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2014 PERIODIC REVIEW REPORT
COOPERVISION
711 NORTH STREET
SCOTTSVILLE, NEW YORK

By **Haley & Aldrich of New York**
Rochester, New York

For New York State Department of Environmental Conservation
East Avon, New York

File No. 70665-018
Revised 8 June 2015

Haley & Aldrich of New York
200 Town Centre Drive
Suite 2
Rochester, NY 14623
585.359.9000

15 June 2015
File No. 70665-018

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
East Avon, New York 14414

Attention: Mr. Frank Sowers, P.E.

Subject: CooperVision Facility – VCA Site#V00175
711 North Street
Scottsville, New York

Ladies and Gentlemen:

Haley & Aldrich, Inc. is pleased to provide this annual Periodic Review Report (PRR) for the CooperVision Facility (VCA #V00175) located in Scottsville, New York on behalf of CooperVision, Inc. This report summarizes activities performed during the period 16 May 2014 through 16 May 2015, including the results of the NYSDEC-approved supplemental remedial action (injection of Emulsified Vegetable Oil) to address contaminant residues in groundwater near the eastern property line. This report also summarizes the groundwater monitoring and sampling activities and data from the sub-slab depressurization system.

This report is being submitted to the New York State Department of Environmental Conservation (NYSDEC) in electronic (Adobe Acrobat) format conforming to the requirements of the NYSDEC letter dated 3 April 2015.

Please do not hesitate to contact us should you have any questions regarding this report.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

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

Vincent B. Dick
Senior Vice President

Enclosures

C: CooperVision; Randy Golden
CooperVision; Chuck Rogers
BakerHostetler; Christopher H. Marraro, Esq.

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Executive Summary

The CooperVision Site is located at 711 North Road in Scottsville, New York (See Figures 1 and 2) (the "Site"). The Site has been used for manufacturing of contact lenses since the mid-1970s. It includes the original site building with later additions comprising an aggregate total building area of approximately 50,000 sq. ft. Soil and groundwater on some portions of the Site have been found to contain certain volatile organic compounds (VOCs), primarily 1,1,1-trichloroethane (1,1,1-TCA) and its breakdown daughter products.

The Site has been remediated as part of the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP). The remedy for the Site included the following:

- Injection of Hydrogen Release Compound (HRC) to stimulate reductive dechlorination of the Site contaminants of concern (performed 2001).
- Installation and operation of a sub-slab depressurization system in the Site building to mitigate potential soil vapor intrusion (constructed and started 2006, operated continuously since).
- Installation of soil-bentonite-cement trench collars along utility lines to mitigate the potential for impacted soil vapors from migrating offsite via a potential preferential subsurface utility pathway (constructed 2008).
- Injection of an Emulsified Vegetable Oil up gradient of the Well MW-202 Area (initiated in 2013) to provide additional substrate for biologic breakdown of contaminant residues in groundwater near the eastern property line.

Also included as part of the remedy was the recording of Deed Restrictions, the Deed Restrictions address administrative control requirements of the VCA, including, but not limited to continuing the industrial use of the property, preventing use of groundwater at the site without prior approval of the state, and other measures required by NYSDEC, such as adherence to a NYSDEC approved Site Management Plan (SMP) for long-term management of the Site to maintain protection of human health and the environment.

Following approval of the Final Engineering Report (FER) on 16 June 2010 and the SMP on 29 July 2010, the NYSDEC granted CooperVision a release from liability for the Site on 29 November 2010. The Site is currently in a Site management program per the SMP.

The Site management program consists of implementing institutional and engineering controls (IC/ECs). Engineering controls include maintenance of the existing site cover, the sub-slab depressurization system (SSDS), and utility trench collars. Monitoring of the engineering controls is conducted periodically per the SMP. Institutional controls include those listed in the Deed Restrictions on the property, which include groundwater and land use restrictions, and adherence to the SMP. The institutional and engineering controls have remained in-place and functioned as designed during the reporting period without exception.

In addition, semi-annual groundwater sampling was conducted to monitor effectiveness of the Site remedy. The groundwater results indicate that the Site conditions are stable with the exception of results of trend analysis for one well , MW-202 which showed an increasing trend starting in the Spring of 2012 based on trend analysis criteria established in the SMP. As required by the SMP an evaluation was conducted as per Section 3.4.2 of the SMP, and a Remedial Action Work Plan (RAWP) for

supplemental remedial action was approved by the NYSDEC. Results of the RAWP implementation (well installation and injection of Emulsified Vegetable Oil (EVO)) are reported in this PRR.

Three rounds of sampling have been completed since the start of injection of the Emulsified Vegetable Oil in December 2013. The results of the groundwater monitoring conducted in October 2014 and April 2015 show changes in the groundwater geochemistry indicating enhanced reducing conditions within the groundwater and an increase in available organic substrate to support bioremediation of the Site COC in the vicinity of the injection. The Mann Kendall trend analysis of the historical groundwater monitoring data continues to shows an "increasing trend" of 1,1-DCE and 1,1-DCA concentrations at MW-202, as that term is defined under the Mann Kendall method; however the current groundwater monitoring data does not indicate that the EVO injection program has dispersed sufficiently to significantly impact this well area yet. Additional monitoring will continue with the next sampling event(s) to determine the effectiveness of the EVO injection program.

There were no areas of non-compliance noted during the reporting period. The SMP and Deed Restrictions remain in-place, groundwater has not been used, and Site use is consistent with land use restrictions (commercial/industrial).

We do not recommend changes to the Site management program at this time.

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1. Site Overview

The CooperVision Site is located at 711 North Road in Scottsville, New York (See Figures 1 and 2) (the "Site"). The Site has been used for manufacturing (fabrication of contact lenses) since the mid-1970s and includes the original building with additions having a total area of approximately 50,000 sq. ft. Soil and groundwater on some portions of the Site contain certain volatile organic compounds (VOCs), primarily 1,1,1-trichloroethane (1,1,1-TCA).

Soil and groundwater investigations were conducted at the Site between 1998 and 2000 as part of application for and acceptance into a 1998 investigation Voluntary Cleanup Agreement (VCA). Following investigation, a remedy was selected for the Site, which consisted of an injection with hydrogen release compound (HRC) to stimulate and enhance intrinsic bioremediation of the VOCs in the soil and groundwater. The HRC injection was conducted in 2001. In addition, a sub-slab depressurization system (SSDS) was installed in a portion of the Site building as a mitigative measure in 2006 as part of an Interim Remedial Measure (IRM).

A supplemental vapor intrusion investigation was conducted on the Site, in the right-of-way to the east of the Site, and on the adjacent apartments/townhomes to the east of the Site in 2008 and 2009. The investigation revealed soil vapors with detectable concentrations of Site compounds (1,1,1-TCA, 1,1–dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), chloroethane, and vinyl chloride) along the property line and in the adjacent eastern right-of-way, though the vapors were determined not to be adversely impacting the indoor air or sub-slab vapor at the apartment or townhome buildings to the east (per indoor air and sub-slab vapor testing). In addition to the investigation, a second IRM was completed that consisted of installing soil-bentonite-cement (SBC) trench collars in five(5) locations along existing utilities located on the CooperVision Site and within the adjacent eastern right-of-way. The purpose of the trench collars was to mitigate the potential for Site and nearby utility lines to act as potential preferential pathways for impacted soil vapors and groundwater.

Also included as part of the remedy, was the recording of Deed Restrictions. The Deed Restrictions address administrative control requirements of the VCA, including, but not limited to continuing the industrial use of the property, preventing use of groundwater at the site without prior approval of the state, and other measures required by NYSDEC, such as adherence to this Site Management Plan for long-term management of the Site to maintain protection of human health and the environment.

Following submittal and approval of a 16 June 2010 Final Engineering Report (FER) and 29 July 2010 Site Management Plan (SMP), the NYSDEC granted CooperVision a release from liability for the Site on 29 November 2010.

This report summarizes activities performed during the period 16 May 2014 through 16 May 2015. Historical data shown in this report contains data collected since the SMP was approved.
The corrective action was continued during the reporting period to address concentrations of Site related compounds observed at MW-202 during the 2012 reporting period which were determined through the SMP trend analysis procedure to constitute an increasing trend in the previous reporting period. A Remedial Action Work Plan (RAWP) was developed and implemented, which included the installation of an array of injection wells between the source area and monitoring well MW-202. The RAWP was approved by the Department on 18 October 2013 and was implemented in November 2013

with periodic injections of an organic carbon substrate consisting on Emulsified Vegetable Oil (EVO) from December 2013 through October 2014.
The corrective action activities included:

- The installation of seven (7) permanent injection wells
- The installation of two (2) bioaugmentation points (BAP)
- The introduction of emulsified oil via gravity infiltration to the wells as a bio-stimulation substrate
- The collection of groundwater samples at the BAP locations (3 events)

The results of the groundwater monitoring conducted in October 2014 and April 2015 as part of the corrective action activities is provided in Section 3.1.4 of this report.

2. Compliance Report

2.1 INSTITUTIONAL CONTROLS - REQUIREMENTS AND COMPLIANCE

A series of site restrictions in the form of Deed Restrictions are in effect at the Site. Those restrictions include prohibition of groundwater use unless rendered safe for the intended purpose and land use restrictions (commercial and/or industrial use, only). The Deed Restrictions also stipulate that the Site be managed under an approved SMP and that it be periodically certified that the engineering controls remain in-place at the Site and continue to be effective. These controls are to be certified annually by the property owner and professional engineer representing the remedial party, which is provided in this report.

The site restrictions have not been breached, and the Deed Restrictions remained in force during the reporting period. Certifications are included in Appendix A.

2.2 ENGINEERING CONTROLS - REQUIREMENTS AND COMPLIANCE

There are three engineering controls in place at the Site, which are as follows and further described in the sections below:

1. Existing Cover
2. Sub-Slab Depressurization System
3. Soil-Bentonite-Cement Utility Trench Collars

2.2.1 Existing Cover

Potential exposure to residual contamination at the Site is prevented by an existing cover, which consists of the CooperVision building slab, pavement, and vegetative cover. The existing cover is required to be maintained in accordance with the SMP. Excavations that breach the existing cover may require additional monitoring and soil management in accordance with the Excavation Management Plan included in the SMP. In addition, certain fill materials imported onto the Site must be tested prior to Site use to demonstrate that they comply with the requirements in the SMP. The cover system is monitored via visual inspection at the time of excavation as required, and during periodic Site visits as part of monitoring and certification.

Activities that would have impacted the integrity of the site cover were not performed during the reporting period. The site cover therefore remains in-place.

2.2.2 Sub-Slab Depressurization System

A sub-slab depressurization (SSD) system was installed as a contingency measure in order to mitigate potential risks of soil vapor intrusion, at the request of the NYSDEC and the New York State Department of Health (NYSDOH). The system was designed according to the "Sub-Slab Depressurization System (Amended Work Plan)" dated 18 May 2006 (Amended SSD Work Plan) and correspondence from the NYSDEC (RE: CooperVision Site #V00175-8, Sub-Slab Depressurization System (Amended Work Plan)) dated 8 August 2006.

Six (6) fans were installed to depressurize the sub-slab in the vicinity of the identified source area of groundwater contamination, each with a discrete suction location (except for the fan above the switch gear room which has two suction locations). The fans are located on the roof of the facility. In addition to the suction points and fans, seventeen (17) permanent vacuum measurement points were installed.

Based on vacuum testing results and regular system monitoring, the sub-slab depressurization system appears to be working as designed. Refer to Section 3.2 below, for additional information, including updates provided with this PRR.

2.2.3 Soil-Bentonite-Cement Utility Trench Collars

In order to reduce the potential for onsite and offsite utility lines (natural gas and water) to act as preferred pathways for offsite migration of soil vapor, five (5) soil-bentonite-cement (SBC) trench collars were installed along both the natural gas and water lines on the CooperVision Site and in the adjacent eastern right-of-way (Figure 2). The trench collars are monitored via visual inspection at the time of utility excavations if and when such excavations are required.

Activities that would have impacted the integrity of the trench collars were not performed during the reporting period. The trench collars therefore remain in-place as designed and installed.

2.2.4 Remedial Action Work Plan Implementation

After evaluation of the increasing trend analysis for MW-202, a Remedial Action Work Plan (RAWP) was prepared by Haley & Aldrich dated 1 October 2013. The RAWP was for the Emulsified Vegetable Oil Injection to be performed at the site in close proximity to the MW-202 well. The NYSDEC approved the plan on October 18, 2013, and the implementation was commenced on 18 November 2013.

Two (2) microwell points, useable for bioaugmentation, were installed following the injection point installation. The points are to be used for monitoring of the in-situ groundwater conditions. The points were constructed with 1-inch PVC risers with 0.10 slotted well screens extending from 10 to 20 feet bgs. All material removed was loaded into a roll off box and disposed of at Mill Seat landfill in Riga, NY.

After installation of the points and microwells, initial water levels were monitored and the emulsified vegetable oil was poured into each injection point in measured amounts and allowed to migrate into the formation via gravity. The gravity feed process was repeated periodically from November 2013 to October 2014. The amounts and dates are summarized on Table VI. As of October 13, 2014 110 gallons of emulsified vegetable oil has been injected.

2.4 IC/EC CERTIFICATION

Based on site visits and interviews with site personnel, the IC/ECs are herein certified by Mark N. Ramsdell, a professional engineer in the State of New York. Refer to Appendix A for a copy of the appropriate certification documentation.

3. Operations, Maintenance, & Monitoring Plan Compliance Report

Onsite monitoring during this reporting period consisted of three (3) groundwater sampling events in accordance with the sampling and analysis plan in the SMP and two (2) rounds of sub slab vacuum measurements of the sub-slab depressurization system (SSDS). Monitoring of the groundwater and operations, maintenance, and monitoring of the SSDS are further described below.

3.1 GROUNDWATER MONITORING

Groundwater sampling was conducted in October 2014, and April 2015. Updated summary tables (Tables I through IV), associated time series charts and groundwater contours (Figure 3, 4, and 5) are attached. The laboratory data has been submitted as an EQuIS deliverable to the NYSDEC.

Overall, the data appear consistent with previous sampling events. The following summarizes our observations from the groundwater monitoring program:

3.1.1 Source Area

Refer to Table I and Table IV for a summary of source area well data. Wells in the source area (MW-205 and OWS-302S) continue to show evidence that biological degradation continues to be active as described below. OWS-302S was not sampled during the October 2014 event:

- *The groundwater sampling results indicate a decreasing concentration for 1,1,1-TCA at well MW-205 over the reporting period.* These conditions indicate that this compound is biodegrading as 1,1-DCA continues to be detected at levels consistent with previous sampling events. These conditions indicate that 1,1-DCA is not "stacking" and appears to be degrading even though chloroethane has not been detected at concentrations exceeding the laboratory reporting limits. The biologically mediated reductive dechlorination process for 1,1,1-TCA is shown below:

$$1,1,1-TCA \rightarrow DCA \rightarrow Chloroethane \rightarrow Ethane \ \& \ Chloride$$

- 1,1,1-TCA was not detected during the April 2015 sampling event and chloroethane and chloride ion was detected at OWS-302S throughout the reporting period.

- Metabolic acids, butyric, propionic and acetic were detected in MW-205 indicating that the biologic processes stimulated by the Hydrogen Release Compound (HRC) injection continues to enhance the reductive dechlorination at the Site.

- The presence of ferrous iron (Fe^{2+}) and negative oxidation reduction potential (ORP) readings in the source area indicate that the aquifer conditions continue to be anaerobic, which is conducive to promote further biologically mediated reductive dechlorination of the 1,1,1-TCA and its associated daughter products.

3.1.2 Mid-gradient Area

A summary of mid-gradient area well data (MW-3, MW-501, MW-502) is provided in Table II for VOC and dissolved gases and Table IV for inorganic and field parameters. Overall, mid-gradient conditions are similar to recent groundwater monitoring events.

- A low level of 1,1,1-TCA (0.0019J mg/L) was detected at MW-3 during the April 2015 sampling event. This detection is likely due to the lower detection achieved by the laboratory analysis since the concentration of daughter products (1,1 DCA and 1,1-DCE) were significantly lower than during previous monitoring events.

- 1,1-DCA and vinyl chloride concentrations continue to decline or remain steady in the wells with detectable concentrations.

- The concentration of chloroethane, the breakdown product of 1,1-DCA, continues to be detected in the mid-gradient wells, most notably in MW-502. The concentrations in the mid-gradient wells decreased during the reporting period indicating that reductive dechlorination is continuing to progress to completion in this area.

3.1.3 Down-gradient Area

Table III provides a summary of groundwater quality for the downgradient wells MW-202, MW-203, MW-204 and OW-306. Overall, down-gradient groundwater conditions at these monitoring well locations are similar to previous groundwater monitoring events.

- 1,1,1-TCA concentrations were not detected in the downgradient wells with the exception of MW-202 and MW-204, where it was detected at an estimated concentration below the laboratory reporting limit of 0.005 mg/L in Well MW-202 and slightly above the laboratory reporting limit in MW-204. 1,1,1-TCA has been detected sporadically in MW-204 at a similar concentration as observed during the reporting period.

- 1,1-DCA and 1,1-dichloroethene (1,1-DCE) were detected in wells MW-202 and MW-204 during the reporting period. The concentrations of 1,1-DCA and 1,1,DCE detected during the reporting period at MW-204 was slightly lower than the concentrations detected during prior sampling events indicating that the plume is stable in this area of the Site. The concentrations of 1,1-DCA and 1,1-DCE were slightly higher in MW-202 than prior sampling events.

- Chloroethane was detected at an estimated concentration below the laboratory reporting limits in MW-202 during the April 2015 sampling event. The presence of chloroethane suggests that the reductive dechlorination process is progressing to completion in this area of the Site.

- VOCs were not detected at MW-306 and MW-203.

3.1.4 Remedial Action Monitoring Locations

Bioaugmentation points identified as BAP-1 and BAP-2 were installed in November 2013 as part of the corrective action. The points had been sampled in the previous reporting period and twice this period. . The field and indicator parameter analysis data (Table III) indicate that the

emulsified oil injection program has induced reducing groundwater conditions in this area of the Site during the 2014-2015 reporting period.

These observations include:

- Negative ORP readings with an average of -112 mV
- An increase in total alkalinity than observed in MW-202
- A lower concentration of sulfate relative to MW-202
- The presence of sulfide corresponding to the reduction of sulfate
- A lower concentration of nitrate than observed in MW-202
- An elevated concentration of Total Organic Carbon (TOC) of approximately 10 parts per million (ppm)
- The presence of Metabolic Acids

The field and indicator parameter data suggest that the groundwater conditions in this area of the Site is poised to support enhanced biodegradation of the groundwater contaminants via reductive dechlorination. These observations are further supported by the presence of the 1,1,1-TCA daughter products of 1,1-DCA and chloroethane at the BAP monitoring well locations.

The observed concentrations of these constituents were higher than detected at MW-3 suggesting that the introduction of the EVO substrate has continued to solubilize these constituents from the surrounding soil matrix.

It is anticipated that the intrinsic microbial population will continue to biodegrade these constituents via reductive dechlorination as has been observed throughout the Site.

3.1.5 Mann-Kendall Trend Analysis

The analytical results for the VOC analyses from the groundwater sampling events conducted during the reporting period in conjunction with the previous sampling events were evaluated using the Mann-Kendall statistical test for trend analysis (Refer to Appendix B for the results of the Mann-Kendall trend analysis).

In summary, most wells showed no trend, and MW-3 and MW-501 exhibited a decreasing trend. Even though the measured concentration of these constituents showed a decrease from October 2012 through April 2014, an increasing trend was noted at MW-202 for both 1,1-DCE and 1,1-DCA through the reporting period and for 1,1,1-TCA and 1,1-DCE at MW-204.

The Mann-Kendall trend analysis does not take into account magnitude of an increase or decrease; therefore as 1,1,1-TCA continues to degrade within the source area, it is expected that the daughter compounds, 1,1-DCA and 1,1-DCE will continue to increase in concentration at the downgradient wells prior to establishing a decreasing trend as reductive dechlorination proceeds towards completion.

The introduction of the EVO substrate upgradient from MW-202 may have induced an increased solubilization of these constituents from the soil matrix (as indicated by the analytical results for the BAP locations) but as biodegradation progresses in this area of the Site, the groundwater concentrations for these constituents will stabilize and decrease over time.

3.2 SUB-SLAB DEPRESSURIZATION SYSTEM OPERATIONS, MAINTENANCE, AND MONITORING

The sub-slab depressurization system continuously operates at the Site and is monitored monthly by CooperVision staff. CooperVision staff record the system vacuum readings and operations data on a Maintenance Form. This data is either stored onsite or sent offsite by CooperVision for permanent storing at a document storage facility. No maintenance was required or performed on the system during the reporting period.

The system was evaluated in October 2014 and in April 2015 by Haley & Aldrich. The system evaluation included vacuum measurements at the seventeen (17) existing monitoring points located within the facility. Overall, the system operation is consistent as in the past and acceptably and consistent with its intended function, design and construction. Leaks and/or other system concerns were not observed. The sub-slab vacuum levels were above the design criteria of 0.002 inches of water, except in the switchgear room. The switchgear room was noted during the initial installation and is caused by the negative pressure created by the facility's vacuum pumps located in this room. Vacuum testing results are included in Table V. Vacuum testing locations are shown on Figure 5.

4. Conclusions & Recommendations

The following are conclusions and recommendations regarding the PRR for the Site during the reporting period:

Site management complied with the SMP during the reporting period.

- The engineering controls (existing cover, sub-slab depressurization system, trench collars) were maintained during the reporting period.

- The Deed Restrictions remain in place. Groundwater has not been used at the Site during the reporting period. Site land use has remained manufacturing during the reporting period as dictated in the deed restrictions.

- Groundwater monitoring results indicate that the groundwater plume remains stable and that degradation is continuing; the apparent increasing trend in the previous reporting period for the two compounds at well MW-204 has been changed to a "No Trend" indicated by the Mann-Kendall statistical evaluation; the Mann-Kendall trend for this location otherwise remains the same while the EVO injection takes effect.

- No modifications to the Site remedy are recommended at this time.

- The implementation of the approved Remedial Action Work Plan has been completed. Three rounds of sampling have been completed since injection initiated, and results show initial effects of the injection such as changed geochemistry are occurring, indicating enhanced reducing conditions and increased organic substrate to support bioremediation.

- After the presence of the EVO is determined at MW-202, the next steps in the remedial action will include the evaluation of the intrinsic microbial population through the use of Biotraps® placed within the BAP locations and the introduction of microbial consortia if deemed necessary based on the results of the Biotrap® testing.

TABLE I
COOPERVISION, INC.
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES
SOURCE AREA WELLS

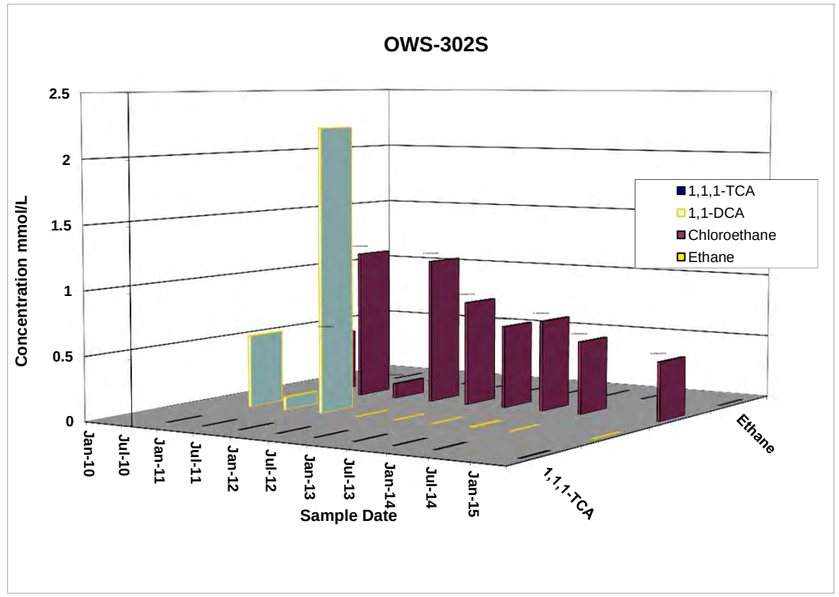
All values expressed in mg/L (ppm)

Sample ID:	**OWS-302S**										**MW-205**										
Well Screen Interval (ft):	13.0 - 14.0										21.2 - 28.0										
Date Sampled:	4/21/10	10/18/10	4/13/11	10/14/11	4/13/12	10/19/12	4/12/13	10/3/13	4/2/14	4/20/15	4/21/10	10/18/10	4/13/11	10/14/11	4/13/12	10/19/12	4/26/13	10/3/13	4/2/14	10/13/14	4/2/15
Compound:																					
VOLATILE ORGANICS	500x Dil.	500x Dil.	500x Dil.	500x Dil.	500x Dil.	500x Dil.	500x Dil.	250x Dil.	250x Dil.	250x Dil.	1000x Dil.	2000x Dil	2000x Dil	2500x Dil	2000x Dil	2000x Dil	2000x Dil.	2000x Dil.	2000x Dil.	2000x Dil.	2000x Dil.
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**56**	**10**	**220 D**	ND	ND	ND	**0.47**	ND	ND	ND	**230 D**	**220**	**300**	**230**	**250**	**250**	**240**	**230**	**220**	**200**	**240**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.9 J**
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**140**	**160**	**130**	**110**	**120**	**210**	**140**	**110**	**75**	**60**	**61**
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	**30**	**74**	**7.5**	**72**	**52**	**41**	**45**	**36**	**29**	**23**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.96 J**
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	**0.052**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMI-VOLATILE ORGANICS																					
Bis(2-ethylhexyl) pthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	10x Dil.	20x Dil.		125x Dil	125x Dil	125x Dil	100x Dil.	200x Dil.	100x Dil.	10x Dil.							5x Dil.	10x Dil.	25x Dil.	20x Dil.	50x Dil.
Methane	**0.93**	**1.3**	**0.054**	**11**	**13**	**17**	**6.6**	**14**	**8.8**	**0.46**	**0.011**	**0.006**	**0.130**	**0.024**	**0.021**	**0.015**	**0.520**	**1.000**	**2.200**	**2.0**	**3.0**
Ethane	ND	ND	**0.018**	**0.0057**	ND	ND	ND	ND	ND	ND	**0.013**	**0.006**	**0.011**	**0.024**	**0.021**	**0.012**	**0.014**	**0.010**	ND	**0.13**	ND
Ethene	ND	ND	**0.026**	**0.0052**	ND	ND	ND	ND	ND	ND	**0.012**	**0.0062**	**0.0077**	**0.017**	**0.014**	**0.012**	**0.011**	**0.01**	ND	**0.12**	ND

Notes & Abbreviations:
ND: Not Detected
NA: Not Analyzed
DRY: Insufficent Recharge
D: Diluted Result
J: Estimated Result
B: Blank Contamination

1. The tables represent all data as reported from the lab in concentration format (mg/L).

2. The time-trend graphs concentrations have been converted to mmol/L to provide better stochiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale may vary between graphs in order to depict ranges of values for each well.



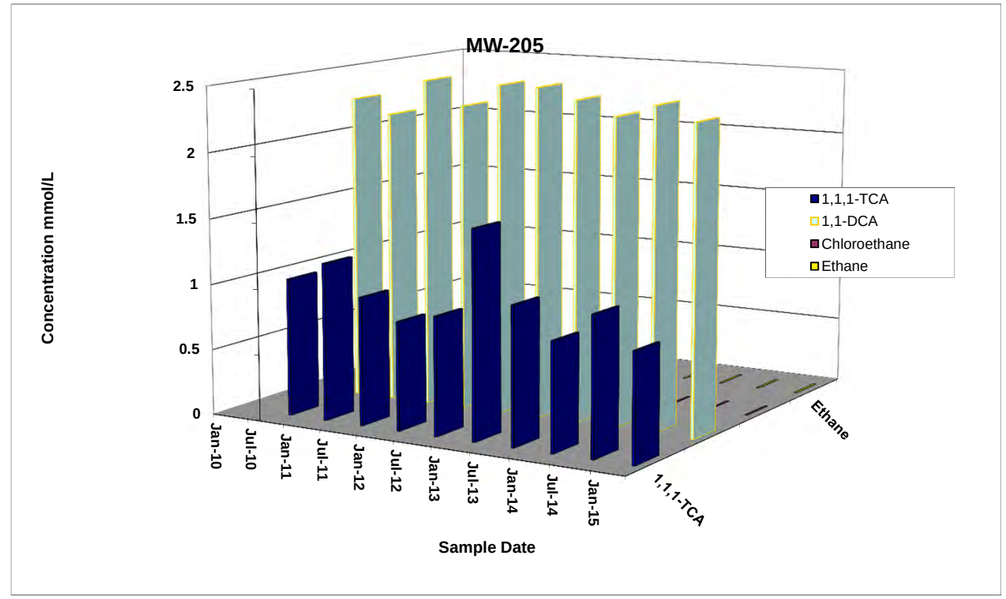


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

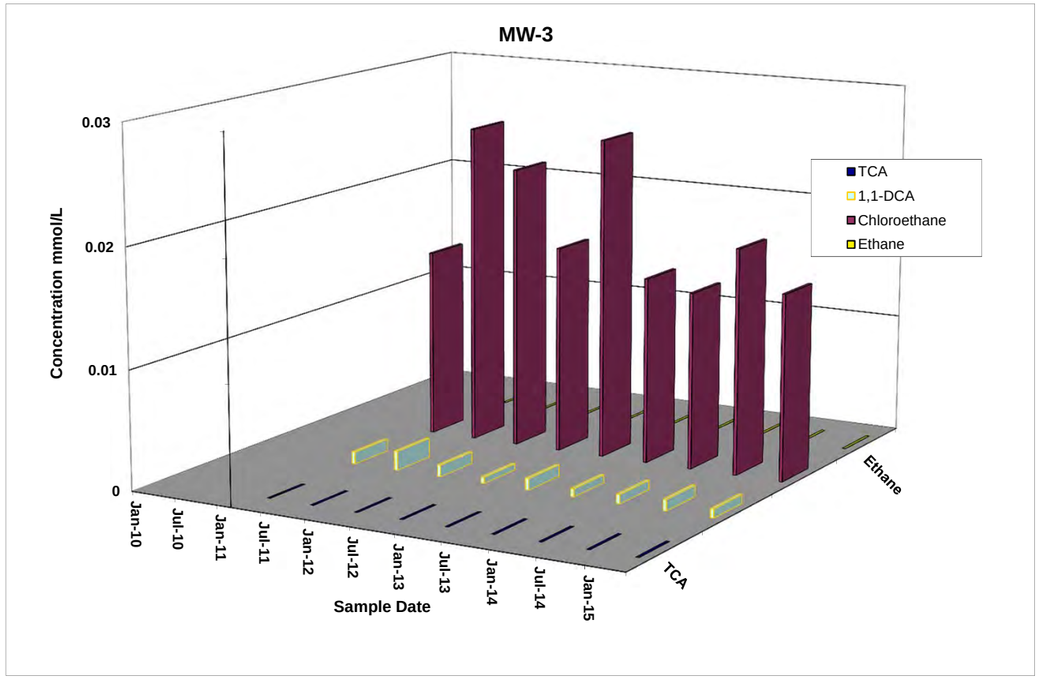
Sample ID:	**MW-3**											**MW-501**										
Well Screen Interval (ft):	3.0 - 10.0											20.0 - 25.0										
Date Sampled:	4/21/2010	10/19/2010	4/12/2011	10/14/2011	4/13/2012	10/19/2012	4/11/2013	10/3/2013	4/1/2014	10/13/2014	4/1/2015	4/21/2010	10/18/2010	4/13/2011	10/14/2011	4/13/2012	10/19/2012	4/12/2013	10/3/2013	4/2/2014	10/13/2014	4/2/2015
Compound:																						
VOLATILE ORGANICS	10x Dil.	10x Dil.	10x Dil.	10x Dil.	10x Dil.	10x Dil.	5x Dil.	10x Dil.	5x Dil.	5x Dil.		2.5x Dil.	2.5x Dil.	5x Dil.	5x Dil	5x Dil	5x Dil	5x Dil.	10x Dil.	2x Dil.	10x Dil.	10x Dil.
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0027J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.1**	**0.16**	**0.098**	**0.052**	**0.096**	**0.067**	**0.077**	**0.093**	**0.074**	**0.062**	**0.025**	**0.088**	**0.089**	**0.15**	**0.1**	**0.17**	**0.16**	**0.076**	**0.13**	**0.063**	**0.090**	**0.14**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.019**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.00031J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	**1.0**	**1.7**	**1.5**	**1.1**	**1.7**	**1.0**	**0.94**	**1.2**	**0.99**	**0.82**	**0.11**	**0.46**	**0.49 D**	**1.2 D**	**0.9 D**	**0.98 D**	**1.4 D**	**0.59**	**1.4**	**0.34**	**1.0**	**1.2**
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	**0.25**	**0.38**	**0.32**	**0.19**	**0.29**	**0.14**	**0.15**	**0.14**	**0.083**	**0.050**	**0.004J**	**0.065**	**0.095**	**0.1**	**0.084**	**0.079**	**0.09**	**0.094**	**0.093**	**0.055**	ND	**0.088**
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	10x Dil.	10x Dil.	25x Dil.	25x Dil.			25x Dil.	25x Dil.	25x Dil.			250x Dil.	125x Dil.	250x Dil.	250x Dil.	250x Dil.	250x Dil.	200x Dil.	200x Dil.	200x Dil.	100x Dil.	250x Dil.
Methane	**0.93**	**1.6 D**	**1.4**	**2.4**	**4.3**	**3.5**	**1.7**	**2.2**	**1.6**	**0.44**	**0.76**	**15**	**9.7**	**19**	**13**	**17**	**12**	**12**	**12**	**10**	**2.4**	**16**
Ethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethene	**0.020**	**0.031**	**0.032**	**0.053**	**0.110**	**0.083**	**0.048**	**0.070**	**0.058**	**0.042**	**0.010**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes & Abbreviations:

ND: Not Detected
NA: Not Analyzed
DRY: Insufficent Recharge
D: Diluted Result
J: Estimated Result
B: Blank Contamination

1. The tables represent all data as reported from the lab in concentration format (mg/L).

2. The time-trend graphs concentrations have been converted to mmol/L to provide better stochiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale may vary between graphs in order to depict ranges of values for each well.



