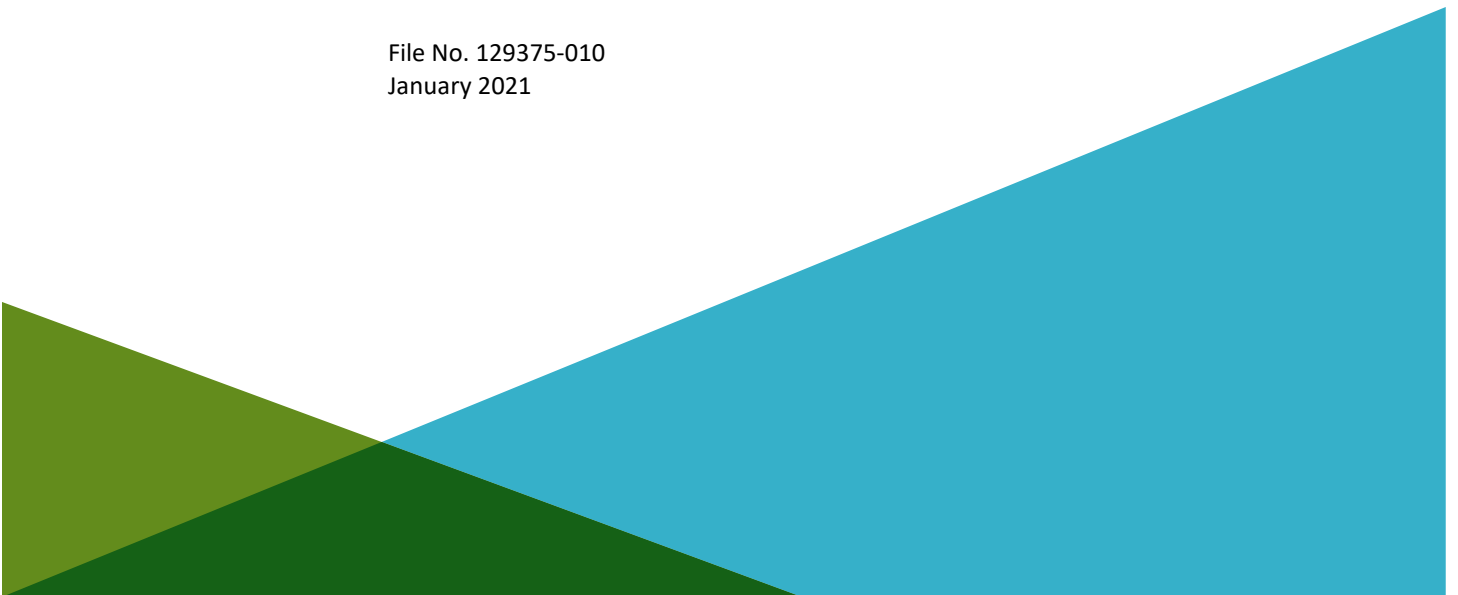


**REPORT ON  
COOPERVISION CORRECTIVE MEASURES SUMMARY REPORT  
700 NORTH ROAD  
SCOTTSVILLE, NEW YORK**

by  
Haley & Aldrich of New York  
Rochester, New York

for  
New York State Department of Environmental Conservation  
Avon, New York

File No. 129375-010  
January 2021



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8  
6274 East Avon-Lima Road, Avon, NY 14414-9516  
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February 10, 2021

BakerHostetler  
Christopher H. Marraro, Esq.  
Washington Square  
1050 Connecticut Avenue, N.W., Suite 1100  
Washington, DC 20036-5304

**Re: Corrective Measures Summary Report; January 2021  
711 North Road (CooperVision), Scottsville  
Monroe County, Site No.: V00175**

Dear Mr. Marraro;

The New York State Departments of Environmental Conservation and Health (collectively “the Departments”) have completed their review of the Corrective Measures Summary Report (the Report) dated January 2021 and prepared by Haley & Aldrich of New York for the CooperVision site - Site No. V00175.

In accordance with 6 NYCRR 375-1.6, the ~~Work Plan~~ is hereby approved with the following modifications and clarifications:

- Downgradient of MW-202 Soil Vapor Evaluation, Second Paragraph:
  - The Report states: “Three (3) soil vapor samples were collected from locations SV-6S and D and SV-201D...” and that “Target compounds, 1,1,1-TCA and 1,1-DCA were detected at concentrations of 20 and 1.67 micrograms per cubic meter (ug/m3)...” The text is revised to clarify that:
    - For sample SV-201D, target compounds, 1,1,1-TCA and 1,1-DCA were detected at concentrations of 20 and 1.67 ug/m<sup>3</sup>.
    - For samples SV-6S and SV-6D, a number of target compounds were detected. In both SV-6S and SV-6D, the compound with the highest concentration was 1,1-DCA at 2000 and 4610 ug/m<sup>3</sup>, respectively.
  - The Report incorrectly states that the soil vapor results “are well below the concentration of 100 ug/m3 where further action is recommended by the NYSDOH guidance.” This statement is deleted. Not only are the results for SV-6S and SV-6D well above 100 as ug/m<sup>3</sup>, but NYSDOH guidance states, “The State of New York does not have any standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor).”
- The Departments understand that monitoring well MW-601 was installed at the approximate location of soil boring HA-3 and that MW-601 will be added to the groundwater sampling program. The Departments also request that monitoring well BAP-01 be added to the groundwater sampling program.

This letter represents the completion of the Corrective Measures project requested in the Departments’ letter of September 10, 2020. The next steps for this site are for CooperVision to:



- Submit a revised Periodic Review Report by **March 26, 2021**. The certification period will be May 16, 2019 to February 10, 2021. Updated certification forms are attached to the electronic copy of this letter.
- Submit a revised Site Management Plan (SMP) by **April 12, 2021**. The revised SMP was originally scheduled to be submitted within 60 days of completion of the New Employee Entrance change of use project but was postponed while the Front Entrance change of use project and the Corrective Measures project were completed.

Thank you for your cooperation and please contact me at [frank.sowers@dec.ny.gov](mailto:frank.sowers@dec.ny.gov) if you have any questions or concerns regarding this letter.

Sincerely,



Frank Sowers  
Project Manager

e-Enclosure

cc: w/e-Encl.

David Pratt  
Santa McKenna  
Dusty Tinsley  
Myles Ott  
Denis Conley  
Tricia Wittreich

Vince Dick  
Mark Ramsdell  
Justin Deming  
Julia Kenney  
Bob Ooyama  
Mike Cruden

## Enclosure 1

### Certification Instructions

#### I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

#### II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

#### III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>V00175</b>		
<b>Site Name 711 North Road (Cooper Vision)</b>			
Site Address: 711 North Road      Zip Code: 14546-			
City/Town: Scottsville			
County: Monroe			
Site Acreage: 5.500			
Reporting Period: May 16, 2019 to February 10, 2021			
		YES	NO
1.	Is the information above correct?	<input type="checkbox"/>	<input type="checkbox"/>
	If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input type="checkbox"/>
	<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>		
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input type="checkbox"/>

		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
Signature of Owner, Remedial Party or Designated Representative		Date	

**Description of Institutional Controls**

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
<b>187.170-1-18</b>	CooperVision, Inc	Ground Water Use Restriction Landuse Restriction  Site Management Plan

Deed Restriction with following provisions:  
 1) Site use limited to Commercial and Industrial Uses;  
 2) groundwater use restriction;  
 3) site disturbance must comply with Site Management Plan; and  
 4) annual certification.

<b>187.170-1-18.1</b>	CooperVision, Inc.	Ground Water Use Restriction Landuse Restriction  Site Management Plan
-----------------------	--------------------	---

Deed Restriction with following provisions:  
 1) Site use limited to Commercial and Industrial Uses;  
 2) groundwater use restriction;  
 3) site disturbance must comply with Site Management Plan; and  
 4) annual certification.

**Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
<b>187.170-1-18</b>	Cover System Subsurface Barriers Vapor Mitigation
<b>187.170-1-18.1</b>	Cover System Subsurface Barriers Vapor Mitigation

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

**IC CERTIFICATIONS  
SITE NO. V00175**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I \_\_\_\_\_ at \_\_\_\_\_,  
print name print business address

am certifying as \_\_\_\_\_(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

\_\_\_\_\_  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

\_\_\_\_\_  
Date



**IC/EC CERTIFICATIONS**

**Box 7**

**Professional Engineer Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I \_\_\_\_\_ at \_\_\_\_\_,  
print name print business address

am certifying as a Professional Engineer for the \_\_\_\_\_  
(Owner or Remedial Party)

\_\_\_\_\_  
Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification

\_\_\_\_\_  
Stamp  
(Required for PE)

\_\_\_\_\_  
Date

**Enclosure 3**  
**Periodic Review Report (PRR) General Guidance**

- I. Executive Summary: (1/2-page or less)
  - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
  - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
    1. progress made during the reporting period toward meeting the remedial objectives for the site
    2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
  - C. Compliance
    1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
    2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
  - D. Recommendations
    1. recommend whether any changes to the SMP are needed
    2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
    3. recommend whether the requirements for discontinuing site management have been met.
  
- II. Site Overview (one page or less)
  - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
  - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
  
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness  
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
  
- IV. IC/EC Plan Compliance Report (if applicable)
  - A. IC/EC Requirements and Compliance
    1. Describe each control, its objective, and how performance of the control is evaluated.
    2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
    3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
    4. Conclusions and recommendations for changes.
  - B. IC/EC Certification
    1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
  
- V. Monitoring Plan Compliance Report (if applicable)
  - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
  - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
  - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
  - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
  - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
  
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
  - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
  - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
  - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

#### VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
  - 1. whether all requirements of each plan were met during the reporting period
  - 2. any requirements not met
  - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
  - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
  - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

#### VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.



HALEY & ALDRICH OF NEW YORK  
200 Town Centre Drive  
Suite 2  
Rochester, NY 14623  
585.359.9000

22 January 2021  
File No. 129375-010

New York State Department of Environmental Conservation  
6274 East Avon-Lima Road  
Rochester, NY 14414

Attention: Mr. Frank Sowers, P.E

Subject: Corrective Measures Summary Report  
CooperVision Facility Site No. V00175-8  
711 North Street  
Scottsville, New York

Dear Mr. Sowers:

This letter report provides a summary of the tasks performed in conjunction with the Corrective Measures Plan (CMP) dated 6 November 2020, requested in your Site Management (SM) Periodic Review Report (PRR) Response Letter dated 10 September 2020 and approved by New York State Department of Environmental Conservation (NYSDEC) on 12 November 2020. This report summarizes the results of the additional sampling conducted on site.

## **Downgradient of MW-202 Groundwater Evaluation**

On 2 December 2020, Haley & Aldrich of New York (Haley & Aldrich) personnel oversaw Trec Environmental to advance three (3) soil borings at the locations identified in the CMP using a Geoprobe®6620DT direct push drilling rig. HA-1 through HA-3 were advanced to depths ranging from 17.0 to 17.5 ft below ground surface (bgs). The elevation of these depths ranged between 563.15 and 552.95 mean sea level (msl). A Haley & Aldrich geologist screened soils visually and with a photoionization detector (PID). No odors or stains were observed during drilling activities.

Once the soil boring was advanced to a depth within the target elevation range corresponding to within the 10-foot screened interval for MW-202, a groundwater grab sample was obtained using hydro-punch sampling methods. Groundwater samples were submitted to Alpha Analytical (Alpha) of Westborough MA, a New York State Department of Health (NYSDOH) approved environmental laboratory, for the analysis of Site contaminants of concern (COC), 1,1,1- trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), trichloroethene (TCE), chloroethane (CA) and vinyl chloride (VC) in accordance with EPA method 8260C.

Groundwater grab samples collected from soil borings HA-1 and HA-2 did not exhibit detectable concentrations of the target compounds. The groundwater grab sample collected from soil boring HA-3 exhibited concentrations of 1,1-DCA and 1,1-DCE below the NYSDEC Class GA water quality criteria of

5.0 micrograms per liter (ug/L) provided in the Technical and Operational Guidance Series Memorandum 1.1.1. (TOGS 1.1.1). The results of the laboratory analysis are provided in Table 1 and the laboratory report is provided as Appendix A.

On 16 December 2020, Trec Environmental re-mobilized to the Site to install a one-inch monitoring well, identified as MW-601 at the approximate location of soil boring HA-3. The well was constructed with a 10 foot well screen installed at an elevation ranging from 562.12 to 552.12 to correspond with the groundwater monitoring interval for MW-202. The well was constructed with a 12-foot sand pack to extend above the screen interval and a cement/bentonite grout to ground surface with a flush mount concrete surface completion. The well construction details for MW-601 are provided in Appendix B.

Following installation, MW-601 was developed to remove suspended solids from the sand pack and allowed to equilibrate with the static groundwater conditions for two weeks prior to collection of a groundwater sample for laboratory analysis.

On 4 January 2021, Haley & Aldrich personnel purged MW-601 in accordance with the low-flow low-stress sampling method in the approved Site Management Plan (SMP). The groundwater sample was collected and submitted to Alpha for the analysis of the Site COC in accordance with EPA Method 8260C. The results of the analysis were consistent with the results for the grab sample collected from HA-3 and are also presented in Table 1.

## **Downgradient of MW-202 Soil Vapor Evaluation**

On 2 December 2020, Trec Environmental installed two soil vapor points, one shallow and one deep labeled SV-201 S and D, at the locations along Briarwood Lane identified in the CMP and presented on Figure 1. The shallow point was advanced to a depth of three (3) feet below ground surface and the deep point to a depth of five (5) feet below ground surface. The point installation consisted of a screened interval surrounded by a sand pack and backfilled with bentonite to grade and completed with a concrete collar and road box.

On 7 December 2020, Haley & Aldrich collected soil vapor samples in accordance with *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH Guidance). Helium tracer gas testing to confirm the integrity of the sample point was conducted on each of the soil vapor sampling locations prior to the collection of samples. Three (3) soil vapor samples were collected from locations SV-6S and D and SV-201D using 2.7-liter passivated SUMMA® canister and analyzed by Alpha in accordance with EPA Method TO-15 for the Site COC. A sample was not collected from SV-201S due to water present in the sample tubing. One ambient air sample was collected upwind of the soil vapor sample locations to evaluate background conditions. Target compounds, 1,1,1-TCA and 1,1-DCA were detected at concentrations of 20 and 1.67 micrograms per cubic meter (ug/m<sup>3</sup>) which are well below the concentration of 100 ug/m<sup>3</sup> where further action is recommended by the NYSDOH guidance. Results of the soil vapor sampling are presented in Table 2.

## October 2020 Groundwater Monitoring

The bi-annual groundwater monitoring was conducted in October 2020 in accordance with the approved SMP. The groundwater samples were analyzed at Eurofins Test America, Inc. of Amherst, NY, a NYSDOH approved environmental laboratory. Tables 3 through 5 present the monitoring information collected during the reporting period. Groundwater sampling field forms are provided in Appendix C and the laboratory reports are provided in Appendix D. Overall, the results are consistent with the findings from previous sampling events: that the biodegradation of the Site COCs continues to be occurring at the Site.

The results of the analysis of the groundwater sample collected from MW-202 in October 2020 were approximately 30% lower in concentration than October 2019. Time-series charts of the results for the concentration of 1,1-DCE and 1,1-DCA detected at MW-202 from 2010 through 2020 are attached to this report as Figures 2 and 3. However, the inclusion of this data within the Mann Kendall Trend analysis for MW-202, indicates an increasing trend for these COCs at this monitoring well location.

