disulfide	ND		ug/kg	6.4	2.9	1
2-Butanone	ND		ug/kg	6.4	1.4	1
4-Methyl-2-pentanone	ND		ug/kg	6.4	0.82	1
2-Hexanone	ND		ug/kg	6.4	0.75	1
Bromochloromethane	ND		ug/kg	1.3	0.13	1
Tetrahydrofuran	ND		ug/kg	2.6	1.0	1
2,2-Dichloropropane	ND		ug/kg	1.3	0.13	1
1,2-Dibromoethane	ND		ug/kg	0.64	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	0.08	1
Bromobenzene	ND		ug/kg	1.3	0.09	1
n-Butylbenzene	ND		ug/kg	0.64	0.11	1
sec-Butylbenzene	ND		ug/kg	0.64	0.09	1
tert-Butylbenzene	ND		ug/kg	1.3	0.08	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.3	0.11	1
o-Chlorotoluene	ND		ug/kg	1.3	0.12	1
p-Chlorotoluene	ND		ug/kg	1.3	0.07	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	0.64	1
Hexachlorobutadiene	ND		ug/kg	2.6	0.11	1
Isopropylbenzene	ND		ug/kg	0.64	0.07	1
p-Isopropyltoluene	ND		ug/kg	0.64	0.07	1
Naphthalene	ND		ug/kg	2.6	0.42	1
n-Propylbenzene	ND		ug/kg	0.64	0.11	1



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-02 Date Collected: 08/12/19 09:50

Client ID: B105A-S2 Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - W	estborough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	0.17	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	0.12	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	0.21	1
Ethyl ether	1.0	J	ug/kg	1.3	0.22	1
Isopropyl Ether	ND		ug/kg	1.3	0.14	1
Tert-Butyl Alcohol	ND		ug/kg	13	3.3	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	0.08	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	0.11	1
1,4-Dioxane	ND		ug/kg	51	22.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	117	70-130	
Toluene-d8	107	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	108	70-130	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1936388

Report Date: 08/27/19

Lab ID: Date Collected: 08/12/19 12:20 L1936388-04

Client ID: Date Received: 08/13/19 B113-S4 Field Prep: Sample Location: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 08/22/19 00:59

Analyst: NLK 94% Percent Solids:

Volatile Organics by EPA 5035 Low - West	borough Lab				
Methylene chloride	ND	ug/kg	3.2	1.5	1
1,1-Dichloroethane	ND	ug/kg	0.65	0.09	1
Chloroform	ND	ug/kg	0.98	0.09	1
Carbon tetrachloride	ND	ug/kg	0.65	0.15	1
1,2-Dichloropropane	ND	ug/kg	0.65	0.08	1
Dibromochloromethane	ND	ug/kg	0.65	0.09	1
1,1,2-Trichloroethane	ND	ug/kg	0.65	0.17	1
Tetrachloroethene	ND	ug/kg	0.32	0.13	1
Chlorobenzene	ND	ug/kg	0.32	0.08	1
Trichlorofluoromethane	ND	ug/kg	2.6	0.45	1
1,2-Dichloroethane	ND	ug/kg	0.65	0.17	1
1,1,1-Trichloroethane	ND	ug/kg	0.32	0.11	1
Bromodichloromethane	ND	ug/kg	0.32	0.07	1
trans-1,3-Dichloropropene	ND	ug/kg	0.65	0.18	1
cis-1,3-Dichloropropene	ND	ug/kg	0.32	0.10	1
1,3-Dichloropropene, Total	ND	ug/kg	0.32	0.10	1
1,1-Dichloropropene	ND	ug/kg	0.32	0.10	1
Bromoform	ND	ug/kg	2.6	0.16	1
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.32	0.11	1
Benzene	ND	ug/kg	0.32	0.11	1
Toluene	ND	ug/kg	0.65	0.35	1
Ethylbenzene	ND	ug/kg	0.65	0.09	1
Chloromethane	ND	ug/kg	2.6	0.61	1
Bromomethane	ND	ug/kg	1.3	0.38	1
Vinyl chloride	ND	ug/kg	0.65	0.22	1
Chloroethane	ND	ug/kg	1.3	0.29	1
1,1-Dichloroethene	ND	ug/kg	0.65	0.15	1
trans-1,2-Dichloroethene	ND	ug/kg	0.98	0.09	1



L1936388

08/27/19

Project Name: WW CROSS PROPERTY

L1936388-04

JAFFREY, NH

B113-S4

Project Number: 141.05051.010

SAMPLE RESULTS

Date Collected: 08/12/19 12:20

Lab Number:

Report Date:

Date Received: 08/13/19 Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	ow - Westborough Lab					
Trichloroethene	ND		ug/kg	0.32	0.09	1
1,2-Dichlorobenzene	ND		ug/kg	1.3	0.09	1
1,3-Dichlorobenzene	ND		ug/kg	1.3	0.10	1
1,4-Dichlorobenzene	ND		ug/kg	1.3	0.11	1
Methyl tert butyl ether	ND		ug/kg	1.3	0.13	1
p/m-Xylene	ND		ug/kg	1.3	0.36	1
o-Xylene	ND		ug/kg	0.65	0.19	1
Xylenes, Total	ND		ug/kg	0.65	0.19	1
cis-1,2-Dichloroethene	ND		ug/kg	0.65	0.11	1
1,2-Dichloroethene, Total	ND		ug/kg	0.65	0.09	1
Dibromomethane	ND		ug/kg	1.3	0.15	1
1,2,3-Trichloropropane	ND		ug/kg	1.3	0.08	1
Styrene	ND		ug/kg	0.65	0.13	1
Dichlorodifluoromethane	ND		ug/kg	6.5	0.60	1
Acetone	94		ug/kg	6.5	3.1	1
Carbon disulfide	ND		ug/kg	6.5	3.0	1
2-Butanone	ND		ug/kg	6.5	1.4	1
4-Methyl-2-pentanone	ND		ug/kg	6.5	0.83	1
2-Hexanone	ND		ug/kg	6.5	0.77	1
Bromochloromethane	ND		ug/kg	1.3	0.13	1
Tetrahydrofuran	ND		ug/kg	2.6	1.0	1
2,2-Dichloropropane	ND		ug/kg	1.3	0.13	1
1,2-Dibromoethane	ND		ug/kg	0.65	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.32	0.09	1
Bromobenzene	ND		ug/kg	1.3	0.09	1
n-Butylbenzene	ND		ug/kg	0.65	0.11	1
sec-Butylbenzene	ND		ug/kg	0.65	0.10	1
tert-Butylbenzene	ND		ug/kg	1.3	0.08	1
1,3,5-Trichlorobenzene	ND		ug/kg	1.3	0.11	1
o-Chlorotoluene	ND		ug/kg	1.3	0.12	1
p-Chlorotoluene	ND		ug/kg	1.3	0.07	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.0	0.65	1
Hexachlorobutadiene	ND		ug/kg	2.6	0.11	1
Isopropylbenzene	ND		ug/kg	0.65	0.07	1
p-Isopropyltoluene	ND		ug/kg	0.65	0.07	1
Naphthalene	ND		ug/kg	2.6	0.42	1
n-Propylbenzene	ND		ug/kg	0.65	0.11	1



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-04 Date Collected: 08/12/19 12:20

Client ID: B113-S4 Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 Low - We	estborough Lab						
1,2,3-Trichlorobenzene	ND		ug/kg	1.3	0.21	1	
1,2,4-Trichlorobenzene	ND		ug/kg	1.3	0.18	1	
1,3,5-Trimethylbenzene	ND		ug/kg	1.3	0.12	1	
1,2,4-Trimethylbenzene	ND		ug/kg	1.3	0.22	1	
Ethyl ether	8.4		ug/kg	1.3	0.22	1	
Isopropyl Ether	ND		ug/kg	1.3	0.14	1	
Tert-Butyl Alcohol	15		ug/kg	13	3.3	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	1.3	0.08	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	1.3	0.11	1	
1,4-Dioxane	ND		ug/kg	52	23.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	116	70-130	
Toluene-d8	109	70-130	
4-Bromofluorobenzene	107	70-130	
Dibromofluoromethane	102	70-130	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1936388

Report Date: 08/27/19

Lab ID: Date Collected: 08/12/19 14:00 L1936388-06

Client ID: Date Received: 08/13/19 B117-S1 Field Prep: Sample Location: JAFFREY, NH Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 08/21/19 22:12

Analyst: MV 97% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High	- Westborough Lab					
Methylene chloride	ND		ug/kg	180	85.	1
1,1-Dichloroethane	ND		ug/kg	37	5.4	1
Chloroform	ND		ug/kg	56	5.2	1
Carbon tetrachloride	ND		ug/kg	37	8.5	1
1,2-Dichloropropane	ND		ug/kg	37	4.6	1
Dibromochloromethane	ND		ug/kg	37	5.2	1
1,1,2-Trichloroethane	ND		ug/kg	37	9.9	1
Tetrachloroethene	ND		ug/kg	18	7.3	1
Chlorobenzene	ND		ug/kg	18	4.7	1
Trichlorofluoromethane	ND		ug/kg	150	26.	1
1,2-Dichloroethane	ND		ug/kg	37	9.5	1
1,1,1-Trichloroethane	ND		ug/kg	18	6.2	1
Bromodichloromethane	ND		ug/kg	18	4.0	1
trans-1,3-Dichloropropene	ND		ug/kg	37	10.	1
cis-1,3-Dichloropropene	ND		ug/kg	18	5.8	1
1,3-Dichloropropene, Total	ND		ug/kg	18	5.8	1
1,1-Dichloropropene	ND		ug/kg	18	5.9	1
Bromoform	ND		ug/kg	150	9.1	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	18	6.2	1
Benzene	ND		ug/kg	18	6.2	1
Toluene	ND		ug/kg	37	20.	1
Ethylbenzene	ND		ug/kg	37	5.2	1
Chloromethane	ND		ug/kg	150	34.	1
Bromomethane	ND		ug/kg	74	22.	1
Vinyl chloride	ND		ug/kg	37	12.	1
Chloroethane	ND		ug/kg	74	17.	1
1,1-Dichloroethene	ND		ug/kg	37	8.8	1
trans-1,2-Dichloroethene	ND		ug/kg	56	5.1	1