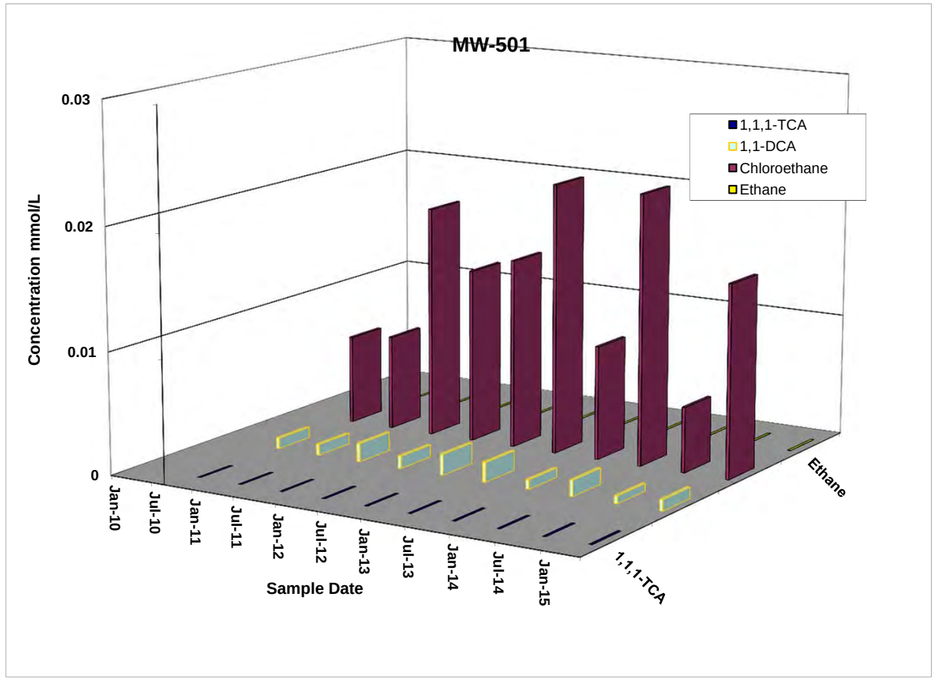


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID:	**MW-502**											**BAP-01**			**BAP-02**		
Well Screen Interval (ft):	30.0 - 35.0											10.0 - 20.0			10.0 - 20.0		
Date Sampled:	4/21/2010	10/18/2010	4/12/2011	10/14/2011	4/13/2012	10/19/2012	4/12/2013	10/3/2013	4/2/2014	10/9/2014	4/2/2015	4/2/2014	10/14/2014	4/2/2015	4/2/2014	10/13/2014	4/2/2015
Compound:																	
VOLATILE ORGANICS	50x Dil.	100x Dil.	100x Dil.	100x Dil.	100x Dil.	100x Dil.	25x Dil.	50x Dil.	25x Dil.	25x Dil.	25x Dil.	20x Dil.	20x Dil.	20x Dil.	2x Dil.	2x Dil.	2x Dil.
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.089 J**	**1.3**	**1.6**	**1.8**	**0.25**	**0.35**	**0.21**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.3**	**2.7**	**1.8**	**0.18**	**0.27**	**0.057**
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0082 J**	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.019**	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.025 J**	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.25 J**	ND	ND	**0.00056 J**
Chloroethane	**11 D**	**13**	**17**	**16**	**15**	**11**	**4.9**	**7.2**	**4.4**	**5.0**	**3.5**	**0.16**	**0.28**	**0.24**	**0.012**	**0.019**	**0.0078 J**
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0086 J**	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	**0.6**	ND	**0.28**	**0.54**	**0.36**	**0.29**	**0.27**	**0.065**	ND	**0.094 J**	ND	ND	**0.0025 J**
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	ND	NA	ND	ND
DISSOLVED GASES	200x Dil.	200x Dil.	200x Dil.	250x Dil.	250x Dil.	250x Dil.	125x Dil.	250x Dil.	250x Dil.			5x Dil.				10x Dil.	
Methane	**15**	**11**	**18**	**17**	**20**	**21**	**8.8**	**22**	**16**	**14**	**15**	**0.33**	**0.39**	**0.28**	**0.061**	**0.33**	**0.071**
Ethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0011**	ND	ND	**0.0072**	**0.0023**	**0.004**
Ethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0072**	**0.0088**	ND	**0.002**	**0.0023**	ND

Notes & Abbreviations:
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DRY: Insufficent Recharge
D: Diluted Result
J: Estimated Result
B: Blank Contamination

1. The tables represent all data as reported from the lab in concentration format (mg/L).

2. The time-trend graphs concentrations have been converted to mmol/L to provide better stochiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale may vary between graphs in order to depict ranges of values for each well.

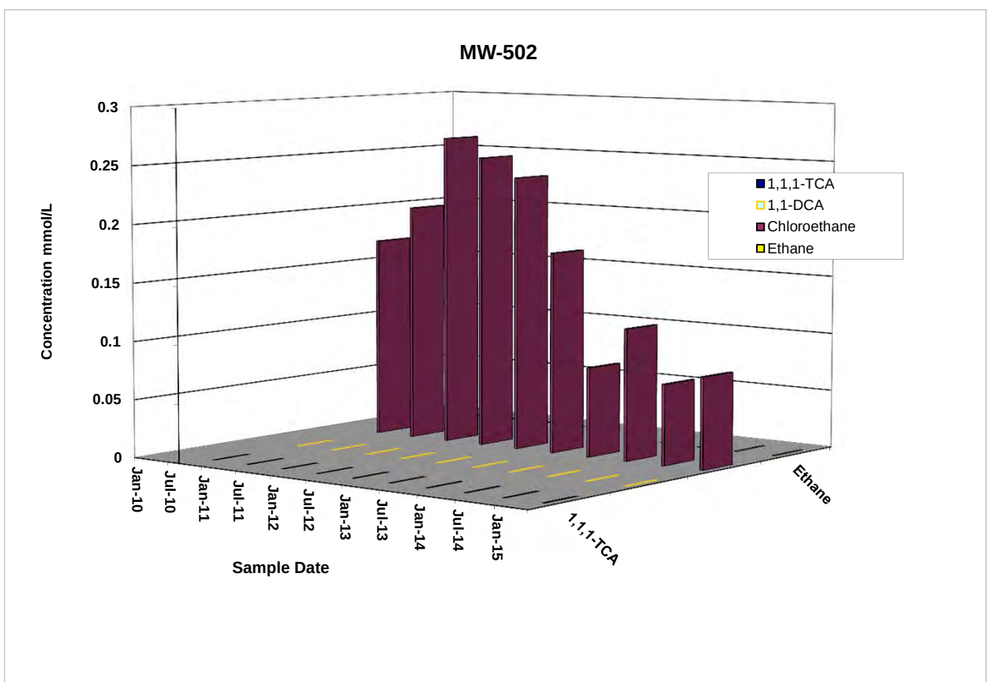

TABLE III
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID:	**MW-202**											**MW-203**										
Well Screen Interval (ft):	10.1 - 20.3											9.8 - 20.0										
Date Sampled: / **Compound:**	4/21/10	10/19/10	4/12/11	10/13/11	4/12/12	10/19/12	4/11/13	10/3/13	4/1/14	10/9/14	4/1/15	4/21/10	10/19/10	4/11/11	10/13/11	4/12/12	10/18/12	4/11/13	10/3/13	4/1/14	10/9/14	4/1/15
VOLATILE ORGANICS																						
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.0130**	ND	**0.0160**	**0.0300**	**0.0180**	**0.0510**	**0.0340**	**0.0300**	**0.0360**	**0.0360**	**0.064**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	**0.0083**	ND	**0.0100**	**0.0200**	**0.0140**	**0.0400**	**0.0320**	**0.0260**	**0.0360**	**0.0350**	**0.050**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.00170 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.00063 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0013 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES																						
Methane	NA	NA	NA	NA	NA	NA	NA	NA	ND	**0.004**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes & Abbreviations:
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NA: Not Analyzed
DRY: Insufficent Recharge
D: Diluted Result
J: Estimated Result
B: Blank Contamination
E: Estimated Result

1. The tables represent all data as reported from the lab in concentration format (mg/L).

TABLE III
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID:	**MW-204**											**OW-306**									
Well Screen Interval (ft):	9.8 - 20.0											4.0 - 14.0									
Date Sampled: / **Compound:**	4/21/10	10/19/10	4/12/11	10/14/11	4/12/12	10/19/12	4/11/13	10/3/13	4/2/14	10/9/14	4/1/15	4/21/10	10/19/10	4/11/11	10/13/11	4/12/12	10/18/12	4/11/13	10/2/13	4/1/14	10/9/14
VOLATILE ORGANICS																					
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	**0.0055**	**0.0130**	**0.0059**	**0.0077**	**0.0082**	**0.0071**	**0.0074**	**0.0074**	**0.0074**	ND	**0.0089**	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.00021 J**
1,1-Dichloroethene	**0.0053**	**0.0130**	ND	**0.0087**	**0.0084**	**0.0067**	**0.0092**	**0.0093**	**0.0094**	**0.0061**	**0.0088**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	**0.0063**	ND	ND	**0.0051**	ND	ND	ND	**0.005**	ND	**0.0066**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0021 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
DISSOLVED GASES																					
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes & Abbreviations:
ND: Not Detected
NA: Not Analyzed
DRY: Insufficent Recharge
D: Diluted Result
J: Estimated Result
B: Blank Contamination
E: Estimated Result

1. The tables represent all data as reported from the lab in concentration format (mg/L).

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	**MW-205**											**MW-3**										
Analyte	4/24/10	10/18/10	4/13/11	10/14/11	4/13/12	10/19/12	4/26/13	10/3/13	4/2/14	10/13/14	4/2/15	4/21/10	10/19/10	4/12/11	10/14/11	4/13/12	10/19/12	4/11/13	10/3/13	4/1/14	10/14/14	4/1/15
INORGANICS (mg/L)																						
Nitrite Nitrogen	**2**	<0.05	<20	**0.058**	<20	<10	<20	<20	<20	<20	**0.056**	<0.50	<0.010	<0.010	<0.010	<0.1	<0.1	<10	<10	<10	<1	**0.142**
Nitrate/Nitrite Nitrogen	NA	NA	NA	<0.05	<0.01	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	<0.05	<0.010	<0.1	NA	NA	NA	NA	NA
Chloride	**659**	**762**	**830**	**821**	**720**	**748**	**837**	**736**	**760**	**831**	**731**	**257**	**290**	**331**	**407**	**516**	**656**	**633**	**561**	**458**	**406**	**530**
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	-	-	-	-	-	-	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	NA	NA	NA
Nitrate Nitrogen	<0.05	<4.0	<5.0	NA	NA	NA	<1	<1	<4	<1	<1	<0.50	<1.0	<1.0	NA	NA	NA	<1	<1	1 R	<1	<1
Total Alkalinity	**2610**	**2750**	<2.0	**2900**	**2900**	**2980**	**2900**	**2900**	**3150**	**3300**	**3400**	**205**	**212**	**188**	**184**	**183**	**185**	**192**	**210**	**230**	NA	NA
Sulfate	**8.8**	**10.9**	**10.5**	**10**	**10.4**	**14.9**	**9.7**	**10.9**	**9.3**	**11.3**	**8.9**	**2.6**	**3.2**	**3.4**	**2.7**	**2.9**	**3.3**	**6.9**	**7.7**	**15**	**12.2**	**20.9**
Total Sulfide	**1.6**	<1.0	<1.0	**2.6**	**1.2**	**1.2**	<1	<1	**<1**	**1.6**	<1	**1.5**	<1.0	<1.0	<1.0	<1.0	**1.1**	**1.1**	<1	<1	<1	<1.0
Total Iron	**117**	**10.5**	**103**	**106**	NA	NA	NA	**99.1**	NA	NA	NA	**21.8**	**6.7**	**7.79**	**18.2**	NA	NA	NA	**15.2**	NA	NA	NA
Total Manganese	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)	20x Dil.		20x Dil	25x Dil																		
Lactic Acid (C3)	<20	<1.0	<20	<25	<25	<20	<25	<25	<100	<20	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetic Acid (C2)	**310**	**430 D**	**400**	**500**	**480**	**550**	**630**	**720**	**850**	**860**	**940**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Propionic Acid (C3)	**820**	**850 D**	**700**	**730**	**790**	**860**	**810**	**890**	**1000**	**790**	**770**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyruvic Acid (C3)	<10	<0.5	<10	<13	<13	<10	<13	<13	<50	<10	<13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyric Acid (C4)	**1800**	**2600 D**	**2400**	**3000**	**2400**	**2500**	**3100**	**2900**	**2100**	**3000**	**3100**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																						
Dissolved Oxygen (mg/L)	**1**	**2.04**	**3.51**	**1.6**	**0.33**	**0.62**	**1.32**	**0.12**	**5.73**	**0.14**	**0.54**	NA	NA	NA	NA	NA	NA	**12.61**	**2.18**	**1.90**	**6.57**	**9.92**
Redox (mV)	**-113**	**-105**	**-82**	**-48**	**-105**	**-22**	**-40.7**	**-80.7**	**40.8**	**-139.2**	**-17.6**	NA	NA	NA	NA	NA	NA	**295.2**	**-94.4**	**73.6**	**81**	**108.8**
Conductivity (mS)	**12.9**	**6.75**	**6.98**	**0.81**	**10.52**	**7.19**	**7.28**	**6.86**	**0.387**	**7.67**	**7.53**	NA	NA	NA	NA	NA	NA	**2.13**	**1.93**	**1.94**	**1.78**	**1.7**
Iron, dissolved (mg/L)	**2.5**	**4.5**	**6**	**6**	**3**	NA	**5.5**	**6.5**	**4.5**	**5**	**1.25**	**0**	**0.3**	NA	NA	NA	NA	**0.5**	**0.0**	**0.5**	**0**	**0**
Alkalinity (mg/L)	**1460**	**1600**	**1840**	**2200**	**195**	NA	NA	NA	NA	NA	NA	**300**	**240**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide (mg/L)	NA	NA	**470**	NA	NA	NA	NA	NA	NA	NA	NA	**136**	**80**	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	**MW-501**											**MW-502**										
Analyte	7/19/01	10/18/10	4/13/11	10/14/11	4/13/12	10/19/12	4/12/13	10/3/13	4/2/14	10/13/14	4/2/15	4/21/10	10/18/10	4/12/11	10/14/11	4/12/12	10/19/12	4/12/13	10/3/13	4/2/14	10/9/14	4/2/15
INORGANICS (mg/L)																						
Nitrite Nitrogen	ND	<0.010	<0.100	<0.010	<60	<2.0	<100	<40	<200	<40	**0.011**	<0.50	<1.0	<1.0	<0.010	<20	<1.0	<20	<20	<20	<20	<0.010
Nitrate/Nitrite Nitrogen	**0.063**	NA	NA	<0.05	<1	<1.0	NA	NA	NA	NA	<1	NA	NA	NA	<0.050	<1	<1.0	NA	NA	NA	NA	NA
Chloride	**355**	**1460**	**7500**	**1940**	**2820**	**1940**	**4260**	**1860**	**7090**	**2310**	**5590**	**562**	**606**	**693**	**676**	**744**	**884**	**862**	**1030**	**1030**	**935**	**780**
Dissolved Organic Carbon	**3.38**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	-	-	-	-	-	-	-	-	NA	NA	NA	-	-	-	-	-	-	-	-	NA	NA	NA
Nitrate Nitrogen	**0.063**	<1.0	<1.0	NA	NA	NA	<1	<1	4 R	<1	<1	<0.50	<0.010	<0.010	NA	NA	NA	<1	<1	1 R	<1	<1
Total Alkalinity	**201**	**381**	**262**	**424**	**309**	**365**	**217**	**410**	**211**	**413**	**293**	**800**	**751**	**670**	**730**	**656**	**722**	**510**	**489**	**460**	**468**	**445**
Sulfate	**40.2**	**7.3**	**64.1**	**4.3**	**31.1**	**8.1**	**62.4**	**36.3**	**123**	**53.6**	**92**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2	<2	<2	**2.7**
Total Sulfide	<1.00	**1.4**	<1.0	**2.2**	**6.2**	<1.0	**1.8**	**1**	<1	**1.3**	**1.1**	**5.8**	**1.8**	<1.0	<1.0	**1.3**	<1.0	**1.4**	<1	<1	<1	**1.3**
Total Iron	**462**	**6.37**	**11.8**	**4.6**	NA	NA	NA	21	NA	NA	NA	**186**	**26**	**571**	**637**	NA	NA	NA	**11.5**	NA	NA	**88.4**
Total Manganese	**11.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)																						
Lactic Acid (C3)	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetic Acid (C2)	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Propionic Acid (C3)	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyruvic Acid (C3)	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyric Acid (C4)	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																						
Dissolved Oxygen (mg/L)	**0.3**	**0.02**	**0**	**0.4**	**2.11**	**0.32**	**6.25**	**2.00**	**0.79**	**5.5**	**0.52**	**0**	**0.17**	**0**	**0.3**	**0.2**	**0.11**	**0.24**	**0.07**	**0.0**	**0.09**	**0.85**
Redox (mV)	**-280**	**-339**	**-122**	**-194**	**-82**	**-149**	**-34.9**	**-134.1**	**-48.2**	**-31**	**-13.4**	**-184**	**-131**	**-148**	**-157**	**-93**	**-102.5**	**-10.1**	**-143.6**	**-42.7**	**-100.7**	**-53.0**
Conductivity (mS)	**1.61**	**5.37**	**23.2**	**0.76**	**9.31**	**6.69**	**12.18**	**6.28**	**19.92**	**7.93**	**20.38**	**9.64**	**3.13**	**2.04**	**0.36**	**3.17**	**3.34**	**3.36**	**3.67**	**3.87**	**3.54**	**3.17**
Iron, dissolved (mg/L)	ND	**1.6**	**4.6**	**1**	**NA**	NA	**4.25**	**6.0**	**3.5**	**1.5**	**0.5**	**0**	**1**	**4.2**	NA	**1**	NA	**1.5**	**6.0**	NA	NA	**0**
Alkalinity (mg/L)	**920**	**400**	**270**	**500**	**60**	NA	NA	NA	NA	NA	NA	**2400**	**740**	**650**	**110**	**1820**	NA	NA	NA	NA	NA	NA
Carbon Dioxide (mg/L)	**34**	**225**	**194**	**37.9**	**217.5**	NA	NA	NA	NA	NA	NA	**624**	NA	**3838**	NA	NA	NA	NA	NA	NA	NA	NA

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	**OWS-302-S**										**MW-202**			**BAP-01**			**BAP-02**		
Analyte	4/21/10	10/18/10	4/13/11	10/14/11	4/13/12	10/19/12	4/12/13	10/3/13	4/2/14	4/20/15	4/1/14	10/9/14	4/1/15	4/2/14	10/13/14	4/2/15	4/2/14	10/13/14	4/2/15
INORGANICS (mg/L)																			
Nitrite Nitrogen	<0.50	<1.0	<100	0.031	<1.0	<0.020	<50	<100	<100	<100	<100	<30	0.011	<10	<1	**0.021**	<10	<1	**0.055**
Nitrate/Nitrite Nitrogen	NA	NA	NA	<0.050	<0.060	<0.010	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	NA	NA
Chloride	**3070**	**2880**	**3670**	**3200**	**3300**	**3090**	**2630**	**2720**	**2790**	**2850**	**3560**	**1680**	**3800**	**406**	**466**	**6.5**	**434**	**574**	**580**
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	-	-	-	-	-	-	-	-	NA	NA	<1	NA	<1	**6**	NA	**6.5**	**14.5**	NA	**6.6**
Nitrate Nitrogen	<5.0	<0.020	<2.0	<0.050	NA	NA	<1	<1	<1	<1	**1.7**	<1	**2.6**	<1	<1	<1	<1	<1	<1
Total Alkalinity	**1210**	**1150**	**622**	**958**	**772**	**608**	**676**	**669**	**749**	**762**	**150**	**125**	**160**	**230**	**219**	**261**	**260**	**275**	**258**
Sulfate	**44.9**	**2.2**	**8.7**	<2.0	<2.0	<2.0	<2	<2	2.4	**2.5**	**424**	**490**	**404**	**328**	**223**	**189**	**64.9**	**95.4**	**178**
Total Sulfide	**1.2**	<1.0	**4.2**	<1.0	<1.0	<1.0	**1.4**	<1	<1	<1	<1	<1	<1	**1.5**	**<1**	**3.3**	**1.4**	<1	**2.4**
Total Iron	**18.1**	**79.6**	**52.5**	**50.6**	NA	NA	NA	**18.7**	NA	NA	NA	NA	**0.92**	NA	NA	NA	NA	NA	NA
Total Manganese	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)																			
Lactic Acid (C3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetic Acid (C2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1	<1	<1	**7.3**	**1**	**5.5**	**9.7**	**8.1**	<1
Propionic Acid (C3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1	<1	<1	**6.5**	**<1**	<1	**1.6**	**1.1**	<1
Pyruvic Acid (C3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.5	<0.5	<0.5
Butyric Acid (C4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2	<2	<2	<2	<2.0	<2	<2	<2	<2
FIELD PARAMETERS																			
Dissolved Oxygen (mg/L)	**0.86**	**3.08**	**4.66**	**0.7**	**4.71**	**0.48**	**0.64**	**0.08**	**0**	**2.03**	**1.26**	**0.84**	**2.03**	**0.67**	**0.15**	**2.45**	**0.04**	**0.14**	**6.99**
Redox (mV)	**-63**	**-100**	**-156**	**-128**	**-17**	**-71.8**	**-68.1**	**-136.3**	**-27**	**-37.6**	**157.2**	**90.3**	**215.8**	**-186.2**	**-107.1**	**-65.1**	**-210.5**	**-192.7**	**-87.8**
Conductivity (mS)	**9**	**12.8**	**17.6**	**1.2**	**7.12**	**9.84**	**3.52**	**8.50**	**9.27**	**9.39**	**12.02**	**6.3**	**10.97**	**2.22**	**2.21**	**2.28**	**2.08**	**2.38**	**2.56**
Iron, dissolved (mg/L)	**1.1**	**5.8**	**1.6**	**2.6**	**5**	NA	**4.25**	**7.0**	**3.5**	**2**	**0.0**	**0.0**	**0.0**	**0.0**	**1.5**	**NA**	NA	NA	NA
Alkalinity (mg/L)	**920**	**1000**	**900**	**1000**	**315**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Dioxide (mg/L)	**526**	**589**	**1050**	**150**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes & Abbreviations

NS - Not Sampled

NA - Not analyzed or results not determined due to field conditions (e.g. - water too turbid to obtain field parameters).

ND - Not detected in field tests

TOC - Total Organic Carbon

D - Diluted

R - Result rejected. See Data Usability Summary Report.

* - The dissolved oxygen values detected may be a result of malfunctioning field equipment and may not be indicative of actual aquifer conditions.

1. Due to the conditions at wells MW-3, OWD-302-D, OWS-302-S, and MW-501 (poor well recharge during purging), dissolved oxygen and redox values will appear variable and may not be indicative of actual aquifer conditions.

Table V
Annual SSD System Monitoring

Location (Site/Facility Name): **CooperVision**
Location (Address): **Scottsville, NY**
Client: **CooperVision**

Date: **13-Oct-14**
Performed By: **J. Sanger**
Job Number: **70665-018**

Test Point	10/18/2012 Vacuum Reading ("WC)	4/22-4/25/2013 Vacuum Reading ("WC)	10/02/13 Vacuum Reading ("WC)	4/03/2014 Vacuum Reading ("WC)	10/13/2014 Vacuum Reading ("WC)	_____ Vacuum Reading ("WC)
T-1	Covered by Cupboards	0.021	0.017	0.017	0.022	
T-2	*	*	*	*	*	
T-3	0.392	0.446	0.476	0.434	0.358	
T-4	covered by ventilation box	0.042	0.032	0.030	0.025	
T-5	0.067	0.045	0.063	0.043	0.079	
T-6	0.080	0.057	0.059	0.060	0.078	
T-7 (doors closed)	0.007	0.007	-0.005	-0.019	-0.025	
T-7 (doors open)	ND	ND	0.000	0.000	0.000	
T-8	0.031	0.028	0.038	0.032	0.034	
T-9 (doors closed)	ND	ND	-0.021	-0.010	-0.001	
T-9 (doors open)	0.013	0.026	0.017	0.023	0.023	
T-10	0.022	0.027	0.021	0.021	0.023	
T-11	covered by carpet	0.402	0.753	0.744	0.777	
T-12	0.015	0.011	0.014	0.017	0.012	
T-13	covered by carpet	0.009	0.007	0.009	0.008	
T-14	0.010	0.014	0.015	0.019	0.005	
T-15	0.030	0.029	0.034	0.036	0.035	
T-16	0.023	0.021	0.021	0.027	0.021	
T-17	0.018	0.019	0.019	0.024	0.011	
T-18	blocked by vending machines	0.040	0.014	0.014	0.024	

* T-2 is not a valid test point

Suction Point	10/18/2012 Vacuum Reading ("WC)	4/22-4/25/2013 Vacuum Reading ("WC)	10/02/13 Vacuum Reading ("WC)	4/03/2014 Vacuum Reading ("WC)	10/13/2014 Vacuum Reading ("WC)	_____ Vacuum Reading ("WC)
S-1	3.8	3.8	3.8	3.8	3.7	
S-2	3.7	3.7	3.6	3.8	3.6	
S-3	2.7	1.6	1.5	1.5	1.5	
S-4/5	2.4	2.4	2.2	2.1	2.1	
S-6	3.6	3.6	3.5	3.6	3.4	
S-7	1.7	1.7	1.6	1.6	1.5	

Visual Inspection of System:
(4/13) The Bio Lab has been converted into the Human Resources Director's Office, and has been covered with wall-to-wall carpet. Carpet was removed to access points.
(4/13) Cafeteria (T-1 and T-18) was renovated, but points were made accessible.
(4/13) Injection Molding Room (T-9) and Switchgear Room (T-7) are under considerable negative pressure and when doors are open, vacuum is achieved in the subslab.
(04/03/14) 1. Bring a really big screw driver. 2. T-1 is under new counter, under column of drawers with the top drawer labeled "knives". 3. T-11 and T-13 are accessible through a hole in the new carpet. 4. T-18 is now a 1-inch stick-up with a brass cap in front of the ice cream machine.

Recommendation Actions:
None

Description of Past Year Activities:

Table V
Annual SSD System Monitoring

Location (Site/Facil **CooperVision**
Location (Address) **Scottsville, NY**
Client: **CooperVision**

Date: **2-Apr-15**
Performed By: **J. Sanger**
Job Number: **70665-020**

Test Point	4/03/2014 Vacuum Reading ("WC)	10/13/2014 Vacuum Reading ("WC)	4/1/2015 Vacuum Reading ("WC)	_____ Vacuum Reading ("WC)
T-1	0.017	0.022	0.021	
T-2	*	*	*	
T-3	0.434	0.358	0.444	
T-4	0.030	0.025	0.036	
T-5	0.043	0.079	0.059	
T-6	0.060	0.078	0.069	
T-7 (doors closed)	-0.019	-0.025	-0.022	
T-7 (doors open)	0.000	0.000	0.000	
T-8	0.032	0.034	0.035	
T-9 (doors closed)	-0.010	-0.001	0.007	
T-9 (doors open)	0.023	0.023	0.023	
T-10	0.021	0.023	0.067	
T-11	0.744	0.777	0.923	
T-12	0.017	0.012	0.017	
T-13	0.009	0.008	0.011	
T-14	0.019	0.005	0.006	
T-15	0.036	0.035	0.036	
T-16	0.027	0.021	0.025	
T-17	0.024	0.011	0.017	
T-18	0.014	0.024	0.078	

* T-2 is not a valid test point

Suction Point	4/03/2014 Vacuum Reading ("WC)	10/13/2014 Vacuum Reading ("WC)	4/1/2015 Vacuum Reading ("WC)	_____ Vacuum Reading ("WC)
S-1	3.8	3.7	3.9	
S-2	3.8	3.6	3.4	
S-3	1.5	1.5	1.3	
S-4/5	2.1	2.1	2.1	
S-6	3.6	3.4	3.4	
S-7	1.6	1.5	1.6	

Visual Inspection of System:
T-9 room has been converted into storage room, carpet and board was placed over suction point. A hole was cut in the board so the point can be accessed by removing the carpet
T-10 in the mail room has been covered by removable carpet

Recommendation Actions:
None

Description of Past Year Activities:

EVO Injection Report

Site/Facility Name: **CooperVision** Job Number: **70665-019**

Location (Address): **Scottsville, NY**

Client: **CooperVision**

Injection Point	Date:	11/26/13	Date:	12/03/13	Date:	12/06/13	Date:	12/11/13	Date:	12/17/13
	Weather:	Overcast, 30's	Weather:	Sunny, 40's	Weather:	Overcast, 30's	Weather:	Cloudy, 20's	Weather:	overcast, 20's
	Personnel:	MR	Personnel:	MR/DBK	Personnel:	DBK	Personnel:	DBK	Personnel:	DBK
	Depth to Water (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)
IP-01	6.6	0.0	6.5	3.5	6.2	3.0	3.8	2.5	1.2	0.0
IP-02	6.3	0.0	6.2	3.5	5.9	3.0	4.0	2.5	1.3	0.0
IP-03	5.4	0.0	5.3	3.5	4.9	3.0	4.8	2.5	3.9	0.0
IP-04	5.1	0.0	5.1	3.5	4.4	3.0	4.3	2.5	3.2	0.0
IP-05	6.5	0.0	6.5	3.5	4.8	3.0	3.5	2.5	0.6	0.0
IP-06	6.5	0.0	6.1	3.5	5.6	3.0	3.7	2.5	1.6	0.0
IP-07	5.3	0.0	5.3	3.5	4.9	3.0	4.3	2.5	2.6	0.0
BAP-01 (Water level Only)	6.4	NA	6.3	NA	nd	NA	6.3	NA	6.4	NA
BAP-02 (Water level Only)	5.9	NA	5.8	NA	nd	NA	5.8	NA	5.9	NA
Total Added Per Day (gal):		0.00		24.50		21.00		17.50		0.00
Notes:	Pre-injection water levels.		Also added ~2 oz of Vitamin B12 to each IP.		Also added ~2 oz of Vitamin B12 to each IP.		Also added ~2 oz of Vitamin B12 to each IP.		IP-04 road box destroyed by snowplow.	
							Water level meter will read top of oil.		Not enough room in riser of IP-05 to add EVO today.	

EVO Injection Report

Site/Facility Name: **CooperVision** Job Number: **70665-019**

Location (Address): **Scottsville, NY**

Client: **CooperVision**

Injection Point	Date:	12/19/13	Date:	12/23/13	Date:	01/02/14	Date:	01/14/14	Date:	01/17/14
	Weather:	sunny, 40's	Weather:	cloudy, 30's	Weather:	snow, 10's	Weather:	overcast, 40's	Weather:	sunny, 30's
	Personnel:	DBK	Personnel:	DBK	Personnel:	DBK	Personnel:	DBK	Personnel:	DBK
	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)
IP-01	1.5	0.0	1.8	0.0	2.4	1.5	1.9	1.0	0.7	0.3
IP-02	1.4	0.0	1.6	0.0	2.1	1.0	1.5	0.8	0.7	0.3
IP-03	4.0	0.0	4.0	0.0	4.2	2.5	2.7	1.6	1.2	0.6
IP-04	2.9	0.0	3.0	0.0	3.2	2.0	1.7	0.9	0.4	0.1
IP-05	1.1	0.0	1.3	0.0	1.8	1.0	1.5	0.7	0.7	0.2
IP-06	1.8	0.0	2.0	0.0	2.4	1.5	1.3	0.7	0.6	0.2
IP-07	2.7	0.0	3.0	0.0	3.5	2.0	1.9	1.2	0.6	0.2
BAP-01 (Water level Only)	6.4	NA	5.2	NA	6.1	NA	5.9	NA	6.1	NA
BAP-02 (Water level Only)	5.9	NA	4.6	NA	5.6	NA	6.5	NA	5.5	NA
Total Added Per Day (gal):		0.00		0.00		11.50		6.84		1.84
Notes:	Not enough room in riser of IP-05 to add EVO today.		Nothnagle replaced road box for IP-04		Pressurized IP-05 to 100 psi for ~30 min. Level dropped to 1.85 ft. Concluded that pressurizing is not effective.		No Vitamin B12 added today.		Added ~1 oz of Vitamin B12 to each well.	
			Not enough room in riser of IP-05 to add EVO today.				Noted some diluted EVO at BAP-02 today.		Noted EVO at BAP-02 today.	
					No Vitamin B12 added today				Noted trace EVO at BAP-01 today.	