## Conclusions and Recommendations

Based on the results of the additional groundwater and soil vapor investigation conducted at the Site in December 2020, Haley & Aldrich has made the following conclusions:

- 1,1,1-TCA, 1,1-DCA, 1,1-DCE, CA and VC in groundwater above the NYSDEC TOGS 1.1.1 Class GA guidance values do not extend beyond the location of MW-601.
- Groundwater data for MW-202 in October 2020 demonstrates a reduction in the site COCs concentration indicating water quality improvement in this area of the Site.
- There is no impact from Site COCs in the soil vapor in the vicinity of SV-201 S/D installed east of MW-202 across Briarwood Lane from the Site; The remedial measure installed in 2008 is mitigating potential impacted soil vapor migration as the concentration of the Site COCs detected in soil vapor samples collected at SV-6S/D are generally lower than previous sampling events.

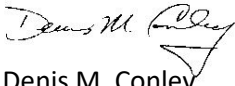
Based on these conclusions, Haley & Aldrich makes the following recommendations:

- Due to the lower soil vapor concentrations observed at SV6S/D and results of the analysis of soil vapor at SV-201 D, no further investigation of soil vapor impacts is warranted.
- Continue to monitor the groundwater quality downgradient of MW-202 through the collection of representative groundwater samples from MW-601 as part of the periodic groundwater monitoring activities at the Site.
- The groundwater monitoring parameters should include:
  - Water level monitoring
  - Water quality parameters including pH, oxidation reduction potential (ORP), specific conductance, turbidity, and temperature.
  - Laboratory analysis of the Site COCs in accordance with EPA Method 8260C at a NYSDOH approved environmental laboratory.

## Closing

We appreciate the opportunity to provide this report of the implementation of the Corrective Measures Plan to the Department. Please do not hesitate to call us, if you have any questions concerning the information in this report.

Sincerely yours,  
HALEY & ALDRICH OF NEW YORK



Denis M. Conley  
Senior Scientist



Mark N. Ramsdell, P.E.  
Senior Project Manager

### Enclosures:

- Table 1 – Summary of Corrective Measures – Groundwater Analytical Results
- Table 2 – Summary of Corrective Measures – Soil Vapor Analytical Results
- Table 3 – Summary of Analytical Results – Groundwater Source Area Wells
- Table 4 – Summary of Analytical Results – Groundwater Mid-Gradient Wells
- Table 5 – Summary of Analytical Results – Groundwater Down-Gradient Wells
- Figure 1 – Site Plan
- Figure 2 – MW-202 1,1-Dichloroethane Time Series Chart
- Figure 3 – MW-202 1,1-Dichloroethene Time Series Chart
- Appendix A - Corrective Measures Groundwater Laboratory Reports
- Appendix B - MW-601 Well Construction Log
- Appendix C – October 2020 Groundwater Field Forms
- Appendix D – October 2020 Groundwater Laboratory Report

c: CooperVision; Attn: Tricia Wittreich, Damaris Santiago Lebron, Bob Ooyama, Myles Ott  
Baker Hostetler; Attn: Christopher H. Marraro, Esq.  
Haley & Aldrich; Attn: Vince Dick, Santa McKenna

## **TABLES**



TABLE 1  
SUMMARY OF CORRECTIVE MEASURES - GROUNDWATER  
ANALYTICAL RESULTS  
COOPERVISION  
SCOTTSVILLE, NY

LOCATION			HA-1	HA-2	HA-3	-	MW-601
HALEY & ALDRICH SAMPLE ID			HA1-120220-1130	HA2-120220-1445	HA3-120220-1630	TRIP BLANK	HA3-010421-1150*
SAMPLING DATE			12/2/2020	12/2/2020	12/2/2020	12/2/2020	1/4/2021
LAB SAMPLE ID			L2053622-01	L2053622-02	L2053622-03	L2053622-04	L2100131-01
SAMPLE TYPE			WATER	WATER	WATER	WATER	WATER
	NYSDEC TOGS	Units	Results	Results	Results	Results	Results
Volatile Organics by GC/MS							
1,1-Dichloroethane	5	ug/l	ND (2.5)	ND (2.5)	<b>3.7</b>	ND (2.5)	<b>1.9 J</b>
1,1,1-Trichloroethane	5	ug/l	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
Vinyl chloride	2	ug/l	ND (1)	ND (1)	ND (1)	ND (1)	<b>0.10 J</b>
Chloroethane	5	ug/l	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
1,1-Dichloroethene	5	ug/l	ND (0.5)	ND (0.5)	<b>1.1</b>	ND (0.5)	<b>1.5</b>
Trichloroethene	5	ug/l	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)

Notes:

**Notes:**

1. NYSDEC Technical Operational Guidance Series Memorandum 1.1.1 (1998) Class GA Ambient Water Quality Guidance Value.
2. Results in **bold** were detected.
3. ND = Not detected at a concentration above the reporting limit.  
J = Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL).
4. Samples analyzed at Alpha Analytical in Westborough, MA
5. \* Groundwater sample was collected from MW-601.

**TABLE 2  
SUMMARY OF CORRECTIVE MEASURES - SOIL VAPOR  
ANALYTICAL RESULTS  
COOPERVISION  
SCOTTSVILLE, NY**

LOCATION	SV-6										SV-201	Ambient Air
SAMPLE ID	SV-6 (S)					SV-6 (D)					SV-201 (D)	OA01-120720
SAMPLE DEPTH	3.0 ft.					4.8 ft.					5.0 ft.	-
DATE SAMPLED	5/1/2008	6/12/2008	10/14/2008	12/30/2008	12/7/2020	6/16/2008	10/14/2008	12/30/2008	12/7/2020	12/7/2020	12/7/2020	
<b>VOLATILE ORGANICS</b>												
1,1,1-Trichloroethane	2700	4200	5100	1700	276	8200	5900	3100	584	20	ND(0.20)	
1,1-Dichloroethane	1000	2900	3200	680	2000	5900	3900	2100	4610	ND(0.81)	ND(0.20)	
1,1-Dichloroethene	4500	4500	5100	2400	1780	9200	5600	3800	3500	1.67	ND(0.20)	
Trichloroethene	NA	NA	NA	NA	88.7	NA	NA	NA	190	ND (1.1)	ND(0.20)	
Chloroethane	36	28	ND (29)	11	8.79	56	ND (48)	ND (19)	20.5	ND (0.53)	ND(0.20)	
Vinyl Chloride	10	29	23	7.2	ND (5.1)	82	34	15	ND (6.9)	ND (0.51)	ND(0.20)	

Notes & Abbreviations:

1. Volatile organic compounds were collected using 2-hour, 2.7 Liter Summa Canisters and analyzed via method TO-15.
2. The tables represent all data as reported from the lab in concentration format (ug/m3).
3. ND - Not detected above laboratory reporting limits (RL).
4. NA - Not analyzed.
5. ft. - feet below ground surface (bgs).
6. (S) Shallow (D) Deep

**TABLE 3**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**SOURCE AREA WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	MW-205	MW-205	MW-205	MW-205	MW-205	OWS-302	OWS-302	OWS-302	OWS-302
Sample Name	NYSDEC	MW-205-102518-1615	MW205-042319-1540	MW205-102419-1055	MW-205-040720-1545	MW-205-102920-1620	OWS-302-102618-1320	OWS302-042419-1020	OWS302-102419-1530	OWS-302-040720-1350
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)
<b>Field Parameters</b>										
Temperature, Field (Deg C)	--	18.3	19.3	18.7	19.1	18	17.3	12.3	18.5	16.4
Dissolved Oxygen, Field (mg/L)	--	0.15	20.44	0.44	0.37	5.93	0.25	16.03	0.28	0.73
Specific Conductance, Field (mS/cm)	--	8.01	7.62	7.54	0.453	4.74	12.1	10.65	10.23	11.01
ORP, Field (mv)	--	-83.1	-60.1	-82.9	-54.2	-20.7	-103.6	-103	-110.5	-41.3
Turbidity, Field (NTU)	--	2.18	19.8	6.86	4.86	0.64	18.7	18.4	12.5	23.0
pH, Field (pH units)	--	6.05	6.03	10.08	6.33	7.11	6.94	6.97	10.12	6.96
<b>Volatile Organic Compounds (ug/L)</b>										
1,1,1,2-Tetrachloroethane	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,1,1-Trichloroethane	5	54,000	51,200	46,900	32,000	27,000	ND (500)	ND (100)	ND (100)	ND (500)
1,1,2,2-Tetrachloroethane	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
1,1,2-Trichloroethane	1	ND (10,000)	18.4	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
1,1-Dichloroethane	5	270,000 J	247,000	221,000	200,000	140,000	ND (500)	209	253	190 J
1,1-Dichloroethene	5	ND (10,000)	2,680	2,260	2,800 J	1,800 J	ND (500)	ND (100)	ND (100)	ND (500)
1,1-Dichloropropene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,2,3-Trichlorobenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,2,3-Trichloropropane	--	--	ND (2.5)	ND (1,250)	--	--	--	ND (2.5)	ND (250)	--
1,2,3-Trimethylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,2,4-Trichlorobenzene	5	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
1,2,4-Trimethylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,2-Dibromo-3-chloropropane (DBCP)	0.04	--	ND (5)	ND (2,500)	ND (4,000)	ND (4,000)	--	ND (5)	ND (500)	ND (500)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
1,2-Dichlorobenzene	3	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
1,2-Dichloroethane	0.6	ND (10,000)	58.7	ND (500)	ND (4,000)	ND (4,000)	ND (500)	7.99	ND (100)	ND (500)
1,2-Dichloropropane	1	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
1,3,5-Trimethylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,3-Dichlorobenzene	3	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
1,3-Dichloropropane	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
1,4-Dichlorobenzene	3	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
2,2-Dichloropropane	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
2-Butanone (Methyl Ethyl Ketone)	50	24,000	ND (10)	ND (5,000)	ND (40,000)	ND (40,000)	ND (1,000)	ND (10)	ND (1,000)	ND (5,000)
2-Chlorotoluene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
2-Hexanone	50	ND (20,000)	--	--	ND (20,000)	ND (20,000)	ND (1,000)	--	--	ND (2,500)
2-Phenylbutane (sec-Butylbenzene)	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
4-Chlorotoluene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	--	ND (20,000)	ND (10)	ND (5,000)	ND (20,000)	ND (20,000)	ND (1,000)	ND (10)	ND (1,000)	ND (2,500)
Acetone	50	45,000	ND (25,000)	ND (25,000)	ND (40,000)	ND (40,000)	ND (1,000)	ND (50)	ND (5,000)	ND (5,000)
Acrolein	--	--	ND (50)	ND (25,000)	--	--	--	ND (50)	ND (5,000)	--
Acrylonitrile	--	--	ND (10)	ND (5,000)	--	--	--	ND (10)	ND (1,000)	--
Benzene	1	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Bromobenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Bromodichloromethane	50	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Bromoform	50	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Bromomethane (Methyl Bromide)	5	ND (10,000)	ND (5)	ND (2,500)	ND (4,000)	ND (4,000)	ND (500)	ND (5)	ND (500)	ND (500)
Carbon disulfide	60	ND (20,000)	--	--	ND (4,000)	ND (4,000)	ND (1,000)	--	--	ND (500)
Carbon tetrachloride	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Chlorobenzene	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Chloroethane	5	ND (10,000)	2,830	6,850	13,000	31,000	14,000	7,740	13,000	11,000
Chloroform (Trichloromethane)	7	ND (10,000)	ND (5)	ND (2,500)	ND (4,000)	ND (4,000)	ND (500)	ND (5)	ND (500)	ND (500)
Chloromethane (Methyl Chloride)	5	ND (10,000)	ND (2.5)	ND (1,250)	ND (4,000)	ND (4,000)	ND (500)	ND (2.5)	ND (250)	ND (500)
cis-1,2-Dichloroethene	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
cis-1,3-Dichloropropene	0.4	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)

**TABLE 3  
SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER  
SOURCE AREA WELLS  
COOPERVISION  
SCOTTSVILLE, NY**

Location	Action Level	MW-205	MW-205	MW-205	MW-205	MW-205	OWS-302	OWS-302	OWS-302	OWS-302
Sample Name	NYSDEC	MW-205-102518-1615	MW205-042319-1540	MW205-102419-1055	MW-205-040720-1545	MW-205-102920-1620	OWS-302-102618-1320	OWS302-042419-1020	OWS302-102419-1530	OWS-302-040720-1350
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)
Cyclohexane	--	--	--	--	ND (4,000)	ND (4,000)	--	--	--	ND (500)
Cymene (p-Isopropyltoluene)	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Dibromochloromethane	50	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Dibromomethane	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Dichlorodifluoromethane (CFC-12)	5	--	ND (5)	ND (2,500)	ND (4,000)	ND (4,000)	--	ND (5)	ND (500)	ND (500)
Diisopropyl ether (DIPE)	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Ethylbenzene	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Hexachlorobutadiene	0.5	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Isopropylbenzene (Cumene)	5	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
m,p-Xylenes	5	ND (10,000)	--	--	--	--	ND (500)	--	--	--
Methyl acetate	--	--	--	--	ND (10,000)	ND (10,000)	--	--	--	ND (1,300)
Methyl cyclohexane	--	--	--	--	ND (4,000)	ND (4,000)	--	--	--	ND (500)
Methyl Tert Butyl Ether	10	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
Methylene chloride	5	ND (10,000)	<b>32.3</b>	ND (2,500)	ND (4,000)	ND (4,000)	ND (500)	ND (5)	ND (500)	ND (500)
Naphthalene	10	--	ND (5)	ND (2,500)	--	--	--	ND (5)	ND (500)	--
n-Butylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
n-Propylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
o-Xylene	5	ND (10,000)	--	--	--	--	ND (500)	--	--	--
Styrene	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
tert-Butylbenzene	--	--	ND (1)	ND (500)	--	--	--	ND (1)	ND (100)	--
Tetrachloroethene	5	ND (10,000)	<b>39.9</b>	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Toluene	5	ND (10,000)	<b>17.2</b>	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
trans-1,2-Dichloroethene	5	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
trans-1,3-Dichloropropene	0.4	ND (10,000)	ND (1)	ND (500)	ND (4,000)	ND (4,000)	ND (500)	ND (1)	ND (100)	ND (500)
Trichloroethene	5	ND (10,000)	<b>3.74</b>	ND (500)	ND (4,000)	ND (4,000)	ND (500)	<b>1.03</b>	ND (100)	ND (500)
Trichlorofluoromethane (CFC-11)	5	--	ND (5)	ND (2,500)	ND (4,000)	ND (4,000)	--	ND (5)	ND (500)	ND (500)
Trifluorotrchloroethane (Freon 113)	5	--	ND (1)	ND (500)	ND (4,000)	ND (4,000)	--	ND (1)	ND (100)	ND (500)
Vinyl chloride	2	ND (10,000)	<b>115</b>	ND (500)	ND (4,000)	ND (4,000)	ND (500)	<b>24.6</b>	ND (100)	ND (500)
Xylene (total)	5	--	ND (3)	ND (1,500)	ND (8,000)	ND (8,000)	--	ND (3)	ND (300)	ND (1,000)
<b>Acids (mg/L)</b>										
Acetic acid	--	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,720</b>	<b>1560</b>	--	--	--	--
Butanoic acid	--	<b>3,200</b>	<b>2,900</b>	<b>2,700</b>	<b>2,550</b>	<b>2550</b>	--	--	--	--
Formic Acid	--	--	ND (500)	--	--	--	--	--	--	--
Hexanoic Acid	--	--	<b>660</b>	--	--	--	--	--	--	--
i-Hexanoic Acid	--	--	<b>4 J</b>	--	--	--	--	--	--	--
Isovaleric Acid	--	--	ND (10)	--	--	--	--	--	--	--
Lactic Acid	--	ND (20)	ND (20)	ND (2)	ND (50)	ND (5)	--	--	--	--
Pentanoic acid	--	--	<b>320</b>	--	--	--	--	--	--	--
Propionic acid	--	<b>970</b>	<b>1,000</b>	<b>1,000</b>	<b>1,080</b>	<b>718</b>	--	--	--	--
Pyruvic Acid	--	ND (10)	<b>930</b>	<b>830</b>	ND (75)	ND (7.5)	--	--	--	--
<b>Inorganic Compounds (mg/L)</b>										
Iron, Dissolved	0.3	<b>101</b>	<b>37.5</b>	<b>40.4 J-</b>	<b>89.9</b>	<b>73.2</b>	--	--	--	--
Iron, Total	0.3	<b>101</b>	<b>103</b>	<b>42.2 J-</b>	<b>86.8</b>	<b>77</b>	--	--	--	--
<b>Other (mg/L)</b>										
Alkalinity, Total (as CaCO3)	--	<b>3,080</b>	<b>3,950 J-</b>	<b>3,220</b>	<b>4,950 J</b>	<b>5040</b>	--	--	--	--
Chloride	250	<b>668</b>	<b>620</b>	<b>694</b>	<b>727</b>	<b>725</b>	--	--	--	--
Nitrate (as N)	--	ND (1)	<b>24.2 J+</b>	ND (0.1) J	ND (0.05) J	<b>0.029 J</b>	--	--	--	--
Nitrite (as N)	--	ND (1)	<b>14.8 J+</b>	<b>5.29 J+</b>	ND (0.05) J	ND (0.05) J	--	--	--	--
Sulfate	250	ND (2)	ND (5)	<b>47.3 J</b>	<b>1.9 J</b>	ND (5)	--	--	--	--
Sulfide	--	1 R	ND (0.05)	ND (0.05)	ND (1)	ND (1)	--	--	--	--