L1936388

08/27/19

Project Name: WW CROSS PROPERTY

L1936388-06

JAFFREY, NH

B117-S1

Project Number: 141.05051.010

SAMPLE RESULTS

Date Collected:

Lab Number:

Report Date:

08/12/19 14:00 Date Received: 08/13/19

Field Prep: Not Specified

Sample Location:

Lab ID:

Client ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High	h - Westborough Lab					
Trichloroethene	ND		ug/kg	18	5.1	1
1,2-Dichlorobenzene	ND		ug/kg	74	5.3	1
1,3-Dichlorobenzene	ND		ug/kg	74	5.5	1
1,4-Dichlorobenzene	ND		ug/kg	74	6.3	1
Methyl tert butyl ether	ND		ug/kg	74	7.4	1
p/m-Xylene	ND		ug/kg	74	21.	1
o-Xylene	ND		ug/kg	37	11.	1
Xylenes, Total	ND		ug/kg	37	11.	1
cis-1,2-Dichloroethene	ND		ug/kg	37	6.5	1
1,2-Dichloroethene, Total	ND		ug/kg	37	5.1	1
Dibromomethane	ND		ug/kg	74	8.8	1
1,2,3-Trichloropropane	ND		ug/kg	74	4.7	1
Styrene	ND		ug/kg	37	7.3	1
Dichlorodifluoromethane	ND		ug/kg	370	34.	1
Acetone	ND		ug/kg	370	180	1
Carbon disulfide	ND		ug/kg	370	170	1
2-Butanone	ND		ug/kg	370	82.	1
4-Methyl-2-pentanone	ND		ug/kg	370	47.	1
2-Hexanone	ND		ug/kg	370	44.	1
Bromochloromethane	ND		ug/kg	74	7.6	1
Tetrahydrofuran	ND		ug/kg	150	59.	1
2,2-Dichloropropane	ND		ug/kg	74	7.5	1
1,2-Dibromoethane	ND		ug/kg	37	10.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	18	4.9	1
Bromobenzene	ND		ug/kg	74	5.4	1
n-Butylbenzene	ND		ug/kg	37	6.2	1
sec-Butylbenzene	ND		ug/kg	37	5.4	1
tert-Butylbenzene	ND		ug/kg	74	4.4	1
1,3,5-Trichlorobenzene	ND		ug/kg	74	6.4	1
o-Chlorotoluene	ND		ug/kg	74	7.1	1
p-Chlorotoluene	ND		ug/kg	74	4.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	110	37.	1
Hexachlorobutadiene	ND		ug/kg	150	6.3	1
Isopropylbenzene	ND		ug/kg	37	4.0	1
p-Isopropyltoluene	ND		ug/kg	37	4.0	1
Naphthalene	1300		ug/kg	150	24.	1
n-Propylbenzene	ND		ug/kg	37	6.3	1



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-06 Date Collected: 08/12/19 14:00

Client ID: B117-S1 Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - We	estborough Lab)				
1,2,3-Trichlorobenzene	ND		ug/kg	74	12.	1
1,2,4-Trichlorobenzene	ND		ug/kg	74	10.	1
1,3,5-Trimethylbenzene	ND		ug/kg	74	7.2	1
1,2,4-Trimethylbenzene	ND		ug/kg	74	12.	1
Ethyl ether	ND		ug/kg	74	13.	1
Isopropyl Ether	ND		ug/kg	74	7.9	1
Tert-Butyl Alcohol	ND		ug/kg	740	190	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	74	4.7	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	74	6.5	1
1,4-Dioxane	ND		ug/kg	3000	1300	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	106	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	91	70-130	
Dibromofluoromethane	100	70-130	

L1936388

08/27/19

Project Name: WW CROSS PROPERTY

L1936388-07

TRIP BLANK

JAFFREY, NH

Project Number: 141.05051.010

SAMPLE RESULTS

Date Collected: 08/12/19 00:00

Lab Number:

Report Date:

Date Received: 08/13/19
Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 08/21/19 19:29

Analyst: NLK

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Volatile Organics by EPA 5035 Low - Westl Methylene chloride	oorough Lab				
Methylene chloride	ND				
		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND	ug/kg	1.0	0.14	1
Chloroform	ND	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND	ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND	ug/kg	1.0	0.12	1
Dibromochloromethane	ND	ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.27	1
Tetrachloroethene	ND	ug/kg	0.50	0.20	1
Chlorobenzene	ND	ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND	ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND	ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17	1
Bromodichloromethane	ND	ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND	ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND	ug/kg	0.50	0.16	1
Bromoform	ND	ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.17	1
Benzene	ND	ug/kg	0.50	0.17	1
Toluene	ND	ug/kg	1.0	0.54	1
Ethylbenzene	ND	ug/kg	1.0	0.14	1
Chloromethane	ND	ug/kg	4.0	0.93	1
Bromomethane	ND	ug/kg	2.0	0.58	1
Vinyl chloride	ND	ug/kg	1.0	0.34	1
Chloroethane	ND	ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND	ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14	1



L1936388

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

L1936388-07

Date Collected: 08/12/19 00:00

Client ID: TRIP BLANK Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Lab ID:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	ow - Westborough Lab					
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
Tetrahydrofuran	ND		ug/kg	4.0	1.6	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-07 Date Collected: 08/12/19 00:00

Client ID: TRIP BLANK Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - West	borough Lab					
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Ethyl ether	1.1	J	ug/kg	2.0	0.34	1
Isopropyl Ether	ND		ug/kg	2.0	0.21	1
Tert-Butyl Alcohol	ND		ug/kg	20	5.1	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	1
1,4-Dioxane	ND		ug/kg	80	35.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	109	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	106	70-130	

Report Date:

L1936388

08/27/19

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010

SAMPLE RESULTS

Lab ID: L1936388-07 Date Collected: 08/12/19 00:00

Client ID: TRIP BLANK Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 08/22/19 08:41

Analyst: MV

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 H	igh - Westborough Lab					
Methylene chloride	ND		ug/kg	250	110	1
1,1-Dichloroethane	ND		ug/kg	50	7.2	1
Chloroform	ND		ug/kg	75	7.0	1
Carbon tetrachloride	ND		ug/kg	50	12.	1
1,2-Dichloropropane	ND		ug/kg	50	6.2	1
Dibromochloromethane	ND		ug/kg	50	7.0	1
1,1,2-Trichloroethane	ND		ug/kg	50	13.	1
Tetrachloroethene	ND		ug/kg	25	9.8	1
Chlorobenzene	ND		ug/kg	25	6.4	1
Trichlorofluoromethane	ND		ug/kg	200	35.	1
1,2-Dichloroethane	ND		ug/kg	50	13.	1
1,1,1-Trichloroethane	ND		ug/kg	25	8.4	1
Bromodichloromethane	ND		ug/kg	25	5.4	1
trans-1,3-Dichloropropene	ND		ug/kg	50	14.	1
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9	1
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9	1
1,1-Dichloropropene	ND		ug/kg	25	8.0	1
Bromoform	ND		ug/kg	200	12.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3	1
Benzene	ND		ug/kg	25	8.3	1
Toluene	ND		ug/kg	50	27.	1
Ethylbenzene	ND		ug/kg	50	7.0	1
Chloromethane	ND		ug/kg	200	47.	1
Bromomethane	ND		ug/kg	100	29.	1
Vinyl chloride	ND		ug/kg	50	17.	1
Chloroethane	ND		ug/kg	100	23.	1
1,1-Dichloroethene	ND		ug/kg	50	12.	1
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8	1



L1936388

Project Name: Lab Number: WW CROSS PROPERTY

Project Number: Report Date: 141.05051.010 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-07 Date Collected: 08/12/19 00:00

Client ID: Date Received: 08/13/19 TRIP BLANK Sample Location: Field Prep: Not Specified JAFFREY, NH

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 H	ligh - Westborough Lab					
Trichloroethene	ND		ug/kg	25	6.8	1
1,2-Dichlorobenzene	ND		ug/kg	100	7.2	1
1,3-Dichlorobenzene	ND		ug/kg	100	7.4	1
1,4-Dichlorobenzene	ND		ug/kg	100	8.6	1
Methyl tert butyl ether	ND		ug/kg	100	10.	1
p/m-Xylene	ND		ug/kg	100	28.	1
o-Xylene	ND		ug/kg	50	14.	1
Xylenes, Total	ND		ug/kg	50	14.	1
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8	1
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8	1
Dibromomethane	ND		ug/kg	100	12.	1
1,2,3-Trichloropropane	ND		ug/kg	100	6.4	1
Styrene	ND		ug/kg	50	9.8	1
Dichlorodifluoromethane	ND		ug/kg	500	46.	1
Acetone	ND		ug/kg	500	240	1
Carbon disulfide	ND		ug/kg	500	230	1
2-Butanone	ND		ug/kg	500	110	1
4-Methyl-2-pentanone	ND		ug/kg	500	64.	1
2-Hexanone	ND		ug/kg	500	59.	1
Bromochloromethane	ND		ug/kg	100	10.	1
Tetrahydrofuran	ND		ug/kg	200	80.	1
2,2-Dichloropropane	ND		ug/kg	100	10.	1
1,2-Dibromoethane	ND		ug/kg	50	14.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6	1
Bromobenzene	ND		ug/kg	100	7.2	1
n-Butylbenzene	ND		ug/kg	50	8.4	1
sec-Butylbenzene	ND		ug/kg	50	7.3	1
tert-Butylbenzene	ND		ug/kg	100	5.9	1
1,3,5-Trichlorobenzene	ND		ug/kg	100	8.6	1
o-Chlorotoluene	ND		ug/kg	100	9.6	1
p-Chlorotoluene	ND		ug/kg	100	5.4	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.	1
Hexachlorobutadiene	ND		ug/kg	200	8.4	1
Isopropylbenzene	ND		ug/kg	50	5.4	1
p-Isopropyltoluene	ND		ug/kg	50	5.4	1
Naphthalene	ND		ug/kg	200	32.	1
n-Propylbenzene	ND		ug/kg	50	8.6	1