EVO Injection Report

Site/Facility Name: **CooperVision**

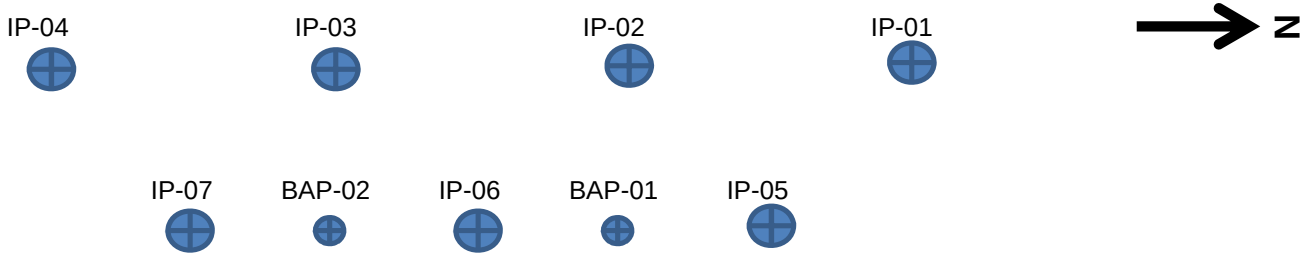
Location (Address): **Scottsville, NY**

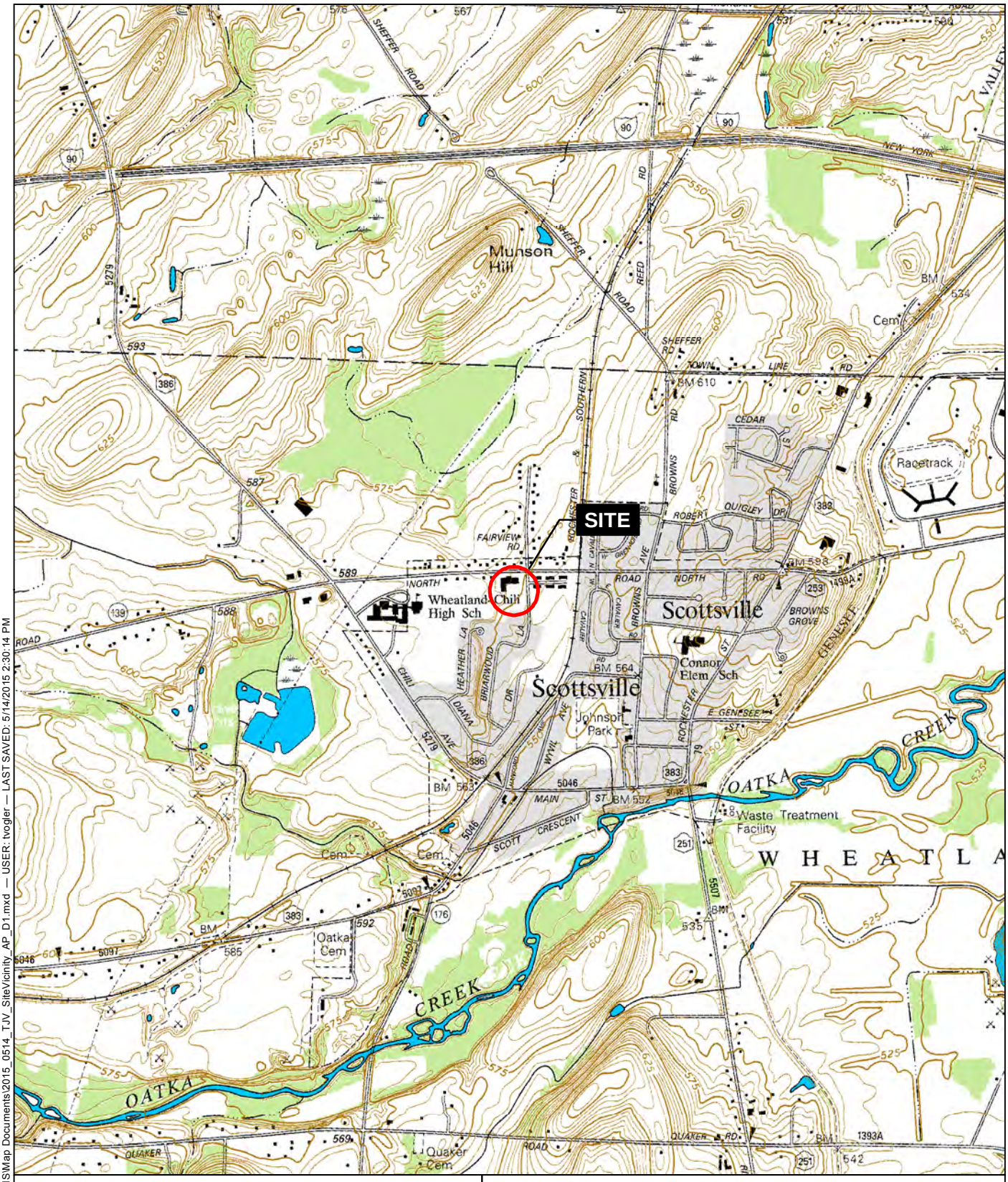
Client: **CooperVision**

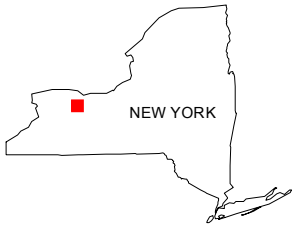
Job Number **70665-019**

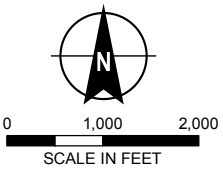
Injection Point	Date: 01/30/14		Date: 02/14/14		Date: 03/11/14		Date: 04/17/14		Date: 07/08/14		Date: 10/13/14		Total
	Weather: P. Cloudy, 25		Weather: cloudy, 25		Weather: Sunny, 48		Weather: Sunny, 55 F		Weather: Sunny, 80's		Weather: mixed, 60s		
	Personnel: DMN		Personnel: DBK		Personnel: DBK		Personnel: TGR		Personnel: DBK		Personnel: DBK		
	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	Depth to Water/Oil (TOR)	Injection Amount (gallons)	
IP-01	1.7	1.0	1.3	0.6	0.9	0.4	0.7	0.4	1.0	0.5	2.2	1.2	15.7
IP-02	1.4	0.8	1.0	0.5	1.2	0.6	0.8	0.5	1.5	0.8	2.7	0.8	14.8
IP-03	1.4	0.8	0.8	0.3	0.7	0.3	0.7	0.5	1.2	0.7	1.7	0.7	16.3
IP-04	0.9	0.5	0.6	0.2	1.2	0.6	0.1	0.0	2.4	1.4	6.0	1.7	16.3
IP-05	1.4	0.8	1.1	0.5	0.8	0.3	1.1	0.5	0.8	0.4	5.0	3.1	16.3
IP-06	1.0	0.5	0.8	0.3	0.9	0.4	0.5	0.3	1.6	0.9	3.3	0.0	13.6
IP-07	1.0	0.5	0.8	0.3	0.7	0.3	0.3	0.2	0.6	0.3	1.9	0.0	13.7
BAP-01 (Water level Only)	6.4	NA	6.4	NA	6.3	NA	5.4	NA	6.2	NA	5.9	NA	NA
BAP-02 (Water level Only)	5.7	NA	5.9	NA	5.9	NA	5.0	NA	5.6	NA	5.9	NA	NA
Total Added Per Day (gal):		4.90		2.70		2.90		2.40		5.01		7.48	110
Notes:	Noted milky film on water level meter probe during water level measurements at BAP-1 and BAP-2.		Added a capfull of Vitamin B12 to each		Added a capfull of Vitamin B12 to each		Added a capfull of Vitamin B12 to each				most EVO appears to be gone		**All**
					Noted EVO at BAP-02 today.		Noted EVO at BAP-02 today. No EVO BAP-01.		No B12 Added.				**EVO**
					No EVO at BAP-01.		IP-04 EVO at top of riser, none added				Added Vitamin B12 to ea		**used**

Well layout:









MAP SOURCE: NYS DOT
USGS QUAD: CLIFTON, NEW YORK
SITE COORDINATES: 43°01'39.9"N, 70°45'27.6"W

HALEY ALDRICH

COOPERVISION, INC.
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

PROJECT LOCUS

AS SHOWN
MAY 2015

FIGURE 1

GIS FILE PATH: G:\70665 CooperVision\GIS\Map Documents\2015_0514_TJV_SiteVicinity_AP_D1.mxd — USER: tvogler — LAST SAVED: 5/14/2015 2:30:14 PM

NORTH ROAD

BRIARWOOD LANE

NIAGARA-MOHAWK POWER LINE

WET/TINT

SPHERE/TORIC DRY MFG.

INJECTION MOLDING

SEALING ROOM

CAFETERIA

BLISTER PAKS

LABELLING

MACHINE SHOP

MACH. SHOP

LABELLING

SPHERE MFG.

AISLE

NYSDEC WATER SAMPLE

WAREHOUSING

TRANSFORMER

DITCH SAMPLE NO. 1

DITCH SAMPLE NO. 2 (SEDIMENT & WATER SAMPLES)

NYSDEC STORM PIPE SAMPLE

MW-201
MW-1
MW-205
MW-502
MW-2
MW-3
MW-403
MW-401
MW-501
MW-402
MW-202
OWS-302
OWD-302
OW-304
MW-203
MW-204
OW-305
OW-306
OWD-303
OWS-303
BAP-01
BAP-02
SV-101S/ SV-101D
SV-3S
SV-3D
SV-4S
SV-4D
SV-5S
SV-5D
SV-6S
SV-6D
SV-7S
SV-7D
SV-8S
SV-8D
SV-108S/ S-108D
SBC-1
SBC-2
SBC-3
SBC-4
SBC-5

AREA 1
AREA 2
AREA 3
AREA 4

LOCATION OF THE SUB-SLAB DEPRESSURIZATION SYSTEM (SEE FIGURE 5)

CB-2
INV. = 574.62'

CB-1
N. INV. = 574.05'
S. INV. = 573.70'

18" C.M.P.
INV. = 565.85'

LEGEND

- MONITORING/OBSERVATION WELL
- HRC INJECTION POINT
- LOCATION OF SOIL VAPOR POINTS
- SOIL-BENTONITE-CEMENT COLLAR
- PROPERTY BOUNDARY
- GAS LOCATION OF KNOWN NATURAL GAS PIPELINE UTILITIES
- W LOCATION OF KNOWN WATER UTILITIES

<BOL>NOTES</BOL>

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.

5. HRC INSTALLED JULY-AUGUST 2001.

6. REFER TO APPENDIX D OF THE FINAL ENGINEERING REPORT FOR A FIGURE SHOWING THE LOCATIONS OF OFFSITE VAPOR POINTS.

7. ALL LOCATIONS ARE APPROXIMATE AND NOT TO SCALE.

8. GAS PIPELINE LOCATIONS BASED ON RECORDS PROVIDED BY RG&E AND ATLANTIC SURVEYING & MAPPING.

9. PROPERTY BOUNDARIES BASED ON RECORDS FROM MONROE COUNTY AND ATLANTIC SURVEYING AND MAPPING.

N

0 50 100
SCALE IN FEET

HALEY ALDRICH

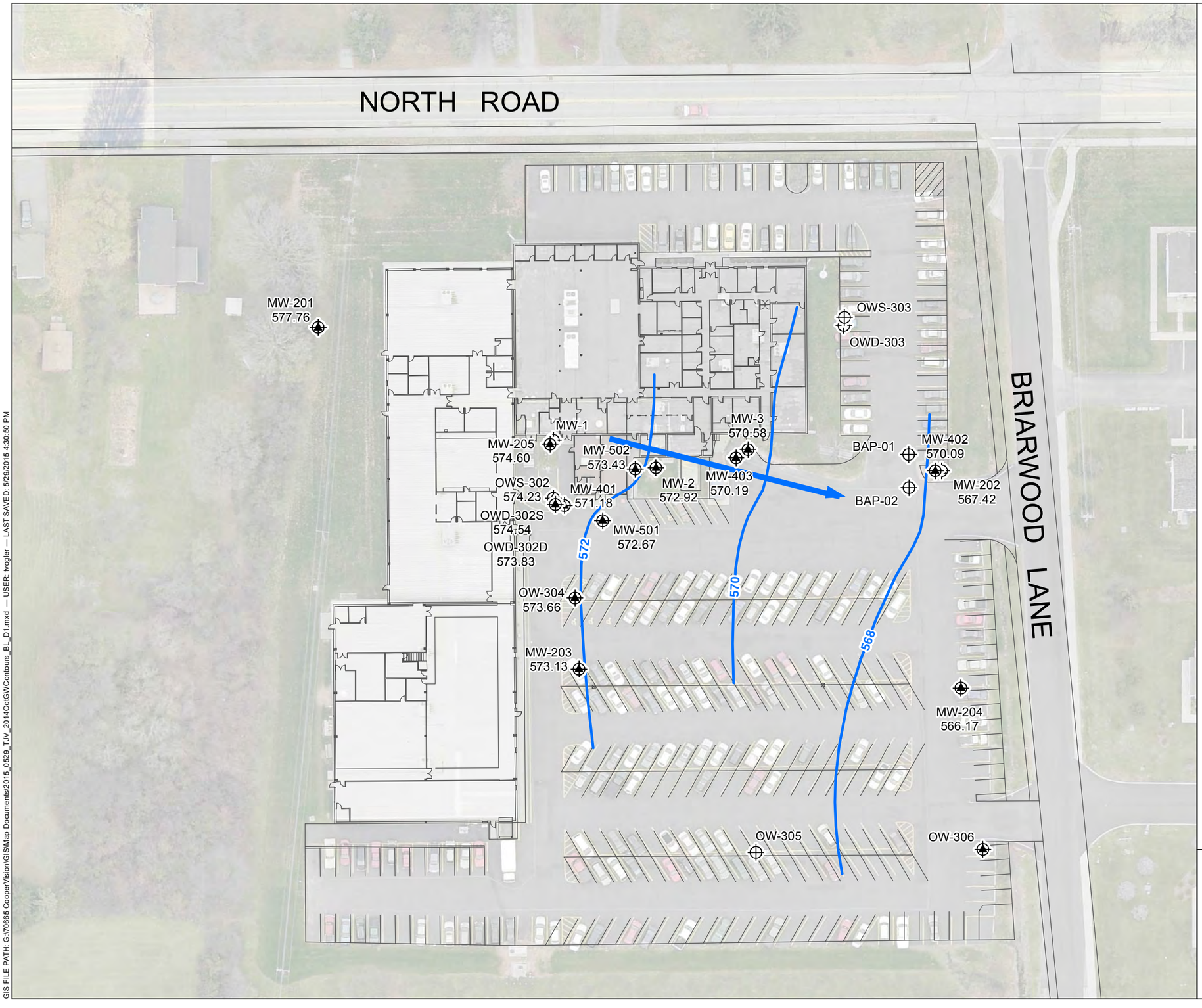
COOPERVISION FACILITY
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

SITE PLAN

SCALE: AS SHOWN
MAY 2015

FIGURE 2

GIS FILE PATH: G:\70665 CooperVision\GIS\Map Documents\2015_0528_TJV_SitePlan_BL_D1.mxd — USER: tvogler — LAST SAVED: 5/29/2015 2:37:18 PM



LEGEND

- WELLS INCLUDED IN CONTOURS
- WELLS NOT INCLUDED IN CONTOURS DUE TO SCREEN DEPTH, INCOMPLETE WELL INFORMATION, POOR WELL RECHARGE, OR PROXIMETRY TO INJECTION WELLS.
- GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTES

1. PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 17 DECEMBER 1996.

2. GROUNDWATER CONTOURS ARE BASED ON DATA COLLECTED ON 9 OCTOBER 2014. ELEVATIONS SHOWN ONLY FOR THOSE WELLS APPLICABLE TO THE ISOPOTENTIAL CONTOURS DEVELOPED.

3. EXPLORATION LOCATIONS ARE APPROXIMATE.

N

0 60 120

SCALE IN FEET

HALEY ALDRICH

COOPERVISION FACILITY INVESTIGATION
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

GROUNDWATER CONTOUR PLAN (OCTOBER 2014)

SCALE: AS SHOWN
MAY 2015

FIGURE 3

GIS FILE PATH: G:\70665 CooperVision\GIS\Map Documents\2015_0529_TJV_2014OctGWContours_BL_D1.mxd — USER: tvogler — LAST SAVED: 5/29/2015 4:30:50 PM

NORTH ROAD

BRIARWOOD LANE

MW-201
577.76

MW-1

MW-205
574.60

MW-502
573.43

MW-3
570.58

OWD-303

OWS-303

BAP-01

MW-402

OWS-302
574.23

MW-401
571.18

MW-2
572.92

MW-403
570.19

BAP-02

MW-202
567.42

OWD-302S
574.54

OWD-302D

MW-501
572.67

576

574

572

570

568

OW-304
573.66

MW-203
573.13

MW-204
566.17

OW-305

OW-306

LEGEND

- WELLS INCLUDED IN CONTOURS
- WELLS NOT INCLUDED IN CONTOURS DUE TO SCREEN DEPTH, INCOMPLETE WELL INFORMATION, POOR WELL RECHARGE, OR PROXIMETRY TO INJECTION WELLS.
- GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

NOTES

1. PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 17 DECEMBER 1996.

2. GROUNDWATER CONTOURS ARE BASED ON DATA COLLECTED ON 1 APRIL 2015. ELEVATIONS SHOWN ONLY FOR THOSE WELLS APPLICABLE TO THE ISOPOTENTIAL CONTOURS DEVELOPED.

3. EXPLORATION LOCATIONS ARE APPROXIMATE.

N

0 60 120

SCALE IN FEET

HALEY ALDRICH

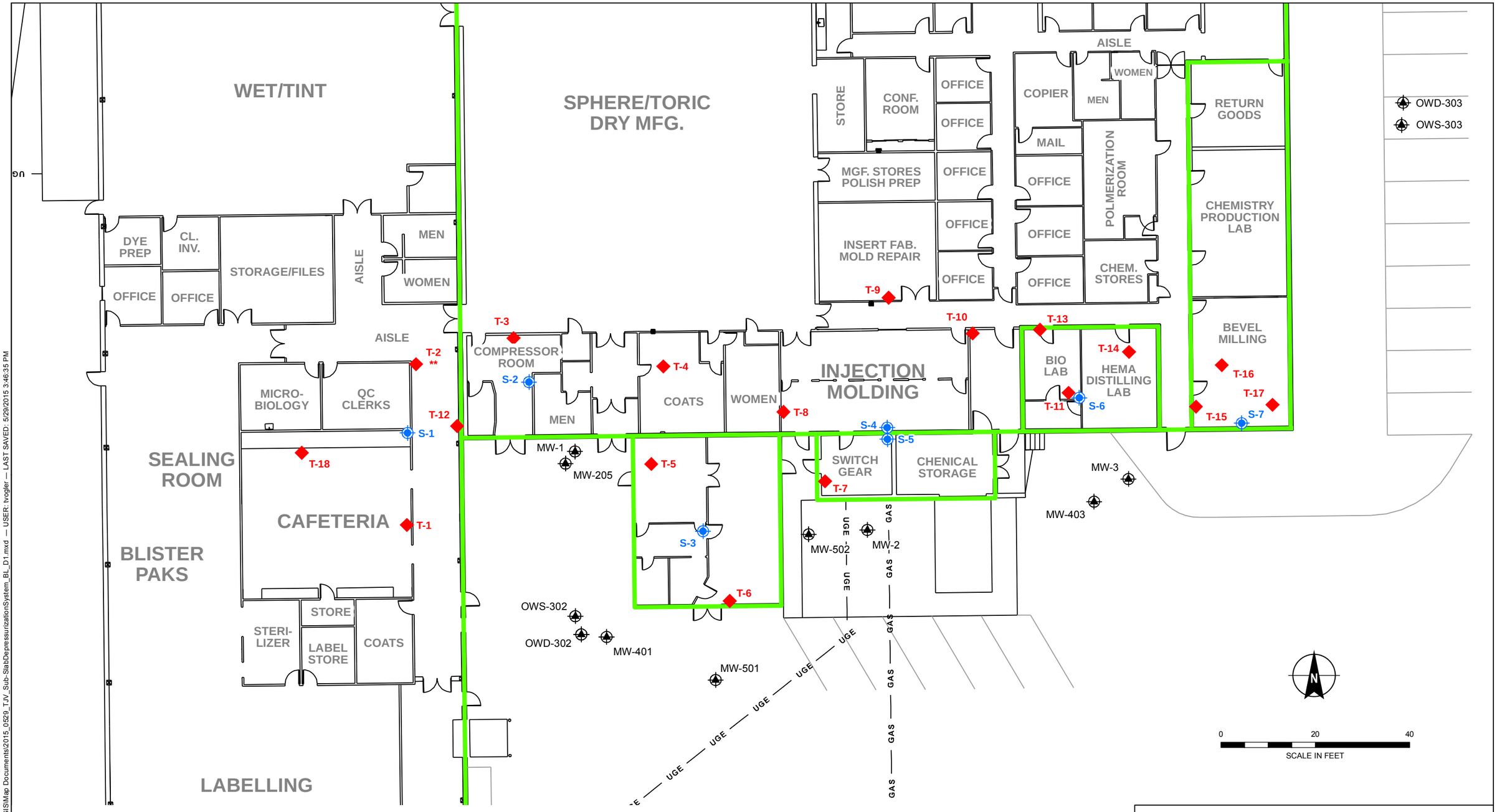
COOPERVISION FACILITY INVESTIGATION
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

GROUNDWATER CONTOUR PLAN (APRIL 2015)

SCALE: AS SHOWN
MAY 2015

FIGURE 4

GIS FILE PATH: G:\70665 CooperVision\GIS\Map Documents\2015_0514_TJV_2015AprGWContours_BL_D1.mxd — USER: tvogler — LAST SAVED: 5/29/2015 3:41:23 PM



THIS RECORD DRAWING HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS RECORD DRAWING OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ENGINEER. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY.

LEGEND

- APPROXIMATE SUCTION POINT
- APPROXIMATE TEST POINT
- MONITORING/OBSERVATION
- APPROXIMATE LOCATION OF SUB-SLAB BARRIERS AFFECTING SYSTEM

NOTES

1. ** T-2 IS NOT A VALID TEST POINT.

HALEY ALDRICH

COOPERVISION FACILITY
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

SUB-SLAB DEPRESSURIZATION SYSTEM

SCALE: AS SHOWN
MAY 2015

FIGURE 5

APPENDIX A

Institutional and Engineering Controls Certification Form

HALEY ALDRICH

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**

Site No. **V00175**

Site Name 711 North Road (Cooper Vision)

Site Address: 711 North Road Zip Code: 14546-
City/Town: Scottsville
County: Monroe
Site Acreage: 5.5

Reporting Period: May 16, 2014 to May 16, 2015

	YES	NO
1. Is the information above correct?	☒	☐
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?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

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.

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

SITE NO. V00175

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
187.170-1-18	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.

187.170-1-18.1	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.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
187.170-1-18	Cover System Subsurface Barriers Vapor Mitigation
187.170-1-18.1	Cover System Subsurface Barriers Vapor Mitigation

Box 5

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 compete.

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 GARY ADAMS (print name) at CooperVision, 711 North Road, Scottsville, New York (print business address)

am certifying as Designated Representative (Owner or Remedial Party)

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

Gary W. Adams — Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

6/9/2015 — 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 Mark N. Ramsdell (print name) at Haley & Aldrich of New York, Rochester, New York (print business address)

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

Mark N. Ramsdell

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

Stamp (Required for PE)

6/9/15

Date

APPENDIX B

Mann-Kendall Analysis Results

Mann-Kendall Analysis: Results
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

	2002-2011		2003-2012		2004-2013		2005-2014		2006-2015
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Source Area									
MW-205									
1,1,1-TCA	No Trend	No Trend	No Trend	No Trend	No Trend	Increasing	No Trend	No Trend	No Trend
1,1-DCA	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
1,1-DCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid-Gradient Area									
MW-3									
1,1,1-TCA	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
1,1-DCA	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
1,1-DCE	No Trend	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
MW-501									
1,1,1-TCA	Decreasing	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
1,1-DCA	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing
1,1-DCE	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
MW-502									
1,1,1-TCA	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
1,1-DCA	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	Increasing
1,1-DCE	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
Down-Gradient Area									
MW-202									
1,1,1-TCA	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend
1,1-DCA	Increasing	No Trend	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
1,1-DCE	Increasing	No Trend	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing
MW-204									
1,1,1-TCA	No Trend	Decreasing	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	Increasing
1,1-DCA	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	Increasing	No Trend	No Trend
1,1-DCE	No Trend	Increasing	No Trend	No Trend	No Trend	No Trend	Increasing	No Trend	Increasing

Notes:
1. This analysis uses the Mann-Kendall test for trend. The test indicates whether or not a set of data is increasing or decreasing at a 95% degree of confidence.
2. A result of "No Trend" is an indication that the data set is not increasing or decreasing signficantly at the degree of confidence evaluated, or that the data does not fit the statistical model. It may indicate a stable trend, or it may indicate that the data is not sufficient to establish trend.

References:
1. EPA Practical Methods for Data Analysis, EPA QA/G-9 QA00 UPDATE, July 2000.

Mann-Kendall Analysis: Data Entry
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

1,1,1-Trichloroethane

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Spring 2002	300	8.5	*0.125 U*	*0.0125 U*	*0.0025 U*	0.01
Spring 2003	320	*0.125 U*	*0.125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Spring 2004	140	0.9	*0.0125 U*	*0.0125 U*	*0.0025 U*	0.006
Spring 2005	76	0.23	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2006	57	*0.05 U*	*0.025 U*	*0.025 U*	*0.0025 U*	*0.0025 U*
Spring 2007	41	0.14	*0.005 U*	*0.125 U*	*0.0025 U*	0.03
Spring 2008	42	*0.05 U*	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2009	48	*0.05 U*	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2010	140	*0.025 U*	*0.0065 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2011	130	*0.025 U*	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Spring 2012	120	*0.025 U*	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0051*
Spring 2013	140	*0.0125 U*	*0.0125 U*	*0.065 U*	*0.0025 U*	*0.0025 U*
Spring 2014	75	*0.0125 U*	*0.005 U*	*0.065 U*	*0.0025 U*	*0.005*
Spring 2015	61	*0.0019*	*0.025 U*	*0.065 U*	*0.0017*	*0.0066*
Spring 2016						
Spring 2017						
Spring 2018						
Spring 2019						
Spring 2020						

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Fall 2002	260	3.4	*0.025 U*	*0.0065 U*	*0.0025 U*	0.011
Fall 2003	250	0.23	*0.0125 U*	*0.25 U*	*0.0025 U*	0.006
Fall 2004	100	0.42	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2005	80	0.17	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2006	62	*0.05 U*	*0.005 U*	*0.0025 U*	*0.0025 U*	0.097
Fall 2007	84	*0.05 U*	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Fall 2008	57	*0.05 U*	*0.0065 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Fall 2009	99	*0.05 U*	*0.0065 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Fall 2010	160	*0.025 U*	*0.0065 U*	*0.25 U*	*0.0025 U*	0.0063
Fall 2011	110	*0.025 U*	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2012	210	*0.025 U*	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2013	110	*0.0125 U*	*0.0125 U*	*0.065 U*	*0.025 U*	*0.0025 U*
Fall 2014	60	*0.0125 U*	*0.005 U*	*0.065 U*	*0.0025 U*	*0.0025 U*
Fall 2015						
Fall 2016						
Fall 2017						
Fall 2018						
Fall 2019						
Fall 2020						

Mann-Kendall Analysis: Data Entry
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

1,1-Dichloroethane

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Spring 2002	290	2.4	9.9	0.82	*0.0025 U*	0.01
Spring 2003	290	8.4	7	13	*0.0025 U*	0.006
Spring 2004	200	1	0.56	0.52	*0.0025 U*	0.006
Spring 2005	240	0.68	0.79	6.8	*0.0025 U*	0.0068
Spring 2006	220	0.34	0.48	*0.025 U*	*0.0025 U*	*0.0025 U*
Spring 2007	230	0.93	0.31	0.054	*0.0025 U*	0.074
Spring 2008	200	0.36	0.15	*0.125 U*	0.0053	0.0056
Spring 2009	200	0.38	0.17	*0.125 U*	0.0093	0.0056
Spring 2010	230	0.1	0.088	*0.125 U*	0.013	0.0055
Spring 2011	300	0.098	0.15	*0.25 U*	0.016	0.0059
Spring 2012	250	0.096	0.17	*0.25 U*	0.018	0.0082
Spring 2013	240	0.077	0.076	*0.065 U*	0.034	0.0074
Spring 2014	220	0.074	0.063	*0.065 U*	0.036	0.0074
Spring 2015	240	0.025	0.14	0.089	0.064	0.0089
Spring 2016						
Spring 2017						
Spring 2018						
Spring 2019						
Spring 2020						

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Fall 2002	260	3.9	2.2	11	*0.0025 U*	0.01
Fall 2003	210	0.56	0.4	1.5	*0.0025 U*	0.008
Fall 2004	230	3.1	0.6	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2005	230	1	0.49	*0.25 U*	*0.0025 U*	0.0053
Fall 2006	270	0.51	0.29	0.016	*0.0025 U*	0.18
Fall 2007	390	0.22	0.24	*0.125 U*	0.0064	0.007
Fall 2008	200	0.36	0.09	*0.125 U*	*0.0025 U*	0.006
Fall 2009	200	0.21	0.11	*0.125 U*	0.011	0.0063
Fall 2010	220	0.16	0.089	*0.25 U*	*0.0025 U*	0.013
Fall 2011	230	0.052	0.1	*0.25 U*	0.03	0.0077
Fall 2012	250	0.067	0.16	*0.25 U*	0.051	0.0071
Fall 2013	230	0.093	0.13	*0.065 U*	0.03	0.0074
Fall 2014	200	0.062	0.097	*0.065 U*	0.036	*0.0025 U*
Fall 2015						
Fall 2016						
Fall 2017						
Fall 2018						
Fall 2019						
Fall 2020						

Mann-Kendall Analysis: Data Entry
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

1,1-Dichloroethene

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Spring 2002	--	2	*0.0125 U*	*0.0125 U*	*0.0025 U*	0.007
Spring 2003	--	1.2	*0.125 U*	*0.25 U*	*0.0025 U*	0.005
Spring 2004	--	0.33	*0.0125 U*	*0.14 U*	*0.0025 U*	0.006
Spring 2005	--	0.099	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2006	--	*0.05 U*	*0.025 U*	*0.025 U*	*0.0025 U*	*0.0025 U*
Spring 2007	--	*0.05 U*	*0.005 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2008	--	*0.05 U*	*0.0125 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Spring 2009	--	*0.05 U*	*0.0125 U*	*0.125 U*	0.005	*0.0025 U*
Spring 2010	--	*0.025 U*	*0.0065 U*	*0.125 U*	0.0085	0.0053
Spring 2011	--	*0.025 U*	*0.0125 U*	*0.25 U*	0.01	*0.0025 U*
Spring 2012	--	*0.025 U*	*0.0125 U*	*0.25 U*	0.014	0.0084
Spring 2013	--	*0.0125 U*	*0.0125 U*	*0.065 U*	0.032	0.0092
Spring 2014	--	*0.0125 U*	*0.005 U*	*0.065 U*	0.036	0.0094
Spring 2015	1.9	*0.0125 U*	*0.025 U*	*0.065 U*	0.05	*0.0088*
Spring 2016						
Spring 2017						
Spring 2018						
Spring 2019						
Spring 2020						

Date	MW-205	MW-3	MW-501	MW-502	MW-202	MW-204
Fall 2002	--	1.4	*0.025 U*	*0.014*	*0.0025 U*	0.008
Fall 2003	--	0.57	*0.0125 U*	*0.25 U*	*0.0025 U*	0.005
Fall 2004	--	0.36	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2005	--	0.1	*0.0125 U*	*0.25 U*	*0.0025 U*	*0.0025 U*
Fall 2006	--	*0.05 U*	*0.005 U*	*0.0025 U*	*0.0025 U*	0.009
Fall 2007	--	*0.05 U*	*0.0125 U*	*0.125 U*	0.0056	0.0067
Fall 2008	--	*0.05 U*	*0.0065 U*	*0.125 U*	*0.0025 U*	*0.0025 U*
Fall 2009	--	*0.05 U*	*0.0065 U*	*0.125 U*	0.0078	0.0067
Fall 2010	--	*0.025 U*	*0.0065 U*	*0.25 U*	*0.0025 U*	0.013
Fall 2011	--	*0.025 U*	*0.0125 U*	*0.25 U*	0.02	0.0087
Fall 2012	--	*0.025 U*	*0.0125 U*	*0.25 U*	0.04	0.0067
Fall 2013	--	*0.0125 U*	*0.0125 U*	*0.065 U*	0.026	0.0093
Fall 2014	--	*0.0125 U*	*0.005 U*	*0.065 U*	*0.035*	*0.0061*
Fall 2015	--					
Fall 2016	--					
Fall 2017	--					
Fall 2018	--					
Fall 2019	--					
Fall 2020	--					

Mann-Kendall Analysis: 1,1,1-TCA (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-205

S Value

Neg	Pos
15	29
S Value	14
n	10
P Value	0.108
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

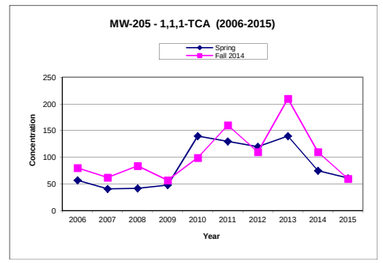
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	57	41	42	48	140	130	120	140	75	61
57		-16	-15	-9	83	73	63	83	18	4
41			1	7	99	89	79	99	34	20
42				6	98	88	78	98	33	19
48					92	82	72	92	27	13
140						-10	-20	0	-65	-79
130							-10	10	-55	-69
120								20	-45	-59
140									-65	-79
75										-14
61										

S Value

Neg	Pos
15	29
S Value	14
n	10
P Value	0.108
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	80	62	84	57	99	160	110	210	110	60
80		-18	4	-23	19	80	30	130	30	-20
62			22	-5	37	98	48	148	48	-2
84				-27	15	76	26	126	26	-24
57					42	103	53	153	53	3
99						61	11	111	11	-39
160							-50	50	-50	-100
110								100	0	-50
210									-100	-150
110										-50
60										



MW-3

S Value

Neg	Pos
37	1
S Value	-36
n	10
P Value	0.00018
Evaluation	**Decreasing**

Mann-Kendall Trend: Spring

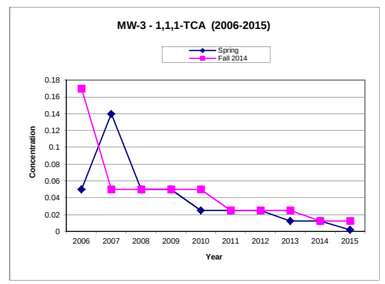
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.05	0.14	0.05	0.05	0.025	0.025	0.025	0.0125	0.0125	0.0019
0.05		0.09	0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0481
0.14			-0.09	-0.09	-0.115	-0.115	-0.115	-0.1275	-0.1275	-0.1381
0.05				0	-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0481
0.05					-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0481
0.025						0	0	-0.0125	-0.0125	-0.0231
0.025							0	-0.0125	-0.0125	-0.0231
0.025								-0.0125	-0.0125	-0.0231
0.0125									0	-0.0106
0.0125										-0.0106
0.0019										

S Value

Neg	Pos
35	0
S Value	-35
n	10
P Value	0.00047
Evaluation	**Decreasing**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.17	0.05	0.05	0.05	0.05	0.025	0.025	0.025	0.0125	0.0125
0.17		-0.12	-0.12	-0.12	-0.12	-0.145	-0.145	-0.145	-0.1575	-0.1575
0.05			0	0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05				0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05					0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05						-0.025	-0.025	-0.025	-0.0375	-0.0375
0.025							0	0	-0.0125	-0.0125
0.025								0	-0.0125	-0.0125
0.025									-0.0125	-0.0125
0.0125										0
0.0125										



MW-501

S Value

Neg	Pos
16	21
S Value	5
n	10
P Value	0.364
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

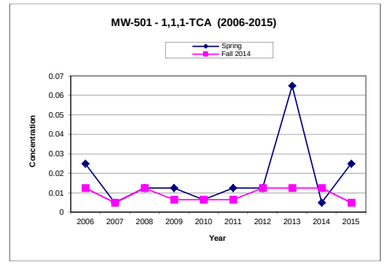
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.025	0.005	0.0125	0.0125	0.0065	0.0125	0.0125	0.065	0.005	0.025
0.025		-0.02	-0.0125	-0.0125	-0.0185	-0.0125	-0.0125	0.04	-0.02	0
0.005			0.0075	0.0075	0.0015	0.0075	0.0075	0.06	0	0.02
0.0125				0	-0.006	0	0	0.0525	-0.0075	0.0125
0.0125					-0.006	0	0	0.0525	-0.0075	0.0125
0.0065						0.006	0.006	0.0585	-0.0015	0.0185
0.0125							0	0.0525	-0.0075	0.0125
0.0125								0.0525	-0.0075	0.0125
0.065									-0.06	-0.04
0.005										0.02
0.025										

S Value

Neg	Pos
15	16
S Value	1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0125	0.005	0.0125	0.0065	0.0065	0.0065	0.0125	0.0125	0.0125	0.005
0.0125		-0.0075	0	-0.006	-0.006	-0.006	0	0	0	-0.0075
0.005			0.0075	0.0015	0.0015	0.0015	0.0075	0.0075	0.0075	0
0.0125				-0.006	-0.006	-0.006	0	0	0	-0.0075
0.0065					0	0	0.006	0.006	0.006	-0.0015
0.0065						0	0.006	0.006	0.006	-0.0015
0.0065							0.006	0.006	0.006	-0.0015
0.0125								0	0	-0.0075
0.0125									0	-0.0075
0.0125										-0.0075
0.005										



Mann-Kendall Analysis: 1,1,1-TCA (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-502

S Value

Neg	Pos
18	17
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

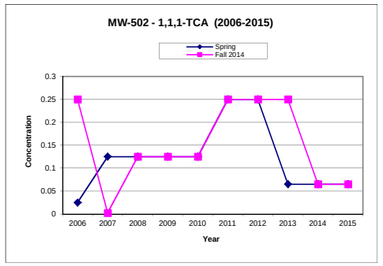
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.025	0.125	0.125	0.125	0.125	0.25	0.25	0.065	0.065	0.065
0.025		0.1	0.1	0.1	0.1	0.225	0.225	0.04	0.04	0.04
0.125			0	0	0	0.125	0.125	-0.06	-0.06	-0.06
0.125				0	0	0.125	0.125	-0.06	-0.06	-0.06
0.125					0	0.125	0.125	-0.06	-0.06	-0.06
0.125						0.125	0.125	-0.06	-0.06	-0.06
0.25							0	-0.185	-0.185	-0.185
0.25								-0.185	-0.185	-0.185
0.065									0	0
0.065										0
0.065										