**TABLE 3  
SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER  
SOURCE AREA WELLS  
COOPERVISION  
SCOTTSVILLE, NY**

	Location	Action Level	MW-205	MW-205	MW-205	MW-205	MW-205	OWS-302	OWS-302	OWS-302	OWS-302
	Sample Name	NYSDEC	MW-205-102518-1615	MW205-042319-1540	MW205-102419-1055	MW-205-040720-1545	MW-205-102920-1620	OWS-302-102618-1320	OWS302-042419-1020	OWS302-102419-1530	OWS-302-040720-1350
	Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020
	Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
	Sample Depth (bgs)	Values	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	21.2 - 28 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)	13 - 17.8 (ft)
Total Organic Carbon (TOC)	--	--	--	--	--	--	--	--	--	--	--
<b>Dissolved Gases (mg/L)</b>											
Butane	--	--	--	<b>0.00037 J-</b>	--	--	--	--	--	--	--
Ethane	--	ND (0.1)	--	<b>0.027 J-</b>	<b>0.0364</b>	ND (0.83)	ND (0.330)	--	--	--	--
Ethene	--	ND (0.1)	--	<b>0.023 J-</b>	<b>0.0301</b>	ND (0.77)	ND (0.310)	--	--	--	--
Isobutane	--	--	--	<b>0.00025 J-</b>	--	--	--	--	--	--	--
Methane	--	<b>7</b>	--	<b>9.2 J-</b>	<b>20.3</b>	<b>14</b>	<b>13</b>	--	--	--	--
Propane	--	ND (0.1)	--	<b>0.00081 J-</b>	--	--	--	--	--	--	--

**Notes:**

- Results shaded orange exceed the following criteria:  
NYSDEC TOGS Ambient Water Class GA
- Results in **bold** were detected.
- ND = Not detected at a concentration above the reporting limit.  
J - Estimated result  
J+ is estimated biased high.  
J- is estimated biased low.  
R - Data rejected by validator  
-- Not Analyzed
- October 2018 samples analyzed at ALS Environmental of Rochester, NY  
April 2019 samples were analyzed at Pace Analytical Services of Mt. Juliet, TN.

**TABLE 3**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**SOURCE AREA WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	OWS-302
Sample Name	NYSDEC	OWS-302-103020-1015
Sample Date	TOGS 1.1.1	10/30/2020
Sample Type	Guidance	Normal
Sample Depth (bgs)	Values	13 - 17.8 (ft)

**Field Parameters**

Temperature, Field (Deg C)	--	<b>15</b>
Dissolved Oxygen, Field (mg/L)	--	<b>6.77</b>
Specific Conductance, Field (mS/cm)	--	<b>1.29</b>
ORP, Field (mv)	--	<b>-43.2</b>
Turbidity, Field (NTU)	--	<b>7.53</b>
pH, Field (pH units)	--	<b>7.59</b>

**Volatile Organic Compounds (ug/L)**

1,1,1,2-Tetrachloroethane	--	--
1,1,1-Trichloroethane	5	ND (500)
1,1,2,2-Tetrachloroethane	5	ND (500)
1,1,2-Trichloroethane	1	ND (500)
1,1-Dichloroethane	5	ND (500)
1,1-Dichloroethene	5	ND (500)
1,1-Dichloropropene	--	--
1,2,3-Trichlorobenzene	--	--
1,2,3-Trichloropropane	--	--
1,2,3-Trimethylbenzene	--	--
1,2,4-Trichlorobenzene	5	ND (500)
1,2,4-Trimethylbenzene	--	--
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ND (500)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	ND (500)
1,2-Dichlorobenzene	3	ND (500)
1,2-Dichloroethane	0.6	ND (500)
1,2-Dichloropropane	1	ND (500)
1,3,5-Trimethylbenzene	--	--
1,3-Dichlorobenzene	3	ND (500)
1,3-Dichloropropane	--	--
1,4-Dichlorobenzene	3	ND (500)
2,2-Dichloropropane	--	--
2-Butanone (Methyl Ethyl Ketone)	50	ND (5,000)
2-Chlorotoluene	--	--
2-Hexanone	50	ND (2,500)
2-Phenylbutane (sec-Butylbenzene)	--	--
4-Chlorotoluene	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	--	ND (2,500)
Acetone	50	ND (5,000)
Acrolein	--	--
Acrylonitrile	--	--
Benzene	1	ND (500)
Bromobenzene	--	--
Bromodichloromethane	50	ND (500)
Bromoform	50	ND (500)
Bromomethane (Methyl Bromide)	5	ND (500)
Carbon disulfide	60	ND (500)
Carbon tetrachloride	5	ND (500)
Chlorobenzene	5	ND (500)
Chloroethane	5	<b>12,000</b>
Chloroform (Trichloromethane)	7	ND (500)
Chloromethane (Methyl Chloride)	5	ND (500)
cis-1,2-Dichloroethene	5	ND (500)
cis-1,3-Dichloropropene	0.4	ND (500)

**TABLE 3**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**SOURCE AREA WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	OWS-302
Sample Name	NYSDEC	OWS-302-103020-1015
Sample Date	TOGS 1.1.1	10/30/2020
Sample Type	Guidance	Normal
Sample Depth (bgs)	Values	13 - 17.8 (ft)
Cyclohexane	--	ND (500)
Cymene (p-Isopropyltoluene)	--	--
Dibromochloromethane	50	ND (500)
Dibromomethane	--	--
Dichlorodifluoromethane (CFC-12)	5	ND (500)
Diisopropyl ether (DIPE)	--	--
Ethylbenzene	5	ND (500)
Hexachlorobutadiene	0.5	--
Isopropylbenzene (Cumene)	5	ND (500)
m,p-Xylenes	5	--
Methyl acetate	--	ND (1,300)
Methyl cyclohexane	--	ND (500)
Methyl Tert Butyl Ether	10	ND (500)
Methylene chloride	5	ND (500)
Naphthalene	10	--
n-Butylbenzene	--	--
n-Propylbenzene	--	--
o-Xylene	5	--
Styrene	5	ND (500)
tert-Butylbenzene	--	--
Tetrachloroethene	5	ND (500)
Toluene	5	ND (500)
trans-1,2-Dichloroethene	5	ND (500)
trans-1,3-Dichloropropene	0.4	ND (500)
Trichloroethene	5	ND (500)
Trichlorofluoromethane (CFC-11)	5	ND (500)
Trifluorotrchloroethane (Freon 113)	5	ND (500)
Vinyl chloride	2	ND (500)
Xylene (total)	5	ND (1,000)
<b>Acids (mg/L)</b>		
Acetic acid	--	--
Butanoic acid	--	--
Formic Acid	--	--
Hexanoic Acid	--	--
i-Hexanoic Acid	--	--
Isovaleric Acid	--	--
Lactic Acid	--	--
Pentanoic acid	--	--
Propionic acid	--	--
Pyruvic Acid	--	--
<b>Inorganic Compounds (mg/L)</b>		
Iron, Dissolved	0.3	--
Iron, Total	0.3	--
<b>Other (mg/L)</b>		
Alkalinity, Total (as CaCO3)	--	--
Chloride	250	--
Nitrate (as N)	--	--
Nitrite (as N)	--	--
Sulfate	250	--
Sulfide	--	--

**TABLE 3  
SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER  
SOURCE AREA WELLS  
COOPERVISION  
SCOTTSVILLE, NY**

	Location	Action Level	OWS-302
	Sample Name	NYSDEC	OWS-302-103020-1015
	Sample Date	TOGS 1.1.1	10/30/2020
	Sample Type	Guidance	Normal
	Sample Depth (bgs)	Values	13 - 17.8 (ft)
<hr/>			
Total Organic Carbon (TOC)		--	--
<b>Dissolved Gases (mg/L)</b>			
Butane		--	--
Ethane		--	--
Ethene		--	--
Isobutane		--	--
Methane		--	--
Propane		--	--

**Notes:**

1. Results shaded orange exceed the following criteria:  
NYSDEC TOGS Ambient Water Class GA
2. Results in **bold** were detected.
3. ND = Not detected at a concentration above the reporting limit  
J - Estimated result  
    J+ is estimated biased high.  
    J- is estimated biased low.  
R - Data rejected by validator  
-- Not Analyzed
4. October 2018 samples analyzed at ALS Environmental of Roc  
April 2019 samples were analyzed at Pace Analytical Services



**TABLE 4**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**MID-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	MW-3	MW-3	MW-3	MW-3	MW-3	MW-501	MW-501	MW-501	MW-501	MW-501	MW-502	MW-502	MW-502	MW-502	MW-502
Sample Name	NYSDEC	MW3-102518-1000	MW3-042319-1055	MW3-102419-1230	MW3-040720-1100	MW3-102920-0945	MW501-102618-1235	MW501-042419-1150	MW501-102419-1430	MW501-040720-1240	MW501-102920-1535	MW502-102618-1115	MW502-042419-1325	MW502-102419-1315	MW502-040720-1155	MW502-102920-1340
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020	10/29/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)
<b>Field Parameters</b>																
Temperature, Field (Deg C)	--	14.8	15.2	17.2	14.0	13.1	17.8	12.8	19.2	14.5	17.1	14.8	14.0	16.4	15.5	14.1
Dissolved Oxygen, Field (mg/L)	--	5.3	3.76	2.07	6.47	7.6	0.22	79.75	0.59	0.29	8.22	0.07	342.9	0.24	1.66	1.92
Specific Conductance, Field (mS/cm)	--	2.24	1.72	1.85	1.48	0.61	12.06	22.22	7.99	13.20	2.69	2.77	2.83	2.87	2.68	2.38
ORP, Field (mv)	--	-22.4	20.7	-60.8	10.2	69.4	-79.1	-68.3	-119.7	-99.8	-62.2	-130	-103	-113.5	-92.3	-69.9
Turbidity, Field (NTU)	--	93.6	32.3	24.6	15.8	11.18	73.5	84.6	62.4	11.7	92.2	0.12	16.9	63.8	70.4	19.8
pH, Field (pH units)	--	7.23	7.45	10.37	7.44	7.97	7.38	7.25	10.87	7.57	7.68	7.11	7.0	10.58	7.06	7.38
<b>Volatile Organic Compounds (ug/L)</b>																
1,1,1,2-Tetrachloroethane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,1,1-Trichloroethane	5	ND (13)	7.52	4.98	ND (10)	5.3	ND (13)	ND (10)	ND (10)	ND (2)	ND (2)	ND (5)	ND (20)	ND (5)	ND (50)	ND (20)
1,1,2,2-Tetrachloroethane	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
1,1,2-Trichloroethane	1	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
1,1-Dichloroethane	5	83	80	115	59	50	74	68.6	44.1	31	140	120	95.5	106	95	96
1,1-Dichloroethene	5	ND (13)	1.07	1.75	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
1,1-Dichloropropene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,2,3-Trichlorobenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,2,3-Trichloropropane	--	--	ND (2.5)	ND (2.5)	--	--	--	ND (2.5)	ND (25)	--	--	--	ND (2.5)	ND (12.5)	--	--
1,2,3-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,2,4-Trichlorobenzene	5	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
1,2,4-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,2-Dibromo-3-chloropropane (DBCP)	0.04	--	ND (5)	ND (5)	ND (10)	ND (4)	--	ND (5)	ND (50)	ND (2)	ND (2)	--	ND (5)	ND (25)	ND (50)	ND (20)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
1,2-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
1,2-Dichloroethane	0.6	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
1,2-Dichloropropane	1	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
1,3,5-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,3-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
1,3-Dichloropropane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
1,4-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
2,2-Dichloropropane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
2-Butanone (Methyl Ethyl Ketone)	50	ND (25)	ND (10)	ND (10)	ND (100)	ND (40)	ND (25)	ND (10)	ND (100)	ND (20)	ND (20)	ND (10)	ND (10)	ND (50)	ND (500)	ND (200)
2-Chlorotoluene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
2-Hexanone	50	ND (25)	--	--	ND (50)	ND (20)	ND (25)	--	--	ND (10)	ND (10)	ND (10)	--	--	ND (250)	ND (100)
2-Phenylbutane (sec-Butylbenzene)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
4-Chlorotoluene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	--	ND (25)	ND (10)	ND (10)	ND (50)	ND (20)	ND (25)	ND (10)	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)	ND (250)	ND (100)
Acetone	50	ND (25)	ND (50)	ND (50)	ND (100)	ND (40)	ND (25)	ND (50)	ND (500)	ND (20)	ND (20)	ND (10)	ND (50)	ND (250)	ND (500)	ND (200)
Acrolein	--	--	ND (50)	ND (50)	--	--	--	ND (50)	ND (500)	--	--	--	ND (50)	ND (250)	--	--
Acrylonitrile	--	--	ND (10)	ND (10)	--	--	--	ND (10)	ND (100)	--	--	--	ND (10)	ND (50)	--	--
Benzene	1	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Bromobenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
Bromodichloromethane	50	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Bromoform	50	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Bromomethane (Methyl Bromide)	5	ND (13)	ND (5)	ND (5)	ND (10)	ND (4)	ND (13)	ND (5)	ND (50)	ND (2)	ND (2)	ND (5)	ND (5)	ND (25)	ND (50)	ND (20)
Carbon disulfide	60	ND (25)	--	--	ND (10)	ND (4)	ND (25)	--	--	ND (2)	ND (2)	11	--	--	ND (50)	ND (20)
Carbon tetrachloride	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Chlorobenzene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Chloroethane	5	460	222	534	220	120	300	262	84.8	32	510	1,400	854	1,160	1,100	730
Chloroform (Trichloromethane)	7	ND (13)	ND (5)	ND (5)	ND (10)	ND (4)	ND (13)	ND (5)	ND (50)	ND (2)	ND (2)	ND (5)	ND (5)	ND (25)	ND (50)	ND (20)
Chloromethane (Methyl Chloride)	5	ND (13)	ND (2.5)	ND (2.5)	ND (10)	ND (4)	ND (13)	ND (2.5)	ND (25)	ND (2)	ND (2)	ND (5)	ND (2.5)	ND (12.5)	ND (50)	ND (20)
cis-1,2-Dichloroethene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
cis-1,3-Dichloropropane	0.4	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Cyclohexane	--	--	--	--	ND (10)	ND (4)	--	--	--	ND (2)	ND (2)	--	--	ND (50)	ND (20)	ND (20)
Cymene (p-Isopropyltoluene)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
Dibromochloromethane	50	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Dibromomethane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
Dichlorodifluoromethane (CFC-12)	5	--	ND (5)	ND (5)	ND (10)	ND (4)	--	ND (5)	ND (50)	ND (2)	ND (2)	--	ND (5)	ND (25)	ND (50)	ND (20)
Diisopropyl ether (DIPE)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
Ethylbenzene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Hexachlorobutadiene	0.5	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
Isopropylbenzene (Cumene)	5	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
m,p-Xylenes	5	ND (13)	--	--	--	--	ND (13)	--	--	--	--	ND (5)	--	--	--	--
Methyl acetate	--	--	--	--	ND (25)	ND (10)	--	--	--	ND (5)	ND (5)	--	--	--	ND (130)	ND (50)
Methyl cyclohexane	--	--	--	--	ND (10)	ND (4)	--	--	--	ND (2)	ND (2)	--	--	--	ND (50)	ND (20)
Methyl Tert Butyl Ether	10	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
Methylene chloride	5	ND (13)	ND (5)	ND (5)	ND (10)	ND (4)	ND (13)	ND (5)	ND (50)	ND (2)	ND (2)	ND (5)	ND (5)	ND (25)	ND (50)	ND (20)
Naphthalene	10	--	ND (5)	ND (5)	--	--	--	ND (5)	ND (50)	--	--	--	ND (5)	ND (25)	--	--
n-Butylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
n-Propylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--
o-Xylene	5	ND (13)	--	--	--	--	ND (13)	--	--	--	--	ND (5)	--	--	--	--
Styrene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
tert-Butylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (10)	--	--	--	ND (1)	ND (5)	--	--