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-07 Date Collected: 08/12/19 00:00

Client ID: TRIP BLANK Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by EPA 5035 High - W	estborough Lab)					
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.	1	
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6	1	
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.	1	
Ethyl ether	ND		ug/kg	100	17.	1	
Isopropyl Ether	ND		ug/kg	100	11.	1	
Tert-Butyl Alcohol	ND		ug/kg	1000	260	1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	6.4	1	
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	8.8	1	
1,4-Dioxane	ND		ug/kg	4000	1800	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	106	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	96	70-130	
Dibromofluoromethane	99	70-130	



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 18:17

Analyst: AD

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035	High - Westbord	ough Lab for	r sample(s):	06	Batch:	WG1275383-5
Methylene chloride	ND		ug/kg	250		110
1,1-Dichloroethane	ND		ug/kg	50		7.2
Chloroform	ND		ug/kg	75		7.0
Carbon tetrachloride	ND		ug/kg	50		12.
1,2-Dichloropropane	ND		ug/kg	50		6.2
Dibromochloromethane	ND		ug/kg	50		7.0
1,1,2-Trichloroethane	ND		ug/kg	50		13.
Tetrachloroethene	ND		ug/kg	25		9.8
Chlorobenzene	ND		ug/kg	25		6.4
Trichlorofluoromethane	ND		ug/kg	200		35.
1,2-Dichloroethane	ND		ug/kg	50		13.
1,1,1-Trichloroethane	ND		ug/kg	25		8.4
Bromodichloromethane	ND		ug/kg	25		5.4
trans-1,3-Dichloropropene	ND		ug/kg	50		14.
cis-1,3-Dichloropropene	ND		ug/kg	25		7.9
1,3-Dichloropropene, Total	ND		ug/kg	25		7.9
1,1-Dichloropropene	ND		ug/kg	25		8.0
Bromoform	ND		ug/kg	200		12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25		8.3
Benzene	ND		ug/kg	25		8.3
Toluene	ND		ug/kg	50		27.
Ethylbenzene	ND		ug/kg	50		7.0
Chloromethane	ND		ug/kg	200		47.
Bromomethane	ND		ug/kg	100		29.
Vinyl chloride	ND		ug/kg	50		17.
Chloroethane	ND		ug/kg	100		23.
1,1-Dichloroethene	ND		ug/kg	50		12.
trans-1,2-Dichloroethene	ND		ug/kg	75		6.8
Trichloroethene	ND		ug/kg	25		6.8



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 18:17

Analyst: AD

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 503	5 High - Westbord	ough Lab for	sample(s):	06	Batch:	WG1275383-5
1,2-Dichlorobenzene	ND		ug/kg	100		7.2
1,3-Dichlorobenzene	ND		ug/kg	100		7.4
1,4-Dichlorobenzene	ND		ug/kg	100		8.6
Methyl tert butyl ether	ND		ug/kg	100		10.
p/m-Xylene	ND		ug/kg	100		28.
o-Xylene	ND		ug/kg	50		14.
Xylenes, Total	ND		ug/kg	50		14.
cis-1,2-Dichloroethene	ND		ug/kg	50		8.8
1,2-Dichloroethene, Total	ND		ug/kg	50		6.8
Dibromomethane	ND		ug/kg	100		12.
1,2,3-Trichloropropane	ND		ug/kg	100		6.4
Styrene	ND		ug/kg	50		9.8
Dichlorodifluoromethane	ND		ug/kg	500		46.
Acetone	ND		ug/kg	500		240
Carbon disulfide	ND		ug/kg	500		230
2-Butanone	ND		ug/kg	500		110
4-Methyl-2-pentanone	ND		ug/kg	500		64.
2-Hexanone	ND		ug/kg	500		59.
Bromochloromethane	ND		ug/kg	100		10.
Tetrahydrofuran	ND		ug/kg	200		80.
2,2-Dichloropropane	ND		ug/kg	100		10.
1,2-Dibromoethane	ND		ug/kg	50		14.
1,1,1,2-Tetrachloroethane	ND		ug/kg	25		6.6
Bromobenzene	ND		ug/kg	100		7.2
n-Butylbenzene	ND		ug/kg	50		8.4
sec-Butylbenzene	ND		ug/kg	50		7.3
tert-Butylbenzene	ND		ug/kg	100		5.9
1,3,5-Trichlorobenzene	ND		ug/kg	100		8.6
o-Chlorotoluene	ND		ug/kg	100		9.6



L1936388

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 18:17

Parameter	Result	Qualifier	Units	RL		MDL
Volatile Organics by EPA 5035 High	- Westbord	ough Lab fo	or sample(s):	06	Batch:	WG1275383-5
p-Chlorotoluene	ND		ug/kg	100		5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150		50.
Hexachlorobutadiene	ND		ug/kg	200		8.4
Isopropylbenzene	ND		ug/kg	50		5.4
p-Isopropyltoluene	ND		ug/kg	50		5.4
Naphthalene	ND		ug/kg	200		32.
n-Propylbenzene	ND		ug/kg	50		8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100		16.
1,2,4-Trichlorobenzene	ND		ug/kg	100		14.
1,3,5-Trimethylbenzene	ND		ug/kg	100		9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100		17.
Ethyl ether	ND		ug/kg	100		17.
Isopropyl Ether	ND		ug/kg	100		11.
Tert-Butyl Alcohol	ND		ug/kg	1000		260
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100		6.4
Tertiary-Amyl Methyl Ether	ND		ug/kg	100		8.8
1,4-Dioxane	ND		ug/kg	4000		1800

		Acceptance
Surrogate	%Recovery Qual	ifier Criteria
40.00	400	70.400
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130
Dibromofluoromethane	99	70-130



Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 19:02

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	02,04,07	Batch:	WG1275448-5
Methylene chloride	ND		ug/kg	5.0	2.3	
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	
Chloroform	ND		ug/kg	1.5	0.14	
Carbon tetrachloride	ND		ug/kg	1.0	0.23	
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	
Dibromochloromethane	ND		ug/kg	1.0	0.14	
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	
Tetrachloroethene	ND		ug/kg	0.50	0.20	
Chlorobenzene	ND		ug/kg	0.50	0.13	
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	
Bromodichloromethane	ND		ug/kg	0.50	0.11	
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	
Bromoform	ND		ug/kg	4.0	0.25	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	
Benzene	ND		ug/kg	0.50	0.17	
Toluene	ND		ug/kg	1.0	0.54	
Ethylbenzene	ND		ug/kg	1.0	0.14	
Chloromethane	ND		ug/kg	4.0	0.93	
Bromomethane	ND		ug/kg	2.0	0.58	
Vinyl chloride	ND		ug/kg	1.0	0.34	
Chloroethane	ND		ug/kg	2.0	0.45	
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	
Trichloroethene	ND		ug/kg	0.50	0.14	



Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 19:02

Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,04,07 Batch: WG1275448- 1,2-Dichlorobenzene	Parameter	Result	Qualifier	Units	RL	MDL	
1,3-Dichlorobenzene ND ug/kg 2.0 0.15 1,4-Dichlorobenzene ND ug/kg 2.0 0.17 Methyl tert butyl ether ND ug/kg 2.0 0.20 p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.18 1,2-Dichloroethene ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 1	olatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	02,04,07	Batch:	WG1275448-5
1,4-Dichlorobenzene ND ug/kg 2.0 0.17 Methyl tert butyl ether ND ug/kg 2.0 0.20 p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.29 xylenes, Total ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 </td <td>1,2-Dichlorobenzene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>2.0</td> <td>0.14</td> <td></td>	1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	
Methyl tert butyl ether ND ug/kg 2.0 0.20 p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 1.3 2-Butanone ND ug/kg 10	1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	
p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 <td>1,4-Dichlorobenzene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>2.0</td> <td>0.17</td> <td></td>	1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	
o-Xylene ND ug/kg 1.0 0.29 Xylenes, Total ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.20 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.8 2-Butanone ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6	Methyl tert butyl ether	ND		ug/kg	2.0	0.20	
Xylenes, Total ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6	p/m-Xylene	ND		ug/kg	2.0	0.56	
cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 1,2-Dichloroethene, Total ND ug/kg 1.0 0.14 Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 0.50 <td>o-Xylene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.0</td> <td>0.29</td> <td></td>	o-Xylene	ND		ug/kg	1.0	0.29	
1,2-Dichloroethene, Total ND ug/kg 1.0 0.14	Xylenes, Total	ND		ug/kg	1.0	0.29	
Dibromomethane ND ug/kg 2.0 0.24 1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodiffluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0	cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	
1,2,3-Trichloropropane ND ug/kg 2.0 0.13 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 2.0 0.13 Bromobenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0	1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	
Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 2.0 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 2.0 0.	Dibromomethane	ND		ug/kg	2.0	0.24	
Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 <td>1,2,3-Trichloropropane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>2.0</td> <td>0.13</td> <td></td>	1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	
Acetone ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.12	Styrene	ND		ug/kg	1.0	0.20	
Carbon disulfide ND ug/kg 10 4.6 2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 2.0 0.12 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Dichlorodifluoromethane	ND		ug/kg	10	0.92	
2-Butanone ND ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Acetone	ND		ug/kg	10	4.8	
4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Carbon disulfide	ND		ug/kg	10	4.6	
2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	2-Butanone	ND		ug/kg	10	2.2	
Bromochloromethane ND ug/kg 2.0 0.20 Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	4-Methyl-2-pentanone	ND		ug/kg	10	1.3	
Tetrahydrofuran ND ug/kg 4.0 1.6 2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	2-Hexanone	ND		ug/kg	10	1.2	
2,2-Dichloropropane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Bromochloromethane	ND		ug/kg	2.0	0.20	
1,2-Dibromoethane ND ug/kg 1.0 0.28 1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Tetrahydrofuran	ND		ug/kg	4.0	1.6	
1,1,1,2-Tetrachloroethane ND ug/kg 0.50 0.13 Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	2,2-Dichloropropane	ND		ug/kg	2.0	0.20	
Bromobenzene ND ug/kg 2.0 0.14 n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	1,2-Dibromoethane	ND		ug/kg	1.0	0.28	
n-Butylbenzene ND ug/kg 1.0 0.17 sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	
sec-Butylbenzene ND ug/kg 1.0 0.15 tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	Bromobenzene	ND		ug/kg	2.0	0.14	
tert-Butylbenzene ND ug/kg 2.0 0.12 1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	n-Butylbenzene	ND		ug/kg	1.0	0.17	
1,3,5-Trichlorobenzene ND ug/kg 2.0 0.17	sec-Butylbenzene	ND		ug/kg	1.0	0.15	
	tert-Butylbenzene	ND		ug/kg	2.0	0.12	
a Objectations	1,3,5-Trichlorobenzene	ND		ug/kg	2.0	0.17	
o-Chiorotoluene ND ug/kg 2.0 0.19	o-Chlorotoluene	ND		ug/kg	2.0	0.19	



Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/21/19 19:02

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by EPA 5035 Low	- Westbore	ough Lab fo	r sample(s):	02,04,07	Batch:	WG1275448-5
p-Chlorotoluene	ND		ug/kg	2.0	0.11	
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	
Isopropylbenzene	ND		ug/kg	1.0	0.11	
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	
Naphthalene	ND		ug/kg	4.0	0.65	
n-Propylbenzene	ND		ug/kg	1.0	0.17	
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	
Ethyl ether	ND		ug/kg	2.0	0.34	
Isopropyl Ether	ND		ug/kg	2.0	0.21	
Tert-Butyl Alcohol	ND		ug/kg	20	5.1	
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	0.13	
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	0.18	
1,4-Dioxane	ND		ug/kg	80	35.	

		Acceptance	
Surrogate	%Recovery Qua	alifier Criteria	
1,2-Dichloroethane-d4	114	70-130	
Toluene-d8	113	70-130	
4-Bromofluorobenzene	106	70-130	
Dibromofluoromethane	102	70-130	



Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/22/19 06:28

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035	High - Westbord	ough Lab fo	or sample(s):	07	Batch:	WG1275471-5
Methylene chloride	ND		ug/kg	250		110
1,1-Dichloroethane	ND		ug/kg	50		7.2
Chloroform	ND		ug/kg	75		7.0
Carbon tetrachloride	ND		ug/kg	50		12.
1,2-Dichloropropane	ND		ug/kg	50		6.2
Dibromochloromethane	ND		ug/kg	50		7.0
1,1,2-Trichloroethane	ND		ug/kg	50		13.
Tetrachloroethene	ND		ug/kg	25		9.8
Chlorobenzene	ND		ug/kg	25		6.4
Trichlorofluoromethane	ND		ug/kg	200		35.
1,2-Dichloroethane	ND		ug/kg	50		13.
1,1,1-Trichloroethane	ND		ug/kg	25		8.4
Bromodichloromethane	ND		ug/kg	25		5.4
trans-1,3-Dichloropropene	ND		ug/kg	50		14.
cis-1,3-Dichloropropene	ND		ug/kg	25		7.9
1,3-Dichloropropene, Total	ND		ug/kg	25		7.9
1,1-Dichloropropene	ND		ug/kg	25		8.0
Bromoform	ND		ug/kg	200		12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25		8.3
Benzene	ND		ug/kg	25		8.3
Toluene	ND		ug/kg	50		27.
Ethylbenzene	ND		ug/kg	50		7.0
Chloromethane	ND		ug/kg	200		47.
Bromomethane	ND		ug/kg	100		29.
Vinyl chloride	ND		ug/kg	50		17.
Chloroethane	ND		ug/kg	100		23.
1,1-Dichloroethene	ND		ug/kg	50		12.
trans-1,2-Dichloroethene	ND		ug/kg	75		6.8
Trichloroethene	ND		ug/kg	25		6.8



L1936388

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/22/19 06:28

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 503	5 High - Westbord	ough Lab fo	r sample(s):	07	Batch:	WG1275471-5
1,2-Dichlorobenzene	ND		ug/kg	100		7.2
1,3-Dichlorobenzene	ND		ug/kg	100		7.4
1,4-Dichlorobenzene	ND		ug/kg	100		8.6
Methyl tert butyl ether	ND		ug/kg	100		10.
p/m-Xylene	ND		ug/kg	100		28.
o-Xylene	ND		ug/kg	50		14.
Xylenes, Total	ND		ug/kg	50		14.
cis-1,2-Dichloroethene	ND		ug/kg	50		8.8
1,2-Dichloroethene, Total	ND		ug/kg	50		6.8
Dibromomethane	ND		ug/kg	100		12.
1,2,3-Trichloropropane	ND		ug/kg	100		6.4
Styrene	ND		ug/kg	50		9.8
Dichlorodifluoromethane	ND		ug/kg	500		46.
Acetone	ND		ug/kg	500		240
Carbon disulfide	ND		ug/kg	500		230
2-Butanone	ND		ug/kg	500		110
4-Methyl-2-pentanone	ND		ug/kg	500		64.
2-Hexanone	ND		ug/kg	500		59.
Bromochloromethane	ND		ug/kg	100		10.
Tetrahydrofuran	ND		ug/kg	200		80.
2,2-Dichloropropane	ND		ug/kg	100		10.
1,2-Dibromoethane	ND		ug/kg	50		14.
1,1,1,2-Tetrachloroethane	ND		ug/kg	25		6.6
Bromobenzene	ND		ug/kg	100		7.2
n-Butylbenzene	ND		ug/kg	50		8.4
sec-Butylbenzene	ND		ug/kg	50		7.3
tert-Butylbenzene	ND		ug/kg	100		5.9
1,3,5-Trichlorobenzene	ND		ug/kg	100		8.6
o-Chlorotoluene	ND		ug/kg	100		9.6



L1936388

Project Name: WW CROSS PROPERTY Lab Number:

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 08/22/19 06:28

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
platile Organics by EPA 5035 Hig	jh - Westbor	ough Lab fo	or sample(s):	07	Batch:	WG1275471-5
p-Chlorotoluene	ND		ug/kg	100		5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150		50.
Hexachlorobutadiene	ND		ug/kg	200		8.4
Isopropylbenzene	ND		ug/kg	50		5.4
p-Isopropyltoluene	ND		ug/kg	50		5.4
Naphthalene	ND		ug/kg	200		32.
n-Propylbenzene	ND		ug/kg	50		8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100		16.
1,2,4-Trichlorobenzene	ND		ug/kg	100		14.
1,3,5-Trimethylbenzene	ND		ug/kg	100		9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100		17.
Ethyl ether	ND		ug/kg	100		17.
Isopropyl Ether	ND		ug/kg	100		11.
Tert-Butyl Alcohol	ND		ug/kg	1000		260
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100		6.4
Tertiary-Amyl Methyl Ether	ND		ug/kg	100		8.8
1,4-Dioxane	ND		ug/kg	4000		1800

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130
Dibromofluoromethane	102	70-130



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	LCSD Qual %Recover	%Recovery 'Y Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High - Westt	oorough Lab Ass	ociated sample(s): 06 B	satch: WG1275383-3 WG1275	383-4	
Methylene chloride	95	95	70-130	0	30
1,1-Dichloroethane	103	103	70-130	0	30
Chloroform	98	94	70-130	4	30
Carbon tetrachloride	93	91	70-130	2	30
1,2-Dichloropropane	101	102	70-130	1	30
Dibromochloromethane	90	90	70-130	0	30
1,1,2-Trichloroethane	99	99	70-130	0	30
Tetrachloroethene	94	92	70-130	2	30
Chlorobenzene	92	91	70-130	1	30
Trichlorofluoromethane	101	100	70-139	1	30
1,2-Dichloroethane	100	98	70-130	2	30
1,1,1-Trichloroethane	93	92	70-130	1	30
Bromodichloromethane	90	91	70-130	1	30
trans-1,3-Dichloropropene	95	94	70-130	1	30
cis-1,3-Dichloropropene	93	92	70-130	1	30
1,1-Dichloropropene	96	95	70-130	1	30
Bromoform	91	91	70-130	0	30
1,1,2,2-Tetrachloroethane	95	93	70-130	2	30
Benzene	94	93	70-130	1	30
Toluene	96	95	70-130	1	30
Ethylbenzene	97	95	70-130	2	30
Chloromethane	121	115	52-130	5	30
Bromomethane	91	86	57-147	6	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	LCS Qual %Reco		%Recovery al Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High - Westb	oorough Lab Ass	ociated sample(s): 06	Batch: WG	1275383-3 WG12753	383-4	
Vinyl chloride	103	101		67-130	2	30
Chloroethane	97	91		50-151	6	30
1,1-Dichloroethene	93	90		65-135	3	30
trans-1,2-Dichloroethene	96	95		70-130	1	30
Trichloroethene	93	92		70-130	1	30
1,2-Dichlorobenzene	92	91		70-130	1	30
1,3-Dichlorobenzene	93	93		70-130	0	30
1,4-Dichlorobenzene	94	93		70-130	1	30
Methyl tert butyl ether	93	91		66-130	2	30
p/m-Xylene	94	93		70-130	1	30
o-Xylene	93	92		70-130	1	30
cis-1,2-Dichloroethene	95	94		70-130	1	30
Dibromomethane	95	95		70-130	0	30
1,2,3-Trichloropropane	98	99		68-130	1	30
Styrene	91	89		70-130	2	30
Dichlorodifluoromethane	95	92		30-146	3	30
Acetone	114	114		54-140	0	30
Carbon disulfide	93	92		59-130	1	30
2-Butanone	111	114		70-130	3	30
4-Methyl-2-pentanone	101	98		70-130	3	30
2-Hexanone	93	90		70-130	3	30
Bromochloromethane	93	93		70-130	0	30
Tetrahydrofuran	120	116		66-130	3	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	LCS Qual %Reco		%Recovery Qual Limits	RPD	RPD Qual Limits	
Volatile Organics by EPA 5035 High - Westbo	orough Lab Ass	sociated sample(s): 06	Batch:	WG1275383-3 WG1275	5383-4		
2,2-Dichloropropane	93	92		70-130	1	30	
1,2-Dibromoethane	94	93		70-130	1	30	
1,1,1,2-Tetrachloroethane	88	86		70-130	2	30	
Bromobenzene	90	90		70-130	0	30	
n-Butylbenzene	99	97		70-130	2	30	
sec-Butylbenzene	94	93		70-130	1	30	
tert-Butylbenzene	91	90		70-130	1	30	
1,3,5-Trichlorobenzene	92	92		70-139	0	30	
o-Chlorotoluene	96	95		70-130	1	30	
p-Chlorotoluene	94	94		70-130	0	30	
1,2-Dibromo-3-chloropropane	88	87		68-130	1	30	
Hexachlorobutadiene	85	83		67-130	2	30	
Isopropylbenzene	94	92		70-130	2	30	
p-Isopropyltoluene	92	92		70-130	0	30	
Naphthalene	90	88		70-130	2	30	
n-Propylbenzene	98	96		70-130	2	30	
1,2,3-Trichlorobenzene	92	90		70-130	2	30	
1,2,4-Trichlorobenzene	93	91		70-130	2	30	
1,3,5-Trimethylbenzene	94	94		70-130	0	30	
1,2,4-Trimethylbenzene	93	93		70-130	0	30	
Ethyl ether	82	81		67-130	1	30	
Isopropyl Ether	113	112	2	66-130	1	30	
Tert-Butyl Alcohol	99	93		70-130	6	30	