S Value

Neg	Pos
18	17
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.25	0.0025	0.125	0.125	0.125	0.25	0.25	0.25	0.065	0.065
0.25		-0.2475	-0.125	-0.125	-0.125	0	0	0	-0.185	-0.185
0.0025			0.1225	0.1225	0.1225	0.2475	0.2475	0.2475	0.0625	0.0625
0.125				0	0	0.125	0.125	0.125	-0.06	-0.06
0.125					0	0.125	0.125	0.125	-0.06	-0.06
0.125						0.125	0.125	0.125	-0.06	-0.06
0.25							0	0	-0.185	-0.185
0.25								0	-0.185	-0.185
0.25									-0.185	-0.185
0.065										0
0.065										



MW-202

S Value

Neg	Pos
9	0
S Value	-9
n	10
P Value	0.242
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

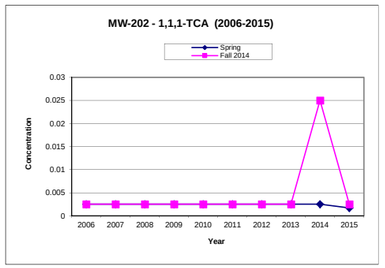
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0017
0.0025		0	0	0	0	0	0	0	0	-0.0008
0.0025			0	0	0	0	0	0	0	-0.0008
0.0025				0	0	0	0	0	0	-0.0008
0.0025					0	0	0	0	0	-0.0008
0.0025						0	0	0	0	-0.0008
0.0025							0	0	0	-0.0008
0.0025								0	0	-0.0008
0.0025									0	-0.0008
0.0025										-0.0008
0.0017										

S Value

Neg	Pos
1	8
S Value	7
n	10
P Value	0.3
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.025	0.0025
0.0025		0	0	0	0	0	0	0	0.0225	0
0.0025			0	0	0	0	0	0	0.0225	0
0.0025				0	0	0	0	0	0.0225	0
0.0025					0	0	0	0	0.0225	0
0.0025						0	0	0	0.0225	0
0.0025							0	0	0.0225	0
0.0025								0	0.0225	0
0.0025									0.0225	0
0.025										-0.0225
0.0025										



MW-204

S Value

Neg	Pos
10	20
S Value	10
n	10
P Value	0.019
Evaluation	**Increasing**

Mann-Kendall Trend: Spring

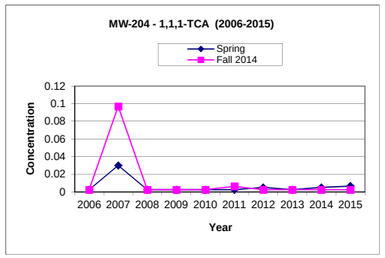
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.03	0.0025	0.0025	0.0025	0.0025	0.0051	0.0025	0.005	0.0066
0.0025		0.0275	0	0	0	0	0.0026	0	0.0025	0.0041
0.03			-0.0275	-0.0275	-0.0275	-0.0275	-0.0249	-0.0275	-0.025	-0.0234
0.0025				0	0	0	0.0026	0	0.0025	0.0041
0.0025					0	0	0.0026	0	0.0025	0.0041
0.0025						0	0.0026	0	0.0025	0.0041
0.0025							0.0026	0	0.0025	0.0041
0.0051								-0.0026	-0.0001	0.0015
0.0025									0.0025	0.0041
0.005										0.0016
0.0066										

S Value

Neg	Pos
12	5
S Value	-7
n	10
P Value	0.3
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.097	0.0025	0.0025	0.0025	0.0063	0.0025	0.0025	0.0025	0.0025
0.0025		0.0945	0	0	0	0.0038	0	0	0	0
0.097			-0.0945	-0.0945	-0.0945	-0.0907	-0.0945	-0.0945	-0.0945	-0.0945
0.0025				0	0	0.0038	0	0	0	0
0.0025					0	0.0038	0	0	0	0
0.0025						0.0038	0	0	0	0
0.0063							-0.0038	-0.0038	-0.0038	-0.0038
0.0025								0	0	0
0.0025									0	0
0.0025										0
0.0025										



Mann-Kendall Analysis: 1,1-DCA (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-205

S Value

Neg	Pos
14	27
S Value	13
n	10
P Value	0.146
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	220	230	200	200	230	300	250	240	220	240

220		10	-20	-20	10	80	30	20	0	20
230			-30	-30	0	70	20	10	-10	10
200				0	30	100	50	40	20	40
200					30	100	50	40	20	40
230						70	20	10	-10	10
300							-50	-60	-80	-60
250								-10	-30	-10
240									-20	0
220										20
240										

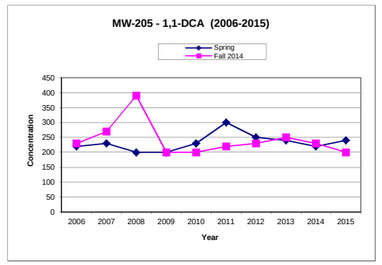
S Value

Neg	Pos
23	16
S Value	-7
n	10
P Value	0.3
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	230	270	390	200	200	220	230	250	230	200

230		40	160	-30	-30	-10	0	20	0	-30
270			120	-70	-70	-50	-40	-20	-40	-70
390				-190	-190	-170	-160	-140	-160	-190
200					0	20	30	50	30	0
200						20	30	50	30	0
220							10	30	10	-20
230								20	0	-30
250									-20	-50
230										-30
200										



MW-3

S Value

Neg	Pos
41	4
S Value	-37
n	10
P Value	0.00018
Evaluation	**Decreasing**

Mann-Kendall Trend: Spring

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.34	0.93	0.36	0.38	0.1	0.098	0.096	0.077	0.074	0.025

0.34		0.59	0.02	0.04	-0.24	-0.242	-0.244	-0.263	-0.266	-0.315
0.93			-0.57	-0.55	-0.83	-0.832	-0.834	-0.853	-0.856	-0.905
0.36				0.02	-0.26	-0.262	-0.264	-0.283	-0.286	-0.335
0.38					-0.28	-0.282	-0.284	-0.303	-0.306	-0.355
0.1						-0.002	-0.004	-0.023	-0.026	-0.075
0.098							-0.002	-0.021	-0.024	-0.073
0.096								-0.019	-0.022	-0.071
0.077									-0.003	-0.052
0.074										-0.049
0.025										

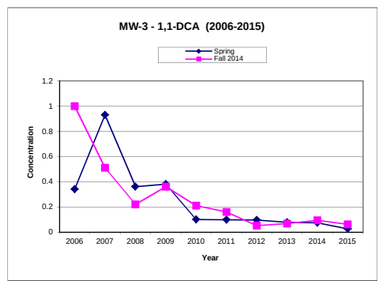
S Value

Neg	Pos
40	5
S Value	-35
n	10
P Value	0.00047
Evaluation	**Decreasing**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	1	0.51	0.22	0.36	0.21	0.16	0.052	0.067	0.093	0.062

1		-0.49	-0.78	-0.64	-0.79	-0.84	-0.948	-0.933	-0.907	-0.938
0.51			-0.29	-0.15	-0.3	-0.35	-0.458	-0.443	-0.417	-0.448
0.22				0.14	-0.01	-0.06	-0.168	-0.153	-0.127	-0.158
0.36					-0.15	-0.2	-0.308	-0.293	-0.267	-0.298
0.21						-0.05	-0.158	-0.143	-0.117	-0.148
0.16							-0.108	-0.093	-0.067	-0.098
0.052								0.015	0.041	0.01
0.067									0.026	-0.005
0.093										-0.031
0.062										



MW-501

S Value

Neg	Pos
35	8
S Value	-27
n	10
P Value	0.0083
Evaluation	**Decreasing**

Mann-Kendall Trend: Spring

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.48	0.31	0.15	0.17	0.088	0.15	0.17	0.076	0.063	0.14

0.48		-0.17	-0.33	-0.31	-0.392	-0.33	-0.31	-0.404	-0.417	-0.34
0.31			-0.16	-0.14	-0.222	-0.16	-0.14	-0.234	-0.247	-0.17
0.15				0.02	-0.062	0	0.02	-0.074	-0.087	-0.01
0.17					-0.082	-0.02	0	-0.094	-0.107	-0.03
0.088						0.062	0.082	-0.012	-0.025	0.052
0.15							0.02	-0.074	-0.087	-0.01
0.17								-0.094	-0.107	-0.03
0.076									-0.013	0.064
0.063										0.077
0.14										

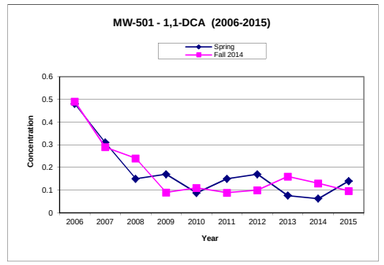
S Value

Neg	Pos
32	13
S Value	-19
n	10
P Value	0.054
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.49	0.29	0.24	0.09	0.11	0.089	0.1	0.16	0.13	0.097

0.49		-0.2	-0.25	-0.4	-0.38	-0.401	-0.39	-0.33	-0.36	-0.393
0.29			-0.05	-0.2	-0.18	-0.201	-0.19	-0.13	-0.16	-0.193
0.24				-0.15	-0.13	-0.151	-0.14	-0.08	-0.11	-0.143
0.09					0.02	-0.001	0.01	0.07	0.04	0.007
0.11						-0.021	-0.01	0.05	0.02	-0.013
0.089							0.011	0.071	0.041	0.008
0.1								0.06	0.03	-0.003
0.16									-0.03	-0.063
0.13										-0.033
0.097										



Mann-Kendall Analysis: 1,1-DCA (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-502

S Value

Neg	Pos
15	25
S Value	10
n	10
P Value	0.019
Evaluation	**Increasing**

Mann-Kendall Trend: Spring

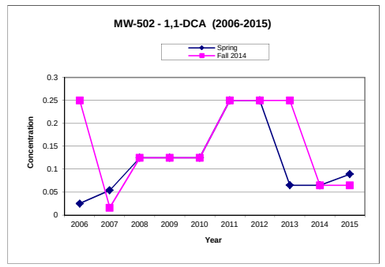
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.025	0.054	0.125	0.125	0.125	0.25	0.25	0.065	0.065	0.089
0.025		0.029	0.1	0.1	0.1	0.225	0.225	0.04	0.04	0.064
0.054			0.071	0.071	0.071	0.196	0.196	0.011	0.011	0.035
0.125				0	0	0.125	0.125	-0.06	-0.06	-0.036
0.125					0	0.125	0.125	-0.06	-0.06	-0.036
0.125						0.125	0.125	-0.06	-0.06	-0.036
0.25							0	-0.185	-0.185	-0.161
0.25								-0.185	-0.185	-0.161
0.065									0	0.024
0.065										0.024
0.089										

S Value

Neg	Pos
18	17
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.25	0.016	0.125	0.125	0.125	0.25	0.25	0.25	0.065	0.065
0.25		-0.234	-0.125	-0.125	-0.125	0	0	0	-0.185	-0.185
0.016			0.109	0.109	0.109	0.234	0.234	0.234	0.049	0.049
0.125				0	0	0.125	0.125	0.125	-0.06	-0.06
0.125					0	0.125	0.125	0.125	-0.06	-0.06
0.125						0.125	0.125	0.125	-0.06	-0.06
0.25							0	0	-0.185	-0.185
0.25								0	-0.185	-0.185
0.25									-0.185	-0.185
0.065										0
0.065										



MW-202

S Value

Neg	Pos
0	44
S Value	43
n	10
P Value	0.0000028
Evaluation	**Increasing**

Mann-Kendall Trend: Spring

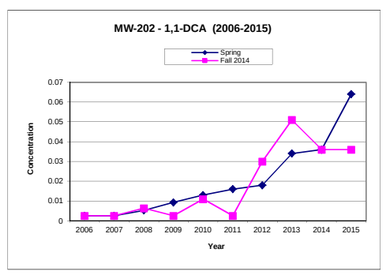
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.0025	0.0053	0.0093	0.013	0.016	0.018	0.034	0.036	0.064
0.0025		0	0.0028	0.0068	0.0105	0.0135	0.0155	0.0315	0.0335	0.0615
0.0025			0.0028	0.0068	0.0105	0.0135	0.0155	0.0315	0.0335	0.0615
0.0053				0.004	0.0077	0.0107	0.0127	0.0287	0.0307	0.0587
0.0093					0.0037	0.0067	0.0087	0.0247	0.0267	0.0547
0.013						0.003	0.005	0.021	0.023	0.051
0.016							0.002	0.018	0.02	0.048
0.018								0.016	0.018	0.046
0.034									0.002	0.03
0.036										0.028
0.064										

S Value

Neg	Pos
5	34
S Value	29
n	10
P Value	0.0046
Evaluation	**Increasing**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0025	0.0025	0.0064	0.0025	0.011	0.0025	0.03	0.051	0.036	0.036
0.0025		0	0.0039	0	0.0085	0	0.0275	0.0485	0.0335	0.0335
0.0025			0.0039	0	0.0085	0	0.0275	0.0485	0.0335	0.0335
0.0064				-0.0039	0.0046	-0.0039	0.0236	0.0446	0.0296	0.0296
0.0025					0.0085	0	0.0275	0.0485	0.0335	0.0335
0.011						-0.0085	0.019	0.04	0.025	0.025
0.0025							0.0275	0.0485	0.0335	0.0335
0.03								0.021	0.006	0.006
0.051									-0.015	-0.015
0.03										0.006
0.036										



MW-204

S Value

Neg	Pos
12	31
S Value	19
n	10
P Value	0.054
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

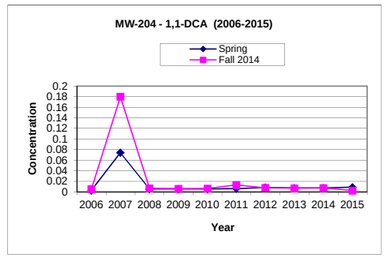
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.074	0.0056	0.0056	0.0055	0.0059	0.0082	0.0074	0.0074	0.0089
0.0025		0.0715	0.0031	0.0031	0.003	0.0034	0.0057	0.0049	0.0049	0.0064
0.074			-0.0684	-0.0684	-0.0685	-0.0681	-0.0658	-0.0666	-0.0666	-0.0651
0.0056				0	-0.0001	0.0003	0.0026	0.0018	0.0018	0.0033
0.0056					-0.0001	0.0003	0.0026	0.0018	0.0018	0.0033
0.0055						0.0004	0.0027	0.0019	0.0019	0.0034
0.0059							0.0023	0.0015	0.0015	0.003
0.0082								-0.0008	-0.0008	0.0007
0.0074									0	0.0015
0.0074										0.0015
0.0089										

S Value

Neg	Pos
23	22
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0053	0.18	0.007	0.006	0.0063	0.013	0.0077	0.0071	0.0074	0.0025
0.0053		0.1747	0.0017	0.0007	0.001	0.0077	0.0024	0.0018	0.0021	-0.0028
0.18			-0.173	-0.174	-0.1737	-0.167	-0.1723	-0.1729	-0.1726	-0.1775
0.007				-0.001	-0.0007	0.006	0.0007	0.0001	0.0004	-0.0045
0.006					0.0003	0.007	0.0017	0.0011	0.0014	-0.0035
0.0063						0.0067	0.0014	0.0008	0.0011	-0.0038
0.013							-0.0053	-0.0059	-0.0056	-0.0105
0.0077								-0.0006	-0.0003	-0.0052
0.0071									0.0003	-0.0046
0.0074										-0.0049
0.0025										



Mann-Kendall Analysis: 1,1-DCE (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-205

S Value

Neg	Pos
0	0
S Value	0
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

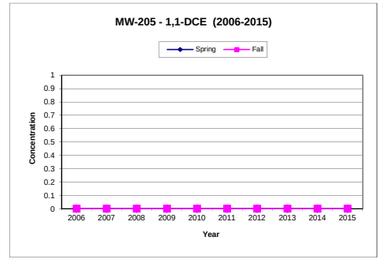
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0
					0	0	0	0	0	0
						0	0	0	0	0
							0	0	0	0
								0	0	0
									0	0
										0

S Value

Neg	Pos
0	0
S Value	0
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0
					0	0	0	0	0	0
						0	0	0	0	0
							0	0	0	0
								0	0	0
									0	0
										0



MW-3

S Value

Neg	Pos
33	0
S Value	-33
n	10
P Value	0.0011
Evaluation	**Decreasing**

Mann-Kendall Trend: Spring

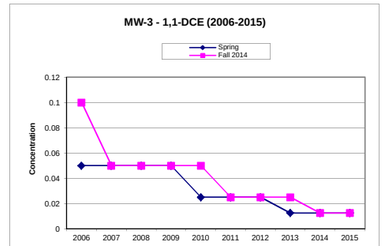
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.05	0.05	0.05	0.05	0.025	0.025	0.025	0.0125	0.0125	0.0125
0.05		0	0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0375
0.05			0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0375
0.05				0	-0.025	-0.025	-0.025	-0.0375	-0.0375	-0.0375
0.025					-0.025	0	0	-0.0125	-0.0125	-0.0125
0.025						0	0	-0.0125	-0.0125	-0.0125
0.025								-0.0125	-0.0125	-0.0125
0.0125									0	0
0.0125										0
0.0125										

S Value

Neg	Pos
35	0
S Value	-35
n	10
P Value	0.00047
Evaluation	**Decreasing**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.1	0.05	0.05	0.05	0.05	0.025	0.025	0.025	0.0125	0.0125
0.1		-0.05	-0.05	-0.05	-0.05	-0.075	-0.075	-0.075	-0.0875	-0.0875
0.05			0	0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05				0	0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05					0	-0.025	-0.025	-0.025	-0.0375	-0.0375
0.05						-0.025	-0.025	-0.025	-0.0375	-0.0375
0.025							0	0	-0.0125	-0.0125
0.025								0	-0.0125	-0.0125
0.025									-0.0125	-0.0125
0.0125										0
0.0125										



MW-501

S Value

Neg	Pos
16	17
S Value	1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

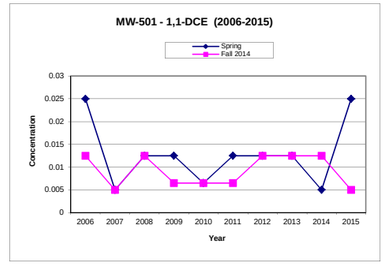
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.025	0.005	0.0125	0.0125	0.0065	0.0125	0.0125	0.0125	0.005	0.025
0.025		-0.02	-0.0125	-0.0125	-0.0185	-0.0125	-0.0125	-0.0125	-0.02	0
0.005			0.0075	0.0075	0.0015	0.0075	0.0075	0.0075	0	0.02
0.0125				0	-0.006	0	0	0	-0.0075	0.0125
0.0125					-0.006	0	0	0	-0.0075	0.0125
0.0065						0.006	0.006	0.006	-0.0015	0.0185
0.0125							0	0	-0.0075	0.0125
0.0125								0	-0.0075	0.0125
0.0125									-0.0075	0.0125
0.005										0.02
0.025										

S Value

Neg	Pos
15	16
S Value	1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0125	0.005	0.0125	0.0065	0.0065	0.0065	0.0125	0.0125	0.0125	0.005
0.0125		-0.0075	0	-0.006	-0.006	-0.006	0	0	0	-0.0075
0.005			0.0075	0.0015	0.0015	0.0015	0.0075	0.0075	0.0075	0
0.0125				-0.006	-0.006	-0.006	0	0	0	-0.0075
0.0065					0	0	0.006	0.006	0.006	-0.0015
0.0065						0	0.006	0.006	0.006	-0.0015
0.0065							0.006	0.006	0.006	-0.0015
0.0125								0	0	-0.0075
0.0125									0	-0.0075
0.0125										-0.0075
0.005										



Mann-Kendall Analysis: 1,1-DCE (2006-2015)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

MW-502

S Value

Neg	Pos
18	17
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Spring

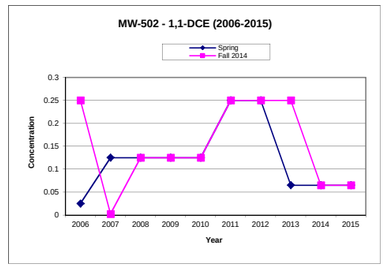
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.025	0.125	0.125	0.125	0.125	0.25	0.25	0.065	0.065	0.065
0.025		0.1	0.1	0.1	0.1	0.225	0.225	0.04	0.04	0.04
0.125			0	0	0	0.125	0.125	-0.06	-0.06	-0.06
0.125				0	0	0.125	0.125	-0.06	-0.06	-0.06
0.125					0	0.125	0.125	-0.06	-0.06	-0.06
0.125						0.125	0.125	-0.06	-0.06	-0.06
0.25							0	-0.185	-0.185	-0.185
0.25								-0.185	-0.185	-0.185
0.065									0	0
0.065										0
0.065										

S Value

Neg	Pos
18	17
S Value	-1
n	10
P Value	0.5
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.25	0.0025	0.125	0.125	0.125	0.25	0.25	0.25	0.065	0.065
0.25		-0.2475	-0.125	-0.125	-0.125	0	0	0	-0.185	-0.185
0.0025			0.1225	0.1225	0.1225	0.2475	0.2475	0.2475	0.0625	0.0625
0.125				0	0	0.125	0.125	0.125	-0.06	-0.06
0.125					0	0.125	0.125	0.125	-0.06	-0.06
0.125						0.125	0.125	0.125	-0.06	-0.06
0.25							0	0	-0.185	-0.185
0.25								0	-0.185	-0.185
0.25									-0.185	-0.185
0.065										0
0.065										



MW-202

S Value

Neg	Pos
0	42
S Value	42
n	10
P Value	0.0000089
Evaluation	**Increasing**

Mann-Kendall Trend: Spring

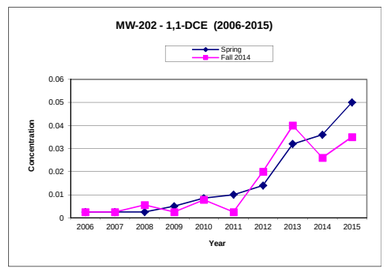
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.0025	0.0025	0.005	0.0085	0.01	0.014	0.032	0.036	0.05
0.0025		0	0	0.0025	0.006	0.0075	0.0115	0.0295	0.0335	0.0475
0.0025			0	0.0025	0.006	0.0075	0.0115	0.0295	0.0335	0.0475
0.0025				0.0025	0.006	0.0075	0.0115	0.0295	0.0335	0.0475
0.005					0.0035	0.005	0.009	0.027	0.031	0.045
0.0085						0.0015	0.0055	0.0235	0.0275	0.0415
0.01							0.004	0.022	0.026	0.04
0.014								0.018	0.022	0.036
0.032									0.004	0.018
0.036										0.014
0.05										

S Value

Neg	Pos
5	34
S Value	29
n	10
P Value	0.0046
Evaluation	**Increasing**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0025	0.0025	0.0056	0.0025	0.0078	0.0025	0.02	0.04	0.026	0.035
0.0025		0	0.0031	0	0.0053	0	0.0175	0.0375	0.0235	0.0325
0.0025			0.0031	0	0.0053	0	0.0175	0.0375	0.0235	0.0325
0.0056				-0.0031	0.0022	-0.0031	0.0144	0.0344	0.0204	0.0294
0.0025				0.0053	0	0.0175	0.0375	0.0235	0.0325	
0.0078					-0.0053	0.0122	0.0322	0.0182	0.0272	
0.0025						0.0175	0.0375	0.0235	0.0325	
0.02							0.02	0.006	0.015	
0.04								-0.014	-0.005	
0.026									0.009	
0.035										



MW-204

S Value

Neg	Pos
3	32
S Value	29
n	10
P Value	0.0046
Evaluation	**Increasing**

Mann-Kendall Trend: Spring

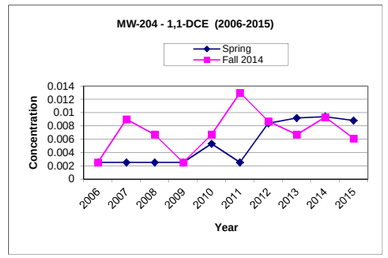
Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data	0.0025	0.0025	0.0025	0.0025	0.0053	0.0025	0.0084	0.0092	0.0094	0.0088
0.0025		0	0	0	0.0028	0	0.0059	0.0067	0.0069	0.0063
0.0025			0	0	0.0028	0	0.0059	0.0067	0.0069	0.0063
0.0025				0	0.0028	0	0.0059	0.0067	0.0069	0.0063
0.0025					0.0028	0	0.0059	0.0067	0.0069	0.0063
0.0053						-0.0028	0.0031	0.0039	0.0041	0.0035
0.0025							0.0059	0.0067	0.0069	0.0063
0.0084								0.0008	0.001	0.0004
0.0092									0.0002	-0.0004
0.0094										-0.0006
0.0088										

S Value

Neg	Pos
17	24
S Value	7
n	10
P Value	0.3
Evaluation	**No Trend**

Mann-Kendall Trend: Fall

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Data	0.0025	0.009	0.0067	0.0025	0.0067	0.013	0.0087	0.0067	0.0093	0.0061
0.0025		0.0065	0.0042	0	0.0042	0.0105	0.0062	0.0042	0.0068	0.0036
0.009			-0.0023	-0.0065	-0.0023	0.004	-0.0003	-0.0023	0.0003	-0.0029
0.0067				-0.0042	0	0.0063	0.002	0	0.0026	-0.0006
0.0025					0.0042	0.0105	0.0062	0.0042	0.0068	0.0036
0.0067						0.0063	0.002	0	0.0026	-0.0006
0.013							-0.0043	-0.0063	-0.0037	-0.0069
0.0087								-0.002	0.0006	-0.0026
0.0067									0.0026	-0.0006
0.0093										-0.0032
0.0061										



APPENDIX C

SSD System Maintenance and Monitoring Documentation

HALEY ALDRICH

1 Purpose

1.1 This Standard Operating Procedure (SOP) describes the procedure for maintaining the Sub-Slab Depressurization (SSD) system at CooperVision in Scottsville, NY by performing the PM and making sure system is working properly.

2 Scope

2.1 This procedure applies to the Sub-Slab Depressurization (SSD) system at CooperVision.

2.2 This PM will be performed monthly.

3 Supporting Documents

3.1 The following documents are referenced in this SOP:

- 3.1.1 FM00916 – Monthly SSD System Monitoring
- 3.1.2 D11163 - Haley and Aldrich SSD Suction Locations Drawing
- 3.1.3 D11162 – Scottsville Site Map

4 Definitions

4.1 SSD-Sub-Slab Depressurization System
4.2 PM –Preventive Maintenance
4.3 SV-Scottsville
4.4 NCR-Non Conformance Report

5 Responsibility

5.1 It is the responsibility of the Maintenance department to perform this PM.

6 Safety

6.1 Not applicable; there are no safety requirements.

7 Procedure

7.1 Refer to attached drawing D11163 for all manometers and depressurization ports locations at the Scottsville facility.

7.2 The Maintenance department will perform below activities monthly.

- 7.2.1 Record manometers readings of each location on Monthly SSD System Monitoring form FM00916.
- 7.2.2 **Notify facility Maintenance Manager if any reading is zero.**
- 7.2.3 Perform following routine maintenance at the time of above manometer readings:
  - 7.2.3.1 A visual inspection of the complete system (i.e.: roof fan, roof and inside piping, labeling system, urethane seal).

7.2.3.2 A visual inspection of manometers.

7.2.3.3 Inspection of exhaust points to verify that the air intakes have not been located nearby.

7.2.3.4 Audible inspection to verify that a fan's operational performance

7.2.3.5 After the inspection; Check "visual inspection" column and write any comments/remarks on both forms.

7.2.4 Using drawing D11163 check all depressurization ports to assure they are easily accessible. If ports are not accessible (covered/blocked) please notify the Maintenance Manager or Supervisor immediately.

7.2.5 Fill out and complete PM work order and attach summary form FM00916. Forward all documents to facility maintenance manager.

7.3 Facility manager will perform below activities:

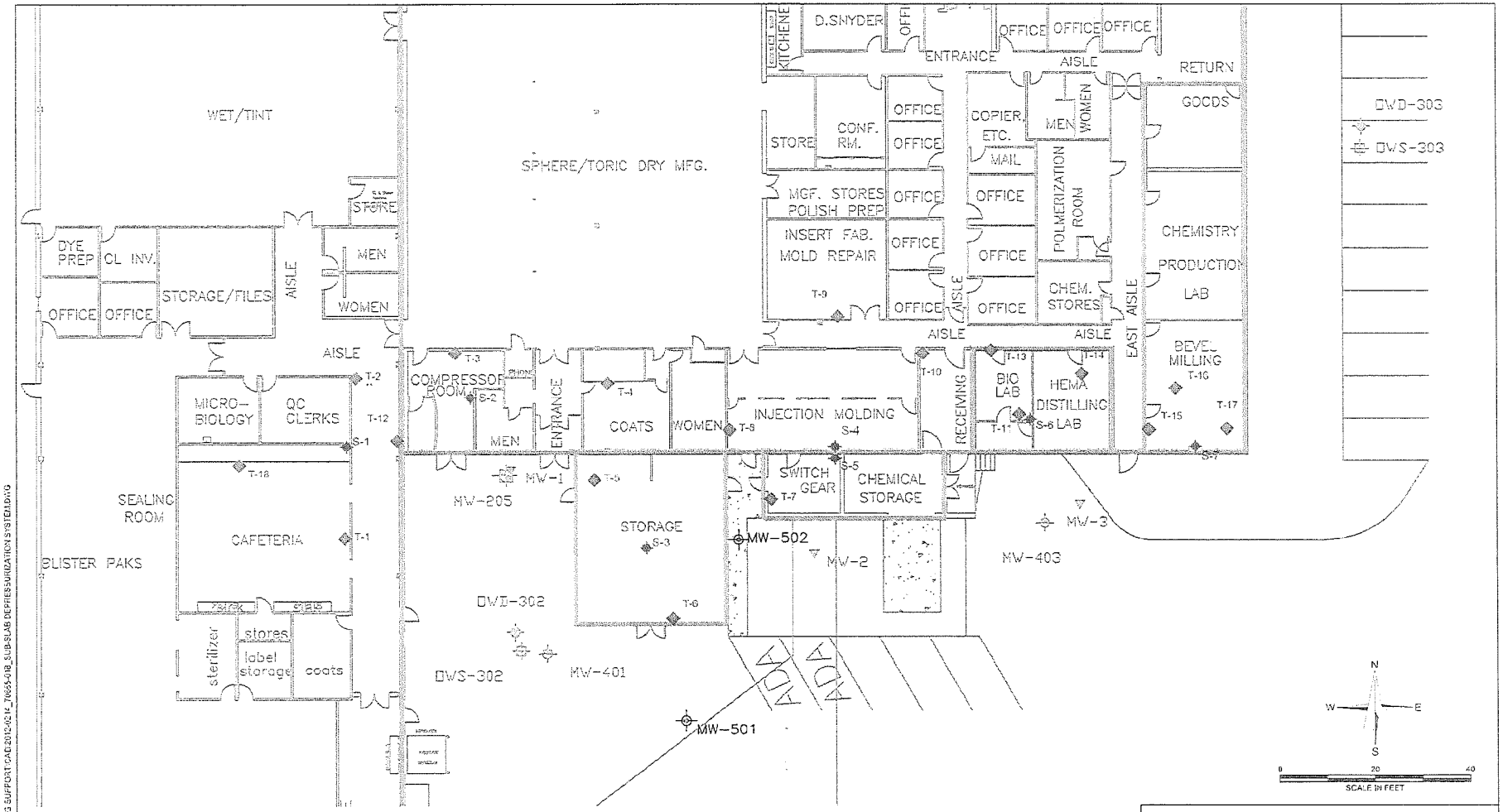
7.3.1 Email results form FM00916 **Yearly** to Hailey & Aldrich contact; Scottsville Engineering Manager and Scottsville General Manager.

7.3.2 Email Hailey & Aldrich contact (copy to Scottsville Engineering Manager and Scottsville General Manager) if any monomer reading is zero and if any equipment is observed to be malfunctioning. Initiate a NCR in Agile system; write NCR number on form FM00916 and forward form with completed PM work order to calibration department to file at proper location.

7.3.3 Hailey & Aldrich will make arrangements working with contractor and SV facility Maintenance Manager to perform repair and to get SSD restarted.

7.3.4 Facility manager will make a folder identifying it with NCR number (in case of any failure) to collect all documents like fan specifications, vendor installation document etc. Once fan is installed and all documents collected, folder will be forwarded to calibration department to file.

7.3.5 Calibration department will file folder at proper location.



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S-3 APPROXIMATE SUCTION POINT LOCATION

T-16 APPROXIMATE TEST POINT LOCATION

APPROXIMATE LOCATION OF SUB-SLAB BARRIERS AFFECTING THE SYSTEM

NOTE:

1. ** T-2 IS NOT A VALID TEST POINT.

HALEY & ALDRICH

SUB-SLAB DEPRESSURIZATION SYSTEM
NORTH ROAD
SCOTTSVILLE, NEW YORK

SUB-SLAB DEPRESSURIZATION SYSTEM

SCALE: AS SHOWN
FEBRUARY 2012

FIGURE 5

G:\PROJECTS\70665918 - OTISCO\13 SUPPORT CAD\2012-02\14_70665-018_SUB-SLAB DEPRESSURIZATION SYSTEM.DWG

CooperVision	TITLE: Monthly SSD System Monitoring	FORM NUMBER: FM00916
	REFERENCE SOP: SOP142-30	REVISION NUMBER: 2

Location (Site / Facility Name): CooperVision, Inc.
Location (Address): Scottsville, New York
Client: CooperVision, Inc.

		Vacuum Reading (in. w.c.)							
		S-1	S-2	S-3	S-4/5	S-6	S-7		
Date	Initials	Rochester	Honeoye Falls	Hilton	Palmyra	Spencerport R.J.	Brockport	Visual Inspection	Comments / Remarks
11-14-14	[illegible]	3.8	3.7	1.6	2.0	3.5	1.6	✓	all good
12-9-14	[illegible]	3.9	3.8	1.6	2.0	3-5	1.6	✓	all running
1-5-15	[illegible]	4.0	3.9	1.6	2.0	3.6	1.6	✓	all good.
2-4-15	[illegible]	3.9	3.9	1.6	2.0	3.6	1.6	✓	all good !
3-3-15	[illegible]	3.9	3.9	1.6	2.0	3.6	1.6	✓	all good
3-31-15	[illegible]	3.9	3.8	1.5	2.0	3.6	1.6	✓	all good

Notes:
Document monthly readings
Email results yearly to contacts
Readings are in inches of water column (in.w.c.)

Contacts:
Mark Ramsdell
Haley & Aldrich 321-4262
Mramsdell@HaleyAldrich.com

CooperVision	TITLE: Monthly SSD System Monitoring	FORM NUMBER: FM00916
	REFERENCE SOP: SOP142-30	REVISION NUMBER: 2

Location (Site / Facility Name): CooperVision, Inc.
Location (Address): Scottsville, New York
Client: CooperVision, Inc.

		Vacuum Reading (in. w.c.)							
Date	Initials	S-1 Rochester	S-2 Honeoye Falls	S-3 Hilton	S-4/5 Palmyra	S-6 Spencerport	S-7 Brockport	Visual Inspection	Comments / Remarks
4-27-15	[signature]	3.9	3.8	1.6	2.0	3.4	1.5	✓	all good

Notes:
Document monthly readings
Email results yearly to contacts
Readings are in inches of water column (in.w.c.)