**TABLE 4**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**MID-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	MW-3	MW-3	MW-3	MW-3	MW-3	MW-501	MW-501	MW-501	MW-501	MW-501	MW-502	MW-502	MW-502	MW-502	MW-502
Sample Name	NYSDEC	MW3-102518-1000	MW3-042319-1055	MW3-102419-1230	MW-3-040720-1100	MW-3-102920-0945	MW-501-102618-1235	MW501-042419-1150	MW501-102419-1430	MW-501-040720-1240	MW-501-102920-1535	MW-502-102618-1115	MW502-042419-1325	MW502-102419-1315	MW-502-040720-1155	MW-502-102920-1340
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020	10/29/2020	10/26/2018	04/24/2019	10/24/2019	04/07/2020	10/29/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	3 - 10 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	20 - 25 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)	30 - 35 (ft)
Tetrachloroethene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	<b>1.08</b>	ND (10)	<b>1.3 J</b>	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Toluene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
trans-1,2-Dichloroethene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
trans-1,3-Dichloropropene	0.4	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	ND (2)	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Trichloroethene	5	ND (13)	ND (1)	ND (1)	ND (10)	ND (4)	ND (13)	ND (1)	ND (10)	<b>1.7 J</b>	ND (2)	ND (5)	ND (1)	ND (5)	ND (50)	ND (20)
Trichlorofluoromethane (CFC-11)	5	--	ND (5)	ND (5)	ND (10)	ND (4)	--	ND (5)	ND (50)	ND (2)	ND (2)	--	ND (5)	ND (25)	ND (50)	ND (20)
Trifluorotrichloroethane (Freon 113)	5	--	ND (1)	ND (1)	ND (10)	ND (4)	--	ND (1)	ND (10)	ND (2)	ND (2)	--	ND (1)	ND (5)	ND (50)	ND (20)
Vinyl chloride	2	<b>23</b>	<b>21.6</b>	<b>28</b>	<b>16</b>	<b>11</b>	<b>52</b>	<b>34.5</b>	<b>33.4</b>	<b>24</b>	<b>78</b>	<b>180</b>	<b>118</b>	<b>118</b>	<b>140</b>	<b>95</b>
Xylene (total)	5	--	ND (3)	ND (3)	ND (20)	ND (8)	--	ND (3)	ND (30)	ND (4)	ND (4)	--	ND (3)	ND (15)	ND (100)	ND (40)
<b>Acids (mg/L)</b>																
Acetic acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butanoic acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Formic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexanoic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
i-Hexanoic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isovaleric Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lactic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentanoic acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Propionic acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyruvic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Inorganic Compounds (mg/L)</b>																
Iron, Dissolved	0.3	ND (0.1)	ND (0.1)	ND (0.1)	<b>0.019 J</b>	ND (0.05)	--	--	--	--	--	--	--	--	--	--
Iron, Total	0.3	<b>12.8</b>	<b>3.49</b>	<b>7.82</b>	<b>5.2</b>	<b>1.4</b>	--	--	--	--	--	--	--	--	--	--
<b>Other (mg/L)</b>																
Alkalinity, Total (as CaCO3)	--	<b>203</b>	<b>226 J-</b>	<b>252</b>	<b>312</b>	<b>331</b>	--	--	--	--	--	--	--	--	--	--
Chloride	250	<b>341</b>	<b>387</b>	<b>242</b>	<b>194</b>	<b>68.4</b>	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	--	ND (1)	0.1 R	ND (0.1) J	ND (0.05) J	ND (0.05)	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	ND (1)	0.1 R	ND (0.1) J	ND (0.05) J	ND (0.05) J	--	--	--	--	--	--	--	--	--	--
Sulfate	250	<b>24</b>	<b>30.9</b>	<b>40.4 J</b>	<b>52.1</b>	<b>18.6</b>	--	--	--	--	--	--	--	--	--	--
Sulfide	--	ND (1)	ND (0.05)	ND (0.05)	ND (1)	ND (1)	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon (TOC)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Dissolved Gases (mg/L)</b>																
Butane	--	--	ND (0.00018)	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethane	--	ND (0.026)	<b>0.0003</b>	ND (0.013)	ND (0.0075)	ND (0.0075)	--	--	--	--	--	--	--	--	--	--
Ethene	--	<b>0.027</b>	<b>0.039</b>	<b>0.0295</b>	<b>0.023</b>	<b>0.019</b>	--	--	--	--	--	--	--	--	--	--
Isobutane	--	--	ND (0.000025)	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	--	<b>1.5</b>	<b>2</b>	<b>1.37</b>	<b>1.2</b>	<b>0.46</b>	--	--	--	--	--	--	--	--	--	--
Propane	--	ND (0.026)	<b>0.000025 J</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

- Notes:**
- Results shaded orange exceed the following criteria:  
 NYSDEC TOGS Ambient Water Class GA
  - Results in **bold** were detected.
  - ND = Not detected at a concentration above the reporting limit.  
 J - Estimated result  
 J+ is estimated biased high.  
 J- is estimated biased low.  
 R - Data rejected by validator  
 -- Not Analyzed
  - October 2018 samples analyzed at ALS Environmental of Rochester, NY  
 April 2019 samples were analyzed at Pace Analytical Services of Mt. Juliet, TN.

**TABLE 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**DOWN-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	MW-202	MW-202	MW-202	MW-202	MW-202	MW-203	MW-203	MW-203	MW-203	MW-203	MW-204	MW-204	MW-204	MW-204	MW-204
Sample Name	NYSDEC	MW-202-102518-1110	MW202-042319-1125	MW202-102519-1030	MW-202-040820-0940	MW-202-102920-1125	MW-203-102518-1440	MW203-042319-1440	MW203-102419-1620	MW-203-040820-1200	MW-203-103020-1115	MW-204-102518-1230	MW204-042319-1215	MW204-102519-1235	MW-204-040820-1030	MW-204-103020-1245
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/29/2020	10/25/2018	04/23/2019	10/24/2019	04/08/2020	10/30/2020	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/30/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)
<b>Field Parameters</b>																
Temperature, Field (Deg C)	--	16.3	13.4	16.3	9.7	13.4	16.9	14.4	18.1	11.0	16.1	17.4	13.4	16.3	10.6	15.1
Dissolved Oxygen, Field (mg/L)	--	1.21	2.79	1.28	1.88	4.74	2.5	9.77	2.39	1.92	4.7	0.49	1.39	0.28	1.62	3.63
Specific Conductance, Field (mS/cm)	--	5.62	13.34	6.41	6.83	2.24	0.87	1.09	0.89	1.13	0.018	3.1	2.8	2.54	2.5	0.021
ORP, Field (mv)	--	9.4	87.3	45.2	82.6	91.7	55.9	92.5	-79.2	100.8	22	-43.9	89.7	-62.8	96.1	60.6
Turbidity, Field (NTU)	--	1.24	6.45	2.54	2.28	2.24	7.51	5.85	24.3	2.35	29	15.3	6.65	1.75	4.43	3.52
pH, Field (pH units)	--	7.55	7.41	10.35	7.60	7.81	7.22	7.64	10.64	7.76	8.17	7.29	7.27	10.13	7.38	7.78
<b>Volatile Organic Compounds (ug/L)</b>																
1,1,1,2-Tetrachloroethane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
1,1,1-Trichloroethane	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	5	120	66.9	177	69	120	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	2.64	3.02	2	2.2
1,1-Dichloroethene	5	120	67.9	159	63	100	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	1.88	3.17	1.5	2.3
1,1-Dichloropropene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	--	--
1,2,3-Trichlorobenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
1,2,3-Trichloropropane	--	--	ND (2.5)	ND (2.5)	--	--	--	ND (2.5)	ND (2.5)	--	--	--	ND (2.5)	ND (2.5)	--	--
1,2,3-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
1,2,4-Trichlorobenzene	5	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	--	--
1,2-Dibromo-3-chloropropane (DBCP)	0.04	--	ND (5)	ND (5)	ND (2)	ND (2)	--	ND (5)	ND (5)	ND (1)	ND (1)	--	ND (5)	ND (5)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloroethane	0.6	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
1,3,5-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
1,3-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichloropropane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
1,4-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
2,2-Dichloropropane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
2-Butanone (Methyl Ethyl Ketone)	50	ND (10)	ND (10)	ND (10)	ND (20)	ND (20)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorotoluene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
2-Hexanone	50	ND (10)	--	--	ND (10)	ND (10)	ND (10)	--	ND (5)	ND (5)	ND (5)	ND (10)	--	ND (5)	ND (5)	ND (5)
2-Phenylbutane (sec-Butylbenzene)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
4-Chlorotoluene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (5)	ND (5)	ND (10)	ND (10)	ND (10)	ND (5)	ND (5)
Acetone	50	ND (10)	ND (50)	ND (50)	ND (20)	ND (20)	ND (10)	ND (50)	ND (50)	ND (10)	ND (10)	ND (10)	ND (50)	ND (50)	ND (10)	ND (10)
Acrolein	--	--	ND (50)	ND (50)	--	--	--	ND (50)	ND (50)	--	--	--	ND (50)	ND (50)	--	--
Acrylonitrile	--	--	ND (10)	ND (10)	--	--	--	ND (10)	ND (10)	--	--	--	ND (10)	ND (10)	--	--
Benzene	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Bromobenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
Bromodichloromethane	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	5	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)
Carbon disulfide	60	ND (10)	--	--	ND (2)	ND (2)	ND (10)	--	--	ND (1)	ND (1)	ND (10)	--	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Chloroethane	5	9.9	ND (5)	14.6	ND (2)	8.7	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Chloroform (Trichloromethane)	7	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	5	ND (5)	ND (2.5)	ND (2.5)	ND (2)	ND (2)	ND (5)	ND (2.5)	ND (2.5)	ND (1)	ND (1)	ND (5)	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
cis-1,2-Dichloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,3-Dichloropropene	0.4	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	--	--	--	--	ND (2)	ND (2)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)
Cymene (p-Isopropyltoluene)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
Dibromochloromethane	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Dibromomethane	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
Dichlorodifluoromethane (CFC-12)	5	--	ND (5)	ND (5)	ND (2)	ND (2)	--	ND (5)	ND (5)	ND (1)	ND (1)	--	ND (5)	ND (5)	ND (1)	ND (1)
Diisopropyl ether (DIPE)	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
Ethylbenzene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Hexachlorobutadiene	0.5	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
Isopropylbenzene (Cumene)	5	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
m,p-Xylenes	5	ND (5)	--	--	--	--	ND (5)	--	--	--	--	ND (5)	--	--	--	--
Methyl acetate	--	--	--	--	ND (5)	ND (5)	--	--	--	ND (2.5)	ND (2.5)	--	--	--	ND (2.5)	ND (2.5)
Methyl cyclohexane	--	--	--	--	ND (2)	ND (2)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)
Methyl Tert Butyl Ether	10	--	ND (1)	ND (1)	ND (2)	ND (2)	--	ND (1)	ND (1)	ND (1)	ND (1)	--	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	5	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)	ND (1)	ND (1)
Naphthalene	10	--	ND (5)	ND (5)	--	--	--	ND (5)	ND (5)	ND (1)	ND (1)	--	ND (5)	ND (5)	--	--
n-Butylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
n-Propylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--
o-Xylene	5	ND (5)	--	--	--	--	ND (5)	--	--	--	--	ND (5)	--	--	--	--
Styrene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
tert-Butylbenzene	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	--	--	--	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	5	ND (1)	ND (1)	ND (1)	ND (2)	ND										

**TABLE 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**DOWN-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	MW-202	MW-202	MW-202	MW-202	MW-202	MW-203	MW-203	MW-203	MW-203	MW-203	MW-204	MW-204	MW-204	MW-204	MW-204
Sample Name	NYSDEC	MW-202-102518-1110	MW202-042319-1125	MW202-102519-1030	MW-202-040820-0940	MW-202-102920-1125	MW-203-102518-1440	MW203-042319-1440	MW203-102419-1620	MW-203-040820-1200	MW-203-103020-1115	MW-204-102518-1230	MW204-042319-1215	MW204-102519-1235	MW-204-040820-1030	MW-204-103020-1245
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/29/2020	10/25/2018	04/23/2019	10/24/2019	04/08/2020	10/30/2020	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/30/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	10.2 - 20.3 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)	9.8 - 20 (ft)
<b>Acids (mg/L)</b>																
Acetic acid	--	ND (1)	ND (10)	<b>0.27 J</b>	ND (50)	ND (5)	--	--	--	--	--	--	--	--	--	--
Butanoic acid	--	ND (2)	ND (10)	<b>0.12 J</b>	ND (50)	ND (5)	--	--	--	--	--	--	--	--	--	--
Formic Acid	--	--	<b>12 J</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexanoic Acid	--	--	ND (20)	--	--	--	--	--	--	--	--	--	--	--	--	--
i-Hexanoic Acid	--	--	ND (20)	--	--	--	--	--	--	--	--	--	--	--	--	--
Isovaleric Acid	--	--	ND (10)	--	--	--	--	--	--	--	--	--	--	--	--	--
Lactic Acid	--	ND (1)	ND (20)	ND (2)	ND (50)	ND (5)	--	--	--	--	--	--	--	--	--	--
Pentanoic acid	--	--	ND (10)	--	--	--	--	--	--	--	--	--	--	--	--	--
Propionic acid	--	ND (1)	ND (10)	<b>0.051 J</b>	ND (50)	ND (5)	--	--	--	--	--	--	--	--	--	--
Pyruvic Acid	--	ND (0.5)	ND (10)	ND (1)	ND (75)	ND (7.5)	--	--	--	--	--	--	--	--	--	--
<b>Inorganic Compounds (mg/L)</b>																
Iron, Dissolved	0.3	ND (0.1)	ND (0.1)	ND (0.1)	<b>0.024 J</b>	ND (0.05)	--	--	--	--	--	--	--	--	--	--
Iron, Total	0.3	<b>0.21</b>	<b>0.113</b>	ND (0.1)	<b>0.13</b>	<b>0.033 J</b>	--	--	--	--	--	--	--	--	--	--
<b>Other (mg/L)</b>																
Alkalinity, Total (as CaCO3)	--	<b>131</b>	<b>157 J-</b>	<b>226</b>	<b>182</b>	<b>135</b>	--	--	--	--	--	--	--	--	--	--
Chloride	250	<b>1,260</b>	<b>4,550</b>	<b>1,760</b>	<b>1,850</b>	<b>908 J</b>	--	--	--	--	--	--	--	--	--	--
Nitrate (as N)	--	ND (1)	<b>1.27 J+</b>	<b>0.764 J</b>	<b>0.66 J</b>	<b>0.068</b>	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	ND (1)	0.1 R	ND (0.1) J	--	<b>0.027 J</b>	--	--	--	--	--	--	--	--	--	--
Sulfate	250	<b>386</b>	<b>377</b>	<b>305 J</b>	<b>376</b>	<b>467 J</b>	--	--	--	--	--	--	--	--	--	--
Sulfide	--	ND (1)	ND (0.05)	ND (0.05)	ND (1)	ND (1)	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon (TOC)	--	<b>1.1</b>	<b>2.15 J</b>	<b>1.43 J+</b>	<b>0.69 J</b>	<b>0.57 J</b>	--	--	--	--	--	--	--	--	--	--
<b>Dissolved Gases (mg/L)</b>																
Butane	--	--	ND (0.000018)	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethane	--	ND (0.001)	<b>0.000022 J</b>	ND (0.013)	ND (0.0075)	ND (0.0075)	--	--	--	--	--	--	--	--	--	--
Ethene	--	<b>0.0017</b>	<b>0.000012 J</b>	ND (0.013)	ND (0.007)	<b>0.0095</b>	--	--	--	--	--	--	--	--	--	--
Isobutane	--	--	<b>0.000047 J</b>	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	--	<b>0.024</b>	<b>0.00016 J</b>	<b>0.0643</b>	ND (0.004)	<b>0.064</b>	--	--	--	--	--	--	--	--	--	--
Propane	--	ND (0.001)	<b>0.000042 J</b>	--	--	--	--	--	--	--	--	--	--	--	--	--

**Notes:**  
1. Results shaded orange exceed the following criteria:  
**NYSDEC TOGS Ambient Water Class GA**  
2. Results in **bold** were detected.  
3. ND = Not detected at a concentration above the reporting limit.  
J - Estimated result  
J+ is estimated biased high.  
J- is estimated biased low.  
R - Data rejected by validator  
-- Not Analyzed  
4. October 2018 samples analyzed at ALS Environmental of Rochester, NY  
April 2019 samples were analyzed at Pace Analytical Services of Mt. Juliet, TN.