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 Lab Number:

L1936388

Report Date:

08/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westbe	orough Lab Ass	ociated sample	e(s): 06 Batc	h: WG12753	383-3 WG127538	33-4		
Ethyl-Tert-Butyl-Ether	101		100		70-130	1		30
Tertiary-Amyl Methyl Ether	92		90		70-130	2		30
1,4-Dioxane	101		100		65-136	1		30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102	102	70-130
Toluene-d8	100	100	70-130
4-Bromofluorobenzene	98	97	70-130
Dibromofluoromethane	99	99	70-130

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

arameter	LCS %Recovery	Qual %	LCSD %Recovery	Qual	%Recovery Limits	, RPD	RPD Qual Limits
olatile Organics by EPA 5035 Low - Westbo	orough Lab Ass	ociated sample(s): 02,04,07	Batch: \	WG1275448-3	WG1275448-4	
Methylene chloride	84		87		70-130	4	30
1,1-Dichloroethane	95		96		70-130	1	30
Chloroform	92		94		70-130	2	30
Carbon tetrachloride	94		96		70-130	2	30
1,2-Dichloropropane	94		96		70-130	2	30
Dibromochloromethane	105		110		70-130	5	30
1,1,2-Trichloroethane	108		112		70-130	4	30
Tetrachloroethene	107		112		70-130	5	30
Chlorobenzene	101		105		70-130	4	30
Trichlorofluoromethane	76		75		70-139	1	30
1,2-Dichloroethane	103		106		70-130	3	30
1,1,1-Trichloroethane	97		99		70-130	2	30
Bromodichloromethane	96		99		70-130	3	30
trans-1,3-Dichloropropene	112		117		70-130	4	30
cis-1,3-Dichloropropene	97		100		70-130	3	30
1,1-Dichloropropene	96		96		70-130	0	30
Bromoform	106		111		70-130	5	30
1,1,2,2-Tetrachloroethane	106		111		70-130	5	30
Benzene	91		94		70-130	3	30
Toluene	107		110		70-130	3	30
Ethylbenzene	107		112		70-130	5	30
Chloromethane	92		98		52-130	6	30
Bromomethane	80		84		57-147	5	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

arameter	LCS %Recovery	Qual %	LCSD 6Recovery	Qual	%Recovery Limits	y RPD	Qual	RPD Limits
olatile Organics by EPA 5035 Low - Westbo	rough Lab Ass	ociated sample(s)): 02,04,07	Batch: \	WG1275448-3	WG1275448-4		
Vinyl chloride	97		98		67-130	1		30
Chloroethane	78		75		50-151	4		30
1,1-Dichloroethene	86		88		65-135	2		30
trans-1,2-Dichloroethene	90		92		70-130	2		30
Trichloroethene	94		97		70-130	3		30
1,2-Dichlorobenzene	108		112		70-130	4		30
1,3-Dichlorobenzene	106		110		70-130	4		30
1,4-Dichlorobenzene	106		109		70-130	3		30
Methyl tert butyl ether	92		95		66-130	3		30
p/m-Xylene	108		113		70-130	5		30
o-Xylene	107		112		70-130	5		30
cis-1,2-Dichloroethene	92		93		70-130	1		30
Dibromomethane	93		96		70-130	3		30
1,2,3-Trichloropropane	109		114		68-130	4		30
Styrene	106		112		70-130	6		30
Dichlorodifluoromethane	84		87		30-146	4		30
Acetone	102		101		54-140	1		30
Carbon disulfide	88		89		59-130	1		30
2-Butanone	93		94		70-130	1		30
4-Methyl-2-pentanone	105		111		70-130	6		30
2-Hexanone	104		109		70-130	5		30
Bromochloromethane	92		94		70-130	2		30
Tetrahydrofuran	101		108		66-130	7		30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	Qual %	LCSD 6Recovery	Qual	%Recovery Limits	r RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westh	oorough Lab Ass	ociated sample(s)	02,04,07	Batch:	WG1275448-3	WG1275448-4		
2,2-Dichloropropane	99		101		70-130	2		30
1,2-Dibromoethane	106		111		70-130	5		30
1,1,1,2-Tetrachloroethane	107		113		70-130	5		30
Bromobenzene	104		108		70-130	4		30
n-Butylbenzene	112		117		70-130	4		30
sec-Butylbenzene	111		115		70-130	4		30
tert-Butylbenzene	111		115		70-130	4		30
1,3,5-Trichlorobenzene	106		110		70-139	4		30
o-Chlorotoluene	122		125		70-130	2		30
p-Chlorotoluene	112		113		70-130	1		30
1,2-Dibromo-3-chloropropane	95		100		68-130	5		30
Hexachlorobutadiene	108		112		67-130	4		30
Isopropylbenzene	110		114		70-130	4		30
p-Isopropyltoluene	112		117		70-130	4		30
Naphthalene	107		114		70-130	6		30
n-Propylbenzene	110		114		70-130	4		30
1,2,3-Trichlorobenzene	107		113		70-130	5		30
1,2,4-Trichlorobenzene	106		111		70-130	5		30
1,3,5-Trimethylbenzene	110		115		70-130	4		30
1,2,4-Trimethylbenzene	112		116		70-130	4		30
Ethyl ether	78		78		67-130	0		30
Isopropyl Ether	99		102		66-130	3		30
Tert-Butyl Alcohol	94		102		70-130	8		30



Project Name: WW CROSS PROPERTY

Lab Number:

L1936388

Project Number: 141.05051.010

Report Date:

08/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbo	orough Lab Asso	ociated sample	(s): 02,04,07	Batch: W	/G1275448-3 V	VG1275448-4		
Ethyl-Tert-Butyl-Ether	94		98		70-130	4		30
Tertiary-Amyl Methyl Ether	92		96		70-130	4		30
1,4-Dioxane	94		99		65-136	5		30

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	112	113	70-130
Toluene-d8	112	111	70-130
4-Bromofluorobenzene	105	108	70-130
Dibromofluoromethane	100	99	70-130

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by EPA 5035 High - Westbo	orough Lab Ass	sociated sample	(s): 07 Batch	: WG1275471-3 WG127	5471-4	
Methylene chloride	102		97	70-130	5	30
1,1-Dichloroethane	103		100	70-130	3	30
Chloroform	100		96	70-130	4	30
Carbon tetrachloride	94		90	70-130	4	30
1,2-Dichloropropane	98		96	70-130	2	30
Dibromochloromethane	93		90	70-130	3	30
1,1,2-Trichloroethane	100		97	70-130	3	30
Tetrachloroethene	87		83	70-130	5	30
Chlorobenzene	90		87	70-130	3	30
Trichlorofluoromethane	119		114	70-139	4	30
1,2-Dichloroethane	108		106	70-130	2	30
1,1,1-Trichloroethane	95		91	70-130	4	30
Bromodichloromethane	94		92	70-130	2	30
trans-1,3-Dichloropropene	98		95	70-130	3	30
cis-1,3-Dichloropropene	92		90	70-130	2	30
1,1-Dichloropropene	93		92	70-130	1	30
Bromoform	93		90	70-130	3	30
1,1,2,2-Tetrachloroethane	96		91	70-130	5	30
Benzene	91		88	70-130	3	30
Toluene	92		89	70-130	3	30
Ethylbenzene	93		90	70-130	3	30
Chloromethane	114		110	52-130	4	30
Bromomethane	110		105	57-147	5	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Vinyl chloride Chloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene	117 121 98 96 90 91	ociated sample(s): 07 11: 95 92	3	WG1275471-3 WG1275 67-130 50-151 65-135	3	30 30
Chloroethane 1,1-Dichloroethene	98 96 90	95 92	3	50-151	3	
1,1-Dichloroethene	98 96 90	95 92				30
,	96 90	92		65-135		
trans-1,2-Dichloroethene	90				3	30
		88		70-130	4	30
Trichloroethene	91			70-130	2	30
1,2-Dichlorobenzene		89		70-130	2	30
1,3-Dichlorobenzene	92	89		70-130	3	30
1,4-Dichlorobenzene	93	90		70-130	3	30
Methyl tert butyl ether	103	99		66-130	4	30
p/m-Xylene	90	87		70-130	3	30
o-Xylene	90	86		70-130	5	30
cis-1,2-Dichloroethene	94	91		70-130	3	30
Dibromomethane	101	96		70-130	5	30
1,2,3-Trichloropropane	104	99		68-130	5	30
Styrene	89	86		70-130	3	30
Dichlorodifluoromethane	105	99		30-146	6	30
Acetone	128	12)	54-140	6	30
Carbon disulfide	98	94		59-130	4	30
2-Butanone	114	10	3	70-130	5	30
4-Methyl-2-pentanone	101	96		70-130	5	30
2-Hexanone	91	88		70-130	3	30
Bromochloromethane	95	92		70-130	3	30
Tetrahydrofuran	119	11:	5	66-130	3	30