Contacts:
Mark Ramsdell
Haley & Aldrich 321-4262
Mramsdell@HaleyAldrich.com

Maintenance Form

Work Order Number 37572
Date Enacted 4/6/2015

Due Date: 4/30/2015

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP 142-30

4-27-15
Daniel J Klein

Maintenance Form

Work Order Number 37317
Date Enacted 3/9/2015

Due Date: 4/2/2015

System ID: PM
Component ID: SUB-SLAB
Equipment Type: Sub-Slab Depressurization System
Description: Sub-Slab Depressurization System
Serial Number:

Scheduled Person:
Event Name: Monthly
Department: Multiple Location
Location Multiple Location
Contact Person: John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

3-31-15
Daniel J Klein

Maintenance Form

Work Order Number 37073
Date Enacted 2/9/2015

Due Date: 3/6/2015

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

3-3-15
Daniel J Klein

Maintenance Form

Work Order Number 36850
Date Enacted 1/9/2015

Due Date: 2/4/2015

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

2-4-15.

Daniel J Klein

Maintenance Form

Work Order Number 36652
Date Enacted 12/15/2014

Due Date: 1/8/2015

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: all good P.M. Complete per procedure SOP 142-30

1-5-15

Daniel J Klein

Maintenance Form

Work Order Number 36439
Date Enacted 11/17/2014

Due Date: 12/14/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

12-9-14
Daniel J. Klein

Maintenance Form

Work Order Number 36199
Date Enacted 10/20/2014

Due Date: 11/12/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

11-14-14

Daniel J Klein

Maintenance Form

Work Order Number 35968
Date Enacted 9/22/2014

Due Date: 10/18/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

10-13-14

Daniel J Klein

Maintenance Form

Work Order Number 35728
Date Enacted 8/28/2014

Due Date: 9/20/2014

System ID: PM
Component ID: SUB-SLAB
Equipment Type: Sub-Slab Depressurization System
Description: Sub-Slab Depressurization System
Serial Number:

Scheduled Person:
Event Name: Monthly
Department: Multiple Location
Location Multiple Location
Contact Person: John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP 142-30

9-18-14
David J Klar

Maintenance Form

Work Order Number 35505
Date Enacted 7/29/2014

Due Date: 8/22/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

8-21-14

Daniel J Klein

Maintenance Form

Work Order Number 35284
Date Enacted 7/10/2014

Due Date: 7/23/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr.

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

~~#1~~ 3.8
~~#2~~ 3.7
~~#3~~ 1.6
~~#4~~/5 2.0
#6 3.5
#7 1.6

7-23-14

Daniel J Klein

Maintenance Form

Work Order Number 35029
Date Enacted 6/13/2014

Due Date: 6/23/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 1 hr

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

6-23-14

Daniel J Klein

Maintenance Form

Work Order Number
Date Enacted

Due Date: 5/24/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 30 min

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

5-24-14

Daniel J Klein

Maintenance Form

Work Order Number
Date Enacted

Due Date: 4/24/2014

System ID:	PM	Scheduled Person:	
Component ID:	SUB-SLAB	Event Name:	Monthly
Equipment Type:	Sub-Slab Depressurization System	Department:	Multiple Location
Description:	Sub-Slab Depressurization System	Location	Multiple Location
Serial Number:		Contact Person:	John Hogan

Procedure to Reference: SOP142-30

Information on Form: The purpose of this procedure is to maintain the Sub-Slab depressurization system at CooperVision in Scottsville, NY by making sure roof fans are always running.

Estimated Time: 30 min

Estimated Cost:

Parts Used:

Remarks: P.M. Complete per procedure SOP142-30

4-24-14
Daniel J Klein

APPENDIX D

Groundwater Sampling Field Forms

(1)

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-3
Field Crew: JMS/DBK

Date: 10/09/14
Start Time: 09:40
Finished Time: 09:55
Sample Time: 10/13 09:35

Initial Depth to Water: 4.33
Well Depth: 9.80
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 9.5

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
10/9 0	—	—	—	—	—	—	—	—	
15	9.5	0.2	—	—	—	—	—	—	purged dry
									let recharge
									before sampling
10/13 —	—	—	17.1	7.33	1.78	6.57	28.2	81.0	SAMPLES

Extra Parameters:
Ferrous Iron 0 mg/L

Comments:

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: OW-306
Field Crew: JMS/DBK

Date: 10/09/14
Start Time: 10:30
Finished Time: 11:15
Sample Time: 11:20

Initial Depth to Water: 3.94
Well Depth: 13.36
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 10

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/-10mV	Comments
0	3.94	—	—	—	—	—	—	—	200 ml/min
5	4.10	0.2	18.10	6.82	17.72	0.45	2709	148.7	
10	4.15	0.5	18.7	6.96	14.55	0.71	68.0	121.6	
15	4.15	0.7	18.9	7.02	13.01	1.38	87.1	107.9	
20	4.20	1.0	18.9	7.07	10.67	2.74	52.2	98.5	
25	4.22	1.2	19.1	7.14	9.44	3.43	55.0	99.0	
30	4.38	1.4	19.0	7.20	8.44	4.01	50.3	94.3	
35	4.32	1.6	19.1	7.22	8.11	4.24	51.1	104.7	
40	4.29	1.8	19.1	7.23	7.88	4.44	49.3	106.0	
45	4.25	2.0	19.0	7.25	7.82	4.55	49.5	105.4	OK TO SAMPLE

Extra Parameters:
Ferrous Iron ( ) mg/L

Comments:
~~OW306 - 100914 - 1120~~

Alkalinity, VOA

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-203
Field Crew: JMS/DBK

Date: 10/09/14
Start Time: 12:05
Finished Time: 13:30
Sample Time: 13:35

Initial Depth to Water: 4.20
Well Depth: 19.45
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 15

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	4.5	0	—	—	—	—	—	—	Purge Rate = 132 mL/min
10	5.8	0.1	18.8	7.99	0.560	0.43	13.4	91.6	
15	5.9	0.2	18.7	7.910	0.537	0.47	13.2	89.7	
20	6.0	0.3	18.9	7.96	0.529	0.53	13.3	88.1	
25	6.1	0.45	18.7	7.94	0.528	0.73	14.4	88.7	
30	6.3	0.8	18.7	7.91	0.540	0.77	17.8	90.6	
35	6.4	1.0	18.6	7.94	0.566	0.98	17.4	91.4	
40	6.45	1.1	18.8	7.93	0.65	1.04	13.5	95.1	
45	6.50	1.2	18.9	7.90	0.74	1.11	12.9	101.3	
50	6.6	1.25	18.8	7.89	0.87	1.17	14.5	104.0	
55	6.65	1.30	19.1	7.86	1.07	1.14	11.5	105.3	
60	—	1.40	19.0	7.85	1.24	1.14	10.94	105.7	
65	6.85	1.60	18.7	7.83	1.49	1.12	10.44	106.1	
70	6.95	1.90	19.0	7.90	1.80	1.04	9.32	107.1	
75	7.0	1.90	18.8	7.77	2.17	1.01	8.62	105.6	
80	7.1	2.0	18.6	7.74	2.31	0.99	7.45	100.2	* Conductivity NOT stabilized

Extra Parameters:
Ferrous Iron 0 mg/L

Comments:
VOA, alkalinity

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-202
Field Crew: SMS/DBK

Date: 10/09/14
Start Time: 14:05
Finished Time: 15:06
Sample Time: 15:05

Initial Depth to Water: 6.58
Well Depth: 18.90
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 16

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	7.0	0	—	—	—	—	—	—	300 ml/min
10	8.9	0.7	17.7	7.103	6.60	1.15	7.73	103.8	
15	9.3	1.2	17.8	7.66	6.43	2.10	11.2	104.1	
20	9.6	1.6	17.7	7.60	6.14	1.69	11.03	102.3	
25	10.1	2.0	17.7	7.55	5.88	1.08	11.80	99.8	
30	10.5	2.3	17.7	7.58	5.86	0.93	11.30	97.8	
35	10.6	2.7	17.5	7.58	5.93	0.80	16.5	97.0	125 mL/min purge
40	10.5	2.8	17.5	7.54	6.17	0.76	17.6	95.6	
45	11.3	3.1	17.4	7.62	6.26	0.78	17.4	91.9	
50	—	3.5	17.5	7.64	6.30	0.84	15.6	90.3	OK to sample

Extra Parameters:
Ferrous Iron ○ mg/L

Comments:
Fe, Alkalinity, Organic Acids, sulfide, NO_2/NO_3/Cl/SO_4, RSK-175, VOA

(5)

Low-Flow Field Sampling Form
Location (Site/Facility Name): **Coopervision**

Job Number: 70665-018
Well ID: MW-204
Field Crew: DBK

Date: 10/09/14
Start Time: 16:15
Finished Time: 16:35
Sample Time: 16:40

Initial Depth to Water: 6.63
Well Depth: 19.12
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 16

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	7.0	0	—	—	—	—	—	—	400 > 190 ml/min
6	—	—	—	—	—	—	—	—	190 ml/min
10	9.1	0.5	19.2	7.32	3.11	0.24	7.16	107.6	
15	9.3	0.8	19.1	7.30	3.11	0.26	4.92	105.7	
20	9.5	1.0	18.9	7.29	3.10	0.25	3.49	101.5	OK to sample

Extra Parameters:
Ferrous Iron ( ) mg/L

Comments:
VOA, alkalinity

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-502
Field Crew: DSK

Date: 10/09/14
Start Time: 1734
Finished Time: 1810
Sample Time: 1815

Initial Depth to Water: 5.40
Well Depth: 32.71
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 30

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	5.5	0	—	—	—	—	—	—	125 ml/min
10	10.1	0.9	18.1	6.94	3.54	0.14	OVER	-95.8	
15	10.4	1.0	18.0	6.94	3.54	0.11	OVER	-97.8	
20	10.6	1.1	18.0	6.93	3.55	0.10	OVER	-99.2	
25	11.8	1.3	17.8	6.94	3.54	0.09	OVER	-100.0	
30	11.3	1.5	17.7	6.94	3.54	0.09	OVER	-100.7	OK except turbidity

Add 5 to depth for flow

Extra Parameters:
Ferrous Iron ND mg/L (too turbid)

Comments:
VOA, RSK-175, Alkalinity, Sulfide, Fe, NO_2/NO_3/Cl/SO_4

Low-Flow Field Sampling Form

Location (Site/Facility Name): Coopervision

Job Number: 70665-018

Well ID: MW-501

Field Crew: JMS / DBK

Date: 10/13/14

Start Time: 10:05

Finished Time: 11:15

Sample Time: 11:20

Initial Depth to Water: 5.03

Well Depth: 10.31

Depth to top of screen:

Depth to bottom of screen:

Depth of Intake: 9.10

Purging Device: Waterra

Tubing in well: No

Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	5.50	0	—	—	—	—	—	—	180 ml / min
10	7.8	0.1	20	6.95	8.62	0.27	17.5	-55.5	
20	8.6	0.3	19.3	6.89	8.40	0.35	15.8	-60.1	110 ml / min
25	8.9	0.5	19.0	6.97	8.36	0.32	25.9	-60.5	
30	8.9	0.7	18.4	6.91	8.23	2.12	52.5	-60.6	
35	9.0	0.8	18.1	6.96	8.25	3.49	49.2	-40.4	
40	9.0	0.9	18.0	7.00	8.22	4.37	62.8	-37.3	
50	9.0	1.0	17.6	7.06	8.15	5.24	62.2	-31.9	
55	9.0	1.05	17.8	7.07	7.89	5.44	66.4	-30.8	
60	9.0	1.1	17.8	7.09	8.05	5.51	72.2	-31.5	
66	9.0	1.15	17.6	7.11	7.93	5.50	81.5	-31.0	OK except turbidity
									SAMPLE
									Flow very slow at end / during sampling → basically well [illegible] [illegible]

Extra Parameters:

Ferrous Iron 1.5 mg/L

Comments:

00100-020

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Low-Flow Field Sampling Form
Location (Site/Facility Name): **Coopervision**

Job Number: 70665-018
Well ID: OW-302S
Field Crew: JMS/DBK

Date: 10/13/14
Start Time: 12:10
Finished Time: 13:05
Sample Time: 13:10

Initial Depth to Water: 3.34
Well Depth: 21.92
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 19-21

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	✱	0	—	—	—	—	—	—	170 ml/min
5	✱	0.1	18.6	12.71	17.25	2.93	57.3	-81.0	
10	✱	0.2	18.7	12.63	15.25	2.39	34.9	-90.7	
15	✱	0.3	18.4	12.49	13.60	2.29	33.1	-100.7	
20	✱	0.4	18.1	12.37	12.25	2.10	29.4	-102.9	may have pumped dry
25	✱	0.5	18.2	12.27	11.54	2.32	105.4	-101.1	below intake
30	✱	0.6	19.2	9.40	17.74	1.40	1514	-96.4	
35	✱	0.7	19.1	9.80	15.49	0.49	735	-126.5	50 ml/min / pump speed no change ✱
40	✱	0.75	19.1	10.00	13.23	1.05	119	-120.9	
45	✱	0.85	19.4	10.04	12.45	1.15	117	-110.3	
50	✱	0.95	19.1	10.04	12.06	1.27	104	-106.0	

Extra Parameters:
Ferrous Iron Not Measured mg/L turbidity too high

Comments:
✱ cannot fit probe in well w/ tubing
☆ is pumped dry

Low-Flow Field Sampling Form
Location (Site/Facility Name): **Coopervision**

Job Number: 70665-018
Well ID: MW-205
Field Crew: JMS/DBK

Date: 10/13/14
Start Time: 14:14
Finished Time: 14:53
Sample Time: 15:00

Initial Depth to Water: 4.45
Well Depth: 27.60
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 27

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/-10 mV	Comments
0	4.2	0	—	—	—	—	—	—	240 > 160 ml/min
5	5.9	0.1	19.7	6.19	7.64	0.26	9.69	-68.8	160 ml/min
10	6.9	0.3	19.8	6.10	7.69	0.16	6.29	-77.8	
15	7.7	0.6	19.6	6.07	7.68	0.17	4.34	-85.3	
20	8.7	0.9	19.6	6.04	7.68	0.16	9.64	-96.4	
25	9.3	1.0	19.5	6.03	7.68	0.16	3.68	-105.1	
30	10.1	1.1	19.5	6.03	7.67	0.15	3.69	-114.8	
35	10.8	1.2	19.7	6.02	7.67	0.15	5.63	-122.4	
40	11.4	1.3	19.6	6.01	7.68	0.15	5.51	-130.9	
45	12.0	1.4	19.5	6.01	7.68	0.14	4.13	-134.9	
50	12.6	1.6	19.4	6.01	7.67	0.14	4.13	-139.2	DTS to sample

Extra Parameters:
Ferrous Iron 5.0 mg/L

Comments:
Strong unidentified odor. Not a pleasant odor.

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Low-Flow Field Sampling Form
Location (Site/Facility Name): **Coopervision**

Job Number: 70665-018
Well ID: BAP-1
Field Crew: JMS/DBK

Date: 10/13/14
Start Time: 16:11
Finished Time: 17:10
Sample Time: 17:15

Initial Depth to Water: 5.93
Well Depth: 20.16
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 19

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	*	0	—	—	—	—	—	—	1.60 ml/min
10	*	0.2	19.6	7.19	2.12	0.36	18.7	-129.1	
15	*	0.5	19.4	7.21	2.16	0.29	54.5	-132.4	
20	*	0.8	19.5	7.21	2.18	0.28	83.9	-131.9	
25	*	1.0	19.7	7.21	2.19	0.24	57	-130.4	
30	*	1.1	19.6	7.21	2.20	0.23	82	-127.6	
35	*	1.3	19.7	7.21	2.21	0.24	80	-123.3	
40	*	1.4	20.0	7.21	2.21	0.20	74	-118.4	
45	*	1.6	19.8	7.20	2.21	0.17	78	-112.8	
50	*	1.9	19.7	7.19	2.22	0.15	87	-108.1	
55	*	2.0	14.6	7.20	2.24	0.15	83	-107.1	OK to Sample

Extra Parameters:
Ferrous Iron 1.5 mg/L

Comments:
* probe will not fit in well with tubing

Low-Flow Field Sampling Form
Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: BAP-2
Field Crew: JMS/DBK

Date: 10/13/14
Start Time: 17:40
Finished Time: 19:20
Sample Time: 19:45

Initial Depth to Water: 5.87
Well Depth: 19.52
Depth to top of screen:
Depth to bottom of screen:
Depth of Intake: 18.5

Purging Device: Waterra
Tubing in well: No
Tubing Type: HDPE

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 <50 (NTU)	ORP/eH (mV) +/- 10 mV	Comments
0	*	0	—	—	—	—	—	—	250? 110 ml/min
5	*	0.1	14.3	7.45	1.85	0.18	1095	-176.2	
10	*	0.15	14.3	7.32	2.04	0.12	715	-166.0	
15	*	0.30	14.3	7.25	2.10	0.09	611	-159.90	
20	*	0.5	14.3	7.24	2.13	0.14	1181	-165.1	
25	*	0.6	19.2	7.27	2.15	0.22	2127	-173.0	
30	*	0.7	14.1	7.24	2.18	0.17	3277	-182.3	
35	*	0.8	19.0	7.32	2.23	0.15	3034	-187.5	
40	*	0.9	14.0	7.33	2.28	0.14	3331	-190.6	
45	*	1.0	18.9	7.33	2.34	0.14	3350	-192.2	
50	*	1.1	18.8	7.33	2.38	0.14	3699	-192.7	close enough except for turbidity

Extra Parameters:
Ferrous Iron NOT MEASURED mg/L (TURBIDITY TOO HIGH)

Comments:
* probe will not fit in well with tube

Low-Flow Field Sampling Form

Location (Site/Facility Name): **Coopervision**

Sample Order: 1

WELL ID: **MW-3**

Job Number: 70665-020
Well ID: MW-3
Field Crew: DBK/JMS

Date: 04/01/15
Start Time: 09:33
Finished Time: 09:43
Sample Time: 14:50

Initial Depth to Water: 3.87
Well Depth: 9.8
Depth to top of screen: unknown
Depth to bottom of screen: unknown
Depth of Intake: 9.3

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE

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	"	0.05	8.3	7.46	1.78	8.88	103.2	112.0	
10	"	0.2	8.5	7.96	1.70	9.92	—	108.8	readings not steady/dry
									Pumped dry
									Sampled when recharged

Extra Parameters:

Ferrous Iron 0 mg/L

$0.04 \frac{gal}{ft} \times (9.3 - 3.9) = 0.2\ gal = 1\ volume$

Comments:

a) 1-inch well, cannot fit water meter

Low-Flow Field Sampling Form | Sample Order 2 | WELL ID: **OW-306**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: OW-306
Field Crew: DBK/JMS

Date: 04/01/15
Start Time: 10:09
Finished Time: 11:20
Sample Time: 11:30

Initial Depth to Water:
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 = 0.4 ppm

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	a	0	-	-	-	-	-	-	500 ml/min
10	"	0.6	6.7	7.04	40.05	7.08	High	256.3	340 ml/min
15	"	1.1	6.9	6.97	38.93	7.05	High	266.5	" "
20	"	1.5	6.9	6.77	28.27	7.50	High	272.8	" "
25	"	2.0	7.0	6.97	36.74	7.00	High	273.8	
30	"	2.4	7.0	6.43	36.71	7.11	High	273.9	Stopped pumping Valve clogged w/Sediment
50	"	2.9	7.4	7.11	45.38	7.42	High	252.9	
55	"	3.3	7.4	7.06	40.36	6.86	High	267.6	300 ml/min
60	"	3.6	7.7	7.09	35.92	7.26	High	279.5	" "
65	"	4.0	7.1	7.08	34.29	7.24	High	285.4	
70	"	4.4	6.9	7.07	33.63	7.39	High	288.8	Good to sample

Extra Parameters:

Ferrous Iron 0 mg/L but very silty

Comments:

a) 1 inch well, no room for meter

Low-Flow Field Sampling Form | Sample Order 3 | WELL ID: **MW-203**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: MW-203
Field Crew: DBK/JMS

Date: 04/01/15
Start Time: 12:10
Finished Time: 12:30
Sample Time: 12:45

Initial Depth to Water: 3.22
Well Depth: 19.45
Depth to top of screen: unknown
Depth to bottom of screen: unknown
Depth of Intake: 19.0

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE

PID = 0.0 ppm

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	3.75	0	-	-	-	-	-	-	400 ml / min
5	6.35	0.6	9.1	7.99	1.01	4.58	54.9	222.5	200 ml / min
10	7.06	0.8	9.2	7.95	0.97	4.59	19.6	220.0	
15	7.68	1.1	9.2	7.80	0.98	4.38	10.98	214.9	
20	7.97	1.3	9.1	7.90	0.99	4.23	10.12	209.5	
25	8.15	1.5	9.3	7.80	1.01	4.07	10.38	205.1	OK to sample
									MW-203_040115

Extra Parameters:

Ferrous Iron 0 mg/L

Comments:

2 in well

VOCs, Alkalinity

Low-Flow Field Sampling Form | Sample Order: 4 | WELL ID: **MW-202**

Location (Site/Facility Name): **Coopervision**

Job Number:	70665-020	Date:	04/01/15	Initial Depth to Water:	5.83	Purging Device:	Waterra w/Hydrolift
Well ID:	MW-202	Start Time:	13:14	Well Depth:	18.9	Tubing in well:	No
Field Crew:	DBK/JMS	Finished Time:	14:04	Depth to top of screen:	unknown	Tubing Type:	HDPE
		Sample Time:	14:20	Depth to bottom of screen:	unknown		
				Depth of Intake:	18.4		

PID = 0.3

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	5.10	0	-	-	-	-	-	-	180 ml/min
5	7.21	0.1	10.1	7.59	10.93	3.94	21.2	255.6	
10	7.44	0.3	9.6	7.48	10.94	3.87	18.9	248.0	
15	7.71	0.5	9.4	7.55	10.95	3.56	14.9	242.9	
20	7.89	0.7	9.9	7.55	10.92	3.18	14.3	238.4	
25	7.93	0.9	9.9	7.54	10.93	2.95	16.0	234.8	
30	8.01	1.1	9.7	7.54	10.92	2.78	23.5	231.1	
35	8.25	1.5	9.7	7.53	10.89	2.42	20.3	227.1	
40	8.39	1.8	9.7	7.52	10.93	2.27	21.1	222.8	
45	8.48	2.1	9.6	7.51	10.90	2.12	23.5	219.2	
50	8.50	2.3	9.5	7.52	10.97	2.03	26.0	215.8	OK to sample
									MW-202_040115

Extra Parameters:

Ferrous Iron ◯ mg/L

Comments:

2 in

VOC, Alkalinity, RSK-175, Sulfide, NO_2/NO_3/Cl/SO_4, Organic Acids, Fe

Low-Flow Field Sampling Form | Sample Order: 5 | WELL ID: **MW-204**

Location (Site/Facility Name): **Coopervision**

Job Number:	70665-020	Date:	04/01	Initial Depth to Water:	4.95	Purging Device:	Waterra w/Hydrolift
Well ID:	MW-204	Start Time:	15:20	Well Depth:	19.12	Tubing in well:	No
Field Crew:	DBK/JMS	Finished Time:	16:20	Depth to top of screen:	unkown	Tubing Type:	HDPE
		Sample Time:	16:25	Depth to bottom of screen:	unkown		
				Depth of Intake:	~~18.6~~ 17.0		

PID = 0.3 ppm

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	4.91	0	-	-	-	-	-	-	250 ml/min
5	7.39	0.3	9.5	7.19	6.78	3.45	6.01	253.3	
10	8.15	0.6	9.5	7.16	6.77	2.40	5.90	244.4	
15	8.79	1.0	9.6	7.16	6.79	2.12	6.16	236.0	
20	9.21	1.3	9.6	7.14	6.77	1.86	7.36	227.0	
25	9.50	1.6	9.7	7.15	6.78	1.69	8.45	219.6	
30	9.71	1.9	9.8	7.15	6.76	1.56	10.36	213.5	
35	9.85	2.2	9.8	7.15	6.71	1.45	10.43	207.4	
40	9.89	2.5	9.8	7.16	6.73	1.36	9.34	201.2	
45	9.95	2.8	9.9	7.16	6.66	1.29	9.77	191.7	
50	9.95	3.1	9.9	7.17	6.64	1.23	8.50	182.3	
55	9.90	3.4	10.0	7.17	6.44	1.16	7.97	166.1	
									MW-204_040115

Extra Parameters:

Ferrous Iron mg/L

Comments:

VOA, Alkalinity

Low-Flow Field Sampling Form | Sample Order 6 | WELL ID: **MW-502**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: MW-502
Field Crew: DBK/JMS

Date: 04/02/15
Start Time: 09:38
Finished Time: 10:38
Sample Time: 10:45

Initial Depth to Water: 4.03
Well Depth: 32.71
Depth to top of screen: unkown
Depth to bottom of screen: unkown
Depth of Intake: ~~32.2~~ 30

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE

PID = 0.1 ppm

0.5 Ft from grid

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	4.45	0	-	-	-	-	-	-	350 ml/min
5	7.65	0.3	14.1	7.04	3.23	3.16	139	-8.3	
10	8.30	0.5	14.3	7.00	3.17	2.73	114	-6.0	220 ml/min
15	8.90	0.7	14.6	6.95	3.11	2.65	116	-5.4	
20	9.57	0.9	14.8	6.98	3.09	2.35	117	-7.2	
25	9.78	1.1	14.9	6.95	2.99	2.17	1109	-15.0	
30	10.0	1.3	15.3	6.95	3.31	1.93	2644	-27.0	
35	10.22	1.5	15.7	6.95	3.23	1.67	High	-37.2	
40	10.30	1.6	15.8	6.95	3.23	1.47	High	-43.3	
45	10.39	1.7	16.7	6.95	3.19	1.20	High	-45.5	
50	10.48	1.9	16.8	6.95	3.17	1.00	High	-49.3	
55	10.52	2.0	16.8	6.94	3.18	1.09	High	-50.8	
60	10.50	2.1	17.2	6.95	3.17	0.85	High	-53.0	
									MW-502 — 04.02.15

Extra Parameters:

Ferrous Iron 0 mg/L

Comments:

Low-Flow Field Sampling Form | Sample Order 7 | WELL ID: **MW-501**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: MW-501
Field Crew: DBK/JMS

Date: 04/02/15
Start Time: 7:58
Finished Time:
Sample Time: 09:10

Initial Depth to Water: 3.86
Well Depth: 10.31
Depth to top of screen: unkown
Depth to bottom of screen: unkown
Depth of Intake: 9.8

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE

PID = 0.4

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	6.25	0.2	8.0	6.78	24.66	2.26	16.0	27.7	150 ml/min
10	—	0.3	8.0	6.78	24.74	1.69	32.6	8.2	" "
15	8.1	0.5	8.7	6.78	24.30	1.38	24.0	4.0	" "
20	8.2	0.6	9.1	6.78	24.20	1.00	25.1	-10.3	
25	8.9	0.7	9.2	6.78	24.04	0.86	48.2	-12.3	lowier tip to 10.2'
30	9.0	0.75	9.5	6.78	23.52	0.66	85.3	-14.8	
35	8.5	0.8	9.7	6.78	23.49	0.57	80.0	-14.3	
40	8.6	0.9	9.7	6.79	22.94	0.54	754	-12.8	
45	8.6	1.0	10.0	6.80	21.79	0.53	1152	-11.1	
50	8.9	1.1	10.4	6.82	21.49	0.49	1424	-11.1	raise tip to 9.8'
55	8.4	1.2	10.7	6.84	21.22	0.47	1616	-11.6	
60	—	1.3	10.9	6.85	20.38	0.52	1884	-13.4	
									MW-501_040215

Extra Parameters:

Ferrous Iron 0.5 mg/L

Comments:

Low-Flow Field Sampling Form | Sample Order: 8 | WELL ID: **OWD-302S**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: OWD-302S
Field Crew: DBK/JMS

Date: 04/02/15
Start Time: 11:35
Finished Time: 12:20
Sample Time: ~~12:35~~ labeled 12:35

Initial Depth to Water: 2.4
Well Depth: 21.82
Depth to top of screen: unkown
Depth to bottom of screen: unkown
Depth of Intake: 21.3

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE

PID = 0.1

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	-	-	-	-	-	-	180 ml/min
5	—	0.3	13.3	9.52	14.64	1.96	high	-130.8	
18	—	0.4	—	—	—	—	—	—	No flow
22	—	0.4	13.6	9.02	14.01	1.87	1946	-117.1	150 ml/min
26	—	0.5	13.4	9.31	14.26	2.20	1336	-129.2	170 ml/min
30	—	0.6	13.1	9.31	12.88	2.17	1090	-123.4	200 ml/min
35	—	0.7	14.9	9.14	12.53	2.20	50	-117.3	slowed way down
40	—	0.8	13.8	9.03	12.21	2.35	1409	-114.2	240 ml/min → 100 ml/min
45	—	1.0	15.4	8.82	11.76	3.26	High	-103.9	
50	—	1.0	17.6	8.58	11.82	6.01	3601	-82.4	very low to no flow
									∴ pumped dry
									try sample — no luck
									OWD-302S — 040215
									*14:20 actual sample time after recharge
									‡ 14:15 complete

Extra Parameters:
Ferrous Iron mg/L

Comments:
1" well
flow very difficult to keep constant

Low-Flow Field Sampling Form | Sample Order 9 | WELL ID: **MW-205**

Location (Site/Facility Name): **Coopervision**

Job Number: 70665-020
Well ID: MW-205
Field Crew: DBK/JMS

Date: 04/02/15
Start Time: 13:03
Finished Time: 13:40
Sample Time: 13:55

Initial Depth to Water: 3.43
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 = 59.7 ppm

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	-	-	-	-	-	-	240 ml / min
5	6.77	0.4	16.6	6.10	7.48	0.85	14.6	-25.6	decreasing flow
10	7.90	0.5	18.1	6.11	7.50	0.65	15.3	-19.9	100 ml/min
15	9.85	1.0	15.3	6.08	7.50	0.56	12.5	-21.2	350 ml/min
20	11.70	1.4	15.6	6.09	7.50	0.53	7.60	-21.3	350 ml/min *
25	12.85	1.5	17.2	6.10	7.54	0.56	6.75	-22.1	180 ml/min
30	13.50	1.7	17.5	6.09	7.54	0.55	7.54	-20.9	
35	15.15	1.9	18.6	6.10	7.53	0.54	6.92	-17.6	OK to sample
									MW-205-040215

Extra Parameters:
Ferrous Iron 1.25 mg/L

Comments:
* dead spot on dial → ~~cannot~~ hard to adjust Flow lower and still get Flow

Low-Flow Field Sampling Form | Sample Order 10 | WELL ID: **BAP-1**

Location (Site/Facility Name): **Coopervision**

Job Number:	70665-020	Date:	04/02/15	Initial Depth to Water:	5.81	Purging Device:	Waterra w/Hydrolift
Well ID:	BAP-1	Start Time:	14:54	Well Depth:	20.16	Tubing in well:	No
Field Crew:	DBK/JMS	Finished Time:	15:43	Depth to top of screen:	unkown	Tubing Type:	HDPE
		Sample Time:	15:55	Depth to bottom of screen:	unkown		
				Depth of Intake:	~~19.7~~ 15		

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	-	-	-	-	-	-	300 ml / min
5	—	0.5	14.1	7.26	2.15	3.93	high	-67.2	
10	—	0.8	13.6	7.22	2.16	3.63	high	-70.0	
15	—	1.2	13.5	7.23	2.18	3.13	high	-69.2	
20	—	1.5	13.4	7.19	2.21	2.92	high	-68.2	
25	—	1.8	13.1	7.22	2.24	2.64	high	-66.0	
30	—	2.2	13.0	7.25	2.28	2.45	high	-65.1	
32	—	—	—	—	—	—	—	—	pumped dry.
									BAP-01_040215

Extra Parameters:

Ferrous Iron mg/L

Comments:

1" well

Sand near bottom - keep tubing high to avoid clogging foot valve

Low-Flow Field Sampling Form | Sample Order 11 | WELL ID: **BAP-2**

Location (Site/Facility Name): **Coopervision**

Job Number:	70665-020	Date:	04/02/15	Initial Depth to Water:	5.33	Purging Device:	Waterra w/Hydrolift
Well ID:	BAP-2	Start Time:	16:21	Well Depth:	19.52	Tubing in well:	No
Field Crew:	DBK/JMS	Finished Time:	16:35	Depth to top of screen:	unkown	Tubing Type:	HDPE
		Sample Time:	16:50	Depth to bottom of screen:	unkown		
				Depth of Intake:	~~19.0~~ 15		

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	-	-	-	-	-	-	100 ml/min
5	—	0.3	12.7	7.60	2.66	3.95	high	-137.5	300 ml/min
9		0.6	13.8	7.49	2.56	6.99	high	-67.6	5 ml/min → dry
									Pumped dry → sample
									BAP-02_040215

Extra Parameters:

Ferrous Iron mg/L

Comments:

1" well.
Sand near bottom - Keep tubing high to avoid clogging foot valve

Low-Flow Field Sampling Form | Sample Order 3 | WELL ID: OWS-302

Location (Site/Facility Name): Coopervision

Job Number: 70665-
Well ID: OWS-302
Field Crew: DBK

Date: 04/20/15
Start Time: 13:55
Finished Time: 14:55
Sample Time: 15:00

Initial Depth to Water: 2.9
Well Depth: ~~21.82~~ 14.1
Depth to top of screen: unkown
Depth to bottom of screen: unkown
Depth of Intake: ~~21.2~~ 13.2 (13.7 + 1.5)

Purging Device: Waterra w/Hydrolift
Tubing in well: No
Tubing Type: HDPE
PID (ppm): not measured

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	2 inch well	0	-	-	-	-	-	-	
5	—	0.5	12.1	6.63	9.477	2.11	169.0	-13.5	500 ml/min
10	—	1.0	14.1	6.61	9.263	2.12	115.2	-15.2	290 ml/min
15	—	1.3	15.5	6.63	9.439	2.20	109.1	-20.6	
20	—	1.5	15.8	6.69	9.431	2.26	96.2	-25.6	130 ml/min
25	—	1.7	16.0	6.69	9.457	2.36	68.1	-27.3	
30	—	1.9	14.5	6.70	9.442	2.10	59.3	-27.7	sun behind cloud
35	—	2.1	15.3	6.71	9.405	2.01	57.4	-31.5	sun out again
40	—	2.3	16.1	6.71	9.396	2.05	50.6	-34.6	
45	—	2.4	16.6	6.71	9.390	2.03	45.9	-37.6	OK to sample
									OWS-302_042015

Extra Parameters:
Ferrous Iron 2.0 mg/L

Comments:

VOCs (3 vials), RSK-175 (3 vials), Alkalinity (1 plastic), $NO_2/NO_3/Cl/SO_4$ (1 plastic), Sulfide (1 plastic)

~~Hexavalent Chromium~~ Watch for sand on bottom

YSI Pro DSS (does turbidity too)

APPENDIX E

Laboratory Data Packages

October 29, 2014

Service Request No: R1408020

Mr. Mark Ramsdell
Haley & Aldrich, Inc.
200 Town Centre Drive
Suite 2
Rochester, NY 14623-4264

Laboratory Results for: Coopervision/70665-001

Dear Mr. Ramsdell:

Enclosed are the results of the sample(s) submitted to our laboratory between October 9, 2014 and October 14, 2014. For your reference, these analyses have been assigned our service request number **R1408020**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7471. You may also contact me via email at Karen.Bunker@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

for KB.
Karen Bunker
Project Manager

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company
www.alsglobal.com

Client:	Haley & Aldrich of New York	**Service Request No:**	R1408020
Project:	Coopervision #70665-001	**Date Received:**	10/14/14
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental (ALS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

Sample Receipt

Eleven (11) water samples were collected between 10/9/14 and 10/13/14 plus 2 trip blanks by H&A and received for analysis at ALS on 10/9/14 and 10/14/14. The samples were received unbroken and consistent with the accompanying chain of custody form. The cooler temperature for samples received 10/9/14 ranged 0-2.9°C upon receipt (within guidelines of 0-6°C), however samples received on 10/14/14 were received at 7°C. Sulfide aliquots collected on 10/13/14 were noted as having headspace on the Cooler Receipt and Preservation Check Form.