**TABLE 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**DOWN-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

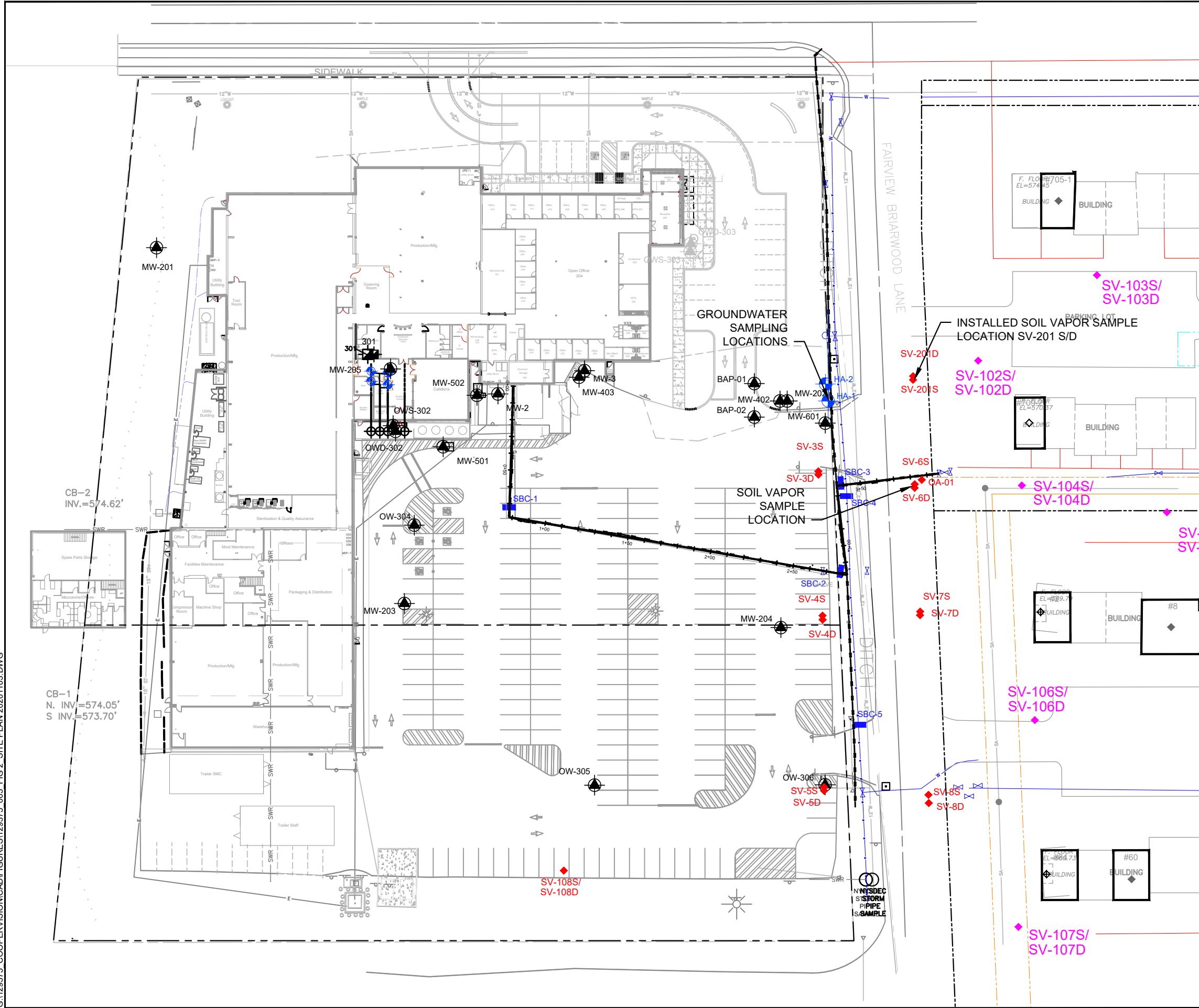
Location	Action Level	OW-306	OW-306	OW-306	OW-306	OW-306
Sample Name	NYSDEC	OW-306-102518-1350	OW306-042319-1350	OW306-102519-1145	OW-306-040820-1130	OW-306-103020-1410
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/30/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)
<b>Field Parameters</b>						
Temperature, Field (Deg C)	--	17.5	13.9	17.3	10.3	15.4
Dissolved Oxygen, Field (mg/L)	--	2.91	20.14	2.24	6.60	6.32
Specific Conductance, Field (mS/cm)	--	5.24	20.37	11.11	14.11	0.026
ORP, Field (mv)	--	109.3	152	74.7	144.1	119.1
Turbidity, Field (NTU)	--	1842	27.47	60.8	30.5	20.3
pH, Field (pH units)	--	7.0	6.88	9.42	6.85	7.34
<b>Volatile Organic Compounds (ug/L)</b>						
1,1,1,2-Tetrachloroethane	--	--	ND (1)	ND (1)	--	--
1,1,1-Trichloroethane	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,1,2,2-Tetrachloroethane	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,1,2-Trichloroethane	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,1-Dichloroethane	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,1-Dichloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,1-Dichloropropene	--	--	ND (1)	ND (1)	--	--
1,2,3-Trichlorobenzene	--	--	ND (1)	ND (1)	--	--
1,2,3-Trichloropropane	--	--	ND (2.5)	ND (2.5)	--	--
1,2,3-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--
1,2,4-Trichlorobenzene	5	--	ND (1)	ND (1)	ND (2)	ND (2)
1,2,4-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--
1,2-Dibromo-3-chloropropane (DBCP)	0.04	--	ND (5)	ND (5)	ND (2)	ND (2)
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	--	ND (1)	ND (1)	ND (2)	ND (2)
1,2-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)
1,2-Dichloroethane	0.6	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,2-Dichloropropane	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
1,3,5-Trimethylbenzene	--	--	ND (1)	ND (1)	--	--
1,3-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)
1,3-Dichloropropane	--	--	ND (1)	ND (1)	--	--
1,4-Dichlorobenzene	3	--	ND (1)	ND (1)	ND (2)	ND (2)
2,2-Dichloropropane	--	--	ND (1)	ND (1)	--	--
2-Butanone (Methyl Ethyl Ketone)	50	ND (10)	ND (10)	ND (10)	ND (20)	ND (20)
2-Chlorotoluene	--	--	ND (1)	ND (1)	--	--
2-Hexanone	50	ND (10)	--	--	ND (10)	ND (10)
2-Phenylbutane (sec-Butylbenzene)	--	--	ND (1)	ND (1)	--	--
4-Chlorotoluene	--	--	ND (1)	ND (1)	--	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	--	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	50	ND (10)	ND (50)	ND (50)	ND (20)	ND (20)
Acrolein	--	--	ND (50)	ND (50)	--	--
Acrylonitrile	--	--	ND (10)	ND (10)	--	--
Benzene	1	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Bromobenzene	--	--	ND (1)	ND (1)	--	--
Bromodichloromethane	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Bromoform	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Bromomethane (Methyl Bromide)	5	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)
Carbon disulfide	60	ND (10)	--	--	ND (2)	ND (2)
Carbon tetrachloride	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Chlorobenzene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Chloroethane	5	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)
Chloroform (Trichloromethane)	7	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)
Chloromethane (Methyl Chloride)	5	ND (5)	ND (2.5)	ND (2.5)	ND (2)	ND (2)
cis-1,2-Dichloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
cis-1,3-Dichloropropene	0.4	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Cyclohexane	--	--	--	--	ND (2)	ND (2)
Cymene (p-Isopropyltoluene)	--	--	ND (1)	ND (1)	--	--
Dibromochloromethane	50	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Dibromomethane	--	--	ND (1)	ND (1)	--	--
Dichlorodifluoromethane (CFC-12)	5	--	ND (5)	ND (5)	ND (2)	ND (2)
Diisopropyl ether (DIPE)	--	--	ND (1)	ND (1)	--	--
Ethylbenzene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Hexachlorobutadiene	0.5	--	ND (1)	ND (1)	--	--
Isopropylbenzene (Cumene)	5	--	ND (1)	ND (1)	ND (2)	ND (2)
m,p-Xylenes	5	ND (5)	--	--	--	--
Methyl acetate	--	--	--	--	ND (5)	ND (5)
Methyl cyclohexane	--	--	--	--	ND (2)	ND (2)
Methyl Tert Butyl Ether	10	--	ND (1)	ND (1)	ND (2)	ND (2)
Methylene chloride	5	ND (5)	ND (5)	ND (5)	ND (2)	ND (2)
Naphthalene	10	--	ND (5)	ND (5)	--	--
n-Butylbenzene	--	--	ND (1)	ND (1)	--	--
n-Propylbenzene	--	--	ND (1)	ND (1)	--	--
o-Xylene	5	ND (5)	--	--	--	--
Styrene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
tert-Butylbenzene	--	--	ND (1)	ND (1) J	--	--
Tetrachloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Toluene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
trans-1,2-Dichloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
trans-1,3-Dichloropropene	0.4	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Trichloroethene	5	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Trichlorofluoromethane (CFC-11)	5	--	ND (5)	ND (5)	ND (2)	ND (2)
Trifluorotrchloroethane (Freon 113)	5	--	ND (1)	ND (1)	ND (2)	ND (2)
Vinyl chloride	2	ND (5)	ND (1)	ND (1)	ND (2)	ND (2)
Xylene (total)	5	--	ND (3)	ND (3)	ND (4)	ND (4)

**TABLE 5**  
**SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER**  
**DOWN-GRADIENT WELLS**  
**COOPERVISION**  
**SCOTTSVILLE, NY**

Location	Action Level	OW-306	OW-306	OW-306	OW-306	OW-306
Sample Name	NYSDEC	OW-306-102518-1350	OW306-042319-1350	OW306-102519-1145	OW-306-040820-1130	OW-306-103020-1410
Sample Date	TOGS 1.1.1	10/25/2018	04/23/2019	10/25/2019	04/08/2020	10/30/2020
Sample Type	Guidance	Normal	Normal	Normal	Normal	Normal
Sample Depth (bgs)	Values	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)	4 - 14 (ft)
<b>Acids (mg/L)</b>						
Acetic acid	--	--	--	--	--	--
Butanoic acid	--	--	--	--	--	--
Formic Acid	--	--	--	--	--	--
Hexanoic Acid	--	--	--	--	--	--
i-Hexanoic Acid	--	--	--	--	--	--
Isovaleric Acid	--	--	--	--	--	--
Lactic Acid	--	--	--	--	--	--
Pentanoic acid	--	--	--	--	--	--
Propionic acid	--	--	--	--	--	--
Pyruvic Acid	--	--	--	--	--	--
<b>Inorganic Compounds (mg/L)</b>						
Iron, Dissolved	0.3	--	--	--	--	--
Iron, Total	0.3	--	--	--	--	--
<b>Other (mg/L)</b>						
Alkalinity, Total (as CaCO3)	--	--	--	--	--	--
Chloride	250	--	--	--	--	--
Nitrate (as N)	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--
Sulfate	250	--	--	--	--	--
Sulfide	--	--	--	--	--	--
Total Organic Carbon (TOC)	--	--	--	--	--	--
<b>Dissolved Gases (mg/L)</b>						
Butane	--	--	--	--	--	--
Ethane	--	--	--	--	--	--
Ethene	--	--	--	--	--	--
Isobutane	--	--	--	--	--	--
Methane	--	--	--	--	--	--
Propane	--	--	--	--	--	--

**Notes:**  
1. Results shaded orange exceed the following criteria:  
**NYSDEC TOGS Ambient Water Class GA**  
2. Results in **bold** were detected.  
3. ND = Not detected at a concentration above the reporting limit.  
J - Estimated result  
J+ is estimated biased high.  
J- is estimated biased low.  
R - Data rejected by validator  
-- Not Analyzed  
4. October 2018 samples analyzed at ALS Environmental of Rochester, NY  
April 2019 samples were analyzed at Pace Analytical Services of Mt. Juliet, TN.

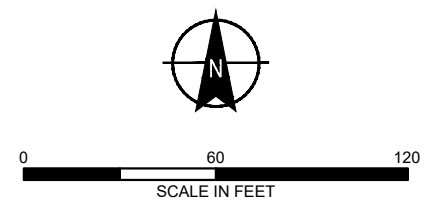
## FIGURES



**LEGEND**

- EXISTING MONITORING WELL LOCATIONS
- SV-6D EXISTING SOIL VAPOR POINT LOCATIONS
- SBC-4 EXISTING SOIL-BENTONITE-CEMENT COLLAR LOCATIONS
- EXISTING DECOMMISSIONED WELL LOCATION
- EXISTING INJECTION POINTS INSTALLED NOVEMBER 2018
- EXISTING INFILTRATION GALLERY
- PROPERTY LINE
- OVERHEAD ELECTRIC LINES
- UNDERGROUND ELECTRIC LINES
- WATER PIPE LINE
- SANITARY SEWER PIPE LINE
- STORM SEWER PIPE LINE
- NATURAL GAS PIPE LINE
- SOLID ADS 3000 HDPE PIPING
- PERFORATED ADS 3000 HDPE PIPING
- HA-1 PROPOSED GROUNDWATER SAMPLING LOCATION

- GENERAL NOTES**
1. PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 12/17/96.
  2. FACILITY INTERIOR USES ACCURATE AS TO DATE OF SURVEY, BUT MAY CHANGE OVER TIME.
  3. SEE REPORT TEXT FOR FURTHER INFORMATION.
  4. EXPLORATION LOCATIONS ARE APPROXIMATE.