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	LCSi Qual %Reco		%Recovery Qual Limits	RPD	RPD Qual Limits	
Volatile Organics by EPA 5035 High - Westb	orough Lab Ass	sociated sample(s): 07	Batch:	WG1275471-3 WG12754	71-4		
2,2-Dichloropropane	96	92		70-130	4	30	
1,2-Dibromoethane	96	93		70-130	3	30	
1,1,1,2-Tetrachloroethane	88	85		70-130	3	30	
Bromobenzene	90	86		70-130	5	30	
n-Butylbenzene	96	93		70-130	3	30	
sec-Butylbenzene	91	87		70-130	4	30	
tert-Butylbenzene	88	85		70-130	3	30	
1,3,5-Trichlorobenzene	91	88		70-139	3	30	
o-Chlorotoluene	94	90		70-130	4	30	
p-Chlorotoluene	93	90		70-130	3	30	
1,2-Dibromo-3-chloropropane	88	85		68-130	3	30	
Hexachlorobutadiene	84	84		67-130	0	30	
Isopropylbenzene	90	86		70-130	5	30	
p-Isopropyltoluene	90	86		70-130	5	30	
Naphthalene	88	84		70-130	5	30	
n-Propylbenzene	95	91		70-130	4	30	
1,2,3-Trichlorobenzene	90	87		70-130	3	30	
1,2,4-Trichlorobenzene	91	88		70-130	3	30	
1,3,5-Trimethylbenzene	91	89		70-130	2	30	
1,2,4-Trimethylbenzene	92	89		70-130	3	30	
Ethyl ether	115	110		67-130	4	30	
Isopropyl Ether	111	108		66-130	3	30	
Tert-Butyl Alcohol	108	99		70-130	9	30	



Project Name: WW CROSS PROPERTY

Lab Number:

L1936388

Project Number: 141.05051.010

Report Date:

08/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westb	orough Lab Ass	ociated sample	e(s): 07 Bato	h: WG1275	471-3 WG127547	' 1-4		
Ethyl-Tert-Butyl-Ether	106		101		70-130	5		30
Tertiary-Amyl Methyl Ether	95		93		70-130	2		30
1,4-Dioxane	100		96		65-136	4		30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
Gurrogate	/#Necovery Quar	78Necovery Quar	
1,2-Dichloroethane-d4	111	112	70-130
Toluene-d8	100	101	70-130
4-Bromofluorobenzene	98	97	70-130
Dibromofluoromethane	102	102	70-130

SEMIVOLATILES



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1936388

Report Date: 08/27/19

•/····· == \(\)

 Lab ID:
 L1936388-02
 Date Collected:
 08/12/19 09:50

 Client ID:
 B105A-S2
 Date Received:
 08/13/19

 Sample Location:
 JAFFREY, NH
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 08/23/19 11:52
Analytical Date: 08/24/19 00:58

Analyst: IM
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - Wes	stborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
Fluoranthene	ND		ug/kg	110	21.	1	
Naphthalene	ND		ug/kg	180	22.	1	
Benzo(a)anthracene	ND		ug/kg	110	20.	1	
Benzo(a)pyrene	ND		ug/kg	140	44.	1	
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1	
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1	
Chrysene	ND		ug/kg	110	19.	1	
Acenaphthylene	ND		ug/kg	140	28.	1	
Anthracene	ND		ug/kg	110	35.	1	
Benzo(ghi)perylene	ND		ug/kg	140	21.	1	
Fluorene	ND		ug/kg	180	18.	1	
Phenanthrene	ND		ug/kg	110	22.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1	
Pyrene	ND		ug/kg	110	18.	1	
1-Methylnaphthalene	ND		ug/kg	180	21.	1	
2-Methylnaphthalene	ND		ug/kg	220	22.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	56	23-120	
2-Fluorobiphenyl	62	30-120	
4-Terphenyl-d14	78	18-120	



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

SAMPLE RESULTS

Lab Number: L1936388

Report Date: 08/27/19

Lab ID: D L1936388-06

Client ID: B117-S1 ${\sf JAFFREY},\,{\sf NH}$ Sample Location:

Date Collected: 08/12/19 14:00 Date Received: 08/13/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 08/26/19 16:41

Analyst: **ALS** 97% Percent Solids:

Extraction Method: EPA 3546 **Extraction Date:** 08/23/19 11:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS - Westborough Lab										
Acenaphthene	3200	J	ug/kg	3400	440	25				
2-Chloronaphthalene	ND		ug/kg	4300	420	25				
Fluoranthene	150000		ug/kg	2600	490	25				
Naphthalene	4300		ug/kg	4300	520	25				
Benzo(a)anthracene	57000		ug/kg	2600	480	25				
Benzo(a)pyrene	49000		ug/kg	3400	1000	25				
Benzo(b)fluoranthene	66000		ug/kg	2600	720	25				
Benzo(k)fluoranthene	22000		ug/kg	2600	690	25				
Chrysene	47000		ug/kg	2600	450	25				
Acenaphthylene	12000		ug/kg	3400	660	25				
Anthracene	25000		ug/kg	2600	840	25				
Benzo(ghi)perylene	28000		ug/kg	3400	500	25				
Fluorene	10000		ug/kg	4300	420	25				
Phenanthrene	68000		ug/kg	2600	520	25				
Dibenzo(a,h)anthracene	6900		ug/kg	2600	500	25				
Indeno(1,2,3-cd)pyrene	32000		ug/kg	3400	600	25				
Pyrene	110000		ug/kg	2600	430	25				
1-Methylnaphthalene	1600	J	ug/kg	4300	500	25				
2-Methylnaphthalene	2200	J	ug/kg	5100	520	25				

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	0	Q	23-120
2-Fluorobiphenyl	0	Q	30-120
4-Terphenyl-d14	0	Q	18-120



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 Lab Number:

L1936388

Report Date: 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 08/23/19 23:24

Analyst:

RC

Extraction Method: EPA 3546

08/23/19 11:52 **Extraction Date:**

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/	MS - Westborough	Lab for s	ample(s):	02,06	Batch:	WG1276079-1
Acenaphthene	ND		ug/kg	130		17.
2-Chloronaphthalene	ND		ug/kg	160		16.
Fluoranthene	ND		ug/kg	97		18.
Naphthalene	ND		ug/kg	160		20.
Benzo(a)anthracene	ND		ug/kg	97		18.
Benzo(a)pyrene	ND		ug/kg	130		39.
Benzo(b)fluoranthene	ND		ug/kg	97		27.
Benzo(k)fluoranthene	ND		ug/kg	97		26.
Chrysene	ND		ug/kg	97		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	97		31.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	97		20.
Dibenzo(a,h)anthracene	ND		ug/kg	97		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		22.
Pyrene	ND		ug/kg	97		16.
1-Methylnaphthalene	ND		ug/kg	160		19.
2-Methylnaphthalene	ND		ug/kg	190		20.

		Acceptance
Surrogate	%Recovery Qu	ialifier Criteria
Nitrobenzene-d5	42	23-120
2-Fluorobiphenyl	52	30-120
4-Terphenyl-d14	66	18-120



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number: L1936388

Parameter	LCS %Recovery	Qual	LCSD %Recove	ry	%Recove Qual Limits	ery RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westborou	ıgh Lab Assoc	iated sample(s):	02,06 E	Batch:	WG1276079-2 WG	1276079-3			
Acenaphthene	78		75		31-137	4		50	
2-Chloronaphthalene	73		71		40-140	3		50	
Fluoranthene	79		80		40-140	1		50	
Naphthalene	81		72		40-140	12		50	
Benzo(a)anthracene	89		84		40-140	6		50	
Benzo(a)pyrene	87		83		40-140	5		50	
Benzo(b)fluoranthene	92		86		40-140	7		50	
Benzo(k)fluoranthene	95		91		40-140	4		50	
Chrysene	83		82		40-140	1		50	
Acenaphthylene	83		74		40-140	11		50	
Anthracene	88		86		40-140	2		50	
Benzo(ghi)perylene	93		87		40-140	7		50	
Fluorene	87		79		40-140	10		50	
Phenanthrene	82		78		40-140	5		50	
Dibenzo(a,h)anthracene	102		90		40-140	13		50	
Indeno(1,2,3-cd)pyrene	98		90		40-140	9		50	
Pyrene	82		80		35-142	2		50	
1-Methylnaphthalene	70		68		26-130	3		50	
2-Methylnaphthalene	76		72		40-140	5		50	



Project Name: WW CROSS PROPERTY

Lab Number:

L1936388

Project Number: 141.05051.010

Report Date:

08/27/19

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,06 Batch: WG1276079-2 WG1276079-3

Surrogate	LCS %Recovery Qua	LCSD I %Recovery Qual	Acceptance Criteria
Nitrobenzene-d5	91	90	23-120
2-Fluorobiphenyl	72	70	30-120
4-Terphenyl-d14	78	78	18-120

PETROLEUM HYDROCARBONS



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-06 D Date Collected: 08/12/19 14:00

Client ID: B117-S1 Date Received: 08/13/19
Sample Location: JAFFREY, NH Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8015D(M) Extraction Date: 08/22/19 16:32
Analytical Date: 08/23/19 20:14

Analyst: LL Percent Solids: 97%

Parameter	Result	Qualifier U	nits	RL	MDL	Dilution Factor
Petroleum Hydrocarbon Quan	titation - Westborough Lab					
ТРН	6430000	uç	/kg	654000	75200	20
Surrogate		% I	Recovery	Qualifier		ptance iteria
o-Terphenyl			45		4	10-140



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8015D(M) Extraction Method: EPA 3546
Analytical Date: 08/23/19 00:28 Extraction Date: 08/22/19 02:08

Analyst: LL

Parameter	Result	Qualifier	Units	RL		MDL
Petroleum Hydrocarbon Quantitation	- Westbord	ough Lab fo	or sample(s):	06	Batch:	WG1275324-1
TPH	6590	J	ug/kg	33000		3800

		Acceptance		
Surrogate	%Recovery Q	ualifier Criteria		
o-Terphenyl	83	40-140		



Project Name: WW CROSS PROPERTY

Lab Number:

L1936388

Project Number: 141.05051.010

Report Date:

08/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Petroleum Hydrocarbon Quantitation - West	borough Lab Asso	ciated samp	ole(s): 06 Batch:	WG127	5324-2				
ТРН	88		-		40-140	-		40	

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qual	%Recovery Qual	Criteria
o-Terphenyl	80		40-140

METALS



Project Name:WW CROSS PROPERTYLab Number:L1936388Project Number:141.05051.010Report Date:08/27/19

SAMPLE RESULTS

Lab ID:L1936388-04Date Collected:08/12/19 12:20Client ID:B113-S4Date Received:08/13/19Sample Location:JAFFREY, NHField Prep:Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 94%

Percent Solids:	94%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Antimony, Total	ND		mg/kg	2.05	0.156	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Arsenic, Total	5.09		mg/kg	0.409	0.085	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Beryllium, Total	0.290		mg/kg	0.205	0.014	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.409	0.040	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Chromium, Total	6.04		mg/kg	0.409	0.039	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Copper, Total	19.4		mg/kg	0.409	0.106	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Lead, Total	3.58		mg/kg	2.05	0.110	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.067	0.044	1	08/22/19 07:50	08/22/19 16:45	EPA 7471B	1,7471B	GD
Nickel, Total	3.97		mg/kg	1.02	0.099	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	0.818	0.106	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.409	0.116	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	0.818	0.129	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB
Zinc, Total	15.8		mg/kg	2.05	0.120	1	08/21/19 20:07	08/22/19 23:53	EPA 3050B	1,6010D	AB



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1936388

Report Date: 08/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	d Lab for sample(s)	: 04 Batcl	h: WG12	275217-	1				
Antimony, Total	ND	mg/kg	2.00	0.152	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Arsenic, Total	ND	mg/kg	0.400	0.083	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Beryllium, Total	ND	mg/kg	0.200	0.013	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Cadmium, Total	ND	mg/kg	0.400	0.039	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Chromium, Total	0.044 J	mg/kg	0.400	0.038	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Copper, Total	ND	mg/kg	0.400	0.103	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Nickel, Total	ND	mg/kg	1.00	0.097	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Selenium, Total	ND	mg/kg	0.800	0.103	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Thallium, Total	ND	mg/kg	0.800	0.126	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	08/21/19 20:07	08/22/19 21:40	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Manst	field Lab for sample(s):	04 Batch	: WG12	275390-	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	08/22/19 07:50	08/22/19 15:29	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1936388

Report Date:

08/27/19

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 04 Batch:	WG1275217-2 SRM Lot N	Number: D105-540			
Antimony, Total	162	-	19-249	-		
Arsenic, Total	101	-	70-130	-		
Beryllium, Total	99	-	75-125	-		
Cadmium, Total	96	-	75-125	-		
Chromium, Total	90	-	70-130	-		
Copper, Total	101	-	75-125	-		
Lead, Total	91	-	71-128	-		
Nickel, Total	98	-	70-131	-		
Selenium, Total	98	-	63-137	-		
Silver, Total	91	-	69-131	-		
Thallium, Total	95	-	68-132	-		
Zinc, Total	93	-	70-130	-		
otal Metals - Mansfield Lab Associated sample	e(s): 04 Batch:	WG1275390-2 SRM Lot N	Number: D105-540			
Mercury, Total	95	-	60-141	-		

INORGANICS & MISCELLANEOUS



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1936388

Report Date:

08/27/19

SAMPLE RESULTS

Lab ID: L1936388-02

Client ID: B105A-S2 Sample Location: JAFFREY, NH Date Collected:

08/12/19 09:50

Date Received:

08/13/19

Field Prep:

Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result Qualit	ier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab								
Solids, Total	92.1	%	0.100	NA	1	-	08/19/19 08:55	121,2540G	JK



Serial_No:08271910:01

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1936388

Report Date: 08/27/19

SAMPLE RESULTS

Lab ID:

L1936388-04

Client ID:

B113-S4

Sample Location: JAFFREY, NH

Date Collected:

08/12/19 12:20

Date Received:

08/13/19

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	93.9		%	0.100	NA	1	-	08/19/19 08:55	121,2540G	JK
Cyanide, Total	ND		mg/kg	1.0	0.22	1	08/17/19 16:55	08/19/19 10:48	1,9010C/9012B	LH



Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Lab Number:

L1936388

Report Date: 08/27/19

SAMPLE RESULTS

Lab ID: L1936388-06

Client ID: B117-S1 Sample Location: JAFFREY, NH Date Collected:

08/12/19 14:00

Date Received:

08/13/19

Field Prep:

Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab									
Solids, Total	96.5		%	0.100	NA	1	-	08/19/19 08:55	121,2540G	JK



L1936388

Lab Number:

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010 **Report Date:** 08/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab for sam	ple(s): 04	Batch	: WG12	273690-1				
Cyanide, Total	ND	mg/kg	0.93	0.20	1	08/17/19 16:55	08/19/19 09:59	1,9010C/9012	2B LH



Lab Control Sample Analysis Batch Quality Control

Project Name: WW CROSS PROPERTY

Lab Number:

L1936388

Project Number: 141.05051.010

Report Date:

08/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual RPD Limit	<u>s</u>
General Chemistry - Westborough Lab As	sociated sample(s): 04 Ba	atch: WG1273690-2	2 WG12	273690-3			
Cyanide, Total	56	Q	47	Q	80-120	10	35	



Lab Duplicate Analysis

Batch Quality Control

Lab Number:

L1936388

Report Date:

08/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab Associated	d sample(s): 02,04,06	QC Batch ID: WG1273964-1	QC Sample:	L1936388-0	6 Client ID: B117-S1
Solids, Total	96.5	96.8	%	0	20



Project Name:

Project Number: 141.05051.010

WW CROSS PROPERTY

Lab Number: L1936388

Report Date: 08/27/19

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

WW CROSS PROPERTY

Cooler Information

Project Name:

Cooler Custody Seal

A Absent

Project Number: 141.05051.010

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1936388-01A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		HOLD-8260HLW(14)
L1936388-01B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
L1936388-01C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
L1936388-01D	Glass 250ml/8oz unpreserved	Α	NA		2.0	Υ	Absent		HOLD-PETRO(14),HOLD-8270(14)
L1936388-01E	Glass 60ml unpreserved split	Α	NA		2.0	Υ	Absent		HOLD-METAL(180)
L1936388-02A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		8260HLW-NH(14)
L1936388-02B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
L1936388-02C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
L1936388-02D	Plastic 2oz unpreserved for TS	Α	NA		2.0	Υ	Absent		8270TCL-PAH(14),TS(7)
L1936388-02E	Glass 250ml/8oz unpreserved	Α	NA		2.0	Υ	Absent		HOLD-PETRO(14),8270TCL-PAH(14)
L1936388-02F	Glass 60ml unpreserved split	Α	NA		2.0	Υ	Absent		HOLD-METAL(180)
L1936388-03A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		HOLD-8260HLW(14)
L1936388-03B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
L1936388-03C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
L1936388-03D	Plastic 2oz unpreserved for TS	Α	NA		2.0	Υ	Absent		HOLD-8270(14)
L1936388-03E	Glass 60mL/2oz unpreserved	Α	NA		2.0	Υ	Absent		HOLD-PETRO(14)
L1936388-03F	Glass 60mL/2oz unpreserved	Α	NA		2.0	Υ	Absent		HOLD-METAL(180)
L1936388-04A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		8260HLW-NH(14)
L1936388-04B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
L1936388-04C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
L1936388-04D	Plastic 2oz unpreserved for TS	Α	NA		2.0	Υ	Absent		TS(7)
L1936388-04E	Glass 60mL/2oz unpreserved	Α	NA		2.0	Υ	Absent		TCN-9010(14)
L1936388-04F	Glass 60mL/2oz unpreserved	Α	NA		2.0	Υ	Absent		-



Lab Number: L1936388

Report Date: 08/27/19

Project Name: WW CROSS PROPERTY

Project Number: 141.05051.010

Container Information				Initial	Final	Temp			Frozen	
	Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
	L1936388-05A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		HOLD-8260HLW(14)
	L1936388-05B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
	L1936388-05C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	HOLD-8260HLW(14)
	L1936388-05D	Plastic 2oz unpreserved for TS	Α	NA		2.0	Υ	Absent		HOLD-8270(14)
	L1936388-05E	Glass 250ml/8oz unpreserved	Α	NA		2.0	Υ	Absent		HOLD-PETRO(14),HOLD-8270(14)
	L1936388-05F	Glass 60ml unpreserved split	Α	NA		2.0	Υ	Absent		HOLD-METAL(180)
	L1936388-06A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		8260HLW-NH(14)
	L1936388-06B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
	L1936388-06C	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260HLW-NH(14)
	L1936388-06D	Glass 250ml/8oz unpreserved	Α	NA		2.0	Υ	Absent		8270TCL-PAH(14),TS(7),TPH-DRO-D(14)
	L1936388-06E	Glass 60ml unpreserved split	Α	NA		2.0	Υ	Absent		HOLD-METAL(180)
	L1936388-07A	Vial MeOH preserved	Α	NA		2.0	Υ	Absent		8260H-NH(14),TS100(),8260HLW-NH(14)
	L1936388-07B	Vial water preserved	Α	NA		2.0	Υ	Absent	13-AUG-19 20:33	8260H-NH(14),TS100(),8260HLW-NH(14)



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 Report Date: 08/27/19

GLOSSARY

Acronyms

EDL

EMPC

LOQ

MS

RPD

SRM

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name:WW CROSS PROPERTYLab Number:L1936388Project Number:141.05051.010Report Date:08/27/19

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

1

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when using acetone as a solvent.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- **NJ** Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- \boldsymbol{R} Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: WW CROSS PROPERTY Lab Number: L1936388

Project Number: 141.05051.010 Report Date: 08/27/19

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 15

Page 1 of 1

Published Date: 8/15/2019 9:53:42 AM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-

Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kieldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Alphia	CHAIN OF	CUSTO)Y PA	GE_	or_/_	Date	Rec'd	l in Lab:					ALE	ЭΗΔ	Job#:	28(3)	测点	Y S	
AHARYICAL		Project Information		m 2 5455		UE#0	1000						Billing Information						
8 Walkup Drive Westboro, MA 01581 Tel 508-898-9220	320 Forbes Blvd Manefield, MA 02048 Tel: 508-822-9300	Project Name: \/	10	D	4	_	NAME OF TAXABLE PARTY.	iformat	-		iverat	les	The second second						
Client Information	Tel: 508-822-8300	Y V V	N CYO	55 Trap	2014	ACIA		The same of	DEMA	-		-					#1176	4	
Client:	Client 1									Regulatory Requirements & Project Information Requirements U Yes D No MA MCP Analytical Methods D Yes D No CT RCP Analytical Methods									
1 4 1150m	a consulting I	Project #: 4//,	050	5/11	10	U Ye	s⊔N s□N	lo Matrix	CP Analy Spike R	rtical Mi equired	ethods on this	SDG?	(Rea	I Yes uired t	OINO (for MCP	CT RCP A Inorganic	nalytical Method s)	ds	
Address: // 2	ofpriate Drive	Project Manager	tever	Rick	wiels	⊔ Ye	s 🗆 N	o GW1	Stenderd	ls (Info I	Réquire	d for N	letals	& EPI	l with Ta	ugets)		-	
Tor sulou	th NH 03801	ALPHA Quote #:				Q Oi	her Sb	ate /Fed	Program	MH	DE	SIE	PA	_ cr	fteria 🗾	15	SCRAFF	asia?	
Phone: 683-4	36-1490	Turn-Around Tim	ne				1		12	2/2	1.1	1	1	1		11	1		
Email: Sticker	y Varisonnen CC	622			4		/	2		8	Rangles Only		bi	11		//	/		
bounie best	" Yavisomenvice	Standard L	RUSH feety o	unitared Free-app	क्टरना र्ग)	ANALYSIC	?/ y	12/	The state of	1	6	Distribution of the second	M	A	//			Т	
Additional Proje	ect Information:	vale bue.			,	3	D. Sana	$\langle x \rangle$	O MC RAS	0/0	2	5	00 Oct	7	//	/ /	SAMPLE INFO	Q T	
(XHOLU)	all Soutples	Pentino	120	11/20	7	A.	Des.	2 /	10	Same la	//	5	4	* /			Filtration	î	
Fram K	2111 203					1	0/,	. / 8	14.5	/	10/3	2	XY	1	1	Min William	⊒ Fleid ⊒ Lab to do	¥	
XX water	Preserved Vac	comples !	1-4-11	irt.	1017	300	D ABL	10	2 2	/ 8/	C PEST	M	1	1	//		Preservetton	B 0	
ALPHA Lab ID	RUMSAM	FILE				1/20	é	K .	1 2 /	5 8	Downs Out	F	Y	/	//	1	Lab to do	Ţ	
(Lab Use Only)	Sample ID	Colle Date	Time	Sample Matrix	Sampler Initials	100	SVOC	METALS: CINCP 13	EPH. DRAMPES DACEAS	D PCB Target C A	E A	7/1	7/	/ /		Sam	ple Comments	14 27 28	
R	1054-51	81219	9140	5	RAK	V	X				1	#		1		Can	pre commanis		
P	1051-67	111			120	7	1				V			+					
-	2113		9:50	-		V	V	(t)			- 7	1	/	+	-				
- 5	3115-52		12:00	-	-	*	+	*	7	1		*		4					
6	113-54		13:30			V.	1	V				V							
1	116-52		13:50	1		X	X				1	4							
1	3117-51		14:00	W	业	V	V				L	/							
7	VID Blank		7.00	-		1/								+					
TO ELECTION OF	1					V								+					
														+	-			-	
							-				-	+		+	+				
	Preservative		Г			./	À					1			-				
An Amber glass	A= None B= HCI C= HNO _s		_		iner Typa	V	P	A			1	4							
G= Glass B= Bactarta cup	_	eservative e/Time	70	A	A			1	-										
Q= Other	C= Cubs F= MeOH Relinquished By: C= Other G= NeHsO.						1	Receiv		0.01	-		/Time	1=	All same	olas subm	itted are subjec	et te	
"D= BOD Bottle	H = Ne ₂ B ₂ O ₈ I= Ascorbio Acid J = NH ₄ Cr	- al	-6	8151	19 [Ned	5 /	10	2/40	w/o/	PAL	8/13	119	16	-12	Alpha's	Тегтия али	i Conditions.	(II)	
	K= Zn Acetate O= Other															erse side. : 01-01 (rev.	15.Llan.20101		

1	A MAL CATIVA													Conta		27 10 10.01	
Дірна	CHAIN OF	CUSTO	Y P	AGE_/	of	Date	e Rec'	d in Lab	8	13	3/1	9	ALI	PHA Jo	b#:L	19363	88
8 Walkup Drive	320 Forbes Blvd	Project Informati	on			Re	port I	nforma	tion - D	ata Do	elivera	ables	THE PARTY		ormation		
Westboro, MA Tel: 508-898-9	01581 Mansfield, MA 02048	Project Name: W	WCV	ss Pa	pirty	Ser	ADEx		DEMA	JL			Si	ame as C	lient info	PO#: 1/7	64
Client Information	on	Project Location:	Tall	Care I	111	CHANGA-JI			The same of	Charles I	& P	roject	and the same	Acceptant at the	equiren	The second section is	
Client: Punc	om Consulting I	Project #: 14/1	DE	6	010	O Y	es 🗆 N	No MA N	ICP Anal	ytical N	Method	s		Yes 🗆	No CTF	RCP Analytical Me	thods
Address: //		Project Manager:	170	2/10	1) 1										MCP Inor		
Portsun	cout h NH 03801	ALPHA Quote #:	even	KZK	With	UY	es O M	No NPD	ES RGP	1/1	11		115	L.	Λ	/	DO
	-436-1490	198			Service Services	Χo	ther S	tate /Fed	Progra	m/V//	U	40	= 17.4	Criter	ria/er	SSQA	/
	(Turn-Around Tin	ne				1	10	SN.	P 13	Onty			//	//		
hauss's ha	exide nusomen	Standard 🗆	RUSH (anly	confirmed if pre-ag	oproved()	1	0	15	高級	\$\\ g	les o	/_	13	///	/ /		
DOWNI CIDE	evicus viusomenv.co roject Information:	Date Due:	12.9	00.0	20	2	0 23	1/88	200	Ranges	Rang	Parin	80/5	///	/ /	/ /	T
VILDIN			, -	1	+	ANALYOU	D 524.3	XPAH 3	O KEEL	2	ds d	D Fingerprint	(30)	11	11	SAMPLE IN	IFO A
* BOLL	pall Samples	Pencin	9 20	ntar	21	4	624	1 -1	12	P. 12	8	200	9/	/ /	//	Filtration	,
Vert 1 /t	1) absorr	C	0	- E	_	1/	000	CMCP	RCR.	80	PESI	£ 5	3//	//	/ /	Lab to do	В
AN Wale	Raysom Preserved VOC	-20 mples	nequ	ir	1217	192	0 40	10/	Rang	Rang	9 0	4		11	//	Preservation Lab to do	T
ALPHA Lab ID (Lab Use Only)	Sample ID	Colle		Sample	Sampler		SVOC.	METALS:	EPH. DRanges & DRCRAS	VPH. DRanges & Tarro	TPH: DO	2		/ /	//	Lab to do	L
		Date	Time	Matrix	Initials	/ 3	00	N N	141	5/0	12		//			Sample Comme	ints s
36388-01	B105A-51	3-12-19	9140	2	BAB												
-02	B105A-52		9:56														
-03	B113-52		12:00														
-04	R112-54		2							+		+					_
	0113		12:20			+	-	_		+	\vdash	-	-	-	-		_
-05	0116-52		13:50	1	1	\vdash	4					_					
-06	15/17-51	V	14:00	V	<u>V</u>												
-07	TripBlank		X	*													
= == 10	1(8)																
Container Type	Preservative		Г			1/	1	1		+		1	+-+	_			
P= Plastic A= Amber glass V= Viai	A= None B= HCI		-	CHARLE	iner Type	V	H	A		-		1					
G= Glass B= Bacteria cup	C= HNO ₃ D= H ₂ SO ₄ E= NaOH	Dollaguich at D.		1 1120000	eservative	1/0	4	IA	222			4					
C= Cube O= Other E= Encore	F= MeOH G= NaHSO4 H = Na ₂ S ₂ O ₃	Relinquished By:	10	Ø-1>	Time	-	Ra	Recei	ed By:	M	0/	2/19	e/Time	· IZ-All	samples	submitted are su	bject to
D= BOD Bottle	J = NH ₄ Cl	6 March	141	2/13/19	1gc	1	IO	1	100	MC	811	3/19	16	Als	pha's Terr	ns and Condition:	S.
Page 71 of 71	K= Zn Acetate O= Other	1 -10	,	1.41	(0)0		-		11/5		11/			THE RESERVE		01 (rev. 12-Mar-2012)	