Inorganic Parameters

Eight (8) water samples were analyzed for a client specific list of parameters: Chloride, Sulfate, Total Alkalinity, Nitrate, Nitrite, and Sulfide. On 10/14/14, Iron analyses were cancelled by the client on samples MW-202 and MW-502 and Alkalinity analyses for OW-306, MW-203, and MW-204.

All Method numbers are included on the data forms in the report.

All holding times were met for these analyses except for the following:
Nitrite for locations MW-501, OW-302S, and MW-205 (ALS # R1408020-008, 009, and 010 respectively) which were re-analyzed outside of the 48 hour holding time due to poor baseline resolution in the initial analysis possibly due to high Chloride concentration. The initial results are not reported. The data out of holding time has been flagged as "*".

Batch QC is included in the report. All Laboratory Control Sample (LCS) recoveries were within QC limits.

Site QC was not requested on this SDG.

All Laboratory Method Blanks were free from contamination.

No other problems were encountered during the analysis of these samples.

Organic Compounds

Eleven (11) water samples were analyzed for the TCL of Volatile Organics by GC/MS Method 8260C from SW-846. Eight (8) water samples were analyzed for Dissolved Gases by modified GC Method RSK-175 and four (4) samples were analyzed for Metabolic Acids by HPLC methodology.

All Initial and Continuing Calibration Criteria was met for all analyses except for the following 8260C CCV compounds which were < ±20% D on CCV from 10/18/14 for Acetone; and < ±20% D on CCV from 10/20/14 for Acetone and 2-Hexanone.
Any hits in samples associated with this CCV could be considered as estimated.

Approved by _____ Date 10/29/2014

Batch QC is included in the report. All Laboratory Control Samples (LCS) and LCS Duplicate (LCSD) recoveries were within limits were within limits for 8260C, RSK and Metabolic Acids. The Relative Percent Difference (RPD) calculations were within QC acceptance limits.

Site QC was not requested on this SDG.

Hits above the calibration range of the standards are flagged as "E" estimated. The sample is then repeated at the appropriate dilution for the hit. Both sets of data are included in the report. The subsequent dilution hits are flagged as "D".

All surrogate recoveries were within acceptance limits.

All samples were analyzed within the appropriate holding times. All vials are checked for preservation after analysis. The VOC samples were found to be preserved to a pH of <2.

The Laboratory Method Blanks were free from contamination.

No other problems were encountered during the analysis of these samples.

Approved by_____ Date 10/29/14

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1408020

Lab ID	Client ID
R1408020-001	OW-306
R1408020-002	MW-203
R1408020-003	MW-202
R1408020-004	MW-204
R1408020-005	MW-502
R1408020-006	TRIP BLANK
R1408020-007	MW-3
R1408020-008	MW-501
R1408020-009	OW-302S
R1408020-010	MW-205
R1408020-011	BAP-1
R1408020-012	BAP-2
R1408020-013	TRIP BLANK

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to
http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/ 9/14 1120
Date Received: 10/ 9/14
Date Analyzed: 10/18/14 16:39

Sample Name: OW-306
Lab Code: R1408020-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\101814\M9851.D\

Analysis Lot: 416953
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1120
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 16:39
Sample Name:	OW-306	**Units:**	µg/L
Lab Code:	R1408020-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9851.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/18/14 16:39	
Toluene-d8	100	87-121	10/18/14 16:39	
Dibromofluoromethane	95	89-119	10/18/14 16:39	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1335
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 17:11
Sample Name:	MW-203	**Units:**	µg/L
Lab Code:	R1408020-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9852.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1335
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 17:11
Sample Name:	MW-203	**Units:**	µg/L
Lab Code:	R1408020-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9852.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/18/14 17:11	
Toluene-d8	100	87-121	10/18/14 17:11	
Dibromofluoromethane	96	89-119	10/18/14 17:11	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/ 9/14 1505
Date Received: 10/ 9/14

Sample Name: MW-202
Lab Code: R1408020-003

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**125**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**1680**		mg/L	60	300	NA	10/10/14 22:01	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/10/14 11:33	
Nitrite as Nitrogen	9056A	30	U	mg/L	30	300	NA	10/10/14 22:01	
Sulfate	9056A	**490**		mg/L	20	100	NA	10/10/14 21:49	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/14/14	10/14/14 10:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1505
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 17:43
Sample Name:	MW-202	**Units:**	µg/L
Lab Code:	R1408020-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9853.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	36		5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	35		5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1505
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 17:43
Sample Name:	MW-202	**Units:**	µg/L
Lab Code:	R1408020-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9853.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/18/14 17:43	
Toluene-d8	101	87-121	10/18/14 17:43	
Dibromofluoromethane	95	89-119	10/18/14 17:43	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1505
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/13/14 15:11
Sample Name:	MW-202	**Units:**	µg/L
Lab Code:	R1408020-003	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	415885
Data File Name:	1036.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	**4.0**		1.0	
74-98-6	Propane	1.0	U	1.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1505
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/14/14 18:14
Sample Name:	MW-202	**Units:**	mg/L
Lab Code:	R1408020-003	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416280
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101414\X0012641.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1640
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 18:16
Sample Name:	MW-204	**Units:**	µg/L
Lab Code:	R1408020-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9854.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	6.1		5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1640
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/18/14 18:16
Sample Name:	MW-204	**Units:**	µg/L
Lab Code:	R1408020-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9854.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/18/14 18:16	
Toluene-d8	100	87-121	10/18/14 18:16	
Dibromofluoromethane	97	89-119	10/18/14 18:16	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/ 9/14 1815
Date Received: 10/ 9/14

Sample Name: MW-502
Lab Code: R1408020-005

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**468**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**935**		mg/L	40	200	NA	10/10/14 21:38	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/10/14 11:21	
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	10/10/14 21:38	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	10/10/14 11:21	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/14/14	10/14/14 10:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1815
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/20/14 19:33
Sample Name:	MW-502	**Units:**	µg/L
Lab Code:	R1408020-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9881.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	25

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	250	U	250	
71-43-2	Benzene	130	U	130	
75-27-4	Bromodichloromethane	130	U	130	
75-25-2	Bromoform	130	U	130	
74-83-9	Bromomethane	130	U	130	
78-93-3	2-Butanone (MEK)	250	U	250	
75-15-0	Carbon Disulfide	250	U	250	
56-23-5	Carbon Tetrachloride	130	U	130	
108-90-7	Chlorobenzene	130	U	130	
75-00-3	Chloroethane	**5000**		130	
67-66-3	Chloroform	130	U	130	
74-87-3	Chloromethane	130	U	130	
124-48-1	Dibromochloromethane	130	U	130	
75-34-3	1,1-Dichloroethane	130	U	130	
107-06-2	1,2-Dichloroethane	130	U	130	
75-35-4	1,1-Dichloroethene	130	U	130	
156-59-2	cis-1,2-Dichloroethene	130	U	130	
156-60-5	trans-1,2-Dichloroethene	130	U	130	
78-87-5	1,2-Dichloropropane	130	U	130	
10061-01-5	cis-1,3-Dichloropropene	130	U	130	
10061-02-6	trans-1,3-Dichloropropene	130	U	130	
100-41-4	Ethylbenzene	130	U	130	
591-78-6	2-Hexanone	250	U	250	
75-09-2	Methylene Chloride	130	U	130	
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	
100-42-5	Styrene	130	U	130	
79-34-5	1,1,2,2-Tetrachloroethane	130	U	130	
127-18-4	Tetrachloroethene	130	U	130	
108-88-3	Toluene	130	U	130	
71-55-6	1,1,1-Trichloroethane	130	U	130	
79-00-5	1,1,2-Trichloroethane	130	U	130	
79-01-6	Trichloroethene	130	U	130	
75-01-4	Vinyl Chloride	**290**		130	
95-47-6	o-Xylene	130	U	130	
179601-23-1	m,p-Xylenes	130	U	130	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1815
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/20/14 19:33
Sample Name:	MW-502	**Units:**	µg/L
Lab Code:	R1408020-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9881.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	25

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/20/14 19:33	
Toluene-d8	101	87-121	10/20/14 19:33	
Dibromofluoromethane	96	89-119	10/20/14 19:33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14 1815
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/13/14 15:22
Sample Name:	MW-502	**Units:**	µg/L
Lab Code:	R1408020-005	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	415885
Data File Name:	1037.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	250	U	250	
74-85-1	Ethylene	250	U	250	
74-82-8	Methane	**14000**		250	
74-98-6	Propane	250	U	250	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/20/14 13:08
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408020-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9869.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/ 9/14
Sample Matrix:	Water	**Date Received:**	10/ 9/14
		Date Analyzed:	10/20/14 13:08
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408020-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9869.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	10/20/14 13:08	
Toluene-d8	100	87-121	10/20/14 13:08	
Dibromofluoromethane	96	89-119	10/20/14 13:08	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 0935
Sample Matrix:	Water	**Date Received:**	10/14/14
Sample Name:	MW-3		
Lab Code:	R1408020-007	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chloride	9056A	**406**		mg/L	20	100	NA	10/18/14 12:25	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 03:39	
Nitrite as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 03:39	
Sulfate	9056A	**12.2**		mg/L	2.0	10	NA	10/15/14 03:39	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/17/14	10/17/14 09:10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 0935
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 18:28
Sample Name:	MW-3	**Units:**	µg/L
Lab Code:	R1408020-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9879.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	50	U	50	
71-43-2	Benzene	25	U	25	
75-27-4	Bromodichloromethane	25	U	25	
75-25-2	Bromoform	25	U	25	
74-83-9	Bromomethane	25	U	25	
78-93-3	2-Butanone (MEK)	50	U	50	
75-15-0	Carbon Disulfide	50	U	50	
56-23-5	Carbon Tetrachloride	25	U	25	
108-90-7	Chlorobenzene	25	U	25	
75-00-3	Chloroethane	**820**		25	
67-66-3	Chloroform	25	U	25	
74-87-3	Chloromethane	25	U	25	
124-48-1	Dibromochloromethane	25	U	25	
75-34-3	1,1-Dichloroethane	**62**		25	
107-06-2	1,2-Dichloroethane	25	U	25	
75-35-4	1,1-Dichloroethene	25	U	25	
156-59-2	cis-1,2-Dichloroethene	25	U	25	
156-60-5	trans-1,2-Dichloroethene	25	U	25	
78-87-5	1,2-Dichloropropane	25	U	25	
10061-01-5	cis-1,3-Dichloropropene	25	U	25	
10061-02-6	trans-1,3-Dichloropropene	25	U	25	
100-41-4	Ethylbenzene	25	U	25	
591-78-6	2-Hexanone	50	U	50	
75-09-2	Methylene Chloride	25	U	25	
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	
100-42-5	Styrene	25	U	25	
79-34-5	1,1,2,2-Tetrachloroethane	25	U	25	
127-18-4	Tetrachloroethene	25	U	25	
108-88-3	Toluene	25	U	25	
71-55-6	1,1,1-Trichloroethane	25	U	25	
79-00-5	1,1,2-Trichloroethane	25	U	25	
79-01-6	Trichloroethene	25	U	25	
75-01-4	Vinyl Chloride	**50**		25	
95-47-6	o-Xylene	25	U	25	
179601-23-1	m,p-Xylenes	25	U	25	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 0935
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 18:28
Sample Name:	MW-3	**Units:**	µg/L
Lab Code:	R1408020-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9879.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/20/14 18:28	
Toluene-d8	102	87-121	10/20/14 18:28	
Dibromofluoromethane	97	89-119	10/20/14 18:28	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/13/14 0935
Date Received: 10/14/14
Date Analyzed: 10/16/14 10:21

Sample Name: MW-3
Lab Code: R1408020-007

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1005.run

Analysis Lot: 416533
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	**42**		1.0	
74-82-8	Methane	**440**	E	1.0	
74-98-6	Propane	1.0	U	1.0	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/13/14 0935
Date Received: 10/14/14
Date Analyzed: 10/16/14 11:27

Sample Name: MW-3
Lab Code: R1408020-007
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1011.run

Analysis Lot: 416533
Instrument Name: R-GC-02
Dilution Factor: 50

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	50	U	50	
74-85-1	Ethylene	50	U	50	
74-82-8	Methane	1100	D	50	
74-98-6	Propane	50	U	50	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/13/14 1120
Date Received: 10/14/14

Sample Name: MW-501
Lab Code: R1408020-008

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**413**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**2310**		mg/L	80	400	NA	10/16/14 14:54	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 04:25	
Nitrite as Nitrogen	9056A	40	U	mg/L	40	400	NA	10/16/14 14:54	*
Sulfate	9056A	**53.6**		mg/L	2.0	10	NA	10/15/14 04:25	
Sulfide, Acid-Soluble	9034	**1.3**		mg/L	1.0	1	10/17/14	10/17/14 09:10	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 17:25
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9877.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
71-43-2	Benzene	10	U	10	
75-27-4	Bromodichloromethane	10	U	10	
75-25-2	Bromoform	10	U	10	
74-83-9	Bromomethane	10	U	10	
78-93-3	2-Butanone (MEK)	20	U	20	
75-15-0	Carbon Disulfide	20	U	20	
56-23-5	Carbon Tetrachloride	10	U	10	
108-90-7	Chlorobenzene	10	U	10	
75-00-3	Chloroethane	**1000**	E	10	
67-66-3	Chloroform	10	U	10	
74-87-3	Chloromethane	10	U	10	
124-48-1	Dibromochloromethane	10	U	10	
75-34-3	1,1-Dichloroethane	97		10	
107-06-2	1,2-Dichloroethane	10	U	10	
75-35-4	1,1-Dichloroethene	10	U	10	
156-59-2	cis-1,2-Dichloroethene	10	U	10	
156-60-5	trans-1,2-Dichloroethene	10	U	10	
78-87-5	1,2-Dichloropropane	10	U	10	
10061-01-5	cis-1,3-Dichloropropene	10	U	10	
10061-02-6	trans-1,3-Dichloropropene	10	U	10	
100-41-4	Ethylbenzene	10	U	10	
591-78-6	2-Hexanone	20	U	20	
75-09-2	Methylene Chloride	10	U	10	
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	
100-42-5	Styrene	10	U	10	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	
127-18-4	Tetrachloroethene	10	U	10	
108-88-3	Toluene	10	U	10	
71-55-6	1,1,1-Trichloroethane	10	U	10	
79-00-5	1,1,2-Trichloroethane	10	U	10	
79-01-6	Trichloroethene	10	U	10	
75-01-4	Vinyl Chloride	**48**		10	
95-47-6	o-Xylene	10	U	10	
179601-23-1	m,p-Xylenes	10	U	10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 17:25
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9877.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/20/14 17:25	
Toluene-d8	98	87-121	10/20/14 17:25	
Dibromofluoromethane	94	89-119	10/20/14 17:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/21/14 17:37
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417279
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102114\M9922.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	100	U	100	
71-43-2	Benzene	50	U	50	
75-27-4	Bromodichloromethane	50	U	50	
75-25-2	Bromoform	50	U	50	
74-83-9	Bromomethane	50	U	50	
78-93-3	2-Butanone (MEK)	100	U	100	
75-15-0	Carbon Disulfide	100	U	100	
56-23-5	Carbon Tetrachloride	50	U	50	
108-90-7	Chlorobenzene	50	U	50	
75-00-3	Chloroethane	**1000**	D	50	
67-66-3	Chloroform	50	U	50	
74-87-3	Chloromethane	50	U	50	
124-48-1	Dibromochloromethane	50	U	50	
75-34-3	1,1-Dichloroethane	**90**	D	50	
107-06-2	1,2-Dichloroethane	50	U	50	
75-35-4	1,1-Dichloroethene	50	U	50	
156-59-2	cis-1,2-Dichloroethene	50	U	50	
156-60-5	trans-1,2-Dichloroethene	50	U	50	
78-87-5	1,2-Dichloropropane	50	U	50	
10061-01-5	cis-1,3-Dichloropropene	50	U	50	
10061-02-6	trans-1,3-Dichloropropene	50	U	50	
100-41-4	Ethylbenzene	50	U	50	
591-78-6	2-Hexanone	100	U	100	
75-09-2	Methylene Chloride	50	U	50	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	
100-42-5	Styrene	50	U	50	
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	
127-18-4	Tetrachloroethene	50	U	50	
108-88-3	Toluene	50	U	50	
71-55-6	1,1,1-Trichloroethane	50	U	50	
79-00-5	1,1,2-Trichloroethane	50	U	50	
79-01-6	Trichloroethene	50	U	50	
75-01-4	Vinyl Chloride	50	U	50	
95-47-6	o-Xylene	50	U	50	
179601-23-1	m,p-Xylenes	50	U	50	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/21/14 17:37
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417279
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102114\M9922.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/21/14 17:37	
Toluene-d8	103	87-121	10/21/14 17:37	
Dibromofluoromethane	98	89-119	10/21/14 17:37	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 10:36
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1006.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	10	U	10	
74-85-1	Ethylene	10	U	10	
74-82-8	Methane	**3400**	E	10	
74-98-6	Propane	10	U	10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1120
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 11:37
Sample Name:	MW-501	**Units:**	µg/L
Lab Code:	R1408020-008	**Basis:**	NA
Run Type:	Dilution		

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1012.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	100

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	100	U	100	
74-85-1	Ethylene	100	U	100	
74-82-8	Methane	**2400**	D	100	
74-98-6	Propane	100	U	100	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1310
Sample Matrix:	Water	**Date Received:**	10/14/14
Sample Name:	OW-302S		
Lab Code:	R1408020-009	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**424**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**5450**		mg/L	200	1000	NA	10/16/14 15:04	
Nitrate as Nitrogen	9056A	**1.6**		mg/L	1.0	10	NA	10/15/14 05:00	
Nitrite as Nitrogen	9056A	100	U	mg/L	100	1000	NA	10/16/14 15:04	*
Sulfate	9056A	**25.4**		mg/L	2.0	10	NA	10/15/14 05:00	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/17/14	10/17/14 09:10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1310
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 20:05
Sample Name:	OW-302S	**Units:**	µg/L
Lab Code:	R1408020-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9882.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	2500	U	2500	
71-43-2	Benzene	1300	U	1300	
75-27-4	Bromodichloromethane	1300	U	1300	
75-25-2	Bromoform	1300	U	1300	
74-83-9	Bromomethane	1300	U	1300	
78-93-3	2-Butanone (MEK)	2500	U	2500	
75-15-0	Carbon Disulfide	2500	U	2500	
56-23-5	Carbon Tetrachloride	1300	U	1300	
108-90-7	Chlorobenzene	1300	U	1300	
75-00-3	Chloroethane	**36000**		1300	
67-66-3	Chloroform	1300	U	1300	
74-87-3	Chloromethane	1300	U	1300	
124-48-1	Dibromochloromethane	1300	U	1300	
75-34-3	1,1-Dichloroethane	**13000**		1300	
107-06-2	1,2-Dichloroethane	1300	U	1300	
75-35-4	1,1-Dichloroethene	1300	U	1300	
156-59-2	cis-1,2-Dichloroethene	1300	U	1300	
156-60-5	trans-1,2-Dichloroethene	1300	U	1300	
78-87-5	1,2-Dichloropropane	1300	U	1300	
10061-01-5	cis-1,3-Dichloropropene	1300	U	1300	
10061-02-6	trans-1,3-Dichloropropene	1300	U	1300	
100-41-4	Ethylbenzene	1300	U	1300	
591-78-6	2-Hexanone	2500	U	2500	
75-09-2	Methylene Chloride	1300	U	1300	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	
100-42-5	Styrene	1300	U	1300	
79-34-5	1,1,2,2-Tetrachloroethane	1300	U	1300	
127-18-4	Tetrachloroethene	1300	U	1300	
108-88-3	Toluene	1300	U	1300	
71-55-6	1,1,1-Trichloroethane	1300	U	1300	
79-00-5	1,1,2-Trichloroethane	1300	U	1300	
79-01-6	Trichloroethene	1300	U	1300	
75-01-4	Vinyl Chloride	1300	U	1300	
95-47-6	o-Xylene	1300	U	1300	
179601-23-1	m,p-Xylenes	1300	U	1300	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1310
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 20:05
Sample Name:	OW-302S	**Units:**	µg/L
Lab Code:	R1408020-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9882.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	250

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/20/14 20:05	
Toluene-d8	103	87-121	10/20/14 20:05	
Dibromofluoromethane	97	89-119	10/20/14 20:05	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1310
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 10:46
Sample Name:	OW-302S	**Units:**	µg/L
Lab Code:	R1408020-009	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1007.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	**25**		10	
74-85-1	Ethylene	**24**		10	
74-82-8	Methane	**570**		10	
74-98-6	Propane	10	U	10	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/13/14 1500
Date Received: 10/14/14

Sample Name: MW-205
Lab Code: R1408020-010

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**3300**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**831**		mg/L	40	200	NA	10/16/14 15:52	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 05:11	
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	10/16/14 15:52	*
Sulfate	9056A	**11.3**		mg/L	2.0	10	NA	10/15/14 05:11	
Sulfide, Acid-Soluble	9034	**1.6**		mg/L	1.0	1	10/17/14	10/17/14 09:10	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1500
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 20:37
Sample Name:	MW-205	**Units:**	µg/L
Lab Code:	R1408020-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9883.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2000

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20000	U	20000	
71-43-2	Benzene	10000	U	10000	
75-27-4	Bromodichloromethane	10000	U	10000	
75-25-2	Bromoform	10000	U	10000	
74-83-9	Bromomethane	10000	U	10000	
78-93-3	2-Butanone (MEK)	20000	U	20000	
75-15-0	Carbon Disulfide	20000	U	20000	
56-23-5	Carbon Tetrachloride	10000	U	10000	
108-90-7	Chlorobenzene	10000	U	10000	
75-00-3	Chloroethane	10000	U	10000	
67-66-3	Chloroform	10000	U	10000	
74-87-3	Chloromethane	10000	U	10000	
124-48-1	Dibromochloromethane	10000	U	10000	
75-34-3	1,1-Dichloroethane	**200000**		10000	
107-06-2	1,2-Dichloroethane	10000	U	10000	
75-35-4	1,1-Dichloroethene	10000	U	10000	
156-59-2	cis-1,2-Dichloroethene	10000	U	10000	
156-60-5	trans-1,2-Dichloroethene	10000	U	10000	
78-87-5	1,2-Dichloropropane	10000	U	10000	
10061-01-5	cis-1,3-Dichloropropene	10000	U	10000	
10061-02-6	trans-1,3-Dichloropropene	10000	U	10000	
100-41-4	Ethylbenzene	10000	U	10000	
591-78-6	2-Hexanone	20000	U	20000	
75-09-2	Methylene Chloride	10000	U	10000	
108-10-1	4-Methyl-2-pentanone (MIBK)	20000	U	20000	
100-42-5	Styrene	10000	U	10000	
79-34-5	1,1,2,2-Tetrachloroethane	10000	U	10000	
127-18-4	Tetrachloroethene	10000	U	10000	
108-88-3	Toluene	10000	U	10000	
71-55-6	1,1,1-Trichloroethane	**60000**		10000	
79-00-5	1,1,2-Trichloroethane	10000	U	10000	
79-01-6	Trichloroethene	10000	U	10000	
75-01-4	Vinyl Chloride	10000	U	10000	
95-47-6	o-Xylene	10000	U	10000	
179601-23-1	m,p-Xylenes	10000	U	10000	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1500
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 20:37
Sample Name:	MW-205	**Units:**	µg/L
Lab Code:	R1408020-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9883.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2000

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	10/20/14 20:37	
Toluene-d8	102	87-121	10/20/14 20:37	
Dibromofluoromethane	97	89-119	10/20/14 20:37	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1500
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 10:56
Sample Name:	MW-205	**Units:**	µg/L
Lab Code:	R1408020-010	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1008.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	**13**		10	
74-85-1	Ethylene	**12**		10	
74-82-8	Methane	**1300**	E	10	
74-98-6	Propane	10	U	10	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1500
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 11:47
Sample Name:	MW-205	**Units:**	µg/L
Lab Code:	R1408020-010	**Basis:**	NA
Run Type:	Dilution		

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1013.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	20	U	20	
74-85-1	Ethylene	20	U	20	
74-82-8	Methane	2000	D	20	
74-98-6	Propane	20	U	20	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1500
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	12/29/00 23:18
Sample Name:	MW-205	**Units:**	mg/L
Lab Code:	R1408020-010	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416589
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101514\X0012660.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	10	U	10	
64-19-7	Acetic Acid	**860**		20	
107-92-6	Butanoic Acid (Butyric Acid)	**3000**		40	
50-21-5	Lactic Acid	20	U	20	
79-09-4	Propionic Acid	**790**		20	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1715
Sample Matrix:	Water	**Date Received:**	10/14/14
Sample Name:	BAP-1		
Lab Code:	R1408020-011	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**219**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**466**		mg/L	20	100	NA	10/18/14 06:26	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 05:23	
Nitrite as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 05:23	
Sulfate	9056A	**223**		mg/L	8.0	40	NA	10/18/14 07:47	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/17/14	10/17/14 09:10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1715
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 19:00
Sample Name:	BAP-1	**Units:**	µg/L
Lab Code:	R1408020-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9880.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	200	U	200	
71-43-2	Benzene	100	U	100	
75-27-4	Bromodichloromethane	100	U	100	
75-25-2	Bromoform	100	U	100	
74-83-9	Bromomethane	100	U	100	
78-93-3	2-Butanone (MEK)	200	U	200	
75-15-0	Carbon Disulfide	200	U	200	
56-23-5	Carbon Tetrachloride	100	U	100	
108-90-7	Chlorobenzene	100	U	100	
75-00-3	Chloroethane	**280**		100	
67-66-3	Chloroform	100	U	100	
74-87-3	Chloromethane	100	U	100	
124-48-1	Dibromochloromethane	100	U	100	
75-34-3	1,1-Dichloroethane	**1600**		100	
107-06-2	1,2-Dichloroethane	100	U	100	
75-35-4	1,1-Dichloroethene	**2700**		100	
156-59-2	cis-1,2-Dichloroethene	100	U	100	
156-60-5	trans-1,2-Dichloroethene	100	U	100	
78-87-5	1,2-Dichloropropane	100	U	100	
10061-01-5	cis-1,3-Dichloropropene	100	U	100	
10061-02-6	trans-1,3-Dichloropropene	100	U	100	
100-41-4	Ethylbenzene	100	U	100	
591-78-6	2-Hexanone	200	U	200	
75-09-2	Methylene Chloride	100	U	100	
108-10-1	4-Methyl-2-pentanone (MIBK)	200	U	200	
100-42-5	Styrene	100	U	100	
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	
127-18-4	Tetrachloroethene	100	U	100	
108-88-3	Toluene	100	U	100	
71-55-6	1,1,1-Trichloroethane	100	U	100	
79-00-5	1,1,2-Trichloroethane	100	U	100	
79-01-6	Trichloroethene	100	U	100	
75-01-4	Vinyl Chloride	100	U	100	
95-47-6	o-Xylene	100	U	100	
179601-23-1	m,p-Xylenes	100	U	100	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1715
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 19:00
Sample Name:	BAP-1	**Units:**	µg/L
Lab Code:	R1408020-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9880.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	20

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/20/14 19:00	
Toluene-d8	102	87-121	10/20/14 19:00	
Dibromofluoromethane	97	89-119	10/20/14 19:00	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1715
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 11:06
Sample Name:	BAP-1	**Units:**	µg/L
Lab Code:	R1408020-011	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1009.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	5.0	U	5.0	
74-85-1	Ethylene	**8.8**		5.0	
74-82-8	Methane	**390**		5.0	
74-98-6	Propane	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1715
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/15/14 18:01
Sample Name:	BAP-1	**Units:**	mg/L
Lab Code:	R1408020-011	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416589
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101514\X0012661.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	**1.0**		1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Collected: 10/13/14 1845
Date Received: 10/14/14

Sample Name: BAP-2
Lab Code: R1408020-012

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**275**		mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	**574**		mg/L	20	100	NA	10/18/14 07:59	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 05:35	
Nitrite as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/15/14 05:35	
Sulfate	9056A	**95.4**		mg/L	2.0	10	NA	10/15/14 05:35	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/17/14	10/17/14 09:10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1845
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 17:56
Sample Name:	BAP-2	**Units:**	µg/L
Lab Code:	R1408020-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9878.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
71-43-2	Benzene	10	U	10	
75-27-4	Bromodichloromethane	10	U	10	
75-25-2	Bromoform	10	U	10	
74-83-9	Bromomethane	10	U	10	
78-93-3	2-Butanone (MEK)	20	U	20	
75-15-0	Carbon Disulfide	20	U	20	
56-23-5	Carbon Tetrachloride	10	U	10	
108-90-7	Chlorobenzene	10	U	10	
75-00-3	Chloroethane	**19**		10	
67-66-3	Chloroform	10	U	10	
74-87-3	Chloromethane	10	U	10	
124-48-1	Dibromochloromethane	10	U	10	
75-34-3	1,1-Dichloroethane	**350**		10	
107-06-2	1,2-Dichloroethane	10	U	10	
75-35-4	1,1-Dichloroethene	**270**		10	
156-59-2	cis-1,2-Dichloroethene	10	U	10	
156-60-5	trans-1,2-Dichloroethene	10	U	10	
78-87-5	1,2-Dichloropropane	10	U	10	
10061-01-5	cis-1,3-Dichloropropene	10	U	10	
10061-02-6	trans-1,3-Dichloropropene	10	U	10	
100-41-4	Ethylbenzene	10	U	10	
591-78-6	2-Hexanone	20	U	20	
75-09-2	Methylene Chloride	10	U	10	
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	
100-42-5	Styrene	10	U	10	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	
127-18-4	Tetrachloroethene	10	U	10	
108-88-3	Toluene	10	U	10	
71-55-6	1,1,1-Trichloroethane	10	U	10	
79-00-5	1,1,2-Trichloroethane	10	U	10	
79-01-6	Trichloroethene	10	U	10	
75-01-4	Vinyl Chloride	10	U	10	
95-47-6	o-Xylene	10	U	10	
179601-23-1	m,p-Xylenes	10	U	10	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1845
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 17:56
Sample Name:	BAP-2	**Units:**	µg/L
Lab Code:	R1408020-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9878.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/20/14 17:56	
Toluene-d8	91	87-121	10/20/14 17:56	
Dibromofluoromethane	98	89-119	10/20/14 17:56	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1845
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 11:17
Sample Name:	BAP-2	**Units:**	µg/L
Lab Code:	R1408020-012	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1010.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	**2.3**		1.0	
74-85-1	Ethylene	**2.3**		1.0	
74-82-8	Methane	**290**	E	1.0	
74-98-6	Propane	**1.1**		1.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1845
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/16/14 11:57
Sample Name:	BAP-2	**Units:**	µg/L
Lab Code:	R1408020-012	**Basis:**	NA
Run Type:	Dilution		

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1014.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	10	U	10	
74-85-1	Ethylene	10	U	10	
74-82-8	Methane	**330**	D	10	
74-98-6	Propane	10	U	10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14 1845
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	12/30/00 16:47
Sample Name:	BAP-2	**Units:**	mg/L
Lab Code:	R1408020-012	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416589
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101514\X0012658.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	**8.1**		1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	**1.1**		1.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 13:40
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408020-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9870.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	10/13/14
Sample Matrix:	Water	**Date Received:**	10/14/14
		Date Analyzed:	10/20/14 13:40
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408020-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9870.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/20/14 13:40	
Toluene-d8	102	87-121	10/20/14 13:40	
Dibromofluoromethane	97	89-119	10/20/14 13:40	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408020-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/10/14 15:38	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/10/14 10:16	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/10/14 15:38	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/10/14 10:16	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/14/14	10/14/14 10:00	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408020-MB2	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	10/21/14 12:46	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/16/14 13:47	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/14/14 23:24	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/14/14 23:24	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/10/14 15:38	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/17/14	10/17/14 09:10	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408020-MB3	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/17/14 23:52	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/15/14 04:02	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/15/14 04:02	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/14/14 23:24	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408020-MB4	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/18/14 06:49	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/16/14 13:47	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/15/14 04:02	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408020-MB5	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/18/14 06:49	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/18/14 11:16
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412708-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9841.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/18/14 11:16
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412708-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416953
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\101814\M9841.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/18/14 11:16	
Toluene-d8	101	87-121	10/18/14 11:16	
Dibromofluoromethane	95	89-119	10/18/14 11:16	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/20/14 12:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412739-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9868.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/20/14 12:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412739-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417048
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102014\M9868.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/20/14 12:37	
Toluene-d8	102	87-121	10/20/14 12:37	
Dibromofluoromethane	96	89-119	10/20/14 12:37	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/21/14 12:49
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412826-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417279
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102114\M9913.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/21/14 12:49
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412826-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	417279
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\102114\M9913.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/21/14 12:49	
Toluene-d8	101	87-121	10/21/14 12:49	
Dibromofluoromethane	96	89-119	10/21/14 12:49	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/13/14 13:29
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412347-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	415885
Data File Name:	1027.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/16/14 09:59
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412573-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	416533
Data File Name:	1003.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 14:33
Sample Name:	Method Blank	**Units:**	mg/L
Lab Code:	RQ1412470-01	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416280
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101414\X0012634.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1408020
Project:	Coopervision/70665-001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/15/14 12:45
Sample Name:	Method Blank	**Units:**	mg/L
Lab Code:	RQ1412595-01	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	416589
Data File Name:	I:\ACQUDATA\HPLC05\DATA\101514\X0012651.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/10/14 - 10/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408020-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	18.8	20.0	94	81 - 112
Chloride	9056A	2.01	2.00	101	80 - 120
Nitrate as Nitrogen	9056A	1.02	1.00	102	80 - 120
Nitrite as Nitrogen	9056A	1.01	1.0	101	80 - 120
Sulfate	9056A	1.93	2.00	97	80 - 120
Sulfide, Acid-Soluble	9034	5.24	9.7	54	27 - 111

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/10/14 - 10/21/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408020-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	984	1000	98	81 - 112
Chloride	9056A	1.99	2.00	99	80 - 120
Nitrate as Nitrogen	9056A	1.02	1.00	102	80 - 120
Nitrite as Nitrogen	9056A	0.986	1.0	99	80 - 120
Sulfate	9056A	1.94	2.00	97	80 - 120
Sulfide, Acid-Soluble	9034	5.73	9.3	62	27 - 111

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/14/14 - 10/18/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408020-LCS3 Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	1.95	2.00	98	80 - 120
Nitrate as Nitrogen	9056A	1.03	1.00	103	80 - 120
Nitrite as Nitrogen	9056A	0.976	1.0	98	80 - 120
Sulfate	9056A	1.91	2.00	95	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/15/14 - 10/18/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408020-LCS4 Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	1.96	2.00	98	80 - 120
Nitrite as Nitrogen	9056A	1.01	1.0	101	80 - 120
Sulfate	9056A	1.92	2.00	96	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/18/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