**HALEY ALDRICH** COOPERVISION FACILITY  
 711 NORTH ROAD  
 SCOTTSVILLE, NEW YORK

**OVERALL SITE PLAN**

SCALE: AS SHOWN  
 NOVEMBER 2020

**FIGURE 1**



FIGURE 2  
MW-202 1,1-DICHLOROETHANE TIME SERIES CHART  
COOPERVISION  
SCOTTSVILLE, NY

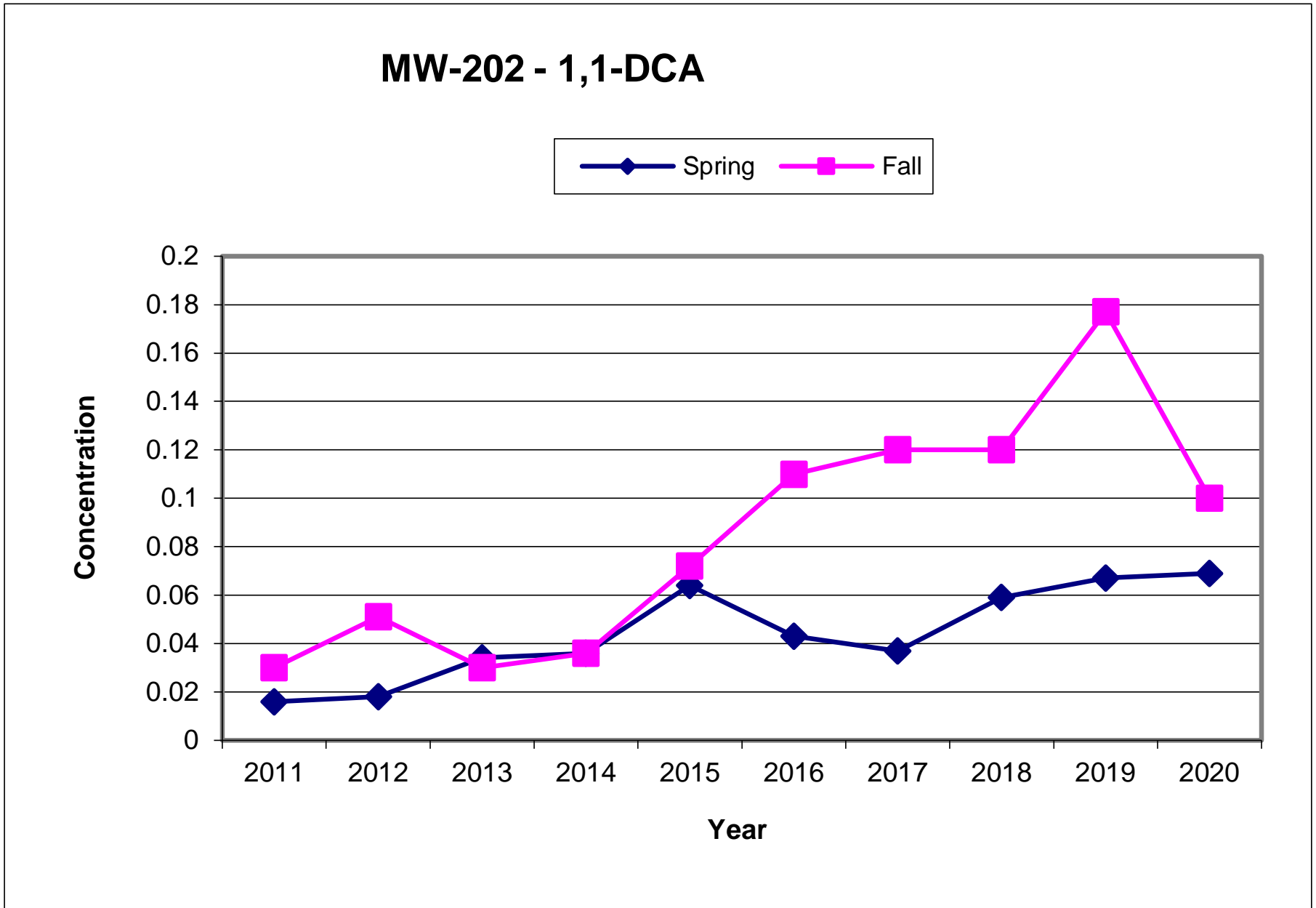
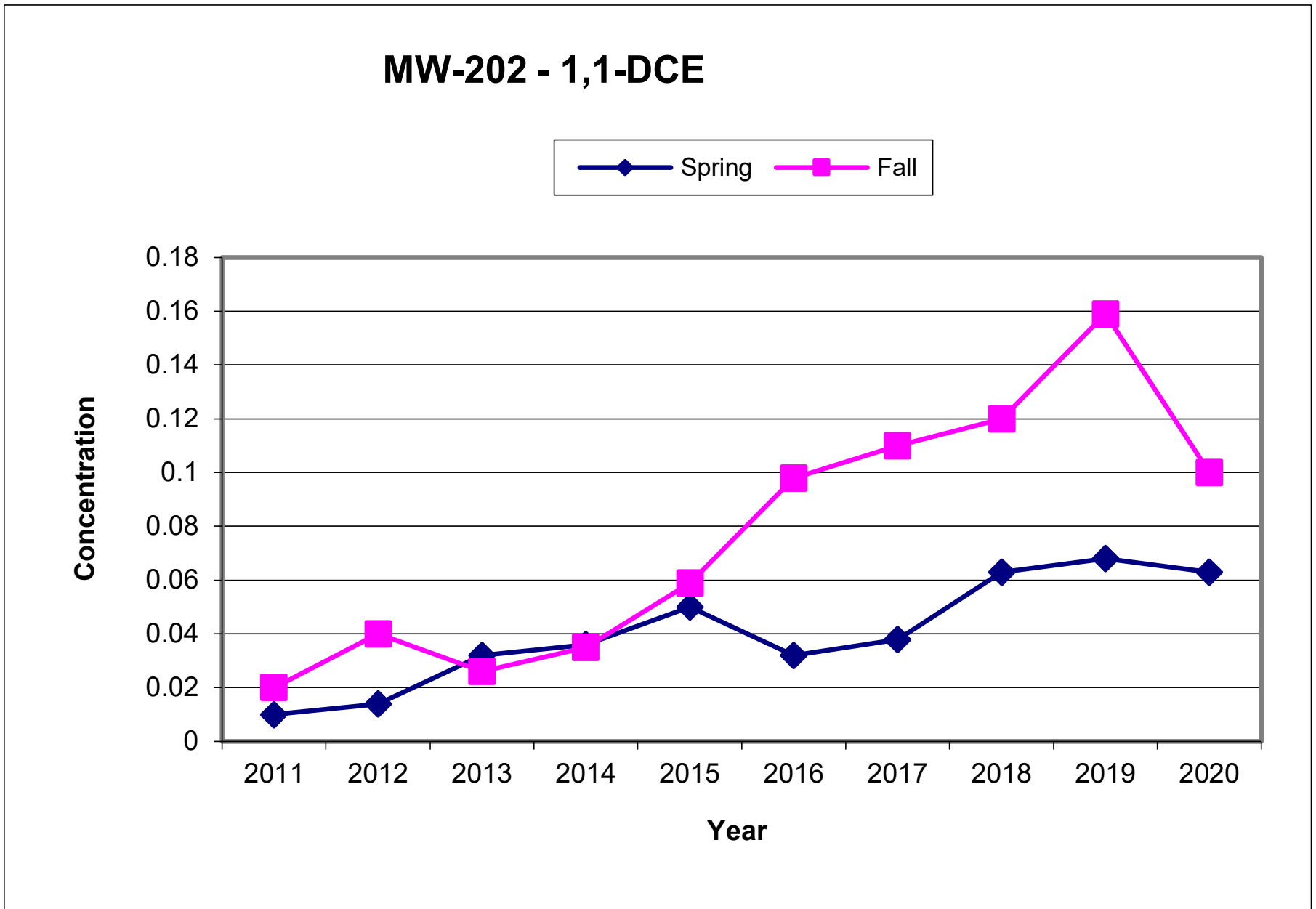


FIGURE 3  
MW-202 1,1-DICHLOROETHENE TIME SERIES CHART  
COOPERVISION  
SCOTTSVILLE, NY



## **APPENDIX A**

### **Corrective Measures Groundwater Laboratory Reports**



## ANALYTICAL REPORT

Lab Number:	L2053622
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Mark Ramsdell
Phone:	(585) 359-9000
Project Name:	COOPERVISION
Project Number:	129375-010
Report Date:	12/08/20

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).

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



**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2053622-01	HA1-120220-1130	WATER	SCOTTSVILLE, NY	12/02/20 11:30	12/02/20
L2053622-02	HA2-120220-1445	WATER	SCOTTSVILLE, NY	12/02/20 14:45	12/02/20
L2053622-03	HA3-120220-1630	WATER	SCOTTSVILLE, NY	12/02/20 16:30	12/02/20
L2053622-04	TRIP BLANK	WATER	SCOTTSVILLE, NY	12/02/20 00:00	12/02/20

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

### 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.

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**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

### 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


L2053622-01 (HA1-120220-1130): Headspace was noted in all sample containers submitted for Volatile Organics. The analysis was performed at the client's request.

#### Volatile Organics

L2053622-01 and -02 (HA1-120220-1130 and HA2-120220-1445): The pH of the sample was greater than two; however, the sample was analyzed within the method required holding time.

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:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/08/20

# ORGANICS



# VOLATILES

**Project Name:** COOPERVISION**Lab Number:** L2053622**Project Number:** 129375-010**Report Date:** 12/08/20**SAMPLE RESULTS**

Lab ID: L2053622-01  
 Client ID: HA1-120220-1130  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/02/20 11:30  
 Date Received: 12/02/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/05/20 14:57  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	99		70-130

**Project Name:** COOPERVISION**Lab Number:** L2053622**Project Number:** 129375-010**Report Date:** 12/08/20**SAMPLE RESULTS**

Lab ID: L2053622-02  
 Client ID: HA2-120220-1445  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/02/20 14:45  
 Date Received: 12/02/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/05/20 14:34  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** COOPERVISION**Lab Number:** L2053622**Project Number:** 129375-010**Report Date:** 12/08/20**SAMPLE RESULTS**

Lab ID: L2053622-03  
 Client ID: HA3-120220-1630  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/02/20 16:30  
 Date Received: 12/02/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/07/20 16:41  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,1-Dichloroethane	3.7		ug/l	2.5	0.70	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	1.1		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

**Project Name:** COOPERVISION**Lab Number:** L2053622**Project Number:** 129375-010**Report Date:** 12/08/20**SAMPLE RESULTS**

Lab ID: L2053622-04  
 Client ID: TRIP BLANK  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/02/20 00:00  
 Date Received: 12/02/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/07/20 09:38  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/05/20 09:04  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1441947-5					
1,1-Dichloroethane	ND		ug/l	2.5	0.70
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Trichloroethene	ND		ug/l	0.50	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/07/20 08:51  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-04 Batch: WG1442352-5					
1,1-Dichloroethane	ND		ug/l	2.5	0.70
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Trichloroethene	ND		ug/l	0.50	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1441947-3 WG1441947-4								
1,1-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Vinyl chloride	100		100		55-140	0		20
Chloroethane	120		110		55-138	9		20
1,1-Dichloroethene	100		100		61-145	0		20
Trichloroethene	100		100		70-130	0		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	106		108		70-130
Toluene-d8	104		102		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	100		100		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1442352-3 WG1442352-4								
1,1-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	91		93		67-130	2		20
Vinyl chloride	94		94		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	92		93		61-145	1		20
Trichloroethene	98		98		70-130	0		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	105		105		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	104		104		70-130
Dibromofluoromethane	100		100		70-130

**Project Name:** COOPERVISION**Lab Number:** L2053622**Project Number:** 129375-010**Report Date:** 12/08/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2053622-01A	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-01B	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-01C	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-02A	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-02B	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-02C	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-03A	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-03B	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-03C	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-04A	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)
L2053622-04B	Vial HCl preserved	A	NA		5.5	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

## GLOSSARY

### Acronyms

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.)
EDL	- 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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

#### Footnotes

- 1 - 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.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**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 acetone is introduced in the process.
- B** - 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).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

**Data Qualifiers**

- 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.

**Project Name:** COOPERVISION  
**Project Number:** 129375-010

**Lab Number:** L2053622  
**Report Date:** 12/08/20

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## 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.



## Certification Information

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

### Westborough Facility

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

**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (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, NO<sub>2</sub>, NO<sub>3</sub>.

### 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.

**EPA TO-12** Non-methane organics

**EPA 3C** Fixed gases

**Biological Tissue Matrix:** EPA 3050B

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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 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 I, 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**

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







## ANALYTICAL REPORT

Lab Number:	L2054544
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Mark Ramsdell
Phone:	(585) 359-9000
Project Name:	COOPERVISION
Project Number:	129375-005
Report Date:	12/23/20

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2054544-01	SV06D-120720	SOIL_VAPOR	SCOTTSVILLE, NY	12/07/20 13:26	12/07/20
L2054544-02	SV06S-120720	SOIL_VAPOR	SCOTTSVILLE, NY	12/07/20 13:27	12/07/20
L2054544-03	SV201D-120720	SOIL_VAPOR	SCOTTSVILLE, NY	12/07/20 15:02	12/07/20
L2054544-04	OA01-120720	AIR	SCOTTSVILLE, NY	12/07/20 13:28	12/07/20
L2054544-05	UNUSED CAN #3033	AIR	SCOTTSVILLE, NY		12/07/20
L2054544-06	UNUSED CAN #345	AIR	SCOTTSVILLE, NY		12/07/20

**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

### 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.

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**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

### Case Narrative (continued)

#### Report Revision

This report replaces the one previously issued on December 14, 2020. The report has been amended to report select VOCs at the request of the client.

#### Volatile Organics in Air

Canisters were released from the laboratory on November 24, 2020. The canister certification results are provided as an addendum.