		Lab Control Sample R1408020-LCS5			
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**
Sulfate	9056A	1.88	2.00	94	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/18/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416953

Lab Control Sample
RQ1412708-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	15.1	20.0	75	51 - 146
Benzene	22.3	20.0	112	76 - 118
Bromodichloromethane	20.4	20.0	102	79 - 122
Bromoform	22.1	20.0	111	65 - 138
Bromomethane	22.9	20.0	114	41 - 159
2-Butanone (MEK)	15.5	20.0	77	66 - 129
Carbon Disulfide	18.8	20.0	94	63 - 141
Carbon Tetrachloride	19.2	20.0	96	66 - 128
Chlorobenzene	22.7	20.0	113	80 - 121
Chloroethane	24.6	20.0	123	71 - 128
Chloroform	19.6	20.0	98	76 - 120
Chloromethane	19.6	20.0	98	64 - 140
Dibromochloromethane	22.0	20.0	110	79 - 125
1,1-Dichloroethane	19.5	20.0	97	76 - 128
1,2-Dichloroethane	18.4	20.0	92	72 - 130
1,1-Dichloroethene	23.8	20.0	119	74 - 135
cis-1,2-Dichloroethene	21.9	20.0	110	80 - 121
trans-1,2-Dichloroethene	22.3	20.0	111	78 - 124
1,2-Dichloropropane	20.3	20.0	101	80 - 119
cis-1,3-Dichloropropene	22.2	20.0	111	77 - 125
trans-1,3-Dichloropropene	22.5	20.0	113	72 - 123
Ethylbenzene	21.6	20.0	108	76 - 120
2-Hexanone	14.8	20.0	74	61 - 131
Methylene Chloride	20.9	20.0	105	73 - 122
4-Methyl-2-pentanone (MIBK)	15.9	20.0	79	68 - 129
Styrene	24.1	20.0	121	81 - 122
1,1,2,2-Tetrachloroethane	21.9	20.0	110	74 - 127
Tetrachloroethene	22.9	20.0	114	69 - 124
Toluene	22.8	20.0	114	77 - 120
1,1,1-Trichloroethane	19.9	20.0	100	71 - 123
1,1,2-Trichloroethane	22.3	20.0	111	79 - 117
Trichloroethene	23.0	20.0	115	76 - 123
Vinyl Chloride	20.4	20.0	102	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/18/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416953

Lab Control Sample
RQ1412708-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	23.5	20.0	118	77 - 131
m,p-Xylenes	46.8	40.0	117	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 417048

Lab Control Sample
RQ1412739-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	15.1	20.0	75	51 - 146
Benzene	20.6	20.0	103	76 - 118
Bromodichloromethane	19.3	20.0	96	79 - 122
Bromoform	20.2	20.0	101	65 - 138
Bromomethane	20.3	20.0	102	41 - 159
2-Butanone (MEK)	15.6	20.0	78	66 - 129
Carbon Disulfide	19.1	20.0	96	63 - 141
Carbon Tetrachloride	17.4	20.0	87	66 - 128
Chlorobenzene	20.8	20.0	104	80 - 121
Chloroethane	23.1	20.0	115	71 - 128
Chloroform	18.0	20.0	90	76 - 120
Chloromethane	17.8	20.0	89	64 - 140
Dibromochloromethane	20.1	20.0	101	79 - 125
1,1-Dichloroethane	17.7	20.0	88	76 - 128
1,2-Dichloroethane	17.1	20.0	86	72 - 130
1,1-Dichloroethene	21.5	20.0	107	74 - 135
cis-1,2-Dichloroethene	20.0	20.0	100	80 - 121
trans-1,2-Dichloroethene	20.8	20.0	104	78 - 124
1,2-Dichloropropane	19.1	20.0	95	80 - 119
cis-1,3-Dichloropropene	20.7	20.0	103	77 - 125
trans-1,3-Dichloropropene	20.3	20.0	102	72 - 123
Ethylbenzene	19.9	20.0	99	76 - 120
2-Hexanone	14.4	20.0	72	61 - 131
Methylene Chloride	19.8	20.0	99	73 - 122
4-Methyl-2-pentanone (MIBK)	16.4	20.0	82	68 - 129
Styrene	21.9	20.0	110	81 - 122
1,1,2,2-Tetrachloroethane	20.1	20.0	101	74 - 127
Tetrachloroethene	20.8	20.0	104	69 - 124
Toluene	20.9	20.0	104	77 - 120
1,1,1-Trichloroethane	17.9	20.0	90	71 - 123
1,1,2-Trichloroethane	20.5	20.0	102	79 - 117
Trichloroethene	21.2	20.0	106	76 - 123
Vinyl Chloride	19.1	20.0	95	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/20/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 417048

Lab Control Sample
RQ1412739-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	21.7	20.0	108	77 - 131
m,p-Xylenes	42.6	40.0	107	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/21/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 417279

Analyte Name	Lab Control Sample RQ1412826-03 Result	Spike Amount	% Rec	% Rec Limits
Acetone	17.3	20.0	87	51 - 146
Benzene	21.5	20.0	107	76 - 118
Bromodichloromethane	20.3	20.0	101	79 - 122
Bromoform	20.7	20.0	104	65 - 138
Bromomethane	21.9	20.0	110	41 - 159
2-Butanone (MEK)	17.9	20.0	89	66 - 129
Carbon Disulfide	19.8	20.0	99	63 - 141
Carbon Tetrachloride	18.5	20.0	92	66 - 128
Chlorobenzene	21.5	20.0	108	80 - 121
Chloroethane	24.3	20.0	122	71 - 128
Chloroform	19.1	20.0	95	76 - 120
Chloromethane	19.5	20.0	98	64 - 140
Dibromochloromethane	20.6	20.0	103	79 - 125
1,1-Dichloroethane	18.9	20.0	95	76 - 128
1,2-Dichloroethane	18.0	20.0	90	72 - 130
1,1-Dichloroethene	23.2	20.0	116	74 - 135
cis-1,2-Dichloroethene	21.1	20.0	106	80 - 121
trans-1,2-Dichloroethene	21.7	20.0	109	78 - 124
1,2-Dichloropropane	19.9	20.0	100	80 - 119
cis-1,3-Dichloropropene	21.8	20.0	109	77 - 125
trans-1,3-Dichloropropene	21.5	20.0	107	72 - 123
Ethylbenzene	20.8	20.0	104	76 - 120
2-Hexanone	16.1	20.0	81	61 - 131
Methylene Chloride	20.7	20.0	104	73 - 122
4-Methyl-2-pentanone (MIBK)	17.8	20.0	89	68 - 129
Styrene	22.5	20.0	112	81 - 122
1,1,2,2-Tetrachloroethane	21.1	20.0	106	74 - 127
Tetrachloroethene	21.6	20.0	108	69 - 124
Toluene	21.6	20.0	108	77 - 120
1,1,1-Trichloroethane	19.4	20.0	97	71 - 123
1,1,2-Trichloroethane	21.5	20.0	107	79 - 117
Trichloroethene	21.4	20.0	107	76 - 123
Vinyl Chloride	21.1	20.0	105	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/21/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 417279

Lab Control Sample
RQ1412826-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	22.7	20.0	114	77 - 131
m,p-Xylenes	44.8	40.0	112	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/13/14

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 415885

Analyte Name	Lab Control Sample RQ1412347-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412347-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethane	22.7	25.9	88	23.7	25.9	91	75 - 118	4	30
Ethylene	22.4	24.2	93	23.4	24.2	97	73 - 129	4	30
Methane	22.9	26.1	88	24.1	26.1	92	65 - 126	5	30
Propane	22.2	25.4	88	23.1	25.4	91	72 - 118	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/16/14

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 416533

Analyte Name	Lab Control Sample RQ1412573-02 Result	Spike Amount	% Rec	% Rec Limits
Ethane	26.1	25.9	101	75 - 118
Ethylene	25.4	24.2	105	73 - 129
Methane	26.4	26.1	101	65 - 126
Propane	25.5	25.4	100	72 - 118

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/14/14

Lab Control Sample Summary
Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method: Organic Acids

Units: mg/L
Basis: NA

Analysis Lot: 416280

Analyte Name	Lab Control Sample RQ1412470-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412470-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Pyruvic Acid	2.49	2.00	124	2.56	2.00	128	70 - 130	3	30
Acetic Acid	21.4	20.1	107	21.6	20.1	107	70 - 130	<1	30
Butanoic Acid (Butyric Acid)	23.3	20.0	117	23.1	20.0	116	70 - 130	<1	30
Lactic Acid	18.1	20.0	91	18.6	20.0	93	70 - 130	3	30
Propionic Acid	19.5	20.1	97	19.4	20.1	97	70 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water

Service Request: R1408020
Date Analyzed: 10/15/14 - 10/15/14

Lab Control Sample Summary
Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method: Organic Acids

Units: mg/L
Basis: NA

Analysis Lot: 416589

Analyte Name	Lab Control Sample RQ1412595-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412595-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Pyruvic Acid	2.01	2.00	100	2.02	2.00	101	70 - 130	<1	30
Acetic Acid	22.7	20.1	113	22.4	20.1	112	70 - 130	1	30
Butanoic Acid (Butyric Acid)	23.3	20.0	117	23.7	20.0	119	70 - 130	2	30
Lactic Acid	19.2	20.0	96	19.5	20.0	98	70 - 130	2	30
Propionic Acid	19.5	20.1	97	19.9	20.1	99	70 - 130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19321

ALS Environmental

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: COOPERVISION	Project Number: 70665-019
Project Manager: MARK RAMSDELL	Report CC:
Company/Address: Haley + Aldrich, 200 Town Ctr Dr. Suite 2, Rochester, NY 14623	
Phone #: 585-321-4241	Email: mramsdell@haleyaldrich.com
Sampler's Signature: DB Keller	Sampler's Printed Name: D. Keller, J. Sanger

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 0 1 5 2 0 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ○ 8260 ○ 624 CLP	GCMS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Alkalinity	RSK-175	Sulfide	Fe	NO2/NO3/Cl/SO4	Organic Acids		REMARKS/ ALTERNATE DESCRIPTION
OW-306	-001	10/9	11:20	GW	4	X							X							
MW-203	-002	10/9	13:35	GW	4	X							X							
MW-202	-003	10/9	15:05	GW	11	X							X	X	X	X	X	X		
MW-204	-004	10/9	16:40	GW	4	X							X							
MW-502	-005	10/9	18:15	GW	10	X							X	X	X	X	X			TB
TRIP BLANK	-006	10/8	11:20	W	3	X														
													/	—						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other H_3PO_4

SPECIAL INSTRUCTIONS/COMMENTS
Metals

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
REQUESTED REPORT DATE
STD

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

R1408020

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED NY

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: David B Keller	Signature: [illegible]	Signature	Signature	Signature	Signature
Printed Name: David B Keller	Printed Name: ACS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: H+A	Firm: 10/9/14 1946	Firm	Firm	Firm	
Date/Time: 10/09 19:46	Date/Time	Date/Time	Date/Time	Date/Time	

R1408020 5
Haley & Aldrich, Inc.
Coopervision

Distribution: White - Lab Copy; Yellow - Return to Originator

Cooler Receipt and Preservation Check Form

Project/Client Haley + Aldrich Folder Number R1408020

Cooler received on 10/9/14 by: DHW

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 10/9/14 Time: 1950 ID: (IR#3) IR#4 From: ~~Temp Blank~~ Sample Bottle

Observed Temp (°C)	3.1						
Correction Factor (°C)	-0.5						
Corrected Temp (°C)	2.6						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by DHW on 10/9/14 at 1950
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: KB 10/10/14

Cooler Breakdown: Date: 10/10/14 Time: 1553 by: DHW

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		13D826138H	9/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-	WC1400 76F	10/15				
	HCl	**	**	4113070	9/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-162-002, 060314-2AA0, 060914-2AAW

Other Comments:

3

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19322

ALS Environmental

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: COOPERVISION	Project Number: 70665-019
Project Manager: Mark Ramsdell	Report CC:
Company/Address: Haley & Aldrich, 200 Town Ctr. Dr. Suite 2, Rochester, NY 14623	
Phone #: 585-321-4241	Email: mramsdell@haleyaldrich.com
Sampler's Signature: DBKeller	Sampler's Printed Name: D. Keller / J. Sanger

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 0 | 1 | 5 | 0 | 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Alkalinity	RSK-175	Sulfide	NO2/NO3 Cl/SO4	Organic Acids			REMARKS/ ALTERNATE DESCRIPTION
MW-3	-009	10/13	09:35	GW	8	X								X	X	X				
MW-501	-008	10/13	11:20	GW	9	X							X	X	X	X				
OW-302S	-009	10/13	13:10	GW	9	X							X	X	X	X				
MW-205	-010	10/13	15:00	GW	10	X							X	X	X	X	X			
BAP-1	-011	10/13	17:15	GW	10	X							X	X	X	X	X			
BAP-2	-012	10/13	19:45	GW	10	X							X	X	X	X	X			
TRIP BLANK	-013	10/08	11:20	W	3	X														TB

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other H_3PO_4

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
REQUESTED REPORT DATE: STND

REPORT REQUIREMENTS
____ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata X Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
R1408020 D

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: DBKeller	Signature: J. Sanger	Signature	Signature	Signature	Signature
Printed Name: DB Keller	Printed Name: J. Sanger	Printed Name	Printed Name	Printed Name	Printed Name
Firm: H+A	Firm: H+A	Firm	Firm	Firm	Firm
Date/Time: 10/14/14 09:15	Date/Time: 10/14/14 0915	Date/Time	Date/Time	Date/Time	Date/Time

R1408020 5
Haley & Aldrich, Inc.
Coopervision

Distribution: White - Lab Copy; Yellow - Return to Originator

Cooler Receipt and Preservation Check Form

R1408020 5
Haley & Aldrich, Inc.
Coopervision

Project/Client Coopervision Folder Number R1408020

Cooler received on 10/14/14 by: JPS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	**Perchlorate** samples have required headspace?	Y N NA
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk, or Sulfide have sig* **bubbles**?	Y N NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	Y N	7	Soil VOA received as:	Bulk Encore 5035set NA

8. Temperature Readings Date: 10/14/14 Time: 0930 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	6.6						
Correction Factor (°C)	+0.4						
Corrected Temp (°C)	7.0						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: MW by SM on 10/14 at 0930
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: KB 10/14/14

Cooler Breakdown: Date: 10/14/14 Time: 1424 by: ok

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated NA

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-	WC1400767	10/15				
	HCl	**	**	4113070	9/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-1162-002, 070814-1BMC, 052614-2AA0, 060914-2AAN

Other Comments:

* All Sulfides have <1" headspace.

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

April 10, 2015

Analytical Report for Service Request No: R1502352

Mr. Mark Ramsdell
Haley & Aldrich, Inc.
200 Town Centre Drive
Suite 2
Rochester, NY 14623-4264

Laboratory Results for: Coopervision 4/1-2/15/70665-020

Dear Mr. Ramsdell:

Enclosed are the results of the sample(s) submitted to our laboratory on April 2, 2015. For your reference, these analyses have been assigned our service request number **R1502352**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7471. You may also contact me via email at Karen.Bunker@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Karen Bunker
Project Manager

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

April 29, 2015

Analytical Report for Service Request No: R1502842

Mr. Mark Ramsdell
Haley & Aldrich, Inc.
200 Town Centre Drive
Suite 2
Rochester, NY 14623-4264

Laboratory Results for: Coopervision/70665-020

Dear Mr. Ramsdell:

Enclosed are the results of the sample(s) submitted to our laboratory on April 20, 2015. For your reference, these analyses have been assigned our service request number **R1502842**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7471. You may also contact me via email at Karen.Bunker@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Karen Bunker
Project Manager

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1502842

Lab ID	Client ID
R1502842-001	OWS-302_042015

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications.

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verificd to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH NELAC

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	4/20/15 1500
Sample Matrix:	Water	**Date Received:**	4/20/15
Sample Name:	OWS-302_042015		
Lab Code:	R1502842-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**762**		mg/L	2.0	1	NA	4/23/15 15:31	
Chloride	9056A	**2850**		mg/L	200	1000	NA	4/22/15 11:16	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/22/15 09:58	
Nitrite as Nitrogen	9056A	100	U	mg/L	100	1000	NA	4/22/15 11:16	
Sulfate	9056A	**2.5**		mg/L	2.0	10	NA	4/22/15 09:58	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/24/15	4/24/15 07:30	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	4/20/15 1500
Sample Matrix:	Water	**Date Received:**	4/20/15
		Date Analyzed:	4/22/15 18:11
Sample Name:	OWS-302_042015	**Units:**	µg/L
Lab Code:	R1502842-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	441466
Data File Name:	I:\ACQUDATA\MSVOA14\DATA\042215\B0338.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	2500	U	2500	
71-43-2	Benzene	1300	U	1300	
75-27-4	Bromodichloromethane	1300	U	1300	
75-25-2	Bromoform	1300	U	1300	
74-83-9	Bromomethane	1300	U	1300	
78-93-3	2-Butanone (MEK)	2500	U	2500	
75-15-0	Carbon Disulfide	2500	U	2500	
56-23-5	Carbon Tetrachloride	1300	U	1300	
108-90-7	Chlorobenzene	1300	U	1300	
75-00-3	Chloroethane	**23000**		1300	
67-66-3	Chloroform	1300	U	1300	
74-87-3	Chloromethane	1300	U	1300	
124-48-1	Dibromochloromethane	1300	U	1300	
75-34-3	1,1-Dichloroethane	1300	U	1300	
107-06-2	1,2-Dichloroethane	1300	U	1300	
75-35-4	1,1-Dichloroethene	1300	U	1300	
156-59-2	cis-1,2-Dichloroethene	1300	U	1300	
156-60-5	trans-1,2-Dichloroethene	1300	U	1300	
78-87-5	1,2-Dichloropropane	1300	U	1300	
10061-01-5	cis-1,3-Dichloropropene	1300	U	1300	
10061-02-6	trans-1,3-Dichloropropene	1300	U	1300	
100-41-4	Ethylbenzene	1300	U	1300	
591-78-6	2-Hexanone	2500	U	2500	
75-09-2	Methylene Chloride	1300	U	1300	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	
100-42-5	Styrene	1300	U	1300	
79-34-5	1,1,2,2-Tetrachloroethane	1300	U	1300	
127-18-4	Tetrachloroethene	1300	U	1300	
108-88-3	Toluene	1300	U	1300	
71-55-6	1,1,1-Trichloroethane	1300	U	1300	
79-00-5	1,1,2-Trichloroethane	1300	U	1300	
79-01-6	Trichloroethene	1300	U	1300	
75-01-4	Vinyl Chloride	1300	U	1300	
95-47-6	o-Xylene	1300	U	1300	
179601-23-1	m,p-Xylenes	1300	U	1300	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	4/20/15 1500
Sample Matrix:	Water	**Date Received:**	4/20/15
		Date Analyzed:	4/22/15 18:11
Sample Name:	OWS-302_042015	**Units:**	Percent
Lab Code:	R1502842-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	441466
Data File Name:	I:\ACQUDATA\MSVOA14\DATA\042215\B0338.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	250

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	4/22/15 18:11	
Toluene-d8	104	87-121	4/22/15 18:11	
Dibromofluoromethane	98	89-119	4/22/15 18:11	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	4/20/15 1500
Sample Matrix:	Water	**Date Received:**	4/20/15
		Date Analyzed:	4/24/15 13:06
Sample Name:	OWS-302_042015	**Units:**	µg/L
Lab Code:	R1502842-001	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	441969
Data File Name:	1016.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	10	U	10	
74-85-1	Ethylene	10	U	10	
74-82-8	Methane	460		10	
74-98-6	Propane	10	U	10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1502842-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	4/23/15 15:31	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	4/22/15 09:36	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/22/15 09:36	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/22/15 09:36	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	4/22/15 09:36	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/24/15	4/24/15 07:30	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/22/15 10:22
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1503986-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	441466
Data File Name:	I:\ACQUDATA\MSVOA14\Data\042215\B0319.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/22/15 10:22
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	RQ1503986-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	441466
Data File Name:	I:\ACQUDATA\MSVOA14\Data\042215\B0319.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	4/22/15 10:22	
Toluene-d8	104	87-121	4/22/15 10:22	
Dibromofluoromethane	98	89-119	4/22/15 10:22	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502842
Project:	Coopervision/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/24/15 08:45
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1504137-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	441969
Data File Name:	1002.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-020
Sample Matrix: Water

Service Request: R1502842
Date Analyzed: 4/22/15 - 4/24/15

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1502842-LCS Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	18.5	20.0	92	81 - 112
Chloride	9056A	2.04	2.00	102	80 - 120
Nitrate as Nitrogen	9056A	1.02	1.00	102	80 - 120
Nitrite as Nitrogen	9056A	1.02	1.00	102	80 - 120
Sulfate	9056A	2.09	2.00	105	80 - 120
Sulfide, Acid-Soluble	9034	6.21	9.9	63	27 - 111

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-020
Sample Matrix: Water

Service Request: R1502842
Date Analyzed: 4/22/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 441466

Lab Control Sample
RQ1503986-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	24.0	20.0	120	51 - 146
Benzene	18.8	20.0	94	76 - 118
Bromodichloromethane	18.3	20.0	92	79 - 122
Bromoform	16.8	20.0	84	65 - 138
Bromomethane	21.7	20.0	108	41 - 159
2-Butanone (MEK)	16.5	20.0	82	66 - 129
Carbon Disulfide	19.7	20.0	99	63 - 141
Carbon Tetrachloride	15.6	20.0	78	66 - 128
Chlorobenzene	18.2	20.0	91	80 - 121
Chloroethane	18.8	20.0	94	71 - 128
Chloroform	18.8	20.0	94	76 - 120
Chloromethane	19.7	20.0	98	64 - 140
Dibromochloromethane	18.1	20.0	90	79 - 125
1,1-Dichloroethane	18.7	20.0	93	76 - 128
1,2-Dichloroethane	17.2	20.0	86	72 - 130
1,1-Dichloroethene	17.3	20.0	87	74 - 135
cis-1,2-Dichloroethene	19.5	20.0	98	80 - 121
trans-1,2-Dichloroethene	19.1	20.0	95	78 - 124
1,2-Dichloropropane	19.4	20.0	97	80 - 119
cis-1,3-Dichloropropene	17.8	20.0	89	77 - 125
trans-1,3-Dichloropropene	16.4	20.0	82	72 - 123
Ethylbenzene	16.1	20.0	80	76 - 120
2-Hexanone	16.2	20.0	81	61 - 131
Methylene Chloride	18.9	20.0	94	73 - 122
4-Methyl-2-pentanone (MIBK)	16.6	20.0	83	68 - 129
Styrene	18.2	20.0	91	81 - 122
1,1,2,2-Tetrachloroethane	18.8	20.0	94	74 - 127
Tetrachloroethene	18.0	20.0	90	69 - 124
Toluene	18.7	20.0	94	77 - 120
1,1,1-Trichloroethane	16.9	20.0	85	71 - 123
1,1,2-Trichloroethane	18.9	20.0	95	79 - 117
Trichloroethene	18.6	20.0	93	76 - 123
Vinyl Chloride	19.8	20.0	99	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-020
Sample Matrix: Water

Service Request: R1502842
Date Analyzed: 4/22/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 441466

Lab Control Sample
RQ1503986-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	17.7	20.0	88	77 - 131
m,p-Xylenes	35.6	40.0	89	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-020
Sample Matrix: Water

Service Request: R1502842
Date Analyzed: 4/24/15

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 441969

	Lab Control Sample RQ1504137-02			Duplicate Lab Control Sample RQ1504137-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ethane	25.7	25.9	99	25.9	25.9	100	75 - 118	1	30
Ethylene	24.1	24.2	99	24.6	24.2	102	73 - 129	2	30
Methane	25.9	26.1	99	25.9	26.1	99	65 - 126	<1	30
Propane	25.0	25.4	99	25.3	25.4	100	72 - 118	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

25140

ALS Environmental

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: CooperVision	Project Number: 70665-020
Project Manager: Mark Ramsdell	Report CC:
Company/Address: Haley + Aldrich, 200 Town Ctr Dr. Rochester, NY 14623	
Phone #: 585-321-4241	Email: mramsdell@haleyaldrich.com
Sampler's Signature: DB Keller	Sampler's Printed Name: D B Keller

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 0 1 5 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Alkalinity	RSK-175	Sulfide	NH3/NH4Cl/SO4			
OWS-302-042015	001	04/20/15	15:00	GW	9	3							1	3	1	1			

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NY

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day X 5 day
REQUESTED REPORT DATE: _____

REPORT REQUIREMENTS
_____ I. Results Only
X II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata X Yes _____ No

INVOICE INFORMATION
PO #:
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: DB Keller	Signature:	Signature:	Signature:	Signature:	
Printed Name: DB Keller	Printed Name: ALS	Printed Name:	Printed Name:	Printed Name:	
Firm: H+A	Firm: 4/20/15 / 19:00	Firm:	Firm:	Firm:	
Date/Time: 04/20/15 19:00	Date/Time:	Date/Time:	Date/Time:	Date/Time:	

R1502842 5
Haley & Aldrich, Inc.
Coopervision

Distribution: White - Lab Copy; Yellow - Return to Originator

Cooler Receipt and Preservation Check Form

Project/Client H+A Folder Number 415-2842.

Cooler received on 4/20/15 by: DW **COURIER:** ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	**Perchlorate** samples have required headspace?	Y N NA
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice Gel packs** present?	Y N	7	Soil VOA received as: Bulk Encore 5035set	NA

8. Temperature Readings Date: 4/20/15 Time: 1903 ID: ~~IR#3~~ IR#5 From: Temp Blank Sample Bottle

Observed Temp (°C)	7.8°						
Correction Factor (°C)	+0.6°						
Corrected Temp (°C)	8.4°						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by DW on 4/20/15 at 1903
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: DW 4/21/15

Cooler Breakdown: Date: 4/21/15 Time: 0759 by: SFJ

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-	WC140186H	4/16				
	HCl	**	**	4114050	3/16				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 122214-ZAAW, 020215-ZAAD, 4-258-004
Other Comments:

PC Secondary Review: DW 4/21/15

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client:	Haley & Aldrich of New York	**Service Request No:**	R1502352
Project:	Coopervision #70665-020	**Date Received:**	4/2/15
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental (ALS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Control Sample (LCS).

Sample Receipt

Eleven (11) water samples were collected over the period 4/1-2/15 by H&A and received for analysis at ALS on 4/2/15. The samples were received unbroken and consistent with the accompanying chain of custody form. The cooler temperature for samples was 5.1°C upon receipt (within guidelines of 0-6°C).

Inorganic Parameters

Water samples were analyzed for a client specific list of parameters: Chloride, Sulfate, Total Alkalinity, Nitrate, Nitrite, and Sulfide. On 4/6/15, the Alkalinity analysis was cancelled by the client on samples OW-306, MW-203, and MW-204. TOC analysis was addede to samples MW-202, BAP-1, and BAP-2.1 Method numbers are included on the data forms in the report.

All holding times were met for these analyses.

Batch QC is included in the report. All Laboratory Control Sample (LCS) recoveries were within QC limits.

Site QC was not requested on this SDG.

All Laboratory Method Blanks were free from contamination.

No other problems were encountered during the analysis of these samples.

Organic Compounds

Eleven (11) water samples were analyzed for the TCL of Volatile Organics by GC/MS Method 8260C from SW-846. Eight (8) water samples were analyzed for Dissolved Gases by modified GC Method RSK-175 and four (4) samples were analyzed for Metabolic Acids by HPLC methodology.

All Initial and Continuing Calibration Criteria were met for all analyses

Hits between the Method Reporting Limit (MRL) and Method Detection Limit (MDL) have been flagged as "J", estimated.

Approved by Karen J Burke **Date** 4/13/15

Batch QC is included in the report. All Laboratory Control Samples (LCS) and LCS Duplicate (LCSD) recoveries were within limits were within limits for 8260C, RSK and Metabolic Acids. The Relative Percent Difference (RPD) calculations were within QC acceptance limits.

Site QC was not requested on this SDG.

Hits above the calibration range of the standards are flagged as "E" estimated. The sample is then repeated at the appropriate dilution for the hit. Both sets of data are included in the report. The subsequent dilution hits are flagged as "D".

All surrogate recoveries were within acceptance limits.

All samples were analyzed within the appropriate holding times. All vials are checked for preservation after analysis. The VOC samples were found to be preserved to a pH of <2 or the samples were analyzed within the 7 day holding time for unpreserved vials.

The Laboratory Method Blanks were free from contamination.

No other problems were encountered during the analysis of these samples.

Approved by Karen Burke **Date** 4/13/15

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1502352

Lab ID	Client ID
R1502352-001	MW-3_040115
R1502352-002	OW-306_040115
R1502352-003	MW-203_040115
R1502352-004	MW-202_040115
R1502352-005	MW-204_040115
R1502352-006	MW-501_040215
R1502352-007	MW-502_040215
R1502352-008	OWD-302S_040215
R1502352-009	MW-205_040215
R1502352-010	BAP-01_040215
R1502352-011	BAP-02_040215

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1450
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-3_040115		
Lab Code:	R1502352-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chloride	9056A	**530**		mg/L	40	200	NA	4/9/15 10:16	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 09:51	
Nitrite as Nitrogen	353.2	**0.142**		mg/L	0.010	1	NA	4/2/15 19:50	
Sulfate	9056A	**20.9**		mg/L	2.0	10	NA	4/3/15 09:51	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1450
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 16:42
Sample Name:	MW-3_040115	**Units:**	µg/L
Lab Code:	R1502352-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439524
Data File Name:	I:\ACQUDATA\msvoa10\data\040815\A7450.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	**2.7**	J	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	**110**		5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	**25**		5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	**1.9**	J	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	**0.31**	J	5.0	0.22	
75-01-4	Vinyl Chloride	**4.0**	J	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1450
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 16:42
Sample Name:	MW-3_040115	**Units:**	Percent
Lab Code:	R1502352-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439524
Data File Name:	I:\ACQUDATA\msvoa10\data\040815\A7450.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	4/8/15 16:42	
Toluene-d8	95	87-121	4/8/15 16:42	
Dibromofluoromethane	98	89-119	4/8/15 16:42	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1450
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 11:01
Sample Name:	MW-3_040115	**Units:**	µg/L
Lab Code:	R1502352-001	**Basis:**	NA

Dissolved Gases by GC/FID

Analytieal Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1004.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	10	U	10	
74-85-1	Ethylene	**25**		10	
74-82-8	Methane	760		10	
74-98-6	Propane	10	U	10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1130
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 15:58
Sample Name:	OW-306_040115	**Units:**	µg/L
Lab Code:	R1502352-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7420.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	**2.7**	J	10	1.3	
71-43-2	Benzene	**0.21**	J	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	**0.21**	J	5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	**0.40**	J	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	**0.37**	J	5.0	0.33	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1130
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 15:58
Sample Name:	OW-306_040115	**Units:**	Percent
Lab Code:	R1502352-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7420.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	4/7/15 15:58	
Toluene-d8	102	87-121	4/7/15 15:58	
Dibromofluoromethane	97	89-119	4/7/15 15:58	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1245
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:27
Sample Name:	MW-203_040115	**Units:**	µg/L
Lab Code:	R1502352-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7421.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	10	U	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1245
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:27
Sample Name:	MW-203_040115	**Units:**	Percent
Lab Code:	R1502352-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7421.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	4/7/15 16:27	
Toluene-d8	101	87-121	4/7/15 16:27	
Dibromofluoromethane	98	89-119	4/7/15 16:27	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-202_040115		
Lab Code:	R1502352-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**160**		mg/L	2.0	1	NA	4/7/15 18:37	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0	U	mg/L	1.0	1	NA	4/10/15 18:01	
Chloride	9056A	**3800**		mg/L	200	1000	NA	4/9/15 13:02	
Nitrate as Nitrogen	9056A	**2.6**		mg/L	1.0	10	NA	4/3/15 10:02	
Nitrite as Nitrogen	353.2	**0.011**		mg/L	0.010	1	NA	4/2/15 19:51	
Sulfate	9056A	**404**		mg/L	20	100	NA	4/9/15 10:27	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-202_040115		
Lab Code:	R1502352-004	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	**920**		µg/L	100	1	4/ 6/15	4/7/15 20:43	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:57
Sample Name:	MW-202_040115	**Units:**	µg/L
Lab Code:	R1502352-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7422.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	10	U	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	**1.3**	J	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	**64**		5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	**50**		5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	**1.7**	J	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	**0.63**	J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:57
Sample Name:	MW-202_040115	**Units:**	Percent
Lab Code:	R1502352-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7422.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	4/7/15 16:57	
Toluene-d8	102	87-121	4/7/15 16:57	
Dibromofluoromethane	98	89-119	4/7/15 16:57	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 14:47
Sample Name:	MW-202_040115	**Units:**	µg/L
Lab Code:	R1502352-004	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439422
Data File Name:	1010.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1420
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 12:53
Sample Name:	MW-202_040115	**Units:**	mg/L
Lab Code:	R1502352-004	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	439592
Data File Name:	I:\ACQUDATA\HPLC05\DATA\040715\X0013270.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1625
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 17:26
Sample Name:	MW-204_040115	**Units:**	µg/L
Lab Code:	R1502352-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7423.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	10	U	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	**8.9**		5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	**8.8**		5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	**6.6**		5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	**2.1**	J	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 1/15 1625
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 17:26
Sample Name:	MW-204_040115	**Units:**	Percent
Lab Code:	R1502352-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7423.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	4/7/15 17:26	
Toluene-d8	101	87-121	4/7/15 17:26	
Dibromofluoromethane	98	89-119	4/7/15 17:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 0910
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-501_040215		
Lab Code:	R1502352-006	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**293**		mg/L	2.0	1	NA	4/7/15 18:37	
Chloride	9056A	**5590**		mg/L	400	2000	NA	4/9/15 13:13	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 10:13	
Nitrite as Nitrogen	353.2	**0.011**		mg/L	0.010	1	NA	4/2/15 19:53	
Sulfate	9056A	**92.0**		mg/L	2.0	10	NA	4/3/15 10:13	
Sulfide, Acid-Soluble	9034	**1.1**		mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 0910
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 17:56
Sample Name:	MW-501_040215	**Units:**	µg/L
Lab Code:	R1502352-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoaI0\data\040715\A7424.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	100	U	100	13	
71-43-2	Benzene	50	U	50	2.0	
75-27-4	Bromodichloromethane	50	U	50	3.2	
75-25-2	Bromoform	50	U	50	4.2	
74-83-9	Bromomethane	50	U	50	2.9	
78-93-3	2-Butanone (MEK)	100	U	100	8.2	
75-15-0	Carbon Disulfide	100	U	100	2.2	
56-23-5	Carbon Tetrachloride	50	U	50	4.5	
108-90-7	Chlorobenzene	50	U	50	2.9	
75-00-3	Chloroethane	**1200**		50	2.4	
67-66-3	Chloroform	50	U	50	2.5	
74-87-3	Chloromethane	50	U	50	2.1	
124-48-1	Dibromochloromethane	50	U	50	3.1	
75-34-3	1,1-Dichloroethane	**140**		50	2.0	
107-06-2	1,2-Dichloroethane	50	U	50	3.6	
75-35-4	1,1-Dichloroethene	50	U	50	5.7	
156-59-2	cis-1,2-Dichloroethene	50	U	50	3.0	
156-60-5	trans-1,2-Dichloroethene	50	U	50	3.4	
78-87-5	1,2-Dichloropropane	50	U	50	2.0	
10061-01-5	cis-1,3-Dichloropropene	50	U	50	2.4	
10061-02-6	trans-1,3-Dichloropropene	50	U	50	2.0	
100-41-4	Ethylbenzene	50	U	50	2.0	
591-78-6	2-Hexanone	100	U	100	17	
75-09-2	Methylene Chloride	50	U	50	6.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	6.7	
100-42-5	Styrene	50	U	50	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	2.5	
127-18-4	Tetrachloroethene	50	U	50	3.0	
108-88-3	Toluene	50	U	50	2.0	
71-55-6	1,1,1-Trichloroethane	50	U	50	3.6	
79-00-5	1,1,2-Trichloroethane	50	U	50	3.5	
79-01-6	Trichloroethene	50	U	50	2.2	
75-01-4	Vinyl Chloride	**88**		50	3.2	
95-47-6	o-Xylene	50	U	50	2.0	
179601-23-1	m,p-Xylenes	50	U	50	3.4	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/2/15 0910
Sample Matrix:	Water	**Date Received:**	4/2/15
		Date Analyzed:	4/7/15 17:56
Sample Name:	MW-501_040215	**Units:**	Percent
Lab Code:	R1502352-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7424.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	10