L2054544-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2054544-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1444089-3 LCS recovery for 1,2-dichlorobenzene (131%), 1,2,4-trichlorobenzene (142%) and hexachlorobutadiene (136%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 12/23/20

**AIR**

**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

### SAMPLE RESULTS

Lab ID: L2054544-01 D  
 Client ID: SV06D-120720  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/07/20 13:26  
 Date Received: 12/07/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/12/20 00:47  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Vinyl chloride	ND	2.71	--	ND	6.93	--		13.57
Chloroethane	7.76	2.71	--	20.5	7.15	--		13.57
1,1-Dichloroethene	883	2.71	--	3500	10.7	--		13.57
1,1-Dichloroethane	1140	2.71	--	4610	11.0	--		13.57
1,1,1-Trichloroethane	107	2.71	--	584	14.8	--		13.57
Trichloroethene	35.4	2.71	--	190	14.6	--		13.57

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140



**Project Name:** COOPERVISION**Lab Number:** L2054544**Project Number:** 129375-005**Report Date:** 12/23/20**SAMPLE RESULTS**

Lab ID: L2054544-02 D  
 Client ID: SV06S-120720  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/07/20 13:27  
 Date Received: 12/07/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/12/20 01:23  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
Chloroethane	3.33	2.00	--	8.79	5.28	--		10
1,1-Dichloroethene	450	2.00	--	1780	7.93	--		10
1,1-Dichloroethane	494	2.00	--	2000	8.09	--		10
1,1,1-Trichloroethane	50.6	2.00	--	276	10.9	--		10
Trichloroethene	16.5	2.00	--	88.7	10.7	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	92		60-140



**Project Name:** COOPERVISION**Lab Number:** L2054544**Project Number:** 129375-005**Report Date:** 12/23/20**SAMPLE RESULTS**

Lab ID: L2054544-03  
 Client ID: SV201D-120720  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/07/20 15:02  
 Date Received: 12/07/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/12/20 02:02  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
1,1-Dichloroethene	0.421	0.200	--	1.67	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	3.67	0.200	--	20.0	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140





**Project Name:** COOPERVISION**Lab Number:** L2054544**Project Number:** 129375-005**Report Date:** 12/23/20**SAMPLE RESULTS**

Lab ID: L2054544-04  
 Client ID: OA01-120720  
 Sample Location: SCOTTSVILLE, NY

Date Collected: 12/07/20 13:28  
 Date Received: 12/07/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/11/20 18:29  
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: COOPERVISION

Lab Number: L2054544

Project Number: 129375-005

Report Date: 12/23/20

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/11/20 15:05

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1444089-4								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: COOPERVISION

Project Number: 129375-005

Lab Number: L2054544

Report Date: 12/23/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1444089-3								
Vinyl chloride	74		-		70-130	-		
Chloroethane	77		-		70-130	-		
1,1-Dichloroethene	92		-		70-130	-		
1,1-Dichloroethane	98		-		70-130	-		
1,1,1-Trichloroethane	99		-		70-130	-		
Trichloroethene	103		-		70-130	-		

Project Name: COOPERVISION

Serial\_No:12232009:09  
Lab Number: L2054544

Project Number: 129375-005

Report Date: 12/23/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2054544-01	SV06D-120720	0808	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	20.0	11
L2054544-01	SV06D-120720	110	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.1	-3.3	-	-	-	-
L2054544-02	SV06S-120720	01948	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	17.7	2
L2054544-02	SV06S-120720	2731	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.2	-4.4	-	-	-	-
L2054544-03	SV201D-120720	01806	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	17.4	3
L2054544-03	SV201D-120720	358	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.2	-3.4	-	-	-	-
L2054544-04	OA01-120720	01545	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	17.3	4
L2054544-04	OA01-120720	338	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.2	-3.7	-	-	-	-
L2054544-05	UNUSED CAN #3033	01941	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	0.6	187
L2054544-05	UNUSED CAN #3033	3033	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.3	-18.6	-	-	-	-
L2054544-06	UNUSED CAN #345	01099	Flow 3	11/24/20	336534		-	-	-	Pass	18.0	16.8	7
L2054544-06	UNUSED CAN #345	345	2.7L Can	11/24/20	336534	L2051773-01	Pass	-30.1	-28.8	-	-	-	-



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 11/20/20 22:16  
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1





**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	88		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/20/20 22:16  
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L2051773  
**Report Date:** 12/23/20

### Air Canister Certification Results

Lab ID: L2051773-01  
 Client ID: CAN 542 SHELF 9  
 Sample Location:

Date Collected: 11/19/20 16:00  
 Date Received: 11/20/20  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

**Project Name:** COOPERVISION**Lab Number:** L2054544**Project Number:** 129375-005**Report Date:** 12/23/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

NA                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2054544-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2054544-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2054544-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2054544-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2054544-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2054544-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()

**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

## GLOSSARY

### Acronyms

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.)
EDL	- 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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: Data Usability Report



**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

#### Footnotes

- 1 - 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.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**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 acetone is introduced in the process.
- B** - 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).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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. 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 reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report



**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
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**Data Qualifiers**

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.



**Project Name:** COOPERVISION  
**Project Number:** 129375-005

**Lab Number:** L2054544  
**Report Date:** 12/23/20

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## 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.



## Certification Information

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

### Westborough Facility

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

**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (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, NO<sub>2</sub>, NO<sub>3</sub>.

### 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.

**EPA TO-12** Non-methane organics

**EPA 3C** Fixed gases

**Biological Tissue Matrix:** EPA 3050B

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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 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 I, 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**

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



**CHAIN OF CUSTODY**

**AIR ANALYSIS**

320 Forbes Blvd, Mansfield, MA 02048  
 TEL: 508-822-9300 FAX: 508-822-3288

**Client Information**

Client: *Haley & Aldrich*  
 Address: *200 Town Centre Drive*  
*Rochester, NY, 14623*  
 Phone: *585-321-4230*  
 Fax:  
 Email: *JSurger@HaleyAldrich.com*

**Project Information**

Project Name: *CooperVision*  
 Project Location: *Scottsville, NY*  
 Project #: *129375-005*  
 Project Manager: *Mark Ramsdell*  
 ALPHA Quote #:

**Turn-Around Time**

Standard  RUSH (only confirmed if pre-approved)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

Other Project Specific Requirements/Comments: *Report to M.Ramsdell@haleyaldrich.com*  
 Project-Specific Target Compound List:  *TO-15*

**Report Information - Data Deliverables**

FAX  
 ADEx  
 Criteria Checker: \_\_\_\_\_  
 (Default based on Regulatory Criteria Indicated)  
 Other Formats: *ASP-B Format*  
 EMAIL (standard pdf report)  
 Additional Deliverables:  
 Report to: (if different than Project Manager)  
*M.Ramsdell@haleyaldrich.com*

ALPHA Job #: *L2054544*

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State/Fed	Program	Res / Comm

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH <small>Subtract Non-petroleum HCs</small>	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum											
<i>54544-01</i>	<i>SV06D-120720</i>	<i>12/7/20</i>	<i>1130</i>	<i>1326</i>	<i>30.25</i>	<i>5.32</i>	<i>SV</i>	<i>JMS</i>	<i>2.7'</i>	<i>110</i>	<i>0808</i>	<i>X</i>					
<i>-02</i>	<i>SV06S-120720</i>	<i>12/7/20</i>	<i>1130</i>	<i>1327</i>	<i>30.08</i>	<i>5.85</i>	<i>SV</i>	<i>JMS</i>		<i>2731</i>	<i>01948</i>	<i>X</i>					
<i>-03</i>	<i>SV201D-120720</i>		<i>1303</i>	<i>1502</i>	<i>29.05</i>	<i>5.66</i>	<i>SV</i>	<i>JMS</i>		<i>368</i>	<i>01806</i>	<i>X</i>					
	<del><i>SV201S-120720</i></del>		<del><i>1316</i></del>		<del><i>29.33</i></del>		<del><i>SV</i></del>	<del><i>JMS</i></del>		<del><i>3033</i></del>	<del><i>01141</i></del>	<del><i>X</i></del>					<i>Do not analyze</i>
<i>-04</i>	<i>OA01-120720</i>		<i>1129</i>	<i>1328</i>	<i>29.92</i>	<i>5.90</i>	<i>AA</i>	<i>JMS</i>		<i>338</i>	<i>01545</i>	<i>X</i>					

**\*SAMPLE MATRIX CODES**

AA = Ambient Air (Indoor/Outdoor)  
 SV = Soil Vapor/Landfill Gas/SVE  
 Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By: *AAL*

Date/Time:

*Patrick McManus*  
*Wendy Manning*  
*T. Hurdell*

*12/7/20 16:30*  
*12/7/20 1725*  
*12/8/20 4:00*  
*12/8/20 0510*

*[Signature]*  
*T. Hurdell*  
*[Signature]*

*12/7/20 1725*  
*12/8/20 0402*  
*12/8/20 0510*



## ANALYTICAL REPORT

Lab Number:	L2100131
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Mark Ramsdell
Phone:	(585) 359-9000
Project Name:	COOPERVISION-CORR. MEASURES
Project Number:	129375-010
Report Date:	01/06/21

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).

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



**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2100131-01	HA3-010421-1150	WATER	COOPERVISION, SCOTTSVILLE, NY	01/04/21 11:50	01/04/21

**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

### 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:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

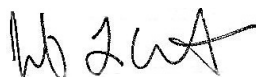
**Case Narrative (continued)**

Report Submission

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

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:



Jennifer L Clements

Title: Technical Director/Representative

Date: 01/06/21

# ORGANICS



# VOLATILES

**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

**SAMPLE RESULTS**

Lab ID: L2100131-01  
 Client ID: HA3-010421-1150  
 Sample Location: COOPERVISION, SCOTTSVILLE, NY

Date Collected: 01/04/21 11:50  
 Date Received: 01/04/21  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 01/06/21 10:13  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
1,1-Dichloroethane	1.9	J	ug/l	2.5	0.70	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.10	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	1.5		ug/l	0.50	0.17	1
Trichloroethene	ND		ug/l	0.50	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	103		70-130

**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/06/21 08:16  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1452109-5					
1,1-Dichloroethane	ND		ug/l	2.5	0.70
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
Trichloroethene	ND		ug/l	0.50	0.18

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** COOPERVISION-CORR. MEASURES

**Lab Number:** L2100131

**Project Number:** 129375-010

**Report Date:** 01/06/21

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1452109-3 WG1452109-4								
1,1-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	93		94		67-130	1		20
Vinyl chloride	93		93		55-140	0		20
Chloroethane	100		99		55-138	1		20
1,1-Dichloroethene	99		99		61-145	0		20
Trichloroethene	97		98		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	108		108		70-130
4-Bromofluorobenzene	111		107		70-130
Dibromofluoromethane	102		103		70-130

**Project Name:** COOPERVISION-CORR. MEASURES**Lab Number:** L2100131**Project Number:** 129375-010**Report Date:** 01/06/21**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information****Cooler**                      **Custody Seal**

A                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2100131-01A	Vial HCl preserved	A	NA		4.9	Y	Absent		NYTCL-8260-R2(14)
L2100131-01B	Vial HCl preserved	A	NA		4.9	Y	Absent		NYTCL-8260-R2(14)
L2100131-01C	Vial HCl preserved	A	NA		4.9	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

## GLOSSARY

### Acronyms

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.)
EDL	- 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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: DU Report with 'J' Qualifiers



**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

### Footnotes

- 1 - 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.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**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 acetone is introduced in the process.
- B** - 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).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - 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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

**Data Qualifiers**

- 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.



**Project Name:** COOPERVISION-CORR. MEASURES  
**Project Number:** 129375-010

**Lab Number:** L2100131  
**Report Date:** 01/06/21

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

## 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.



## Certification Information

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

### Westborough Facility

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

**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (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, NO<sub>2</sub>, NO<sub>3</sub>.

### 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.

**EPA TO-12** Non-methane organics

**EPA 3C** Fixed gases

**Biological Tissue Matrix:** EPA 3050B

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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 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 I, 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**

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

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>NEW YORK CHAIN OF CUSTODY</b> Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1		Date Rec'd in Lab	01/05/21	ALPHA Job #	L2100131	
		of	1						
<b>Client Information</b>		<b>Project Information</b>		<b>Deliverables</b>		<b>Billing Information</b>			
Client: <u>CooperVision</u>		Project Name: <u>CooperVision - Corrective Measures</u>		<input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<input type="checkbox"/> Same as Client Info PO #			
Address: <u>H&amp;A: 200 Town Centre Dr. Rochester, NY 14623</u>		Project Location: <u>CooperVision, Scottsville, NY</u>		<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Please identify below location of applicable disposal facilities. Disposal Facility:			
Project # <u>129375-010</u>		(Use Project name as Project #) <input type="checkbox"/>		<input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		Disposal Site Information			
Project Manager: <u>Mark Ramsdell</u>		ALPHAQuote #:		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Please identify below location of applicable disposal facilities. Disposal Facility:			
Email: <u>mramsdell@haleyaleich.com</u>		These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>ANALYSIS</b>		<b>Sample Filtration</b>		Total Bottles	
Other project specific requirements/comments: <u>1,1,1-TCA, 1,1-DCA, 1,1-DCE, TCE, chloroethane, vinyl chloride</u>		Please specify Metals or TAL.		EPA 8260C, see remarks		<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)			
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time			Sample Matrix	Sampler's Initials		
00131-01	HA3-010421-1150	1/4/21	11:50	GW	PM	X			3
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type: <u>A</u> Preservative: <u>B</u>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By: <u>Robert McCreary</u>		Date/Time: <u>1/4/21 13:00</u>		Received By: <u>RCunningham</u>		Date/Time: <u>1/4/21 17:51</u>	
		Relinquished By: <u>RCunningham</u>		Date/Time: <u>1/4/21 17:51</u>		Received By: <u>MLCunningham</u>		Date/Time: <u>1/5/21 00:10</u>	

**APPENDIX B**

**MW-601 Well Construction Log**

# OBSERVATION WELL INSTALLATION REPORT

Well No.  
**MW-601**  
Boring No.  
**HA-3**

<b>PROJECT</b>	Corrective Measures 2020	<b>H&amp;A FILE NO.</b>	0129375-010
<b>LOCATION</b>	Scottsville, NY	<b>PROJECT MGR.</b>	M. Ramsdell
<b>CLIENT</b>	CooperVision Inc.	<b>FIELD REP.</b>	T. Williams
<b>CONTRACTOR</b>	Trec Environmental	<b>DATE INSTALLED</b>	12/16/2020
<b>DRILLER</b>	Chris	<b>WATER LEVEL</b>	7.3 ft

Ground El. <u>569.54</u> ft	Location <u>Driveway</u>	<input type="checkbox"/> Guard Pipe	
El. Datum <u>NAD 83</u>		<input checked="" type="checkbox"/> Roadway Box	

SOIL/ROCK CONDITIONS	BOREHOLE BACKFILL																		
	Concrete	Type of protective cover/lock (circle one): Pent.bolt <u>9/16" hex.</u> 1/2" hex. 7/10" hex. Padlock key no. _____																	
	0.8	Height/Depth of top of guard pipe/roadway box above/below ground surface <u>0.0</u> ft Height/Depth of top of riser pipe above/below ground surface <u>0.3</u> ft																	
	Bentonite Chips	Type of protective casing: <u>Roadbox</u> Length <u>0.7</u> ft Inside Diameter <u>5.5</u> in Depth of bottom of guard pipe/roadway box <u>0.7</u> ft																	
	5.1	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Type of Seals</th> <th>Top of Seal (ft)</th> <th>Thickness (ft)</th> </tr> </thead> <tbody> <tr> <td>Concrete</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">0.8</td> </tr> <tr> <td>Bentonite Seal</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">4.3</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Type of Seals	Top of Seal (ft)	Thickness (ft)	Concrete	0.0	0.8	Bentonite Seal	0.8	4.3						
Type of Seals	Top of Seal (ft)	Thickness (ft)																	
Concrete	0.0	0.8																	
Bentonite Seal	0.8	4.3																	
	SAND	Type of riser pipe: <u>PVC</u> Inside diameter of riser pipe <u>1.0</u> in Type of backfill around riser <u>Bentonite Chips</u>																	
	L1	Diameter of borehole <u>2.5</u> in Depth to top of well screen <u>7.4</u> ft																	
	L2	Type of screen <u>PVC</u> Screen gauge or size of openings <u>#2</u> in Diameter of screen <u>1.0</u> in Type of backfill around screen <u>Sand</u>																	
	L3	Depth of bottom of well screen <u>17.4</u> ft Bottom of Silt trap <u>17.6</u> ft Depth of bottom of borehole <u>17.6</u> ft																	
17.6	17.6	(Bottom of Exploration)																	
(Numbers refer to depth from ground surface in feet)		(Not to Scale)																	

7.4	ft	+	10	ft	+	0.2	ft	=	17.6	ft
Riser Pay Length (L1)			Length of screen (L2)			Length of silt trap (L3)			Pay length	

**COMMENTS:** \_\_\_\_\_

**APPENDIX C**

**October 2020 Groundwater Field Forms**

Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-205

Field Crew:

Date: 10/21 28.07  
 Start Time: 15:50  
 Finished Time: 16:10  
 Sample Time: 16:20  
 Initial Depth to Water: 4.11  
 Well Depth: 27.6  
 Depth to top of screen: unkown  
 Depth to bottom of screen: unkown  
 Depth of Intake: 27.1

Purging Device: Waterra w/Hydrolift  
 Tubing in well: No  
 Tubing Type: HDPE  
 PID (ppm): 24.9

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0	4.11	0	-	-	-	-	-	-	
2	4.72	0.1	17.9	7.05	5.49	5.01	51.8	-26.8	200 mL/min
5	5.18	0.4	18.2	6.84	0.513	8.42	3.61	-27.9	
10	5.62	0.6	18.1	6.93	5.35	6.73	0.08	-20.6	
15	6.24	0.8	18.2	7.17	5.22	6.93	0.84	-21.7	
20	6.9	1.0	18.0	7.11	4.74	5.93	0.64	-20.7	
									sample FD
									MW-205-102920-1620

Comments:

VOCs (3 vials), RSK-175 (3 vials), Alkalinity (1 plastic), NO<sub>2</sub>/NO<sub>3</sub>/Cl/SO<sub>4</sub> (1 plastic), Sulfide (1 plastic), Organic Acids (1 amber glass), Fe filtered (1 plastic), Fe unfiltered (1 plastic)

This one tends to read moderately high on PID and tends to have a strong odor.

Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-204

Field Crew:

TW, PM

Date:

10/30

Start Time:

11:45

Finished Time:

12:40

Sample Time:

12:45

Initial Depth to Water:

5.19

Well Depth:

19.12

Depth to top of screen:

unkown

Depth to bottom of screen:

unkown

Depth of Intake:

18.6

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm):

0.0

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0		0	-	-	-	-	-	-	
5	8.04	0.5	15.4	7.22	0.019	5.51	9.3	80.3	200 ml/min
10	8.50	0.85	15.8	7.73	0.021	3.76	7.28	66.6	
15	8.79	1.2	15.3	7.82	0.021	3.72	4.14	60.4	
20			15.4	7.84	0.021	3.59	3.74	49.9	Ran out of gas
40	7.18	1.7	15.1	8.12	0.022	3.19	3.11	52.9	
45	7.58	1.95	15.1	7.87	0.022	3.44	3.08	56.8	
50	8.10	2.2	15.2	7.83	0.022	3.76	3.44	55.3	
55	8.4	2.4	15.1	7.78	0.021	3.63	3.52	60.6	
									Sample ID
									MW-204 - 103020 - 1245

Comments:

VOCs (3 vials)




Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

OW-306

Field Crew:

TW, PM

Date: 10/30/20

Start Time: 13:40

Finished Time: 14:05

Sample Time: 14:10

Initial Depth to Water: 2.83

Well Depth: 13.36

Depth to top of screen: unknown

Depth to bottom of screen: unknown

Depth of Intake: 12.9

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 0.0

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0	1-inch well	0	-	-	-	-	-	-	
5		0.4	17.8	7.36	0.200	5.76	over range	107.2	240 mL/min
10		0.7	15.5	7.45	0.360	6.12	90.2	105.3	
15		0.9	15.6	7.37	0.025	6.06	50.4	110.2	
20		1.25	15.2	7.42	0.025	6.13	33.3	111.5	
25		1.5	15.4	7.34	0.026	6.32	20.3	119.1	
									Sample ID
									DW-306-103020-1410

Comments:

VOCs (3 vials)


Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-203

Field Crew:

TW RM

Date: 10/30/20

Initial Depth to Water: 3.24

Start Time: 10:30

Well Depth: 19.45

Finished Time: 11:10

Depth to top of screen: unknown

Sample Time: 11:15

Depth to bottom of screen: unknown

Depth of Intake: 19.0

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 0.0

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0		0	-	-	-	-	-	-	
5	4.65	0.3	15.4	7.59	0.016	4.53	73.0	-86.5	150 mL/min
10	5.10	0.5	14.8	8.11	0.018	4.65	107.6	-63.1	
15	5.83	0.8	15.4	8.18	0.018	3.82	73.0	-47.3	
20	7.04	1.1	16.4	8.20	0.018	3.81	44.1	-36.4	
25	7.79	1.45	16.4	8.20	0.017	6.06	35.6	-17.4	
30	8.5	1.75	16.8	8.21	0.017	4.29	33.9	-4.8	
35	8.83	2.0	16.0	8.17	0.018	4.49	30.1	10.9	
40	9.24	2.4	16.1	8.17	0.018	4.70	29.0	22.0	
									Sample ID
									MW-203-103020-1115

Comments:

VOCs (3 vials)


Location (Site/Facility Name):

**Coopervision**

Job Number:

129375

Well ID:

OWS-302

Field Crew:

TW RM

Date: 10/30

Start Time: 09:10

Finished Time: 10:10

Sample Time: \_\_\_\_\_

Initial Depth to Water: 3.13

Well Depth: 21.82

Depth to top of screen: unkown

Depth to bottom of screen: unkown

Depth of Intake: 21.3

Purging Device: Watterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 5.5

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0	1-inch well	0	-	-	-	-	-	-	
5	3.9	0.2	14.4	6.43	0.21	4.95	7.27	-42.9	160 mL/min
10	4.95	0.4	15.8	7.15	0.25	4.44	10.9	-65.9	
15	5.7	0.6	15.1	7.05	0.265	4.91	7.72	-64.2	
20	6.2	0.75	13.1	7.30	0.33	6.06	6.67	-58.5	
25	6.55	0.85	11.9	7.29	0.31	7.22	7.78	-51.3	
30	6.9	1	14.4	7.42	0.38	7.5	6.75	-47.2	
35	7.2	1.1	15.1	7.49	1.58	7.25	7.55	-45.7	
40	well purged dry							-39.7	
50	7.77	1.25	10.5	7.81	0.67	10.08	5.06		
55	8.3	1.4	15.1	7.55	1.73	7.85	7.78	-40.3	
60	8.7	1.5	12.0	7.59	1.29	6.77	7.53	-43.2	
									Sample ID
									OWS-302-103020-1015

Comments:

VOCs (3 vials)

Has purged dry (occasionally)

Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-202

Field Crew:

TW, PM

Date: 10/29/20

Start Time: 10:35

Finished Time: 11:20

Sample Time: 11:25

Initial Depth to Water: 13.59

Well Depth: 18.9

Depth to top of screen: unknown

Depth to bottom of screen: unknown

Depth of Intake: 18.4

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 23.5

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0	6.62	0	-	-	-	-	-	-	
5	7.15	0.1	13.1	7.78	2.55	4.49	5.35	77.4	
10	7.42	0.2	13.6	7.82	2.64	4.41	5.25	76.9	
15	7.53	0.25	13.6	7.82	4.59	4.26	3.66	77.0	160 ml/min
20	7.68	0.3	13.1	7.82	2.40	4.60	3.15	85.9	
25	7.71	0.4	13.1	7.86	3.86	4.36	2.84	87.1	
30	7.73	0.5	13.2	7.82	4.26	4.44	2.75	85.3	
35	7.70	0.6	13.2	7.79	2.32	4.63	2.63	86.2	
40	7.67	0.7	13.6	7.78	2.16	4.83	2.48	89.2	
45	7.64	0.8	13.4	7.81	2.24	4.74	2.24	91.7	
									Sample ID
									MW-202-102920-1125

Comments:

VOCs (3 vials), TOC (3 vials), RSK-175 (3 vials), Alkalinity (1 plastic), NO<sub>2</sub>/NO<sub>3</sub>/Cl/SO<sub>4</sub> (1 plastic), Fe (1 plastic), Sulfide (1 plastic), Organic Acids (1 amber glass)  
 Fe unfiltered (1 plastic), Fe filtered (1 plastic)



Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-502

Field Crew:

TW, PA

Date: 10/29/20

Start Time: 12:50

Finished Time: 13:29

Sample Time: 13:40

Initial Depth to Water: 3.82

Well Depth: 32.71

Depth to top of screen: unkown

Depth to bottom of screen: unkown

Depth of Intake: 32.2

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 0.0

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0		0							
5	5.1	0.2	14.4	7.92	2.45	1.67	15.9	-58.9	175 mL/min
10	6.5	0.4	14.6	7.57	2.35	1.62	15.8	-64.1	
15	6.95	0.6	14.9	7.41	2.34	1.66	19.2	-68.2	
20	7.17	0.75	14.2	7.38	1.30	2.30	21.3	-66.9	
25	7.3	0.8	14.5	7.38	2.37	1.85	17.7	-66.6	
30	7.4	1.0	14.5	7.38	2.36	1.75	21.2	-62.3	
35	7.5	1.2	14.1	7.39	2.38	1.92	19.9	-69.9	
									Sample ID
									MW-502-102920-1340

Comments:

VOCs (3 vials)

Has purged dry (occasionally)

Location (Site/Facility Name):

Coopervision

Job Number:

129375

Well ID:

MW-501

Field Crew:

TW PM

Date: 10/29/20

Start Time: 14:29

Finished Time: 17:20

Sample Time: 1535

Initial Depth to Water: 3.33

Well Depth: 10.31

Depth to top of screen: unknwn

Depth to bottom of screen: unknwn

Depth of Intake: 9.8

Purging Device: Waterra w/Hydrolift

Tubing in well: No

Tubing Type: HDPE

PID (ppm): 0.0

Time Elapsed (Minutes)	Depth to Water (TOR)	Cumulative Purge Volume (gallons)	Temperature (celsius) +/- 10%	pH +/- 0.1	Conductivity (ms/cm) +/- 3%	Dissolved Oxygen (mg/L) +/- 10%	Turbidity (NTU) <50	ORP/eH (mV) +/- 10 mV	Comments
0		0							
3		0.1	16.1	8.35	0.83	9.31	27.3	19.2	160 ml/min
5	4.85	0.2	16.4	7.04	1.56	8.70	25.1	7.6	
10	6.3	0.5	16.4	9.37	0.82	8.95	70.5	-22.3	
15	7.40	0.7	17.1	9.12	1.96	5.95	69.5	-112	
20	7.89	0.8	17.81	8.63	2.80	5.41	65.1	-124	
25	8.57	1.0	15.1	8.42	3.26	7.95	59.1	-114.1	
30	9.09	1.2	18.0	7.93	4.25	5.69	88.2	-129	
35	8.66	1.4	13.7	8.12	2.67	8.18	105.7	-118	
40	9.3	1.7	17.4	7.75	3.36	6.68	106.3	-110	
45	9.37	1.8	17.1	7.73	2.89	7.59	103.7	-89.2	
50	9.43	1.9	16.6	7.72	2.75	8.16	97.9	-68.1	
55	9.45	2.0	17.1	7.68	2.69	8.22	92.2	-62.2	
60									MW-501-102920-1535

Comments:

VOCs (3 vials)


**APPENDIX D**

**October 2020 Groundwater Laboratory Report**





**Environment Testing  
America**

<b>Invoice/Credit No.</b>	4800031563	<b>Invoice Date</b>	November 13, 2020
<b>Terms</b>	3% 20 days, net 90 days	<b>Federal Tax ID</b>	23-2919996
<b>Remit to</b>	TestAmerica Laboratories, Inc. (dba Eurofins TestAmerica) PO BOX 204290, Dallas, TX 75320-4290		

<b>Bill to:</b>
Haley & Aldrich Inc Attention: Accounts Payable 70 Blanchard Rd Suite 430 Burlington, MA 01803

<b>Ship to:</b>
Haley & Aldrich, Inc. 200 Town Centre Drive #2 Rochester, NY 14623-4264

<b>P.O. Number</b>	<b>W.O. Number</b>	<b>Contract Number</b>	<b>Work Ordered by</b>
129375.005		BSA No Number	Mark Ramsdell
<b>Job Description</b>	<b>Site Name</b>	<b>SDG Number</b>	<b>Invoice Contact</b>
See below			A.P. Accounts Payable

Job No.	Job Description	Receipt Date	Quantity	Unit Price	Amount
	Method/Test Description				
<b>J177373-1</b>	<b>CooperVision</b>	<b>10/30/2020</b>			
	310.2 - Alkalinity		3.00	16.00	48.00
	353.2 - Nitrite		3.00	20.00	60.00
	6010C - Dissolved Iron		3.00	25.00	75.00
	6010C - Total Iron		3.00	25.00	75.00
	8260C - VOC's		9.00	70.00	630.00
	9038 - Sulfate		3.00	20.00	60.00
	9251 - Chloride		3.00	20.00	60.00
	Nitrate by calc - Nitrate		3.00	20.00	60.00
	RSK-175 - Methane, Ethane, Ethene		3.00	105.00	315.00
	SM 4500 S2 F - Sulfide		3.00	30.00	90.00
	SM 5310D - TOC		1.00	30.00	30.00
	VFA-IC - Volatile Fatty Acids		2.00	148.00	296.00
	Deliverables - Level IV Report (%)		1.00	179.90	179.90

<b>Project Number</b>	<b>Client Number</b>	<b>Project Manager</b>	<b>Subtotal (USD)</b>	<b>\$1,978.90</b>
48021757	46594	Steve Hartmann		
<b>Latest Sample Receipt Date</b>	<b>Latest Report Date</b>	<b>Phone Number</b>	<b>Total (USD)</b>	<b>\$1,978.90</b>
10/30/2020	11/13/2020	(413) 572-4000		

**For proper credit, please include invoice number on all remittance.**

Eurofins TestAmerica, Buffalo - 10 Hazelwood Drive, Amherst, NY 14228-2298

This invoice falls under Eurofins TestAmerica Standard T&C's of Net 30 Days unless superseded by another valid contract vehicle in place at the time these services were rendered.

#N/A  
#N/A  
#N/A  
#N/A

Regulatory Program:

TestAmerica Laboratories, Inc.

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc..

<b>Client Contact</b> Haley & Aldrich of New York 200 Town Centre Drive Suite 2 Rochester, NY, 14623 585-321-4242 Phone (xxx) xxx-xxxx email <del>xxx</del> mramsdell@haleyaldrich.com H&A Project Number :129375-005 Site: CooperVision H&A P O # 129375-005		<b>H&amp;A Project Manager: Mark Ramsdell</b> Tel/Fax: 585-321-4242		<b>H&amp;A Site Contact: Tim Williams</b> Lab Contact: Steve Hartman		<b>Date: 10/22/20</b> Carrier:		<b>COC No:</b> 1 of 1 COCs											
<b>Analysis Turnaround Time</b> Standard TAT if different from Below _____								<b>Sampler:</b> <b>For Lab Use Only:</b> Walk-in Client: Lab Sampling:  Job / SDG No.:											
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type</b> (C=Comp, G=Grab)	<b>Matrix</b>	<b># of Cont.</b>	<b>Filtered Sample (Y/N)</b>	<b>Perform MS / MSD (Y/N)</b>	<b>Voc (8260)</b>	<b>Total Organic Carbon (415.1)</b>	<b>Dissolved Gases (RSK - 175)</b>	<b>Alkalinity</b>	<b>Sulfide</b>	<b>Sulfate, Nitrate, Nitrite, Chloride</b>	<b>Organic Acids (Metabolic Acids-4)</b>	<b>Total Iron</b>	<b>Dissolved Iron</b>	<b>Sample Specific Notes:</b>	
MW-3-102920-0945		10/29	9:45	G	W	12			X	X	X	X	X	X	X	X	X	Dissolved Iron is filtered	
MW-202-102920-1125		10/29	11:25			17			X	X	X	X	X	X	X	X	X	Dissolved Iron is filtered	
MW-502-102920-1340		10/29	13:40			3			X										
MW-501-102920-1535		10/29	15:35			3			X										
MW-205-102920-1620		10/29	16:20			15			X	X	X	X	X	X	X	X	X	Dissolved Iron is filtered	
OWS-302-103020-1015		10/30	10:15			3			X										
MW-203-103020-1115		10/30	11:15			3			X										
MW-204-103020-1245		10/30	12:45			3			X										
OW-306-103020-1410		10/30	14:10			3			X										
<b>Preservation Used:</b> 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____																			
<b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.																		<b>Sample Disposal</b>	
<b>Special Instructions/QC Requirements &amp; Comments:</b>																			
<b>Custody Seals Intact:</b>		<b>Custody Seal No.:</b>		<b>Cooler Temp. (°C):</b> Obs'd: 3.0		<b>Corr'd:</b>		<b>Therm ID No.:</b> # LFC15											
Relinquished by: Patrick McGowan		Company: Haley & Aldrich		Date/Time: 10/30/20 14:45		Received by: [Signature]		Company: [Signature]		Date/Time: 10/30/20 14:45									
Relinquished by: [Signature]		Company: TA		Date/Time: 10/30/20 16:15		Received by: [Signature]		Company: TA		Date/Time: 10/30/20 16:15									
Relinquished by: [Signature]		Company: TA		Date/Time: 10/30/20 16:15		Received in Laboratory by: [Signature]		Company: TA		Date/Time: 10/30/20 16:15									



480-177373 Chain of Custody