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	4/7/15 17:56	
Toluene-d8	97	87-121	4/7/15 17:56	
Dibromofluoromethane	97	89-119	4/7/15 17:56	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 0910
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 11:11
Sample Name:	MW-501_040215	**Units:**	µg/L
Lab Code:	R1502352-006	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1005.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	50

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	50	U	50	
74-85-1	Ethylene	50	U	50	
74-82-8	Methane	**13000**	E	50	
74-98-6	Propane	50	U	50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 0910
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 11:30
Sample Name:	MW-501_040215	**Units:**	µg/L
Lab Code:	R1502352-006	**Basis:**	NA
Run Type:	Dilution		

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1006.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	250	U	250	
74-85-1	Ethylene	250	U	250	
74-82-8	Methane	16000	D	250	
74-98-6	Propane	250	U	250	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1045
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-502_040215		
Lab Code:	R1502352-007	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**445**		mg/L	2.0	1	NA	4/7/15 18:37	
Chloride	9056A	**780**		mg/L	40	200	NA	4/9/15 13:24	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 10:24	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	4/2/15 19:54	
Sulfate	9056A	**2.7**		mg/L	2.0	10	NA	4/3/15 10:24	
Sulfide, Acid-Soluble	9034	**1.3**		mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1045
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-502_040215		
Lab Code:	R1502352-007	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	**88400**		µg/L	500	5	4/ 6/15	4/8/15 21:17	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1045
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 18:25
Sample Name:	MW-502_040215	**Units:**	µg/L
Lab Code:	R1502352-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7425.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	25

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	250	U	250	31	
71-43-2	Benzene	130	U	130	5.0	
75-27-4	Bromodichloromethane	130	U	130	8.0	
75-25-2	Bromoform	130	U	130	11	
74-83-9	Bromomethane	130	U	130	7.3	
78-93-3	2-Butanone (MEK)	250	U	250	21	
75-15-0	Carbon Disulfide	250	U	250	5.5	
56-23-5	Carbon Tetrachloride	130	U	130	12	
108-90-7	Chlorobenzene	130	U	130	7.3	
75-00-3	Chloroethane	**3500**		130	6.0	
67-66-3	Chloroform	130	U	130	6.3	
74-87-3	Chloromethane	130	U	130	5.3	
124-48-1	Dibromochloromethane	130	U	130	7.8	
75-34-3	1,1-Dichloroethane	**89**	J	130	5.0	
107-06-2	1,2-Dichloroethane	130	U	130	9.0	
75-35-4	1,1-Dichloroethene	130	U	130	15	
156-59-2	cis-1,2-Dichloroethene	130	U	130	7.5	
156-60-5	trans-1,2-Dichloroethene	130	U	130	8.3	
78-87-5	1,2-Dichloropropane	130	U	130	5.0	
10061-01-5	cis-1,3-Dichloropropene	130	U	130	6.0	
10061-02-6	trans-1,3-Dichloropropene	130	U	130	5.0	
100-41-4	Ethylbenzene	130	U	130	5.0	
591-78-6	2-Hexanone	250	U	250	42	
75-09-2	Methylene Chloride	130	U	130	15	
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	17	
100-42-5	Styrene	130	U	130	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	130	U	130	6.3	
127-18-4	Tetrachloroethene	130	U	130	7.5	
108-88-3	Toluene	130	U	130	5.0	
71-55-6	1,1,1-Trichloroethane	130	U	130	9.0	
79-00-5	1,1,2-Trichloroethane	130	U	130	8.5	
79-01-6	Trichloroethene	130	U	130	5.5	
75-01-4	Vinyl Chloride	**270**		130	8.0	
95-47-6	o-Xylene	130	U	130	5.0	
179601-23-1	m,p-Xylenes	130	U	130	8.3	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1045
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 18:25
Sample Name:	MW-502_040215	**Units:**	Percent
Lab Code:	R1502352-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7425.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	25

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	4/7/15 18:25	
Toluene-d8	101	87-121	4/7/15 18:25	
Dibromofluoromethane	96	89-119	4/7/15 18:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1045
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 11:46
Sample Name:	MW-502_040215	**Units:**	µg/L
Lab Code:	R1502352-007	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1007.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	250	U	250	
74-85-1	Ethylene	250	U	250	
74-82-8	Methane	**15000**		250	
74-98-6	Propane	250	U	250	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1235
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	OWD-302S_040215		
Lab Code:	R1502352-008	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**683**		mg/L	2.0	1	NA	4/7/15 18:37	
Chloride	9056A	**4170**		mg/L	200	1000	NA	4/9/15 11:11	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 10:36	
Nitrite as Nitrogen	353.2	**0.084**		mg/L	0.010	1	NA	4/2/15 19:54	
Sulfate	9056A	**2.8**		mg/L	2.0	10	NA	4/3/15 10:36	
Sulfide, Acid-Soluble	9034	**1.5**		mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1235
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 18:55
Sample Name:	OWD-302S_040215	**Units:**	µg/L
Lab Code:	R1502352-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7426.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	250

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	**360**	J	2500	310	
71-43-2	Benzene	1300	U	1300	50	
75-27-4	Bromodichloromethane	1300	U	1300	80	
75-25-2	Bromoform	1300	U	1300	110	
74-83-9	Bromomethane	1300	U	1300	73	
78-93-3	2-Butanone (MEK)	2500	U	2500	210	
75-15-0	Carbon Disulfide	2500	U	2500	55	
56-23-5	Carbon Tetrachloride	1300	U	1300	120	
108-90-7	Chlorobenzene	1300	U	1300	73	
75-00-3	Chloroethane	**45000**		1300	60	
67-66-3	Chloroform	1300	U	1300	63	
74-87-3	Chloromethane	1300	U	1300	53	
124-48-1	Dibromochloromethane	1300	U	1300	78	
75-34-3	1,1-Dichloroethane	10000		1300	50	
107-06-2	1,2-Dichloroethane	1300	U	1300	90	
75-35-4	1,1-Dichloroethene	1300	U	1300	150	
156-59-2	cis-1,2-Dichloroethene	1300	U	1300	75	
156-60-5	trans-1,2-Dichloroethene	1300	U	1300	83	
78-87-5	1,2-Dichloropropane	1300	U	1300	50	
10061-01-5	cis-1,3-Dichloropropene	1300	U	1300	60	
10061-02-6	trans-1,3-Dichloropropene	1300	U	1300	50	
100-41-4	Ethylbenzene	1300	U	1300	50	
591-78-6	2-Hexanone	2500	U	2500	420	
75-09-2	Methylene Chloride	1300	U	1300	150	
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	170	
100-42-5	Styrene	1300	U	1300	50	
79-34-5	1,1,2,2-Tetrachloroethane	1300	U	1300	63	
127-18-4	Tetrachloroethene	1300	U	1300	75	
108-88-3	Toluene	1300	U	1300	50	
71-55-6	1,1,1-Trichloroethane	1300	U	1300	90	
79-00-5	1,1,2-Trichloroethane	1300	U	1300	85	
79-01-6	Trichloroethene	1300	U	1300	55	
75-01-4	Vinyl Chloride	1300	U	1300	80	
95-47-6	o-Xylene	1300	U	1300	50	
179601-23-1	m,p-Xylenes	1300	U	1300	83	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1235
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 18:55
Sample Name:	OWD-302S_040215	**Units:**	Percent
Lab Code:	R1502352-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7426.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	250

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	4/7/15 18:55	
Toluene-d8	101	87-121	4/7/15 18:55	
Dibromofluoromethane	97	89-119	4/7/15 18:55	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1235
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 15:08
Sample Name:	OWD-302S_040215	**Units:**	µg/L
Lab Code:	R1502352-008	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439422
Data File Name:	1012.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	**2.6**		1.0	
74-85-1	Ethylene	**3.1**		1.0	
74-82-8	Methane	**27**		1.0	
74-98-6	Propane	1.0	U	1.0	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	MW-205_040215		
Lab Code:	R1502352-009	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**3400**		mg/L	2.0	1	NA	4/7/15 18:37	
Chloride	9056A	**731**		mg/L	40	200	NA	4/9/15 11:22	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 10:47	
Nitrite as Nitrogen	353.2	**0.056**		mg/L	0.010	1	NA	4/2/15 19:55	
Sulfate	9056A	**8.9**		mg/L	2.0	10	NA	4/3/15 10:47	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 19:24
Sample Name:	MW-205_040215	**Units:**	µg/L
Lab Code:	R1502352-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7427.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2000

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	20000	U	20000	2500	
71-43-2	Benzene	10000	U	10000	400	
75-27-4	Bromodichloromethane	10000	U	10000	640	
75-25-2	Bromoform	10000	U	10000	840	
74-83-9	Bromomethane	10000	U	10000	580	
78-93-3	2-Butanone (MEK)	20000	U	20000	1700	
75-15-0	Carbon Disulfide	20000	U	20000	440	
56-23-5	Carbon Tetrachloride	10000	U	10000	900	
108-90-7	Chlorobenzene	10000	U	10000	580	
75-00-3	Chloroethane	**960**	J	10000	480	
67-66-3	Chloroform	10000	U	10000	500	
74-87-3	Chloromethane	10000	U	10000	420	
124-48-1	Dibromochloromethane	10000	U	10000	620	
75-34-3	1,1-Dichloroethane	**240000**		10000	400	
107-06-2	1,2-Dichloroethane	10000	U	10000	720	
75-35-4	1,1-Dichloroethene	**1900**	J	10000	1200	
156-59-2	cis-1,2-Dichloroethene	10000	U	10000	600	
156-60-5	trans-1,2-Dichloroethene	10000	U	10000	660	
78-87-5	1,2-Dichloropropane	10000	U	10000	400	
10061-01-5	cis-1,3-Dichloropropene	10000	U	10000	480	
10061-02-6	trans-1,3-Dichloropropene	10000	U	10000	400	
100-41-4	Ethylbenzene	10000	U	10000	400	
591-78-6	2-Hexanone	20000	U	20000	3400	
75-09-2	Methylene Chloride	10000	U	10000	1200	
108-10-1	4-Methyl-2-pentanone (MIBK)	20000	U	20000	1400	
100-42-5	Styrene	10000	U	10000	400	
79-34-5	1,1,2,2-Tetrachloroethane	10000	U	10000	500	
127-18-4	Tetrachloroethene	10000	U	10000	600	
108-88-3	Toluene	10000	U	10000	400	
71-55-6	1,1,1-Trichloroethane	**61000**		10000	720	
79-00-5	1,1,2-Trichloroethane	10000	U	10000	680	
79-01-6	Trichloroethene	10000	U	10000	440	
75-01-4	Vinyl Chloride	10000	U	10000	640	
95-47-6	o-Xylene	10000	U	10000	400	
179601-23-1	m,p-Xylenes	10000	U	10000	660	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 19:24
Sample Name:	MW-205_040215	**Units:**	Percent
Lab Code:	R1502352-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7427.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2000

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	4/7/15 19:24	
Toluene-d8	101	87-121	4/7/15 19:24	
Dibromofluoromethane	96	89-119	4/7/15 19:24	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 11:57
Sample Name:	MW-205_040215	**Units:**	µg/L
Lab Code:	R1502352-009	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1008.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	25

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	25	U	25	
74-85-1	Ethylene	25	U	25	
74-82-8	Methane	**2900**	E	25	
74-98-6	Propane	25	U	25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/8/15 12:10
Sample Name:	MW-205_040215	**Units:**	µg/L
Lab Code:	R1502352-009	**Basis:**	NA
Run Type:	Dilution		

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1009.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	50

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	50	U	50	
74-85-1	Ethylene	50	U	50	
74-82-8	Methane	3000	D	50	
74-98-6	Propane	50	U	50	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1355
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:11
Sample Name:	MW-205_040215	**Units:**	mg/L
Lab Code:	R1502352-009	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	439592
Data File Name:	I:\ACQUDATA\HPLC05\DATA\040715\X0013277.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	25

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	13	U	13	
64-19-7	Acetic Acid	**940**		25	
107-92-6	Butanoic Acid (Butyric Acid)	**3100**		50	
50-21-5	Lactic Acid	25	U	25	
79-09-4	Propionic Acid	**770**		25	

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Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1555
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	BAP-01_040215		
Lab Code:	R1502352-010	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**261**		mg/L	2.0	1	NA	4/7/15 18:37	
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	**6.5**		mg/L	1.0	1	NA	4/9/15 13:27	
Chloride	9056A	**496**		mg/L	20	100	NA	4/9/15 12:29	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 10:58	
Nitrite as Nitrogen	353.2	**0.021**		mg/L	0.010	1	NA	4/2/15 19:49	
Sulfate	9056A	**189**		mg/L	4.0	20	NA	4/9/15 12:18	
Sulfide, Acid-Soluble	9034	**3.3**		mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1555
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 19:54
Sample Name:	BAP-01_040215	**Units:**	µg/L
Lab Code:	R1502352-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7428.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	200	U	200	25	
71-43-2	Benzene	100	U	100	4.0	
75-27-4	Bromodichloromethane	100	U	100	6.4	
75-25-2	Bromoform	100	U	100	8.4	
74-83-9	Bromomethane	100	U	100	5.8	
78-93-3	2-Butanone (MEK)	200	U	200	17	
75-15-0	Carbon Disulfide	200	U	200	4.4	
56-23-5	Carbon Tetrachloride	100	U	100	9.0	
108-90-7	Chlorobenzene	100	U	100	5.8	
75-00-3	Chloroethane	**240**		100	4.8	
67-66-3	Chloroform	100	U	100	5.0	
74-87-3	Chloromethane	100	U	100	4.2	
124-48-1	Dibromochloromethane	100	U	100	6.2	
75-34-3	1,1-Dichloroethane	**1800**		100	4.0	
107-06-2	1,2-Dichloroethane	**8.6**	J	100	7.2	
75-35-4	1,1-Dichloroethene	**1800**		100	12	
156-59-2	cis-1,2-Dichloroethene	**8.2**	J	100	6.0	
156-60-5	trans-1,2-Dichloroethene	100	U	100	6.7	
78-87-5	1,2-Dichloropropane	100	U	100	4.0	
10061-01-5	cis-1,3-Dichloropropene	100	U	100	4.8	
10061-02-6	trans-1,3-Dichloropropene	100	U	100	4.0	
100-41-4	Ethylbenzene	100	U	100	4.0	
591-78-6	2-Hexanone	200	U	200	34	
75-09-2	Methylene Chloride	100	U	100	12	
108-10-1	4-Methyl-2-pentanone (MIBK)	200	U	200	14	
100-42-5	Styrene	100	U	100	4.0	
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	5.0	
127-18-4	Tetrachloroethene	100	U	100	6.0	
108-88-3	Toluene	100	U	100	4.0	
71-55-6	1,1,1-Trichloroethane	100	U	100	7.2	
79-00-5	1,1,2-Trichloroethane	100	U	100	6.9	
79-01-6	Trichloroethene	**25**	J	100	4.4	
75-01-4	Vinyl Chloride	**94**	J	100	6.4	
95-47-6	o-Xylene	100	U	100	4.0	
179601-23-1	m,p-Xylenes	100	U	100	6.7	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1555
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 19:54
Sample Name:	BAP-01_040215	**Units:**	Percent
Lab Code:	R1502352-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7428.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	4/7/15 19:54	
Toluene-d8	101	87-121	4/7/15 19:54	
Dibromofluoromethane	98	89-119	4/7/15 19:54	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1555
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 15:31
Sample Name:	BAP-01_040215	**Units:**	µg/L
Lab Code:	R1502352-010	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439422
Data File Name:	1014.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	5.0	U	5.0	
74-85-1	Ethylene	5.0	U	5.0	
74-82-8	Methane	280		5.0	
74-98-6	Propane	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1555
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 14:48
Sample Name:	BAP-01_040215	**Units:**	mg/L
Lab Code:	R1502352-010	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	439592
Data File Name:	I:\ACQUDATA\HPLC05\DATA\040715\X0013274.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	**5.5**		1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1650
Sample Matrix:	Water	**Date Received:**	4/ 2/15
Sample Name:	BAP-02_040215		
Lab Code:	R1502352-011	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**258**		mg/L	2.0	1	NA	4/7/15 18:37	
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	**6.6**		mg/L	1.0	1	NA	4/9/15 13:48	
Chloride	9056A	**580**		mg/L	40	200	NA	4/9/15 12:51	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/3/15 11:53	
Nitrite as Nitrogen	353.2	**0.055**		mg/L	0.010	1	NA	4/2/15 19:50	
Sulfate	9056A	**178**		mg/L	4.0	20	NA	4/9/15 12:40	
Sulfide, Acid-Soluble	9034	**2.4**		mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1650
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 20:23
Sample Name:	BAP-02_040215	**Units:**	µg/L
Lab Code:	R1502352-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7429.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	**3.3**	J	20	2.5	
71-43-2	Benzene	10	U	10	0.40	
75-27-4	Bromodichloromethane	10	U	10	0.64	
75-25-2	Bromoform	10	U	10	0.84	
74-83-9	Bromomethane	10	U	10	0.58	
78-93-3	2-Butanone (MEK)	20	U	20	1.7	
75-15-0	Carbon Disulfide	**0.54**	J	20	0.44	
56-23-5	Carbon Tetrachloride	10	U	10	0.90	
108-90-7	Chlorobenzene	10	U	10	0.58	
75-00-3	Chloroethane	**7.8**	J	10	0.48	
67-66-3	Chloroform	10	U	10	0.50	
74-87-3	Chloromethane	10	U	10	0.42	
124-48-1	Dibromochloromethane	10	U	10	0.62	
75-34-3	1,1-Dichloroethane	**210**		10	0.40	
107-06-2	1,2-Dichloroethane	10	U	10	0.72	
75-35-4	1,1-Dichloroethene	**57**		10	1.2	
156-59-2	cis-1,2-Dichloroethene	10	U	10	0.60	
156-60-5	trans-1,2-Dichloroethene	10	U	10	0.66	
78-87-5	1,2-Dichloropropane	10	U	10	0.40	
10061-01-5	cis-1,3-Dichloropropene	10	U	10	0.48	
10061-02-6	trans-1,3-Dichloropropene	10	U	10	0.40	
100-41-4	Ethylbenzene	10	U	10	0.40	
591-78-6	2-Hexanone	20	U	20	3.4	
75-09-2	Methylene Chloride	10	U	10	1.2	
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	1.4	
100-42-5	Styrene	10	U	10	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	0.50	
127-18-4	Tetrachloroethene	10	U	10	0.60	
108-88-3	Toluene	10	U	10	0.40	
71-55-6	1,1,1-Trichloroethane	10	U	10	0.72	
79-00-5	1,1,2-Trichloroethane	10	U	10	0.68	
79-01-6	Trichloroethene	**0.56**	J	10	0.44	
75-01-4	Vinyl Chloride	**2.5**	J	10	0.64	
95-47-6	o-Xylene	10	U	10	0.40	
179601-23-1	m,p-Xylenes	10	U	10	0.66	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1650
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 20:23
Sample Name:	BAP-02_040215	**Units:**	Percent
Lab Code:	R1502352-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7429.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	4/7/15 20:23	
Toluene-d8	102	87-121	4/7/15 20:23	
Dibromofluoromethane	99	89-119	4/7/15 20:23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1650
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 16:00
Sample Name:	BAP-02_040215	**Units:**	µg/L
Lab Code:	R1502352-011	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439422
Data File Name:	1016.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	**4.0**		1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	**71**		1.0	
74-98-6	Propane	**1.4**		1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	4/ 2/15 1650
Sample Matrix:	Water	**Date Received:**	4/ 2/15
		Date Analyzed:	4/7/15 15:13
Sample Name:	BAP-02_040215	**Units:**	mg/L
Lab Code:	R1502352-011	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	439592
Data File Name:	I:\ACQUDATA\HPLC05\DATA\040715\X0013275.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1502352-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	4/7/15 18:37	
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	1.0	U	mg/L	1.0	1	NA	4/9/15 12:45	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	4/9/15 09:53	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/3/15 09:29	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	4/2/15 19:38	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	4/3/15 09:29	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/ 6/15	4/6/15 09:19	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1502352-MB2	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	4/7/15 18:37	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	4/9/15 09:53	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1502352-MB	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	100	U	µg/L	100	1	4/ 6/15	4/7/15 19:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/7/15 12:57
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1503320-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7414.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	10	U	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/7/15 12:57
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	RQ1503320-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439396
Data File Name:	I:\ACQUDATA\msvoa10\data\040715\A7414.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	4/7/15 12:57	
Toluene-d8	100	87-121	4/7/15 12:57	
Dibromofluoromethane	97	89-119	4/7/15 12:57	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/15 11:18
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1503374-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439524
Data File Name:	I:\ACQUDATA\msvoa10\data\040815\A7439.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	MDL	Note
67-64-1	Acetone	10	U	10	1.3	
71-43-2	Benzene	5.0	U	5.0	0.20	
75-27-4	Bromodichloromethane	5.0	U	5.0	0.32	
75-25-2	Bromoform	5.0	U	5.0	0.42	
74-83-9	Bromomethane	5.0	U	5.0	0.29	
78-93-3	2-Butanone (MEK)	10	U	10	0.81	
75-15-0	Carbon Disulfide	10	U	10	0.22	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	0.45	
108-90-7	Chlorobenzene	5.0	U	5.0	0.29	
75-00-3	Chloroethane	5.0	U	5.0	0.24	
67-66-3	Chloroform	5.0	U	5.0	0.25	
74-87-3	Chloromethane	5.0	U	5.0	0.21	
124-48-1	Dibromochloromethane	5.0	U	5.0	0.31	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.20	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.36	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.57	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.30	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.33	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.20	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.24	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.20	
100-41-4	Ethylbenzene	5.0	U	5.0	0.20	
591-78-6	2-Hexanone	10	U	10	1.7	
75-09-2	Methylene Chloride	5.0	U	5.0	0.60	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.67	
100-42-5	Styrene	5.0	U	5.0	0.20	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.25	
127-18-4	Tetrachloroethene	5.0	U	5.0	0.30	
108-88-3	Toluene	5.0	U	5.0	0.20	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.36	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	0.34	
79-01-6	Trichloroethene	5.0	U	5.0	0.22	
75-01-4	Vinyl Chloride	5.0	U	5.0	0.32	
95-47-6	o-Xylene	5.0	U	5.0	0.20	
179601-23-1	m,p-Xylenes	5.0	U	5.0	0.33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/15 11:18
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	RQ1503374-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	439524
Data File Name:	I:\ACQUDATA\msvoa10\data\040815\A7439.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85-122	4/8/15 11:18	
Toluene-d8	101	87-121	4/8/15 11:18	
Dibromofluoromethane	97	89-119	4/8/15 11:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/7/15 11:20
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1503332-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439422
Data File Name:	1003.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/8/15 09:49
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1503361-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analytical Method:	RSK 175	**Analysis Lot:**	439594
Data File Name:	1001.run	**Instrument Name:**	R-GC-02
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	1.0	U	1.0	
74-85-1	Ethylene	1.0	U	1.0	
74-82-8	Methane	1.0	U	1.0	
74-98-6	Propane	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Haley & Aldrich, Incorporated	**Service Request:**	R1502352
Project:	Coopervision 4/1-2/15/70665-020	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	4/7/15 11:27
Sample Name:	Method Blank	**Units:**	mg/L
Lab Code:	RQ1503360-01	**Basis:**	NA

Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method:	Organic Acids	**Analysis Lot:**	439592
Data File Name:	I:\ACQUDATA\HPLC05\DATA\040715\X0013267.D\	**Instrument Name:**	R-HPLC-05
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
127-17-3	Pyruvic Acid	0.50	U	0.50	
64-19-7	Acetic Acid	1.0	U	1.0	
107-92-6	Butanoic Acid (Butyric Acid)	2.0	U	2.0	
50-21-5	Lactic Acid	1.0	U	1.0	
79-09-4	Propionic Acid	1.0	U	1.0	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 2/15 - 4/ 9/15

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1502352-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	18.2	20.0	91	81 - 112
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	9.35	10.0	94	76 - 123
Chloride	9056A	2.04	2.00	102	80 - 120
Nitrate as Nitrogen	9056A	0.977	1.00	98	80 - 120
Nitrite as Nitrogen	353.2	0.241	0.250	96	90 - 110
Sulfate	9056A	1.88	2.00	94	80 - 120
Sulfide, Acid-Soluble	9034	8.58	11.3	76	27 - 111

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15 - 4/ 9/15

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1502352-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	974	1000	97	81 - 112
Sulfate	9056A	1.99	2.00	100	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1502352-LCS Result	Spike Amount	% Rec	% Rec Limits
Iron, Total	6010C	1030	1000	103	80 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 439396

Lab Control Sample
RQ1503320-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	24.3	20.0	122	51 - 146
Benzene	16.7	20.0	83	76 - 118
Bromodichloromethane	16.7	20.0	83	79 - 122
Bromoform	17.1	20.0	86	65 - 138
Bromomethane	13.3	20.0	66	41 - 159
2-Butanone (MEK)	23.4	20.0	117	66 - 129
Carbon Disulfide	18.0	20.0	90	63 - 141
Carbon Tetrachloride	15.3	20.0	77	66 - 128
Chlorobenzene	17.9	20.0	89	80 - 121
Chloroethane	17.2	20.0	86	71 - 128
Chloroform	17.6	20.0	88	76 - 120
Chloromethane	21.8	20.0	109	64 - 140
Dibromochloromethane	16.9	20.0	85	79 - 125
1,1-Dichloroethane	18.2	20.0	91	76 - 128
1,2-Dichloroethane	18.9	20.0	94	72 - 130
1,1-Dichloroethene	15.8	20.0	79	74 - 135
cis-1,2-Dichloroethene	16.9	20.0	85	80 - 121
trans-1,2-Dichloroethene	16.8	20.0	84	78 - 124
1,2-Dichloropropane	18.8	20.0	94	80 - 119
cis-1,3-Dichloropropene	17.1	20.0	86	77 - 125
trans-1,3-Dichloropropene	16.9	20.0	85	72 - 123
Ethylbenzene	16.0	20.0	80	76 - 120
2-Hexanone	22.3	20.0	111	61 - 131
Methylene Chloride	17.5	20.0	88	73 - 122
4-Methyl-2-pentanone (MIBK)	20.7	20.0	104	68 - 129
Styrene	17.1	20.0	86	81 - 122
1,1,2,2-Tetrachloroethane	18.7	20.0	93	74 - 127
Tetrachloroethene	17.2	20.0	86	69 - 124
Toluene	16.9	20.0	85	77 - 120
1,1,1-Trichloroethane	16.6	20.0	83	71 - 123
1,1,2-Trichloroethane	16.2	20.0	81	79 - 117
Trichloroethene	16.7	20.0	83	76 - 123
Vinyl Chloride	18.2	20.0	91	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 439396

Lab Control Sample
RQ1503320-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	17.6	20.0	88	77 - 131
m,p-Xylenes	36.1	40.0	90	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 8/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 439524

Analyte Name	Lab Control Sample RQ1503374-02 Result	Spike Amount	% Rec	% Rec Limits
Acetone	23.2	20.0	116	51 - 146
Benzene	16.6	20.0	83	76 - 118
Bromodichloromethane	17.5	20.0	87	79 - 122
Bromoform	18.9	20.0	95	65 - 138
Bromomethane	16.7	20.0	84	41 - 159
2-Butanone (MEK)	24.3	20.0	122	66 - 129
Carbon Disulfide	17.3	20.0	86	63 - 141
Carbon Tetrachloride	14.2	20.0	71	66 - 128
Chlorobenzene	17.8	20.0	89	80 - 121
Chloroethane	16.6	20.0	83	71 - 128
Chloroform	17.8	20.0	89	76 - 120
Chloromethane	20.9	20.0	105	64 - 140
Dibromochloromethane	18.2	20.0	91	79 - 125
1,1-Dichloroethane	18.1	20.0	90	76 - 128
1,2-Dichloroethane	19.6	20.0	98	72 - 130
1,1-Dichloroethene	15.0	20.0	75	74 - 135
cis-1,2-Dichloroethene	17.3	20.0	87	80 - 121
trans-1,2-Dichloroethene	16.4	20.0	82	78 - 124
1,2-Dichloropropane	19.2	20.0	96	80 - 119
cis-1,3-Dichloropropene	17.5	20.0	87	77 - 125
trans-1,3-Dichloropropene	17.7	20.0	88	72 - 123
Ethylbenzene	15.2	20.0	76	76 - 120
2-Hexanone	23.2	20.0	116	61 - 131
Methylene Chloride	18.4	20.0	92	73 - 122
4-Methyl-2-pentanone (MIBK)	22.0	20.0	110	68 - 129
Styrene	17.5	20.0	87	81 - 122
1,1,2,2-Tetrachloroethane	19.9	20.0	99	74 - 127
Tetrachloroethene	15.8	20.0	79	69 - 124
Toluene	16.7	20.0	83	77 - 120
1,1,1-Trichloroethane	15.9	20.0	79	71 - 123
1,1,2-Trichloroethane	17.5	20.0	87	79 - 117
Trichloroethene	16.1	20.0	80	76 - 123
Vinyl Chloride	17.2	20.0	86	69 - 136

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 8/15

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 439524

Lab Control Sample
RQ1503374-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
o-Xylene	17.4	20.0	87	77 - 131
m,p-Xylenes	34.7	40.0	87	78 - 123

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 439422

Lab Control Sample
RQ1503332-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Ethane	24.3	25.9	94	75 - 118
Ethylene	23.4	24.2	96	73 - 129
Methane	24.6	26.1	94	65 - 126
Propane	23.6	25.4	93	72 - 118

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 8/15

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L
Basis: NA

Analysis Lot: 439594

Lab Control Sample
RQ1503361-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Ethane	24.5	25.9	94	75 - 118
Ethylene	24.1	24.2	99	73 - 129
Methane	24.7	26.1	95	65 - 126
Propane	23.4	25.4	92	72 - 118

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 4/1-2/15/70665-020
Sample Matrix: Water

Service Request: R1502352
Date Analyzed: 4/ 7/15

Lab Control Sample Summary
Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC) 28 Day Hold Time

Analytical Method: Organic Acids

Units: mg/L
Basis: NA

Analysis Lot: 439592

	Lab Control Sample RQ1503360-02			Duplicate Lab Control Sample RQ1503360-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Pyruvic Acid	1.79	2.01	89	1.78	2.01	88	70 - 130	<1	30
Acetic Acid	20.2	19.8	102	22.7	19.8	114	70 - 130	12	30
Butanoic Acid (Butyric Acid)	23.0	19.9	115	22.2	19.9	111	70 - 130	4	30
Lactic Acid	20.5	20.0	103	20.2	20.0	101	70 - 130	2	30
Propionic Acid	19.5	20.0	98	19.1	20.0	96	70 - 130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

24742

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: CooperVision	Project Number: 70665-020
Project Manager: Mark Ramsdell	Report CC:
Company/Address: Haley + Aldrich 200 Town Ctr Dr Rochester, NY 14623	
Phone #: 585-321-4241	Email: mramsdell@haleyaldrich.com
Sampler's Signature: DB Keller	Sampler's Printed Name: D Keller

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | | | | | | | 0 | 1 | 5 | 0 | 8 | 2 |

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other ____ (HS PUSH)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS		GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS: TOTAL (List in comments below)	METALS: DISSOLVED (List in comments below)	Alkalinity	RSK-175	Sulfide	NO2/NO3/Cl/SO4	Organic Acids	Fe	REMARKS/ ALTERNATE DESCRIPTION
MW-3_040115	001	04/01/15	14:50	GW	8	3									3	1	1				
OW-306_040115	002	04/01/15	11:30	GW	4	3								1							
MW-203_040115	003	04/01/15	12:45	GW	4	3								1							
MW-202_040115	004	04/01/15	14:20	GW	11	3								1	3	1	1	1	1		
MW-204_040115	005	04/01/15	16:25	GW	4	3								1							
MW-501_040215	006	04/02/15	09:10	GW	9	3								1	3	1	1				
MW-502_040215	007	04/02/15	10:45	GW	10	3								1	3	1	1		1		
OWD-302S_040215	008	04/02/15	12:35	GW	9	3								1	3	1	1				
MW-205_040215	009	04/02/15	13:55	GW	10	3								1	3	1	1	1			
BAP-01_040215	010	04/02/15	15:55	GW	10	3								1	3	1	1	1			
BAP-02_040215	011	04/02/15	16:50	GW	10	3								1	3	1	1	1			

SPECIAL INSTRUCTIONS/COMMENTS
Metals
No trip blank

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: NY

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day X 5 day
REQUESTED REPORT DATE: ____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report
Edata ✓ Yes

INVOICE INFORMATION
PO #:
BILL TO:

R1502352 5
Haley & Aldrich, Inc.
Coopervision

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	
Signature: DB Keller	Signature: Daniel Wilc	Signature:	Signature:	Signature:	Signature:
Printed Name: DB Keller	Printed Name: ALS	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: H+A	Firm: 4/2/15/1900	Firm:	Firm:	Firm:	Firm:
Date/Time: 04/02/15 19:00	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - Lab Copy; Yellow - Return to Originator

Cooler Receipt and Preservation Check For

R1502352 5
Haley & Aldrich, Inc.
Coopervision

Project/Client H+A Folder Number 85-2352

Cooler received on 4/2/15 by: DW

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk, or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as:	Bulk Encore 5035set (NA)

8. Temperature Readings Date: 4/2/15 Time: 1913 ID: IR#3 ~~IR#5~~ From: Temp Blank Sample Bottle

Observed Temp (°C)	5.1°						
Correction Factor (°C)	+0.0°						
Corrected Temp (°C)	5.1°						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by DW on 4/2/15 at 1913
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: KB 4/3/15

Cooler Breakdown: Date: 4/2/15 Time: 2206 by: DW

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		1305261410	2/16				
≤2	H_2SO_4	✓		~~1405~~ WC1261590	11/15				
<4	$NaHSO_4$			DW 4/2/15					
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-	WC1402760F	10/15				
	HCl	**	**	4114050	5/16				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 4258-004, R0114-1BMC, 012615-2AAO, 122214-2AAW
Other Comments:

PC Secondary Review: KB 4/3/15

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter