

**2011 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
29 February 2012**

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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
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 29 November 2010 through 31 January 2011, and is intended to satisfy the annual PRR reporting requirements described in the NYSDEC-approved 29 July 2010 Site Management Plan (SMP). This is the first formal PRR report required as part of the Site Management Plan.

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 16 December 2011. An additional copy of the Engineering/Institutional Control Certification Form is also being submitted in hard copy format as requested.

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

Sincerely yours,

HALEY & ALDRICH OF NEW YORK



Claire L. Mondello
Project Manager



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



Vincent B. Dick
Vice President

Enclosures

c: CooperVision; Chuck Rogers
CooperVision; Bernard Hallatt
McKenna Long and Aldridge LLP; 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 includes an original building with additions having a total area of approximately 50,000 sq. ft. Soil and groundwater on some portions of the Site have been found to be impacted by volatile organic compounds (VOCs), primarily 1,1,1-trichloroethane (1,1,1-TCA). The Site has been used for manufacturing since the mid-1970s.

The Site was 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 vapor intrusion (constructed and started 2006).
- Installation of soil-bentonite-cement trench collars along utility lines to mitigate the potential for impacted soil vapors from migrating offsite via a preferential pathway (constructed 2008).

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 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 29 July 2010 Site Management Plan (SMP) and 16 June 2010 Final Engineering Report, 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) for the purpose of protecting public health and the environment. Engineering controls include maintenance of the existing site cover, the sub-slab depressurization system, 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 use restrictions, land use restrictions, and adherence to the SMP. The institutional and engineering controls have remained in-place and functioned as designed during the reporting 2011 period.

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.

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 and/or industrial).

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

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	i
LIST OF TABLES	iii
LIST OF FIGURES	iii
1. SITE OVERVIEW	1
2. IC/EC COMPLIANCE REPORT	2
2.1 IC Requirements and Compliance	2
2.2 EC Requirements and Compliance	2
2.2.1 Existing Cover	2
2.2.2 Sub-Slab Depressurization System	2
2.2.3 Soil-Bentonite-Cement Utility Trench Collars	3
2.3 IC/EC Certification	3
3. OPERATIONS, MAINTENANCE, & MONITORING PLAN COMPLIANCE REPORT	4
3.1 Groundwater Monitoring	4
3.1.1 Source Area	4
3.1.2 Mid-gradient Area	5
3.1.3 Down-gradient Area	5
3.1.4 Mann-Kendall Trend Analysis	6
3.2 Sub-Slab Depressurization System Operations, Maintenance, and Monitoring	6
4. CONCLUSIONS & RECOMMENDATIONS	7

TABLES

FIGURES

APPENDIX A – Institutional and Engineering Controls Certification Form

APPENDIX B – Mann-Kendall Analysis Results

APPENDIX C – SSD System Maintenance and Monitoring Documentation

LIST OF TABLES

Table No.	Title
I	Summary of Volatile Gases and Dissolved Gases – Source Area Wells
II	Summary of Volatile Gases and Dissolved Gases – Mid-Gradient Wells
III	Summary of Volatile Gases and Dissolved Gases – Down-Gradient Wells
IV	Additional Analytical Parameter Summary
V	Annual SSD System Monitoring Results

LIST OF FIGURES

Figure No.	Title
1	Project Locus
2	Site Plan
3	Groundwater Contour Plan – April 2011
4	Groundwater Contour Plan – October 2011
5	Sub-Slab Depressurization Vacuum Locations

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 includes an original building with additions having a total area of approximately 50,000 sq. ft. Soil and groundwater on some portions of the Site were impacted by volatile organic compounds (VOCs), primarily 1,1,1-trichloroethane (1,1,1-TCA). The Site has been used for manufacturing (fabrication of contact lenses) since the mid-1970s.

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 injection with hydrogen release compound (HRC) to stimulate enhanced bio-remediation of the VOCs in the soil and groundwater. The HRC injection was conducted in 2001. In addition, a sub-slab depressurization system 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 of concern (1,1,1-TCA, 1,1-DCE, 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 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 be potential preferential pathways for 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 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 29 July 2010 Site Management Plan and 16 June 2010 Final Engineering Report, the NYSDEC granted CooperVision a release from liability for the Site on 29 November 2010.

2. IC/EC COMPLIANCE REPORT

2.1 IC Requirements and Compliance

A series of site restrictions in the form of Deed Restrictions is 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 EC 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

Exposure to remaining contamination in 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 the SMP. Excavations that breach the existing cover require additional monitoring and soil management in accordance with the Excavation Management Plan included in the SMP. In addition, 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 excavations as required, and during periodic Site visits as part of monitoring and certification.

Excavation activities and/or importation of clean fill materials that would result soil management and existing cover restoration in accordance with the SMP did not occur during the reporting period. The existing cover remained in-place and was effectively maintained during the reporting period.

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 fans were installed during 2006 to depressurize the sub-slab in the vicinity of the 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, eighteen permanent test points were installed for testing of sub-slab vacuum

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.

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 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.

2.3 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 for 2011 consisted of two rounds of groundwater sampling in accordance with the sampling and analysis plan in the Site Management Plan and two rounds of vacuum testing of the sub-slab depressurization system. Monitoring of the groundwater and operations, maintenance, and monitoring of the sub-slab depressurization system are further described below.

3.1 Groundwater Monitoring

Groundwater sampling was conducted between 11 and 12 April 2011, and 13 and 14 October 2011. Updated summary tables (Tables I through IV), associated time series charts and groundwater contours (Figure 3 and 4) are attached. Laboratory data was submitted as an EQuIS deliverable to the NYSDEC on 9 August 2011 and 16 February 2012.

Overall, the data appear consistent with previous sampling events. The following paragraphs describe specific results:

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:

- 1,1,1-TCA was detected in MW-205 during both sampling events. The sampling results indicate an increase in 1,1,1-TCA in this well during the spring sampling event but then a decrease back to historical levels during the fall sampling event. It is anticipated that it may increase at times as a result of desorption into the aquifer, and an increase is not necessarily indicative of a rebound of contamination in the source area. 1,1,1-TCA was not detected in OWS-302S.
- 1,1-DCA continues to be detected in well MW-205 at levels consistent with previous sampling events, and has shown a slight decrease since 2010. These conditions indicate that this compound is not “stacking” within the aquifer and appears to be degrading completely. 1,1-DCA was detected in April 2011 in well OWS-302S at a level higher than previously seen, however the level of 1,1-DCA decreased to non-detect in October 2011. The 1,1-DCA results are consistent with historical seasonal trends.
- Chloroethane continues to be detected in OWS-302S. In addition ethane and chloride ion, completion products of the reductive dechlorination process (see below) were detected during both sampling events. As with previous sampling events, chloroethane, the daughter product of 1,1-DCA has not been detected in MW-205. Both chloride ion and ethane were detected in MW-205, which are the completion products of the reductive dechlorination process for 1,1,1-TCA as shown below:

Dechlorination of 1,1,1-Trichloroethane:



- Metabolic acids continue to be present in significant amounts in MW-205 indicating that biologic stimulation caused by the Hydrogen Release Compound injection continues to effectively liberate hydrogen into the groundwater for enhancement of the biodegradation processes. Metabolic acids were not analyzed for the other wells.
- Also notable in the source area is continued high aquifer alkalinity, as well as the low redox values. The low redox values indicate that aquifer conditions continue to be anaerobic in the source area, which is conducive to reductive dechlorination.

3.1.2 Mid-gradient Area

Refer to Table II and Table IV for a summary of mid-gradient area well data. Overall, mid-gradient conditions are steady and are similar to recent groundwater monitoring events.

- 1,1,1-TCA was not detected in the mid-gradient wells sampled.
- In the mid-gradient area, 1,1-DCA and vinyl chloride concentrations continue to decline or remain steady in the wells with detectable concentrations. 1,1-DCA and vinyl chloride continue to be non-detect in MW-502.
- Chloroethane, the breakdown product of 1,1-DCA, continues to be present in the sampled wells, most notably in MW-502, where it has been increasing since April 2009. Ethane was not detected in mid-gradient wells during this sampling event, though chloride ion was detected in the wells in which it was sampled. Ethane is highly volatile, and concentrations of ethane can be difficult to quantify. The chloroethane and chloride ion detections are indicators that reductive dechlorination is continuing to move towards completion.

3.1.3 Down-gradient Area

Refer to Table III for a summary of downgradient well data. Overall, down-gradient conditions are steady and are similar to recent groundwater monitoring events.

- 1,1,1-TCA concentrations were not detected above laboratory reporting limits in the downgradient wells sampled.
- 1,1-DCA was detected in wells MW-202 and MW-204 during both 2011 sampling events. 1,1-DCE was detected in MW-202 during both sampling events and in MW-204 during the October 2011 sampling event. The detections were slightly higher than the groundwater standard, with slightly more elevated detections at MW-202, where there appeared to be a slight increase from the previous sampling events. Specifically, 1,1-DCA was detected at 0.03 ppm and 1,1-DCE was detected at 0.02 ppm during the October sampling event in MW-202 (refer to Table III).
- Chloroethane was not detected in the down-gradient wells.
- VOCs were not detected above laboratory reporting limits in MW-306 nor in MW-203.

3.1.4 Mann-Kendall Trend Analysis

The April and October 2011 sampling events in conjunction with the previous 18 sampling events (broken out by season) were analyzed using the Mann-Kendall statistical analysis for trend. Refer to Appendix B for the analysis results sheets.

In summary, most wells showed either no trend or a decreasing trend (MW-3 & MW-501). An increasing trend was noted in MW-202 for 1,1-DCA and 1,1-DCE for the Spring event only, but reverted to “No Trend” in the Fall sample event. For MW-204, no trend was noted for the Spring event, but a mix of decreasing and increasing trends were noted for 1,1,1-TCA and 1,1-DCA in the for the Fall event, respectively.

Note that the Mann-Kendall analysis does not take into account magnitude of an increase or decrease as part of the statistical analysis; therefore it should be used subjectively in concert with other data with respect to the downgradient wells, where concentrations in the groundwater typically fluctuate within 0.01 mg/L. It is noted that the analytical results at both MW-202 and MW-204 are consistent with historical trends and continue to be close to the groundwater standard/detection limit. Therefore, an increasing trend per the Mann-Kendall analysis in those downgradient wells does not appear indicative of plume expansion.

In summary, results of the 2011 sampling indicate dechlorination remains ongoing, and as supported by past results, is not indicative of plume expansion.

3.2 Sub-Slab Depressurization System Operations, Maintenance, and Monitoring

The sub-slab depressurization system continuously operates at the Site building and is monitored weekly by CooperVision staff. They record the system fans’ vacuum readings and record operations data on a Maintenance Form. This data is either stored onsite or sent off-site by CooperVision for permanent storing at a document storage facility. Maintenance forms from 2011 are included in Appendix C. Fan #1 was replaced in August 2011 by Mitigation Tech. CooperVision personnel noticed the fan generating unusual noise and replaced it as a precaution. Therefore, other than the short downtime during fan replacement, system operation was maintained as intended.

The system was evaluated on 11 April 2011 and 14 October 2011 by Haley & Aldrich. The evaluation included vacuum testing of existing test points located within the facility. Overall, the system operation appeared to be acceptable. 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. This 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. Excavations and/or importation of clean fill material requiring implementation of the Excavation Management Plan in the SMP did not occur 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 existing groundwater plume is stable.
- No modifications to the Site remedy are recommended at this time.

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

All values expressed in mg/L (ppm)

Sample ID: Well Screen Interval (ft):	OWS-302S 13.0 - 14.0																											
Date Sampled:	6/1/99	6/1/99 DEC SPLIT	4/28/00	7/19/01	10/18/01	1/30/02	4/9/02	7/31/02	10/16/02	1/28/03	4/7/03	10/30/03	4/8/04	10/27/04	4/8/05	10/12/05	5/16/06	10/17/06	4/24/07	11/15/07	4/30/08	10/16/08	4/23/09	10/20/09	4/21/10	10/18/10	4/13/11	10/14/11
Compound:	2000x Dil. 1000x Dil. 250x Dil. 250x Dil. 100x Dil. 200x Dil. 200x Dil. 200x Dil. 500x Dil. 500x Dil. 500x Dil. 500x Dil. 500x Dil. 500x Dil.																											
VOLATILE ORGANICS																												
Acetone	ND	1.8 B	ND	ND	ND	ND	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	49	61 D	390	180 D	200 D	370 D	390	270	360	330	300	220	250	230	240	140	37 D	27	1	0.52	1.4	0.81	2.9	ND	56	10	220 D	ND
1,1-Dichloroethene	ND	0.022 J	ND	ND	ND	ND	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	0.94	ND	4	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	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	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	0.056 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	19 D	38	18	25 D	38	34 D	62	73	30	74	7.5	72
1,2-Dichloroethane	ND	0.02 J	ND	ND	ND	ND	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	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	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	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	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
SEMI-VOLATILE ORGANICS																												
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	20x Dil. 2.5x Dil. 10x Dil. 10x Dil. 10x Dil. 20x Dil. 125x Dil.																											
Methane	NA	NA	NA	DRY	ND	0.002	NA	0.0063	NA	0.0016	0.031	0.0086	0.003	0.01	0.0068	0.016	0.0042	0.055	1.7	0.17	0.0074	DRY	0.83	3.1	0.93	1.3	0.054	11
Ethane	NA	NA	NA	DRY	0.0079	ND	NA	0.03	NA	0.0034	0.05	0.001	0.0084	0.029	0.0036	0.013	0.0013	0.014	ND	0.0085	0.0018	DRY	ND	ND	ND	ND	0.018	0.0057
Ethene	NA	NA	NA	DRY	0.0075	ND	NA	0.022	NA	0.0025	0.049	0.0071	0.0048	0.37	0.0022	0.0089	ND	0.0069	ND	0.0033	0.0023	DRY	ND	ND	ND	ND	0.026	0.0052

Notes & Abbreviations:
ND: Not Detected
NA: Not Analyzed
DRY: Insufficient 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 stoichiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale varies between graphs in order to depict ranges of values for each well.

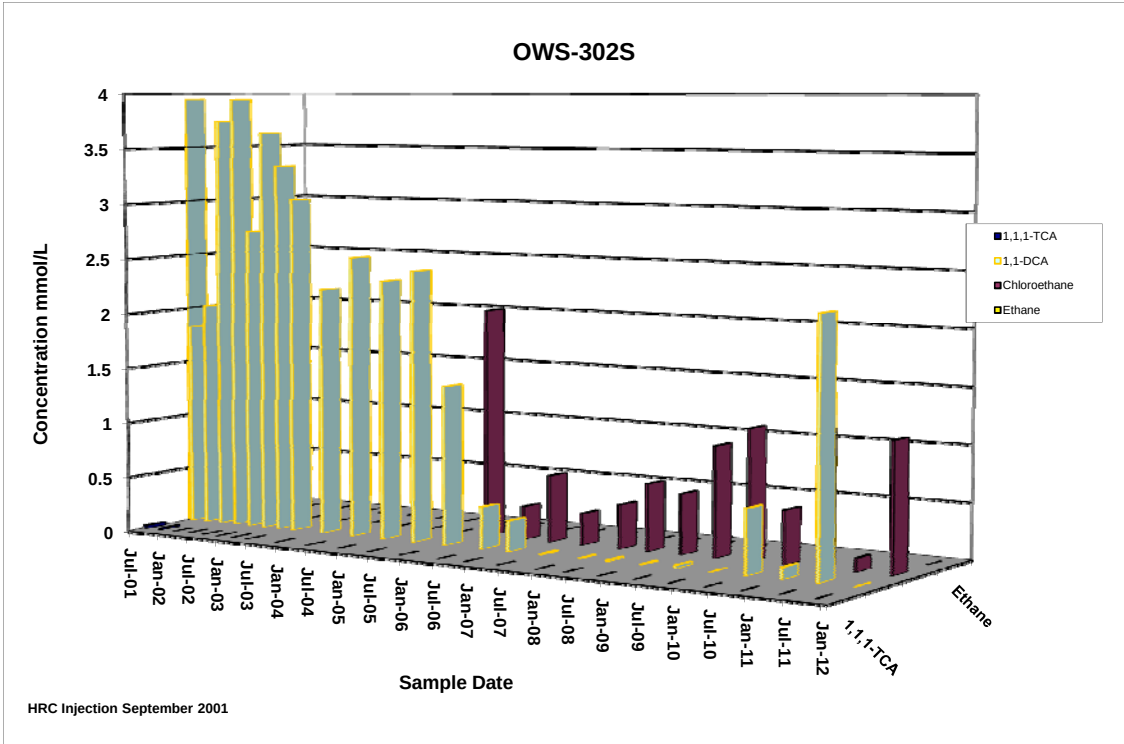


TABLE I
COOPERVISION, INC.
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES
SOURCE AREA WELLS

All values expressed in mg/L (ppm)

Sample ID: Well Screen Interval (ft):	MW-205 21.2 - 28.0																												
Date Sampled:	7/10/97	6/2/99	4/28/00	7/19/01	10/18/01	1/29/02	4/9/02	7/31/02	10/15/02	1/29/03	4/7/03	10/29/03	4/6/04	4/6/04 DEC split	10/28/04	4/8/05	10/11/05	5/16/06	10/18/06	4/25/07	11/15/07	4/30/08	10/16/08	4/24/09	10/21/09	4/21/10	10/18/10	4/13/11	10/14/11
Compound:																													
VOLATILE ORGANICS	2000x Dil2000x Dil2000x Dil 2000x Dil2000x Dil2000x Dil. 2000x Dil. 2000x. Dil 2000x Dil. 1000x Dil. 2000x Dil 2000x Dil 2500x Dil																												
Acetone	ND	ND	NA	ND	ND	ND	ND	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	153	190 D	NA	180 D	160 D	240	290	260	260	230	290	210	200 D	180	230	240	230	220	270	230	390	200	200	200	200	230 D	220	300	230
1,1-Dichloroethene	ND	ND	NA	2.6	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	421	480 D	NA	260 D	180 D	300	300	280	260	200	320	250	140 D	150	100	76	80	57	62	41	84	42	57	48	99	140	160	130	110
Tetrachloroethene	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	NA	ND	ND	ND	ND	ND	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	NA	ND	ND	ND	ND	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	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	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	0.009	0.008	NA	ND	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA
SEMI-VOLATILE ORGANICS																													
Bis(2-ethylhexyl) phthalate	NA	0.016	NA	NA	NA	NA	NA	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	0.005	0.0053	0.0052	NA	0.0062	0.0057	0.0014	0.022	0.0057	0.0013	NA	0.0064	0.0062	0.0098	0.011	0.013	0.019	0.033	0.014	0.022	0.014	0.010	0.011	0.006	0.130	0.024
Ethane	NA	NA	NA	0.01	0.0084	0.0069	NA	0.0098	0.0086	0.0012	0.013	0.0038	0.006	NA	0.0059	0.007	0.012	0.016	0.017	0.019	0.026	0.019	0.023	0.020	0.012	0.013	0.006	0.011	0.024
Ethene	NA	NA	NA	0.0029	0.0024	0.002	NA	0.0026	0.0023	0.004	0.0048	0.0021	0.0028	NA	0.0048	0.0051	0.012	0.012	0.014	0.013	0.016	0.012	0.02	0.015	0.011	0.012	0.0062	0.0077	0.017

Notes & Abbreviations:

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DRY: Insufficient 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 stoichiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale varies between graphs in order to depict ranges of values for each well.

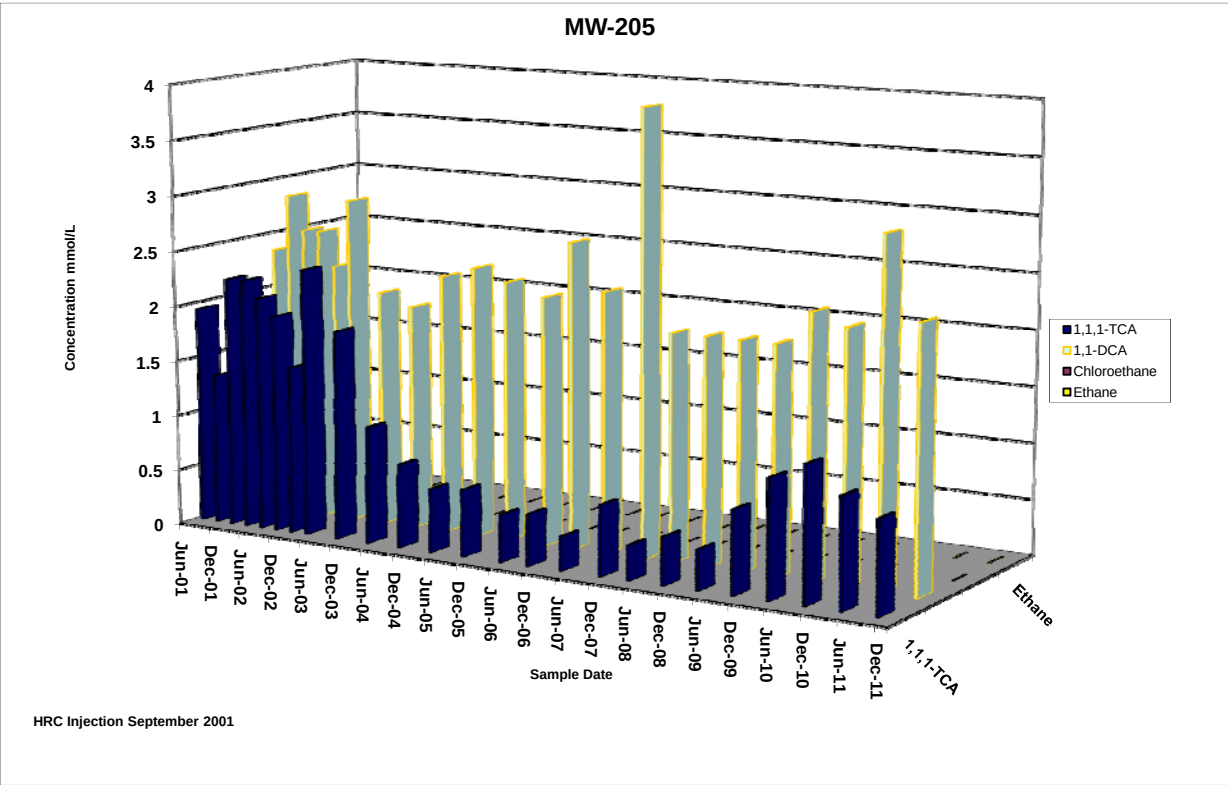


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-3 3.0 - 10.0																											
Date Sampled:	6/18/1997	6/2/1999	10/26/1999	10/18/2001	2/15/2002	4/9/2002	7/30/2002	10/15/2002	1/28/2003	4/7/2003	10/28/2003	4/6/2004	4/6/2004 DEC split	10/27/2004	4/6/2005	10/10/2005	5/17/2006	10/18/2006	4/25/2007	11/14/2007	4/28/2008	10/13/2008	4/24/2009	10/20/2009	4/21/2010	10/19/2010	4/12/2011	10/14/2011
Compound:																												
VOLATILE ORGANICS	20x Dil. 20x Dil. 20x Dil. 20x Dil. 20x Dil. 20x Dil. 20x Dil. 10x Dil. 10x Dil. 10x Dil. 10x Dil. 10x Dil.																											
Acetone	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	2	2.9	3.2	0.79 D	2.8	2.4	3.8	3.9	5.8	8.4	0.56	1 D	0.74 D	3.1	0.68	1	0.34	0.51	0.93	0.22	0.36	0.36	0.38	0.21	0.1	0.16	0.098	0.052
1,1-Dichloroethene	0.63	1.8	2.2	0.53 D	2	2	1.8	1.4	1.5	1.2	0.57	0.33	0.23 D	0.36	0.099	0.1	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	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	3.3	10	8	2.4 D	9.1	8.5	6.2	3.4	1.7	ND	0.23	0.9 D	0.66 D	0.42	0.23	0.17	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	0.026	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	0.29	1.3	3	2.8 D	3 D	2.3	1.0	2.8 E	2.3	3.7	3.4	2.5	2.4	2.8	3.1	1.8	1.0	1.7	1.5	1.1
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.007	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	0.001	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	0.013	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	0.21	0.36	0.50	0.34	0.082	0.56	0.39	0.71	0.67	0.51	0.5	0.63	0.69	0.38	0.25	0.38	0.32	0.19
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058	0.660	NA	ND	NA	NA	NA	NA	0.088 D	NA	0.075	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	10x Dil. 10x Dil. 10x Dil. 20x Dil. 20x Dil. 20x Dil. 20x Dil. 10x Dil. 10x Dil. 25x Dil. 25X Dil.																											
Methane	NA	NA	NA	DRY	0.02	NA	0.039	0.036	0.12	0.18	0.17	0.0095	NA	0.38	0.019	0.3	0.37	0.9	0.96	0.73	0.58	1.2	1	0.83	0.93	1.6 D	1.4	2.4
Ethane	NA	NA	NA	DRY	0.0039	NA	0.0029	0.0016	0.0029	0.003	ND	ND	NA	ND	0.0019	ND	ND	ND	ND	ND	ND	0.003	ND	ND	ND	ND	ND	ND
Ethene	NA	NA	NA	DRY	ND	NA	ND	ND	ND	ND	ND	ND	NA	ND	ND	0.0066	ND	0.019	0.016	0.015	0.011	0.027	ND	0.010	0.020	0.031	0.032	0.053

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

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

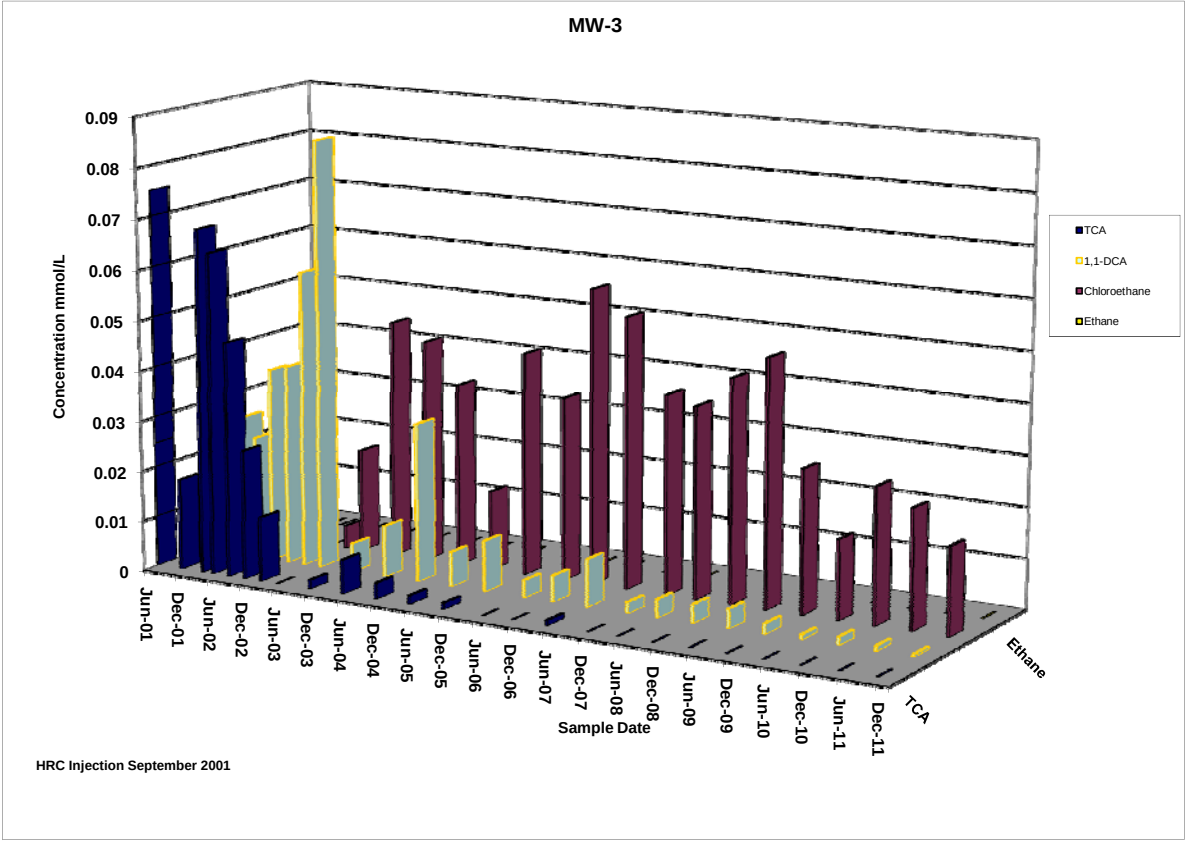


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-501 20.0 - 25.0																										
Date Sampled:	7/19/2001	7/23/2001	10/17/2001	10/17/2001 DEC SPLIT	2/15/2002	4/9/2002	7/30/2002	10/15/2002	1/29/2003	4/7/2003	10/29/2003	4/7/2004	10/27/2004	4/8/2005	10/11/2005	5/16/2006	10/18/2006	4/25/2007	11/14/2007	4/28/2008	10/15/2008	4/24/2009	10/20/2009	4/21/2010	10/18/2010	4/13/2011	10/14/2011
Compound:																											
VOLATILE ORGANICS	5x Dil. 10x Dil. 2x Dil. 2x Dil. 5x Dil. 5x Dil. 2.5x Dil. 5x Dil. 2.5x Dil. 2.5x Dil. 2.5x Dil. 2.5x Dil. 5x Dil. 5x Dil.																										
Acetone	ND	ND	ND	ND	ND	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	ND	5.3 D	0.055	0.4475	0.96	9.9 D	1.8	2.2 D	4.3	7	0.4	0.56	0.6	0.79	0.49	0.48	0.29	0.31	0.24	0.15	0.09	0.17	0.11	0.088	0.089	0.15	0.1
1,1-Dichloroethene	ND	0.0098	ND	ND	ND	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	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	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	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	0.7	0.9	0.42	0.37	1.4 E	0.68 D	0.31	0.28	0.71 D	0.52	0.32	0.61	0.47	0.46	0.49 D	1.2 D	0.9 D
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	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	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	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.028	0.029	ND	0.041	0.046	0.06	0.054	0.051	0.051	0.058	0.018	0.071	0.047	0.065	0.095	0.1	0.084
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	200X Dil. 100X Dil. 100x Dil. 100x Dil. 100x Dil. 200x Dil. 20x Dil. 250x Dil. 100x Dil. 250x Dil. 125x Dil. 250x Dil. 250x Dil.																										
Methane	0.0033	0.0081	0.018	NA	0.02	NA	0.037	0.25	5.5	6.8	11	13	4.4	13	5	8.6	8	7.1	0.042	10	1.6	15	37	15	9.7	19	13
Ethane	ND	0.005	0.004	NA	0.0018	NA	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0024	ND	ND	ND	ND	ND	ND
Ethene	ND	0.0045	0.0014	NA	0.0012	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes & Abbreviations:

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- 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 stoichiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale varies between graphs in order to depict ranges of values for each well.

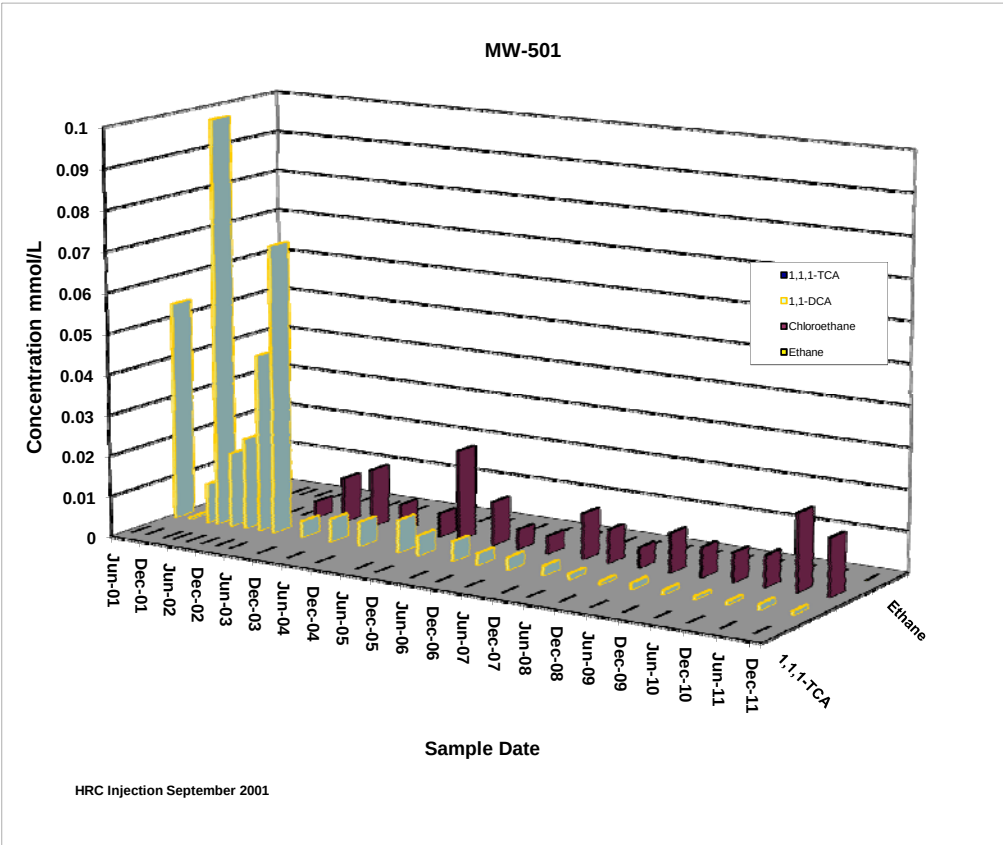


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-502 30.0 - 35.0																									
Date Sampled:	7/24/2001	10/17/2001	10/17/2001 DEC SPLIT	1/28/2002	4/9/2002	7/30/2002	10/15/2002	1/27/2003	4/7/2003	10/28/2003	4/7/2004	10/27/2004	4/7/2005	10/11/2005	7/6/2006	10/18/2006	4/25/2007	11/14/2007	4/30/2008	10/15/2008	4/24/2009	10/20/2009	4/21/2010	10/18/2010	4/12/2011	10/14/2011
Compound:																										
VOLATILE ORGANICS	100x Dil. 100x Dil. 40x Dil. 100X Dil. 50x Dil. 50x Dil. 50x Dil. 50x Dil. 50x Dil. 50x Dil. 50x Dil. 100x Dil. 100x Dil. 100x Dil.																									
Acetone	ND	ND	0.072	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	9.8 D	11	4.4	3.3	0.82 D	3.8 D	11 D	17	13	1.5	0.52	ND	6.8	ND	ND	0.016	0.054	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	0.059	0.16	ND	ND	ND	0.26	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	ND	ND	ND	ND	ND	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	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	ND	ND	ND	ND	ND
Chloroethane	0.011	ND	0.0455	ND	ND	ND	ND	ND	ND	11	7.5 D	12	10	12	5.7 D	10 D	7.9	8.8	7.5	8.7	7.8	9.1	11 D	13	17	16
1,2-Dichloroethane	0.012	ND	0.0115	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.0063	1.1	0.0489	ND	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)	0.011	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19	ND	ND	ND	0.28	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	5.6	ND	0.12	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	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES	100X Dil. 200X Dil. 100X Dil. 100X Dil. 200x Dil. 100x Dil. 200x Dil. 50x Dil. 300x Dil. 400x Dil. 200x Dil. 200x Dil. 200x Dil. 250x Dil.																									
Methane	DRY	0.018	NA	0.0027	NA	0.32	0.78	3.4	1.5	6.3	6.9	7.4	8.5	12	4.8	5.8	12	9.4	15	44 D	8.8	10	15	11	18	17
Ethane	DRY	0.024	NA	0.0061	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0051	ND	ND	ND	ND	ND	ND
Ethene	DRY	0.0066	NA	0.002	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes & Abbreviations:
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DRY: Insufficient 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 stoichiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale varies between graphs in order to depict ranges of values for each well.

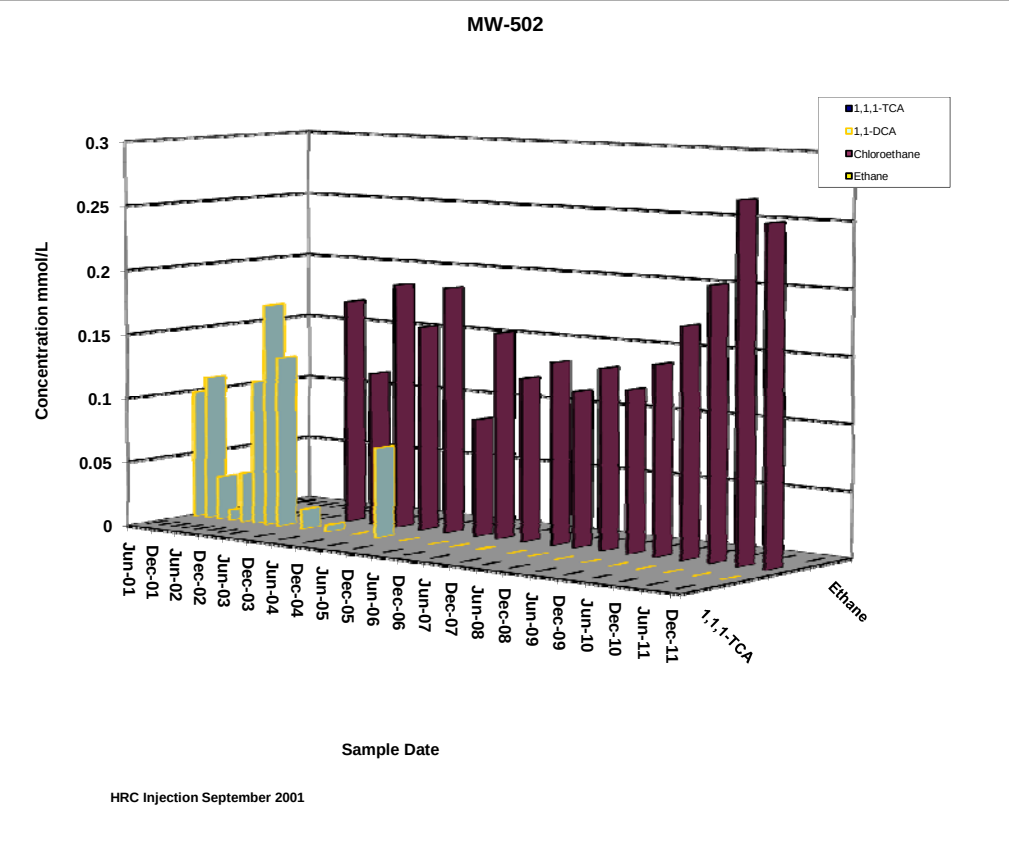


TABLE III
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-202 10.1 - 20.3																											
Date Sampled:	7/10/97	6/2/99	10/26/99	7/18/01	10/18/01	1/28/02	4/8/02	7/29/02	10/14/02	1/29/03	4/7/03	10/28/03	4/7/04	10/26/04	4/6/05	10/10/05	7/6/06	10/17/06	4/24/07	11/14/07	4/28/08	10/13/08	4/23/09	10/20/09	4/21/10	10/19/10	4/12/11	10/13/11
Compound:																												
VOLATILE ORGANICS																												
Acetone	0.027	ND	ND	ND	ND	ND	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	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0064	0.0053	ND	0.0093	0.0110	0.0130	ND	0.0160	0.0300
1,1-Dichloroethene	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0056	ND	ND	0.0050	0.0078	0.0083	ND	0.0100	0.0200
1,1,1-Trichloroethane	0.061	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
Trichloroethene	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	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	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	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	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	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES																												
Methane	NA	NA	NA	NA	NA	NA	NA	ND	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	ND	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	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes & Abbreviations:

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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: Well Screen Interval (ft):	MW-203 9.8 - 20.0																										
Date Sampled:	7/10/97	6/2/99	7/18/01	10/18/01	1/29/02	4/8/02	7/29/02	10/14/02	1/30/03	4/7/03	10/28/03	4/7/04	10/26/04	4/6/05	10/10/05	5/15/06	10/19/06	4/26/07	11/14/07	4/30/08	10/13/08	4/22/09	10/21/09	4/21/10	10/19/10	4/11/11	10/13/11
Compound:																											
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	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.118	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009	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	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	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	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	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	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	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	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED GASES																											
Methane	NA	NA	NA	NA	NA	NA	ND	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	ND	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	ND	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: Insufficient 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: Well Screen Interval (ft):	MW-204 9.8 - 20.0																											
Date Sampled:	7/10/97	6/2/99	7/18/01	10/18/01	1/28/02	4/8/02	7/29/02	10/14/02	1/30/03	4/7/03	10/28/03	4/6/04	4/6/04 DEC split	10/26/04	4/6/05	10/10/05	7/6/06	10/18/06	4/26/07	11/14/07	4/28/08	10/13/08	4/23/09	10/20/09	4/21/10	10/19/10	4/12/11	10/14/11
Compound:																												
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	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	0.012	0.019	0.011	0.010	0.007	0.010	0.008	0.006	0.008	0.006	0.006	ND	0.0068	0.0053	ND	0.1800	0.0740	0.0070	0.0056	0.0060	0.0056	0.0063	0.0055	0.0130	0.0059	0.0077
1,1-Dichloroethene	ND	ND	0.0088	0.015	0.008	0.007	ND	0.008	0.006	0.005	0.005	0.006	0.004	ND	ND	ND	ND	0.009	ND	0.0067	ND	ND	ND	0.0067	0.0053	0.0130	ND	0.0087
1,1,1-Trichloroethane	ND	ND	0.01	0.022	0.011	0.010	ND	0.011	0.007	ND	0.006	0.006	0.005 J	ND	ND	ND	ND	0.097	0.030	ND	ND	ND	ND	ND	ND	0.0063	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	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	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	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	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	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090	0.086	NA	0.047	NA	NA	NA	NA	NA	0.030 D	NA	0.022	NA	NA	NA	NA	NA
DISSOLVED GASES																												
Methane	NA	NA	NA	NA	NA	NA	ND	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	ND	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	ND	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 III
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	OW-306 4.0 - 14.0			
Date Sampled:	4/21/10	10/19/10	4/11/11	10/13/11
Compound:				
VOLATILE ORGANICS				
Acetone	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA
DISSOLVED GASES				
Methane	NA	NA	NA	NA
Ethane	NA	NA	NA	NA
Ethene	NA	NA	NA	NA

Notes & Abbreviations:

ND: Not Detected

NA: Not Analyzed

DRY: Insufficient 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																										
Analyte	7/19/01	9/26/01	10/18/01	1/28/02	4/9/02	7/29/02	10/15/02	1/28/03	4/7/03	10/30/03	4/6/04	10/28/04	4/8/05	10/11/05	5/16/06	10/18/06	4/25/07	11/15/07	4/30/08	10/16/08	4/24/09	10/21/09	4/24/10	10/18/10	4/13/11	10/14/11	
INORGANICS (mg/L)																											
Nitrite Nitrogen	0.0265	NS	<0.0500	NA	NA	0.0174	NA	NA	0.0151	NA	0.069	NA	0.0291	<0.0500	0.0524	0.0107	<0.0600	<0.100	<0.04	<2.0	<0.01	26.6	2	<0.05	<20	0.058	
Nitrate/Nitrite Nitrogen	<.0500	NS	NA	NA	NA	<.0500	NA	NA	0.135	NA	<.0500	NA	<0.100	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05	NA	NA	NA	NA	<0.05	
Chloride	750	NS	708	NA	NA	741	NA	NA	729	NA	746	613	689	677	684	705	690	671	697	834	705	734	659	762	830	821	
Dissolved Organic Carbon	52.2	NS	55.2	NA	NA	201	NA	NA	354	NA	497 ^{TOC}	NA	667	1630	979	1020	1420	1270	1690	1620	2220	2653	NA	NA	NA	NA	
Nitrate Nitrogen	0.0514	NS	<.0500	NA	NA	<.0500	NA	NA	0.12	NA	<.0500	<1.0	<0.200	<0.0500	<0.0500 J	<0.0500	<0.0500	<0.500	<1.0	<0.5	<0.05	<0.50	<0.05	<4.0	<5.0	NA	
Total Alkalinity	404	NS	378	NA	NA	619	NA	NA	1010	NA	1400	NA	1380	1470	1500	1440	1650	1820	1980	2100	2350	2390	2610	2750	<2.0	2900	
Sulfate	96.9	NS	91	NA	NA	27.5	NA	NA	9.21	NA	11.4	<2.0	2.5	2.46	2.34	<0.2	<2.0	<2.0	6.26	4.8	5.7	8.4	8.8	10.9	10.5	10	
Total Sulfide	<1.00	NS	<1.00	NA	NA	<1.00	NA	NA	<1.00	NA	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	4.25	3.05	<1.0	2	<1.0	<1.0	1.6	<1.0	<1.0	2.6	
Total Iron	21.2	NS	47.3	NA	NA	51.2	NA	NA	40.2	NA	42.9	54.2	64.3	90.1	72.7	89.8	92.2	186	90.8	126	89.8	93.9	117	10.5	103	106	
Total Manganese	0.641	NS	NA	NA	NA	1.3	NA	NA	0.912	NA	0.591	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
HRC COMPONENTS (mg/L)	5X Dil.																10x Dil.	5x Dil	10x Dil	10x Dil.	10x Dil.	5x Dil.	10x Dil.	20x Dil.		20x Dil	25x Dil
Lactic Acid (C3)	<1.0	NS	NA	23.6	NA	39.1	59.5	41	81.3	117	72.9	<10	<1.0	<1.0	<10	<1.0	<10	<1.0	<10	<10	<5.0	<10	<20	<1.0	<20	<25	
Acetic Acid (C2)	139	NS	NA	179	NA	209	236	273	282	364	326	210	250	140 E	360	380 D	360	350 D	350	340	270	270	310	430 D	400	500	
Propionic Acid (C3)	<1.0	NS	NA	<1.0	NA	34.9	62.1	134	138	202	158	210	190	320 E	470	530 D	730	600 D	670	800	900	790	820	850 D	700	730	
Pyruvic Acid (C3)	<0.1	NS	NA	<0.1	NA	<0.1	<0.1	<0.1	0.9	4.1	<0.1	<10	<5.0	<0.5	<5.0	<0.5	<5.0	<0.5	<5.0	<5.0	<2.5	<5.0	<10	<0.5	<10	<13	
Butyric Acid (C4)	<1.0	NS	NA	<1.0	NA	<1.0	<1.0	13.1	26.4	68.6	177	420	400	470 E	540	700 D	1000	950	1200	1200	1900	1700	1800	2600 D	2400	3000	
FIELD PARAMETERS																											
Dissolved Oxygen (mg/L)	NA	NA	NA	0.29	0.014	0.1	0.63	0.5	1.07	0.39	1.18	NA	0.76	NA	0.61	0.27	1.04	0.7	0.18	0	5.11*	0	1	2.04	3.51	1.6	
Redox (mV)	-53	-26	NA	-88	-61	-182	-166	-103	-42	-174	-395	NA	-189	NA	-295	-517	-112	-105	-89	-85	-90	-68	-113	-105	-82	-48	
Conductivity (mS)	2.41	3	NA	2.31	2.48	2.49	2.9	2.7	2.7	4.69	4.81	NA	4.87	NA	4.99	5.21	5.59	5.43	5.58	5.86	5.46	6.04	12.9	6.75	6.98	0.81	
Iron, dissolved (mg/L)	0.2	NA	NA	2.6	3.2	4.9	5.8	5.0	5.8	5.8	4.2	NA	5.4	NA	2.8	2.2	2.2	2.4	2.4	2.5	5	1.4	2.5	4.5	6	6	
Alkalinity (mg/L)	500	NA	NA	580	580	630	680	600	1300	760	1320	NA	920	NA	200	1700	1600	1760	1620	2320	1500	2360	1460	1600	1840	2200	
Carbon Dioxide (mg/L)	182	NA	NA	140	330	220	59	418	1.07	1275	NA	NA	NA	NA	160	NA	NA	NA	NA	NA	272	NA	NA	NA	470	NA	

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	MW-3																									
Analyte	7/19/01	9/26/01	10/18/01	2/15/02	4/9/02	7/30/02	10/15/02	1/28/03	4/7/03	10/30/03	4/6/04	10/27/04	4/6/05	10/11/05	5/17/06	10/18/06	4/25/07	11/14/07	4/28/08	10/13/08	4/23/09	10/20/09	4/21/10	10/19/10	4/12/11	10/14/11
INORGANICS (mg/L)																										
Nitrite Nitrogen	NS	NS	0.13	NA	NA	<0.01	NA	NA	<0.0100	NA	0.0433	NA	<0.01	<0.01	0.0171	0.0155	<0.0100	<0.0100	<0.0100	<0.5	<0.01	<0.50	<0.50	<0.010	<0.010	<0.010
Nitrate/Nitrite Nitrogen	NS	NS	NA	NA	NA	<0.05	NA	NA	0.093	NA	<0.0500	NA	<0.05	<0.05	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05	NA	NA	NA	NA	<0.05
Chloride	NS	NS	139	NA	NA	171	NA	NA	269	NA	253	330	391	369	381	382	367	345	251	305	288	189	257	290	331	407
Dissolved Organic Carbon	NS	NS	2.19	NA	NA	287	NA	NA	52.7	NA	5.67 ^{TOC}	NA	3.51	5.49	19.9	21.8	11.8	10.8	12.5	5.45	5.8	4.2	NA	NA	NA	NA
Nitrate Nitrogen	NS	NS	2.21	NA	NA	<0.05	NA	NA	0.093	NA	<0.0500	<1.0	<0.05	<0.05	<0.0500	<0.0500	<0.0500	<0.5	<0.5	<0.5	<0.05	<0.50	<0.50	<1.0	<1.0	NA
Total Alkalinity	NS	NS	197	NA	NA	610	NA	NA	349	NA	218	NA	207	230	251	265	241	266	248	270	242	241	205	212	188	184
Sulfate	NS	NS	15.1	NA	NA	2.08	NA	NA	8.81	NA	11.0	5.9	4.7	4.4	2.7	<0.200	<2.0	<2.0	<2.0	3.03	<2.0	2.4	2.6	3.2	3.4	2.7
Total Sulfide	NS	NS	<1.0	NA	NA	<1.0	NA	NA	<1.00	NA	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0
Total Iron	NS	NS	14.1	NA	NA	181	NA	NA	116	NA	15.6	14.9	44.4	47.9	26.1	35.5	42.6	28.4	15.5	44.9	36.4	10	21.8	6.7	7.79	18.2
Total Manganese	NS	NS	NA	NA	NA	8.01	NA	NA	6.28	NA	1.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)																										
Lactic Acid (C3)	NS	NS	NA	<1.0	<1.0	8.2	<1.0	12.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Acetic Acid (C2)	NS	NS	NA	14	37.2	83.8	180	86.8	80.8	18.7	11.1	<1.0	4.7	9.7	49	58	42	24	22	7.8	12	<1.0	NA	NA	NA	NA
Propionic Acid (C3)	NS	NS	NA	15	42.5	248	606	241	225	28.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Pyruvic Acid (C3)	NS	NS	NA	<0.1	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<5.0	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	NA	NA	NA	NA
Butyric Acid (C4)	NS	NS	NA	7.6	24.3	72	505	157	100	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
FIELD PARAMETERS																										
Dissolved Oxygen (mg/L)	NS	NS	NA	5.19	4.95	1.34	2.86	2.40	3.58	1.11	5.68	NA	6.91	NA	1.42	1.98	0.93	NA	NA	NA	NA	0.85	NA	NA	NA	NA
Redox (mV)	NS	NS	NA	-116	35	-127	-70	-79	-80	-37	54	NA	-68	NA	194	61	-38	NA	NA	NA	NA	-56	NA	NA	NA	NA
Conductivity (mS)	NS	NS	NA	0.07	0.06	0.12	0.25	0.00	1.10	1.33	1.20	NA	1.58	NA	1.61	1.76	1.72	NA	NA	NA	NA	1.41	NA	NA	NA	NA
Iron, dissolved (mg/L)	NS	NS	NA	NA	0.2	0.9	4.4	4.5	4.5	3	1.2	NA	0.2	NA	0.01	0.2	1.2	0	0.4	0.2	NA	0.6	0	0.3	NA	NA
Alkalinity (mg/L)	NS	NS	NA	NA	240	680	1000	280	560	480	280	NA	160	NA	60	320	300	280	220	400	NA	320	300	240	NA	NA
Carbon Dioxide (mg/L)	NS	NS	NA	NA	61.7	84	268	220	356	242	460	NA	NA	NA	23.5	220	160	194	140	212	NA	140	136	80	NA	NA

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	MW-501																									
Analyte	7/19/01	9/26/01	10/18/01	2/15/02	4/9/02	7/29/02	10/15/02	1/29/03	4/7/03	10/30/03	4/7/04	10/27/04	4/6/05	10/11/05	5/16/06	10/18/06	4/25/07	11/14/07	4/28/08	10/15/08	4/23/09	10/20/09	4/21/10	10/18/10	4/13/11	10/14/11
INORGANICS (mg/L)																										
Nitrite Nitrogen	ND	NS	0.159	NA	NA	0.0143	0.0143	NA	0.012	NA	0.0152	NA	0.0407	<0.0100	<0.0100	0.0167	<0.0100	<0.01	0.0144	<0.5	<0.01	<0.5	<0.50	<0.010	<0.100	<0.010
Nitrate/Nitrite Nitrogen	0.063	NS	NA	NA	NA	<0.0500	<0.0500	NA	0.16	NA	<0.0500	NA	<0.100	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05	NA	NA	NA	NA	<0.05
Chloride	355	NS	85.6	NA	NA	208	NA	NA	1840	NA	3870	2180	2130	1860	1700	1200	1060	418	3500	1140	2240	594	7010	1460	7500	1940
Dissolved Organic Carbon	3.38	NS	141	NA	NA	15.7	NA	NA	173	NA	4.72 ^{TOC}	NA	4.7	5.69	5.19	7.3	6.88	7.91	4.82	9.17	5.7	8.95	NA	NA	NA	NA
Nitrate Nitrogen	0.063	NS	0.634	NA	NA	<0.0500	NA	NA	0.148	NA	<0.0500	<1.0	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.500	<0.500	<0.5	<0.05	0.69	0.84	<1.0	<1.0	NA
Total Alkalinity	201	NS	167	NA	NA	259	NA	NA	575	NA	229	NA	270	289	296	349	402	359	231	439	318	282	229	381	262	424
Sulfate	40.2	NS	21.5	NA	NA	27.3	NA	NA	4.38	NA	43.3	5.96	31	6.32	24.4	12	21.5	2.29	51.2	2.75	9.4	15.5	99.9	7.3	64.1	4.3
Total Sulfide	<1.00	NS	1.18J	NA	NA	ND	NA	NA	3.44	NA	2.57	<1.0	1.24	<1.00	<1.0	1.27	<1.0	1.32	<1.0	2.76	<0.01	<1.0	<1.0	1.4	<1.0	2.2
Total Iron	462	NS	662	NA	NA	152	NA	NA	99.4	NA	238	998	377	11.3	9.31	7.3	2.96	8.57	10.5	9.35	8890	155	13.9	6.37	11.8	4.6
Total Manganese	11.8	NS	NA	NA	NA	4.1	NA	NA	3.02	NA	7.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)																										
Lactic Acid (C3)	<1.0	NS	NA	NA	34.3	8.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Acetic Acid (C2)	<1.0	NS	NA	NA	15.7	10.3	6.3	33.3	135	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Propionic Acid (C3)	<1.0	NS	NA	NA	15.4	10.1	4.2	15.2	111	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Pyruvic Acid (C3)	<0.1	NS	NA	NA	1.1	<0.1	2.4	<0.1	<0.1	<0.1	<0.1	<1.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.50	NA	NA	NA	NA
Butyric Acid (C4)	<1.0	NS	NA	NA	8.2	<1.0	<1.0	<1.0	46.3	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
FIELD PARAMETERS																										
Dissolved Oxygen (mg/L)	0.3	0.01	NA	0.27	1.07	0.49	2.18	0.46	0.38	0.4	3.39	NA	3.63	NA	1.19	2.85	1.39	NA	NA	NA	NA	0.86	NA	0.02	0	0.4
Redox (mV)	-280	-205	NA	-108	5	-196	-141	-131	-208	-36	211	NA	-106	NA	92	61	85	NA	NA	NA	NA	-84	NA	-339	-122	-194
Conductivity (mS)	1.61	0.68	NA	12.03	1.55	0.76	1.01	8.08	8.47	1.55	12.2	NA	7.73	NA	5.7	4.28	4.03	NA	NA	NA	NA	1.79	NA	5.37	23.2	0.76
Iron, dissolved (mg/L)	ND	NA	NA	0.2	ND	ND	0.5	0.9	2.8	1.8	1.8	NA	0.8	NA	1.5	0.2	0	0.9	0.8	0	2.4	0.3	1.3	1.6	4.6	1
Alkalinity (mg/L)	920	NA	NA	200	210	320	360	280	960	440	260	NA	100	NA	150	400	360	340	180	500	400	300	260	400	270	500
Carbon Dioxide (mg/L)	34	NA	NA	90	60	38	32.6	104	284	188	230	NA	NA	NA	24	148	210	150	90	100	160	140	116	225	194	37.9

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	MW-502																									
Analyte	7/19/01	9/26/01	10/18/01	1/28/02	4/9/02	7/29/02	10/15/02	1/27/03	4/7/03	10/30/03	4/6/04	10/27/04	4/6/05	10/11/05	5/16/06	10/18/06	4/25/07	11/14/07	4/30/08	10/15/08	4/24/09	10/20/09	4/21/10	10/18/10	4/12/11	10/14/11
INORGANICS (mg/L)																										
Nitrite Nitrogen	0.0389	NS	ND	NA	NA	ND	NA	NA	<0.010	NA	<0.0100	NA	0.066	<0.0200	0.0259	0.0183	<0.0200	<0.0100	<0.200	<0.5	<0.05	<0.50	<0.50	<1.0	<1.0	<0.010
Nitrate/Nitrite Nitrogen	0.137	NS	NA	NA	NA	ND	NA	NA	<0.050	NA	<0.0500	NA	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05	NA	NA	NA	NA	<0.050
Chloride	246	NS	241	NA	NA	84.6	NA	NA	281	NA	310	366	347	360	382	434	505	523	522	493	476	600	562	606	693	676
Dissolved Organic Carbon	5.21	NS	26.7	NA	NA	34.7	NA	NA	284	NA	639 ^{TOC}	NA	903	545	190	167	87.4	59.6	54	14.3	13.9	12.7	NA	NA	NA	NA
Nitrate Nitrogen	0.137	NS	0.859	NA	NA	ND	NA	NA	0.139	NA	<0.0500	<1.0	<0.200	<0.0500	<0.0500	<0.0500	<0.0500	<0.500	<0.500	<0.5	<0.05	<0.50	<0.50	<0.010	<0.010	NA
Total Alkalinity	1.08	NS	94.4	NA	NA	125	NA	NA	531	NA	860	NA	1160	1160	998	1920	1000	1060	968	765	742	791	800	751	670	730
Sulfate	183	NS	56.2	NA	NA	4.74	NA	NA	ND	NA	<2.00	<2.0	<2.0	<2.0	3.13	<0.200	<2.0	<2.0	<2.0	2.46	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Sulfide	1.08	NS	1.28	NA	NA	1.2	NA	NA	2.29	NA	<1.00	<1.0	<1.0	<1.00	29.3	1.24	4.33	2.68	<1.0	1.8	<1.0	<1.0	5.8	1.8	<1.0	<1.0
Total Iron	ND	NS	4.96	NA	NA	12	NA	NA	72.7	NA	282	1820	1960	1030	992	631	2940	2580	1350	1090	987	284	186	26	571	637
Total Manganese	0.317	NS	NA	NA	NA	0.259	NA	NA	1.77	NA	12.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HRC COMPONENTS (mg/L)	20x Dil. 10x Dil. 5x Dil.																									
Lactic Acid (C3)	<1.0	NS	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23.8	<1.0	<1.0	<20	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Acetic Acid (C2)	<1.0	NS	NA	<1.0	3.5	38.5	70.5	236	220	451	635	<1.0	400	660	120 D	150	75	79	87	7.8	7.7	6.1	NA	NA	NA	NA
Propionic Acid (C3)	<1.0	NS	NA	<1.0	<1.0	22.6	97.5	233	216	402	281	<1.0	870	470	260 D	200	37	14	1.5	<1.0	<1.0	<1.0	NA	NA	NA	NA
Pyruvic Acid (C3)	<0.1	NS	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<10	<5.0	<0.5	<0.5	<0.50	<0.5	<0.5	<0.5	<0.5	<0.50	NA	NA	NA	NA
Butyric Acid (C4)	<1.0	NS	NA	<1.0	<1.0	<1.0	20.2	54.8	62.9	99.7	113	<2.0	<40	74	<2.0	<2.0	3.9	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
FIELD PARAMETERS																										
Dissolved Oxygen (mg/L)	2.9	0.51	NA	2.93	0.13	0.00	0.21	0.93	1.03	0.21	1.18	NA	0.41	NA	0.36	0.25	0	0.38	0	0	3.13*	1.97	0	0.17	0	0.3
Redox (mV)	-264	-262	NA	28	-103	-117	-196	-118	-121	-13	-164	NA	-145	NA	93	88	-105	-112	-124	-168	-160	-116	-184	-131	-148	-157
Conductivity (mS)	0.64	0.98	NA	0.33	2.79	0.1	0.93	1.06	1.38	2.83	2.93	NA	13.42	NA	2.9	3.36	3.24	2.99	3.06	2.27	2.27	2.8	9.64	3.13	2.04	0.36
Iron, dissolved (mg/L)	ND	NA	NA	ND	ND	ND	ND	1.5	0.8	2.7	2.2	NA	2.8	NA	0.1	3	1	1.4	NA	1.5	0.5	1.6	0	1	4.2	NA
Alkalinity (mg/L)	120	NA	NA	75	54	220	200	140	440	1100	NA	NA	280	NA	NA	2300	1160	920	960	NA	820	920	2400	740	650	110
Carbon Dioxide (mg/L)	27.2	NA	NA	37.4	180	72	32.6	114	182	240	NA	NA	NA	NA	200	802	800	600	NA	NA	336	426	624	NA	3838	NA

TABLE IV
COOPERVISION INCORPORATED
ADDITIONAL ANALYTICAL
PARAMETER SUMMARY

Sample ID	OWS-302-S																										
Analyte	7/19/01	9/26/01	10/18/01	1/28/02	4/9/02	7/29/02	10/15/02	1/28/03	4/7/03	10/30/03	4/8/04	10/27/04	4/6/05	10/12/05	5/16/06	10/17/06	4/25/07	11/14/07	4/30/08	10/15/08	4/23/09	10/20/09	4/21/10	10/18/10	4/13/11	10/14/11	
INORGANICS (mg/L)																											
Nitrite Nitrogen	NA	NS	0.143	NA	NA	0.03008	NA	NA	0.0279	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<1.0	<100	0.031	
Nitrate/Nitrite Nitrogen	NA	NS	NA	NA	NA	0.0576	NA	NA	0.147	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	
Chloride	NA	NS	1600	NA	NA	NA	NA	NA	2370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3070	2880	3670	3200	
Dissolved Organic Carbon	NA	NS	NA	NA	NA	148	NA	NA	52.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	604	NA	NA	NA	NA	NA	NA	NA	
Nitrate Nitrogen	NA	NS	<0.0500	NA	NA	<0.0500	NA	NA	0.119	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	<0.020	<2.0	<0.050
Total Alkalinity	NA	NS	69.7	NA	NA	696	NA	NA	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1210	1150	622	958	
Sulfate	NA	NS	228	NA	NA	NS	NA	NA	407	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	44.9	2.2	8.7	<2.0	
Total Sulfide	NA	NS	3	NA	NA	NS	NA	NA	2.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	1.2	<1.0	4.2	<1.0	
Total Iron	NA	NS	NA	NA	NA	NS	NA	NA	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.1	79.6	52.5	50.6	
Total Manganese	NA	NS	NA	NA	NA	NS	NA	NA	5.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
HRC COMPONENTS (mg/L)	10x Dil. 10x Dil. 10x Dil																					2x Dil.	5x Dil.				
Lactic Acid (C3)	NA	NS	NA	<1.0	13.4	4.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<1.0	<1.0	<1.0	<5.0	NA	3.2	<5.0	NA	NA	NA	NA	
Acetic Acid (C2)	NA	NS	NA	<1.0	293	286	240	297	90.8	443	623	65	290	1000	890	100	110	190	910	NA	770	690	NA	NA	NA	NA	
Propionic Acid (C3)	NA	NS	NA	<1.0	9.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	150	120	17	6	24	190	NA	220	200	NA	NA	NA	NA	
Pyruvic Acid (C3)	NA	NS	NA	<0.1	0.5	1.4	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<5.0	<5.0	<5.0	<0.5	<0.5	<0.5	<2.5	NA	<1.0	<2.5	NA	NA	NA	NA	
Butyric Acid (C4)	NA	NS	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	35.3	<2.0	23	100	77	14	7.9	9.8	88	NA	110	79	NA	NA	NA	NA	
FIELD PARAMETERS																											
Dissolved Oxygen (mg/L)	NA	NS	NA	NA	1.74	1.24	2.23	8.5	0.11	1.7	6.88	NS	7.26	NA	NS	8.19	1.46	NA	NA	NA	NA	NS	0.86	3.08	4.66	0.7	
Redox (mV)	NA	NS	NA	NA	-59	-133	-122	-51	-158	9	78	NS	-62	NA	NS	38	-126	NA	NA	NA	NA	NS	-63	-100	-156	-128	
Conductivity (mS)	NA	NS	NA	NA	6.45	0.94	4.22	5.03	5.03	4.43	7.86	NS	13.09	NA	NS	1.65	24.4	NA	NA	NA	NA	NS	9	12.8	17.6	1.2	
Iron, dissolved (mg/L)	ND	NS	NA	NA	3.3	5.9	5.2	3.8	NA	3	3.4	NS	NA	NA	NS	1.3	2.2	1.6	4	0	NA	NS	1.1	5.8	1.6	2.6	
Alkalinity (mg/L)	640	NS	NA	580	600	720	820	520	NA	960	1200	NS	NA	NA	NS	720	520	320	1040	1160	NA	NS	920	1000	900	1000	
Carbon Dioxide (mg/L)	NA	NS	NA	NA	358	260	38	475	NA	730	390	NS	NA	NA	NS	320	234	NA	600	264	NA	NS	526	589	1050	150	

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

* - 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:
 Performed By:
 Job Number:

2011 Readings
M. Ramsdell / D. Nostrant
70665-018

Test Point	4/11/2011 Vacuum Reading ("WC)	10/14/2011 Vacuum Reading ("WC)
T-1	Waxed Shut	0.022
T-2	*	*
T-3	0.655	0.654
T-4	0.020	0.033
T-5	0.044	0.062
T-6	0.058	0.076
T-7	-0.028**	-0.027**
T-8	0.010	0.007
T-9	-0.003/0.027***	-0.018
T-10	0.021	0.020
T-11	0.982	0.980
T-12	0.016	0.025
T-13	0.008	0.008
T-14	0.009	0.011
T-15	0.025	0.032
T-16	0.019	0.024
T-17	0.019	0.015
T-18	Obstructed	0.004

Suction Point	4/11/2011 Vacuum Reading ("WC)	10/14/2011 Vacuum Reading ("WC)
S-1	3.70	3.80
S-2	3.60	3.50
S-3	1.60	1.60
S-4/5	2.30	2.30
S-6	3.50	3.50
S-7	1.60	1.60

* T-2 is not a valid test point

** with exterior doors closed

*** with interior doors open, -.003 with doors closed in April 2011; -.018 with doors closed in October 2011

Visual Inspection of System:

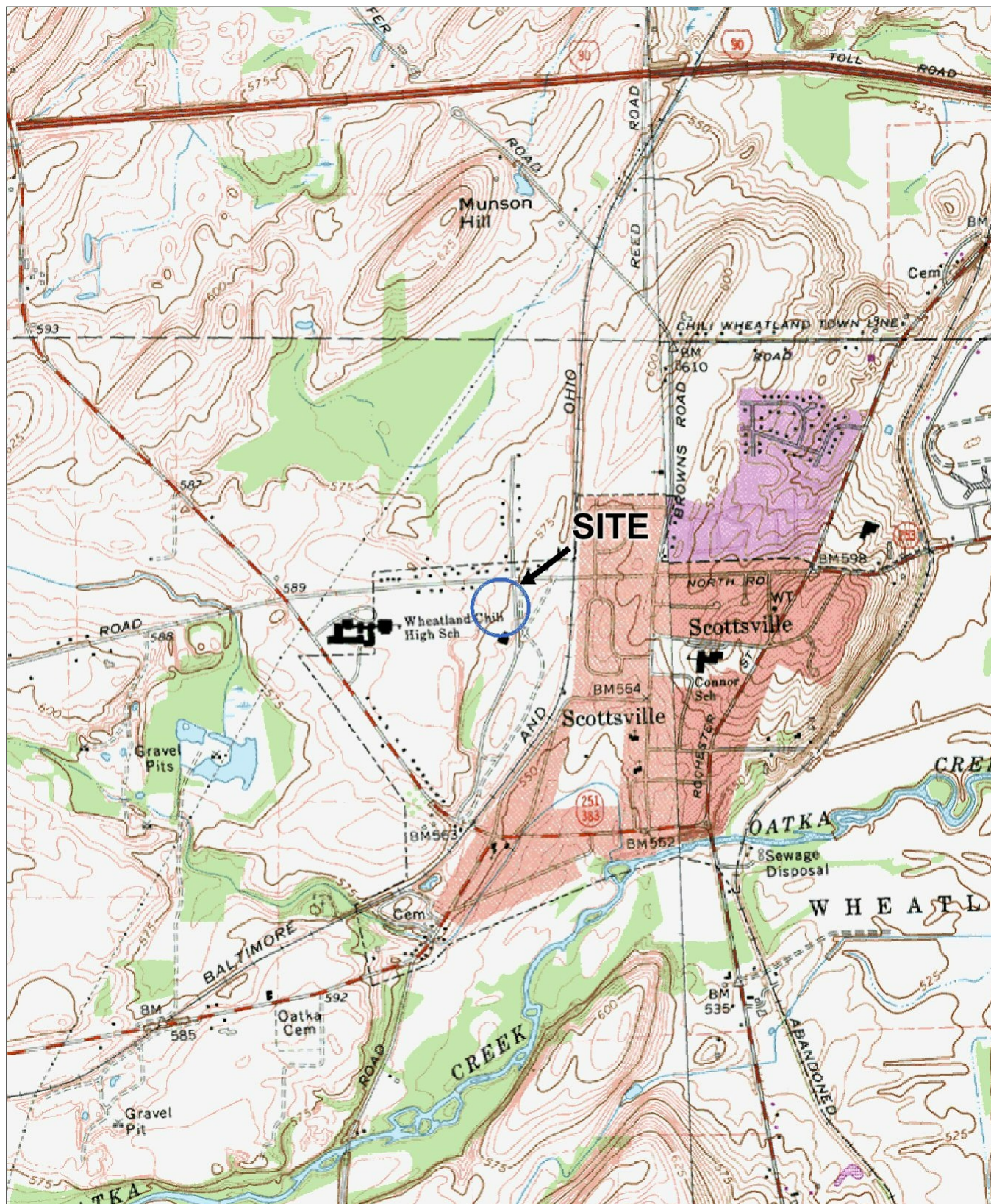
Inspection showed all conditions acceptable.

Recommendation Actions:

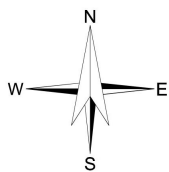
No actions required

Description of Past Year Activities:

Inspection showed normal operation. Fan 1 was replaced in August as a precaution.



SITE COORDINATES: 43°1'39"N 77°45'27"W



U.S.G.S. QUADRANGLE: CLIFTON, NY

HALEY & ALDRICH

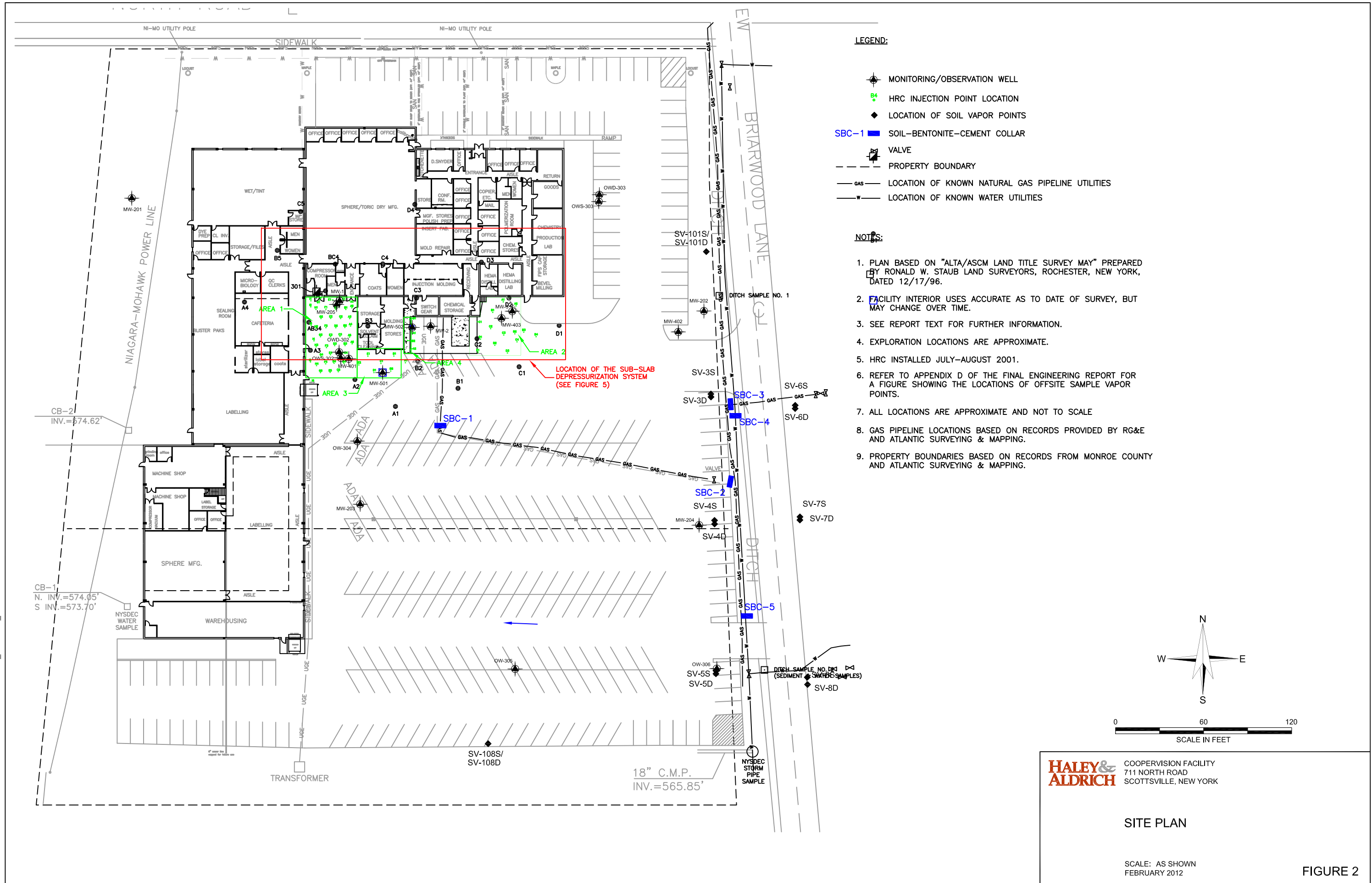
COOPERVISION, INC.
SCOTTSVILLE, NEW YORK

PROJECT LOCUS

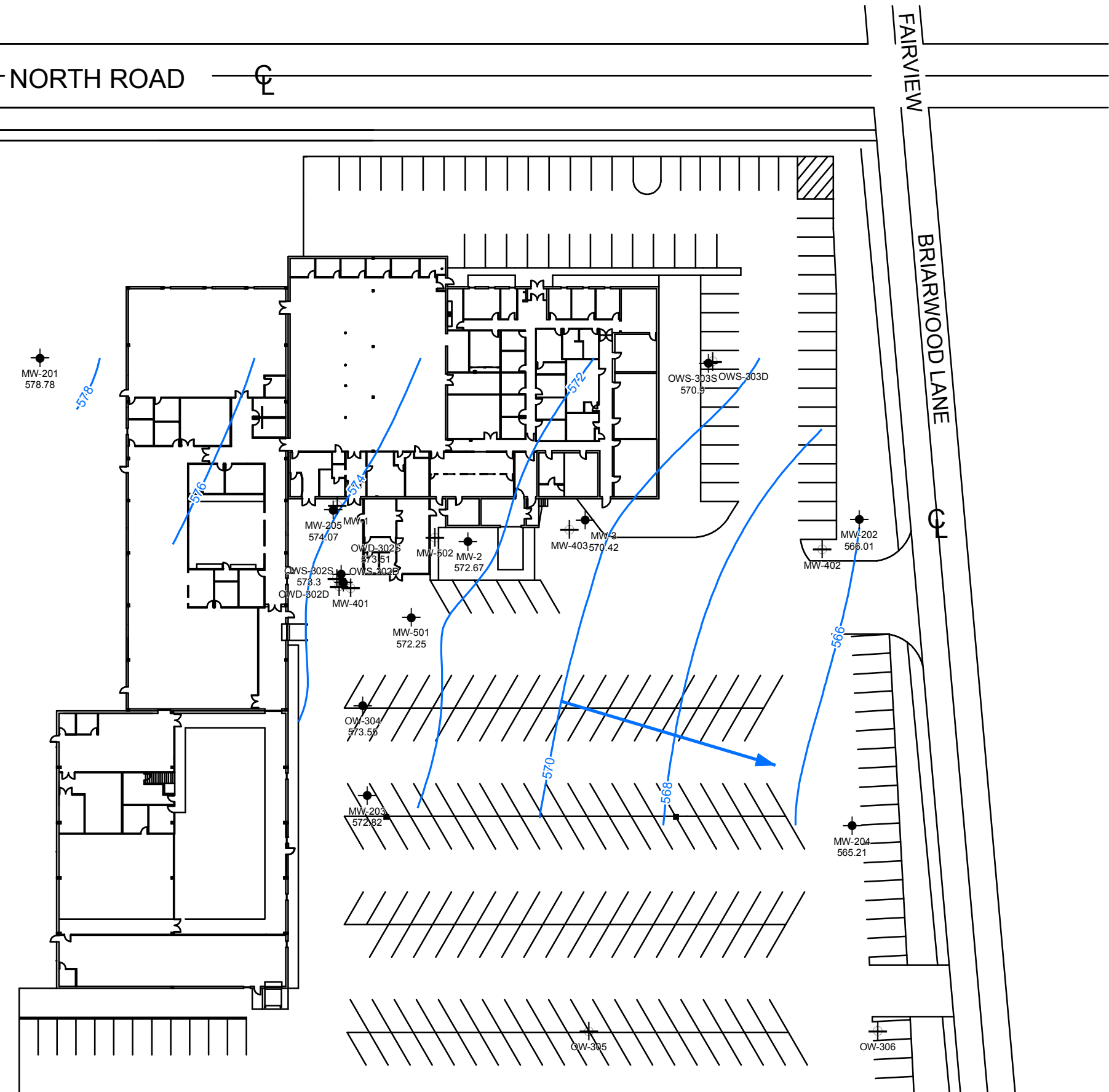
SCALE: 1:24,000
MAY 2010

FIGURE 1

G:\PROJECTS\70665\018 - ONGOING SUPPORT\CAD\2012-0214_70665-018_SITE PLAN.DWG



G:\Projects\70665\011\ARCGIS\MXD\APR11_GW_CONT.mxd

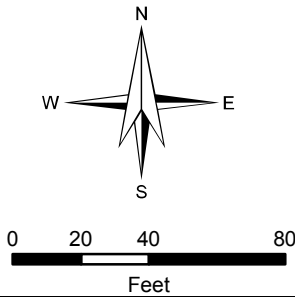


LEGEND:

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

NOTES:

- PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 17 DECEMBER 1996.
- GROUNDWATER CONTOURS ARE BASED ON DATA COLLECTED ON 11 APRIL 2011. ELEVATIONS SHOWN ONLY FOR THOSE WELLS APPLICABLE TO THE ISOPOTENTIAL CONTOURS DEVELOPED.
- EXPLORATION LOCATIONS ARE APPROXIMATE.



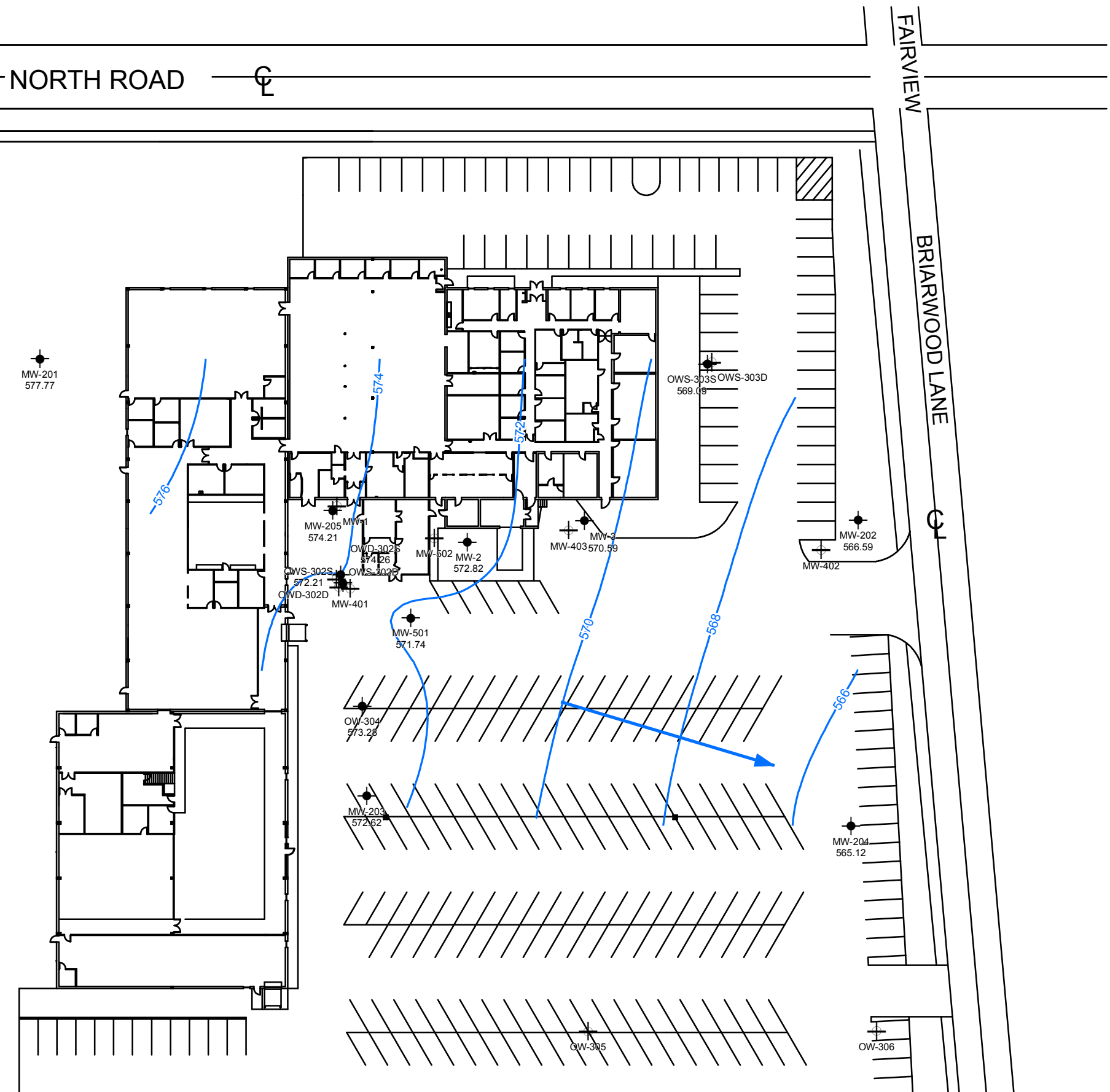
HALEY & ALDRICH COOPERVISION FACILITY INVESTIGATION
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

GROUNDWATER CONTOUR PLAN
(APRIL 2011)

SCALE: AS SHOWN
FEBRUARY 2012

FIGURE 3

G:\Projects\70665\011\ARCGIS\MXD\OCT11_GW_CONT.mxd

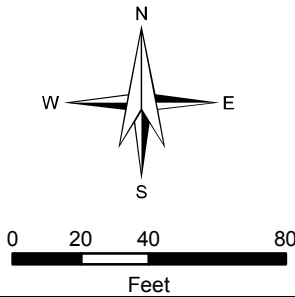


LEGEND:

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

NOTES:

- PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 17 DECEMBER 1996.
- GROUNDWATER CONTOURS ARE BASED ON DATA COLLECTED ON 13 OCTOBER 2011. ELEVATIONS SHOWN ONLY FOR THOSE WELLS APPLICABLE TO THE ISOPOTENTIAL CONTOURS DEVELOPED.
- EXPLORATION LOCATIONS ARE APPROXIMATE.



HALEY & ALDRICH COOPERVISION FACILITY INVESTIGATION
711 NORTH ROAD
SCOTTSVILLE, NEW YORK

GROUNDWATER CONTOUR PLAN
(OCTOBER 2011)

SCALE: AS SHOWN
FEBRUARY 2012

FIGURE 4

G:\PROJECTS\70665\018 - ONGOING SUPPORT\CAD\2012-0214_70665-018_SUB-SLAB DEPRESSURIZATION SYSTEM.DWG

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.

-  S-3 APPROXIMATE SUCTION POINT LOCATION
-  T-16 APPROXIMATE TEST POINT LOCATION
-  APPROXIMATE LOCATION OF SUB-SLAB BARRIERS AFFECTING THE SYSTEM

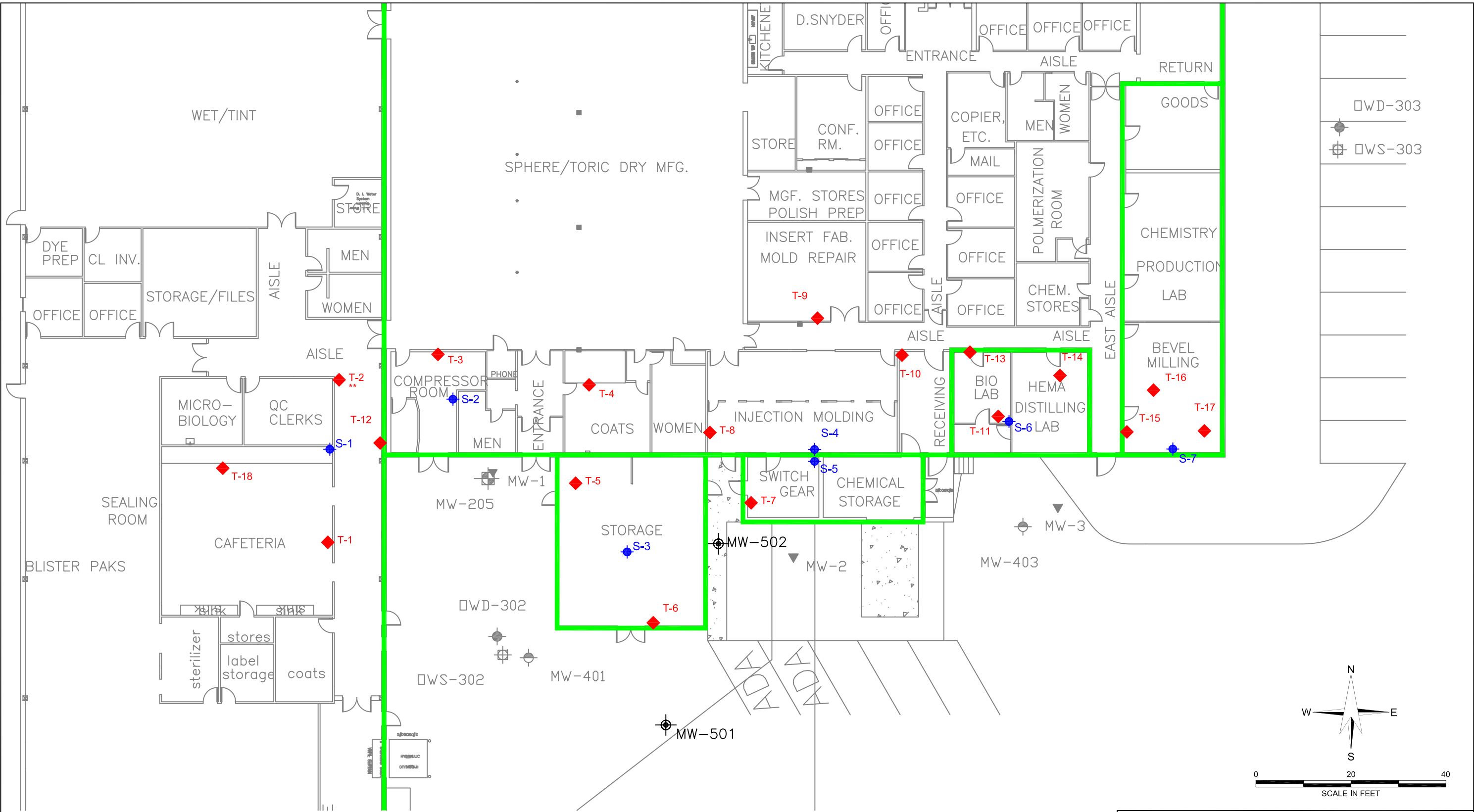
NOTE:
1. ** T-2 IS NOT A VALID TEST POINT.

HALEY & ALDRICH SUB-SLAB DEPRESSURIZATION SYSTEM
NORTH ROAD
SCOTTSVILLE, NEW YORK

**SUB-SLAB
DEPRESSURIZATION SYSTEM**

SCALE: AS SHOWN
FEBRUARY 2012

FIGURE 5



APPENDIX A

Institutional and Engineering Controls Certification Form



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



Site Details

Box 1

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: ~~5.4~~ 5.517 acres

Reporting Period: November 29, 2010 to January 31, 2012

- | | YES | NO |
|---|--------------------------|-------------------------------------|
| 1. Is the information above correct? | ☐ | ☒ |
| If NO, include handwritten above or on a separate sheet.
acreage updated per the SMP survey | | |
| 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.

Chuck Rogers
Signature of Owner, Remedial Party or Designated Representative

2/29/12
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

187.170-1-18.1

CooperVision, Inc.

Ground Water Use Restriction
Landuse Restriction
Site Management Plan

Description of Engineering Controls

Box 4

Parcel

Engineering Control

187.170-1-18

Cover System
Subsurface Barriers
Vapor Mitigation

187.170-1-18.1

Cover System
Subsurface Barriers
Vapor Mitigation

Engineering Control Details for Site No. V00175

Parcel: 187.170-1-18

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.

Parcel: 187.170-1-18.1

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.

Periodic Review Report (PRR) Certification Statements

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

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

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

YES NO

☒ ☐

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

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

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

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

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

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

YES NO

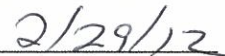
☒ ☐

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

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



Signature of Owner, Remedial Party or Designated Representative



Date

IC CERTIFICATIONS
SITE NO. V00175

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I Chuck Rogers at CooperVision, 711 North Road,
Scottsville, NY 14546
print name print business address

am certifying as Owner (Owner or Remedial Party)

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

Chuck Rogers
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

2/28/12
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.

Haley & Aldrich of New York

I Mark N. Ramsdell at Rochester, NY 14623,
print name print business address

Owner

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



Mark N. Ramsdell
Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification

Stamp
(Required for PE)

2/29/12
Date

APPENDIX B

Mann-Kendall Analysis Results

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

	2002-2011	
	Spring	Fall
Source Area		
MW-205		
1,1,1-TCA	No Trend	No Trend
1,1-DCA	No Trend	No Trend
1,1-DCE	N/A	N/A
Mid-Gradient Area		
MW-3		
1,1,1-TCA	Decreasing	Decreasing
1,1-DCA	Decreasing	Decreasing
1,1-DCE	No Trend	No Trend
MW-501		
1,1,1-TCA	Decreasing	No Trend
1,1-DCA	No Trend	Decreasing
1,1-DCE	No Trend	No Trend
MW-502		
1,1,1-TCA	No Trend	No Trend
1,1-DCA	No Trend	No Trend
1,1-DCE	No Trend	No Trend
Down-Gradient Area		
MW-202		
1,1,1-TCA	No Trend	No Trend
1,1-DCA	Increasing	No Trend
1,1-DCE	Increasing	No Trend
MW-204		
1,1,1-TCA	No Trend	Decreasing
1,1-DCA	No Trend	No Trend
1,1-DCE	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 significantly 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	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	Fall 2002	260	3.4	0.025 U	0.0065 U	0.0025 U	0.011
Spring 2003	320	0.125 U	0.125 U	0.25 U	0.0025 U	0.0025 U	Fall 2003	250	0.23	0.0125 U	0.25 U	0.0025 U	0.006
Spring 2004	140	0.9	0.0125 U	0.0125 U	0.0025 U	0.006	Fall 2004	100	0.42	0.0125 U	0.25 U	0.0025 U	0.0025 U
Spring 2005	76	0.23	0.0125 U	0.125 U	0.0025 U	0.0025 U	Fall 2005	80	0.17	0.0125 U	0.25 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	Fall 2006	62	0.05 U	0.005 U	0.0025 U	0.0025 U	0.097
Spring 2007	41	0.14	0.005 U	0.125 U	0.0025 U	0.03	Fall 2007	84	0.05 U	0.0125 U	0.125 U	0.0025 U	0.0025 U
Spring 2008	42	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
Spring 2009	48	0.05 U	0.0125 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
Spring 2010	140	0.025 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
Spring 2011	130	0.025 U	0.0125 U	0.25 U	0.0025 U	0.0025 U	Fall 2011	110	0.025 U	0.0125 U	0.25 U	0.0025 U	0.0025 U
Spring 2012							Fall 2012						
Spring 2013							Fall 2013						
Spring 2014							Fall 2014						
Spring 2015							Fall 2015						
Spring 2016							Fall 2016						
Spring 2017							Fall 2017						
Spring 2018							Fall 2018						
Spring 2019							Fall 2019						
Spring 2020							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	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	Fall 2002	260	3.9	2.2	11	0.0025 U	0.01
Spring 2003	290	8.4	7	13	0.0025 U	0.006	Fall 2003	210	0.56	0.4	1.5	0.0025 U	0.008
Spring 2004	200	1	0.56	0.52	0.0025 U	0.006	Fall 2004	230	3.1	0.6	0.25 U	0.0025 U	0.0025 U
Spring 2005	240	0.68	0.79	6.8	0.0025 U	0.0068	Fall 2005	230	1	0.49	0.25 U	0.0025 U	0.0053
Spring 2006	220	0.34	0.48	0.025 U	0.0025 U	0.0025 U	Fall 2006	270	0.51	0.29	0.016	0.0025 U	0.18
Spring 2007	230	0.93	0.31	0.054	0.0025 U	0.074	Fall 2007	390	0.22	0.24	0.125 U	0.0064	0.007
Spring 2008	200	0.36	0.15	0.125 U	0.0053	0.0056	Fall 2008	200	0.36	0.09	0.125 U	0.0025 U	0.006
Spring 2009	200	0.38	0.17	0.125 U	0.0093	0.0056	Fall 2009	200	0.21	0.11	0.125 U	0.011	0.0063
Spring 2010	230	0.1	0.088	0.125 U	0.013	0.0055	Fall 2010	220	0.16	0.089	0.25 U	0.0025 U	0.013
Spring 2011	300	0.098	0.15	0.25 U	0.016	0.0059	Fall 2011	230	0.052	0.1	0.25 U	0.03	0.0077
Spring 2012							Fall 2012						
Spring 2013							Fall 2013						
Spring 2014							Fall 2014						
Spring 2015							Fall 2015						
Spring 2016							Fall 2016						
Spring 2017							Fall 2017						
Spring 2018							Fall 2018						
Spring 2019							Fall 2019						
Spring 2020							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	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	Fall 2002	--	1.4	0.025 U	0.014	0.0025 U	0.008
Spring 2003	--	1.2	0.125 U	0.25 U	0.0025 U	0.005	Fall 2003	--	0.57	0.0125 U	0.25 U	0.0025 U	0.005
Spring 2004	--	0.33	0.0125 U	0.14 U	0.0025 U	0.006	Fall 2004	--	0.36	0.0125 U	0.25 U	0.0025 U	0.0025 U
Spring 2005	--	0.099	0.0125 U	0.125 U	0.0025 U	0.0025 U	Fall 2005	--	0.1	0.0125 U	0.25 U	0.0025 U	0.0025 U
Spring 2006	--	0.05 U	0.025 U	0.025 U	0.0025 U	0.0025 U	Fall 2006	--	0.05 U	0.005 U	0.0025 U	0.0025 U	0.009
Spring 2007	--	0.05 U	0.005 U	0.125 U	0.0025 U	0.0025 U	Fall 2007	--	0.05 U	0.0125 U	0.125 U	0.0056	0.0067
Spring 2008	--	0.05 U	0.0125 U	0.125 U	0.0025 U	0.0025 U	Fall 2008	--	0.05 U	0.0065 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	Fall 2009	--	0.05 U	0.0065 U	0.125 U	0.0078	0.0067
Spring 2010	--	0.025 U	0.0065 U	0.125 U	0.0085	0.0053	Fall 2010	--	0.025 U	0.0065 U	0.25 U	0.0025 U	0.013
Spring 2011	--	0.025 U	0.0125 U	0.25 U	0.01	0.0025 U	Fall 2011	--	0.025 U	0.0125 U	0.25 U	0.02	0.0087
Spring 2012							Fall 2012	--					
Spring 2013							Fall 2013	--					
Spring 2014							Fall 2014	--					
Spring 2015							Fall 2015	--					
Spring 2016							Fall 2016	--					
Spring 2017							Fall 2017	--					
Spring 2018							Fall 2018	--					
Spring 2019							Fall 2019	--					
Spring 2020							Fall 2020	--					

Mann-Kendall Analysis: 1,1,1-TCA (2002-2011)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

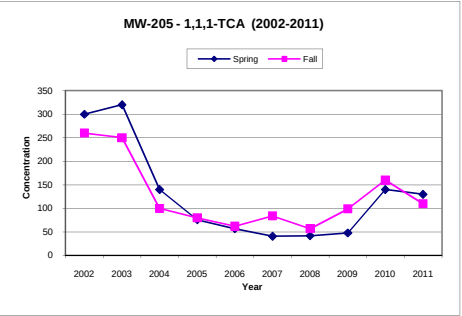
MW-205

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	300	320	140	76	57	41	42	48	140	130
	300		20	-160	-224	-243	-259	-258	-252	-160
	320			-180	-244	-263	-279	-278	-272	-180
	140				-64	-83	-99	-98	-92	0
	76					-19	-35	-34	-28	64
	57						-16	-15	-9	83
	41							7	99	89
	42							6	98	88
	48								92	82
	140									-10
	130									

S Value	
Neg	Pos
30	14
S Value	-16
n	10
P Value	0.078
Evaluation	No Trend

S Value	
Neg	Pos
27	18
S Value	-9
n	10
P Value	0.242
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	260	250	100	80	62	84	57	99	160	110
	260		-10	-160	-180	-198	-176	-203	-161	-100
	250			-150	-170	-188	-166	-193	-151	-90
	100				-20	-38	-16	-43	-1	60
	80					-18	4	-23	19	80
	62						22	-5	37	98
	84							-27	15	76
	57							42	103	53
	99								61	11
	160									-50
	110									



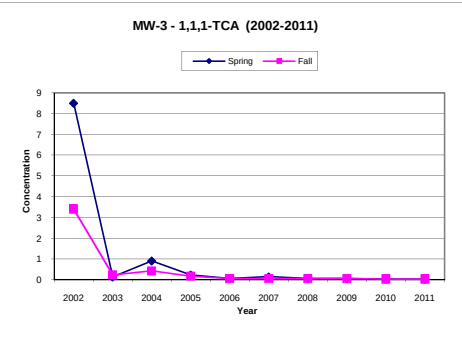
MW-3

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	8.5	0.125	0.9	0.23	0.05	0.14	0.05	0.05	0.025	0.025
	8.5		-8.375	-7.6	-8.27	-8.45	-8.36	-8.45	-8.475	-8.475
	0.125			0.775	0.105	-0.075	0.015	-0.075	-0.075	-0.1
	0.9				-0.67	-0.85	-0.76	-0.85	-0.875	-0.875
	0.23					-0.18	-0.09	-0.18	-0.205	-0.205
	0.05						0.09	0	-0.025	-0.025
	0.14							-0.09	-0.115	-0.115
	0.05							0	-0.025	-0.025
	0.05								-0.025	-0.025
	0.025									0
	0.025									

S Value	
Neg	Pos
37	4
S Value	-33
n	10
P Value	0.0011
Evaluation	Decreasing

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

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	3.4	0.23	0.42	0.17	0.05	0.05	0.05	0.05	0.025	0.025
	3.4		-3.17	-2.98	-3.23	-3.35	-3.35	-3.35	-3.375	-3.375
	0.23			0.19	-0.06	-0.18	-0.18	-0.18	-0.205	-0.205
	0.42				-0.25	-0.37	-0.37	-0.37	-0.395	-0.395
	0.17					-0.12	-0.12	-0.12	-0.145	-0.145
	0.05						0	0	-0.025	-0.025
	0.05							0	-0.025	-0.025
	0.05							0	-0.025	-0.025
	0.025								-0.025	-0.025
	0.025									0



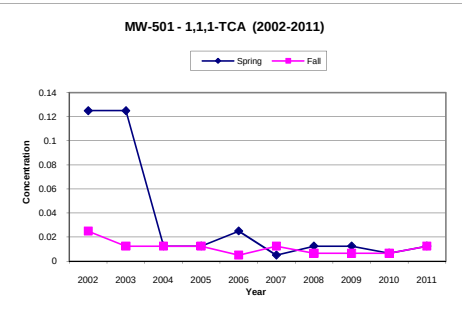
MW-501

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.125	0.125	0.0125	0.0125	0.025	0.005	0.0125	0.0125	0.0065	0.0125
	0.125		0	-0.1125	-0.1125	-0.1	-0.12	-0.1125	-0.1185	-0.1125
	0.125			-0.1125	-0.1125	-0.1	-0.12	-0.1125	-0.1185	-0.1125
	0.0125				0	0.0125	-0.0075	0	-0.006	0
	0.0125				0.0125	-0.0075	0	0	-0.006	0
	0.025					-0.02	-0.0125	-0.0125	-0.0185	-0.0125
	0.005						0.0075	0.0075	0.0015	0.0075
	0.0125							0	-0.006	0
	0.0125								-0.006	0
	0.0065									0.006
	0.0125									

S Value	
Neg	Pos
27	7
S Value	-20
n	10
P Value	0.036
Evaluation	Decreasing

S Value	
Neg	Pos
24	8
S Value	-16
n	10
P Value	0.078
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.025	0.0125	0.0125	0.0125	0.005	0.0125	0.0065	0.0065	0.0065	0.0125
	0.025		-0.0125	-0.0125	-0.0125	-0.02	-0.0185	-0.0185	-0.0185	-0.0125
	0.0125			0	0	-0.0075	0	-0.006	-0.006	0
	0.0125				0	-0.0075	0	-0.006	-0.006	0
	0.0125					-0.0075	0	-0.006	-0.006	0
	0.005						0.0075	0.0015	0.0015	0.0075
	0.0125							-0.006	-0.006	0
	0.0065							0	0	0.006
	0.0065								0	0.006
	0.0065									0.006
	0.0125									



Mann-Kendall Analysis: 1,1,1-TCA (2002-2011)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

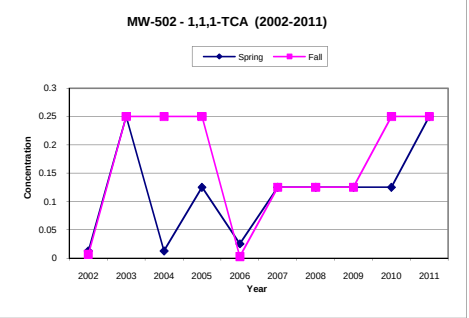
Degree of Confidence (Alpha): 0.05

MW-502

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0125	0.25	0.0125	0.125	0.025	0.125	0.125	0.125	0.125	0.25
0.0125		0.2375	0	0.1125	0.0125	0.1125	0.1125	0.1125	0.1125	0.2375
0.25			-0.2375	-0.125	-0.225	-0.125	-0.125	-0.125	-0.125	0
0.0125				0.1125	0.0125	0.1125	0.1125	0.1125	0.1125	0.2375
0.125					-0.1	0	0	0	0	0.125
0.025						0.1	0.1	0.1	0.1	0.225
0.125							0	0	0	0.125
0.125								0	0	0.125
0.125									0	0.125
0.25										0.125

S Value	
Neg	Pos
8	25
S Value	17
n	10
P Value	0.078
Evaluation	No Trend

S Value	
Neg	Pos
13	19
S Value	6
n	10
P Value	0.3
Evaluation	No Trend

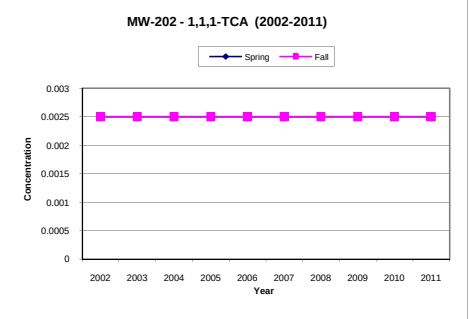


MW-202

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
0.0025		0	0	0	0	0	0	0	0	0
0.0025			0	0	0	0	0	0	0	0
0.0025				0	0	0	0	0	0	0
0.0025					0	0	0	0	0	0
0.0025						0	0	0	0	0
0.0025							0	0	0	0
0.0025								0	0	0
0.0025									0	0
0.0025										0

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

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

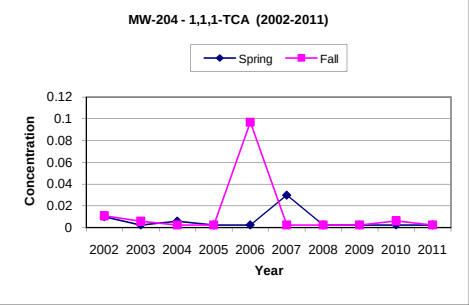


MW-204

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.01	0.0025	0.006	0.0025	0.0025	0.03	0.0025	0.0025	0.0025	0.0025
0.01		-0.0075	-0.004	-0.0075	-0.0075	0.02	-0.0075	-0.0075	-0.0075	-0.0075
0.0025			0.0035	0	0	0.0275	0	0	0	0
0.006				-0.0035	-0.0035	0.024	-0.0035	-0.0035	-0.0035	-0.0035
0.0025					0	0.0275	0	0	0	0
0.0025						0.0275	0	0	0	0
0.03							-0.0275	-0.0275	-0.0275	-0.0275
0.0025								0	0	0
0.0025									0	0
0.0025										0

S Value	
Neg	Pos
18	6
S Value	-12
n	10
P Value	0.146
Evaluation	No Trend

S Value	
Neg	Pos
20	10
S Value	-10
n	10
P Value	0.019
Evaluation	Decreasing



Mann-Kendall Analysis: 1,1-DCA (2002-2011)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

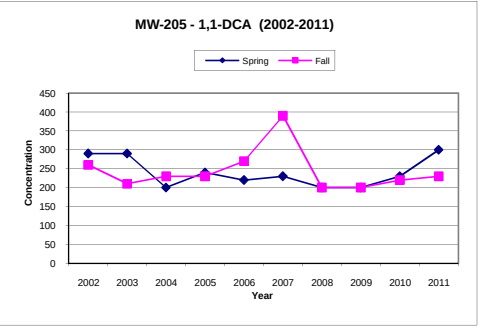
MW-205

S Value	
Neg	Pos
23	17
S Value	-6
n	10
P Value	0.3
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	290	290	200	240	220	230	200	200	230	300
290		0	-90	-50	-70	-60	-90	-90	-60	10
290			-90	-50	-70	-60	-90	-90	-60	10
200				40	20	30	0	0	30	100
240					-20	-10	-40	-40	-10	60
220						10	-20	-20	10	80
230							-30	-30	0	70
200								0	30	100
200									30	100
230										70
300										

S Value	
Neg	Pos
23	18
S Value	-5
n	10
P Value	0.364
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	260	210	230	230	270	390	200	200	220	230
260		-50	-30	-30	10	130	-60	-60	-40	-30
210			20	20	60	180	-10	-10	10	20
230				0	40	160	-30	-30	-10	0
230					40	160	-30	-30	-10	0
270						120	-70	-70	-50	-40
390							-190	-190	-170	-160
200								0	20	30
200									20	30
220										10
230										



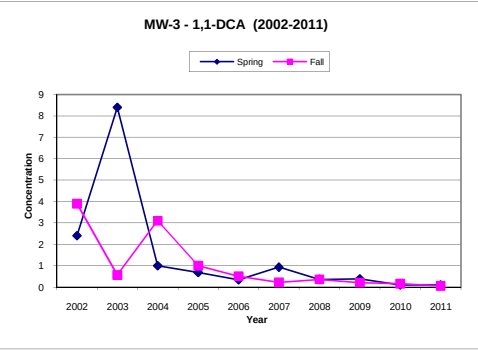
MW-3

S Value	
Neg	Pos
39	6
S Value	-33
n	10
P Value	0.0011
Evaluation	Decreasing

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	2.4	8.4	1	0.68	0.34	0.93	0.36	0.38	0.1	0.098
2.4		6	-1.4	-1.72	-2.06	-1.47	-2.04	-2.02	-2.3	-2.302
8.4			-7.4	-7.72	-8.06	-7.47	-8.04	-8.02	-8.3	-8.302
1				-0.32	-0.66	-0.07	-0.64	-0.62	-0.9	-0.902
0.68					-0.34	0.25	-0.32	-0.3	-0.58	-0.582
0.34						0.59	0.02	0.04	-0.24	-0.242
0.93							-0.57	-0.55	-0.83	-0.832
0.36								0.02	-0.26	-0.262
0.38									-0.28	-0.282
0.1										-0.002
0.098										

S Value	
Neg	Pos
42	3
S Value	-39
n	10
P Value	0.000058
Evaluation	Decreasing

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	3.9	0.56	3.1	1	0.51	0.22	0.36	0.21	0.16	0.052
3.9		-3.34	-0.8	-2.9	-3.39	-3.68	-3.54	-3.69	-3.74	-3.848
0.56			2.54	0.44	-0.05	-0.34	-0.2	-0.35	-0.4	-0.508
3.1				-2.1	-2.59	-2.88	-2.74	-2.89	-2.94	-3.048
1					-0.49	-0.78	-0.64	-0.79	-0.84	-0.948
0.51						-0.29	-0.15	-0.3	-0.35	-0.458
0.22							0.14	-0.01	-0.06	-0.168
0.36								-0.15	-0.2	-0.308
0.21									-0.05	-0.158
0.16										-0.108
0.052										



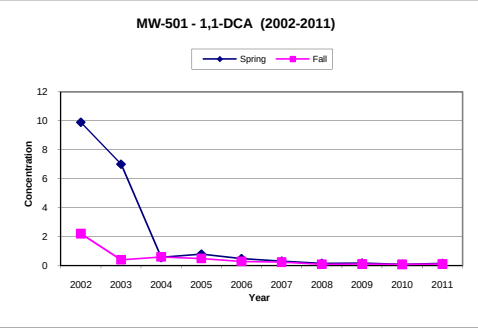
MW-501

S Value	
Neg	Pos
41	3
S Value	-38
n	10
P Value	--
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	9.9	9.9	7	0.56	0.79	0.48	0.31	0.15	0.088	0.15
9.9		-2.9	-9.34	-9.11	-9.42	-9.59	-9.75	-9.73	-9.812	-9.75
7			-6.44	-6.21	-6.52	-6.69	-6.85	-6.83	-6.912	-6.85
0.56				0.23	-0.08	-0.25	-0.41	-0.39	-0.472	-0.41
0.79					-0.31	-0.48	-0.64	-0.62	-0.702	-0.64
0.48						-0.17	-0.33	-0.31	-0.392	-0.33
0.31							-0.16	-0.14	-0.222	-0.16
0.15								0.02	-0.062	0
0.17									-0.082	-0.02
0.088										0.062
0.15										

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

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	2.2	0.4	0.6	0.49	0.29	0.24	0.09	0.11	0.089	0.1
2.2		-1.8	-1.6	-1.71	-1.91	-1.96	-2.11	-2.09	-2.111	-2.1
0.4			0.2	0.09	-0.11	-0.16	-0.31	-0.29	-0.311	-0.3
0.6				-0.11	-0.31	-0.36	-0.51	-0.49	-0.511	-0.5
0.49					-0.2	-0.25	-0.4	-0.38	-0.401	-0.39
0.29						-0.05	-0.2	-0.18	-0.201	-0.19
0.24							-0.15	-0.13	-0.151	-0.14
0.09								0.02	-0.001	0.01
0.11									-0.021	-0.01
0.089										0.011
0.1										



Mann-Kendall Analysis: 1,1-DCA (2002-2011)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

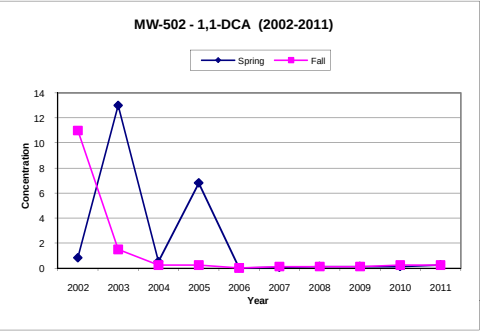
MW-502

S Value	
Neg	Pos
27	15
S Value	-12
n	10
P Value	0.146
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.82	13	0.52	6.8	0.025	0.054	0.125	0.125	0.125	0.25
	0.82	12.18	-0.3	5.98	-0.795	-0.766	-0.695	-0.695	-0.695	-0.57
	13		-12.48	-6.2	-12.975	-12.946	-12.875	-12.875	-12.875	-12.75
	0.52			6.28	-0.495	-0.466	-0.395	-0.395	-0.395	-0.27
	6.8				-6.775	-6.746	-6.675	-6.675	-6.675	-6.55
	0.025					0.029	0.1	0.1	0.1	0.225
	0.054						0.071	0.071	0.071	0.196
	0.125							0	0	0.125
	0.125								0	0.125
	0.125									0.125
	0.25									0.125

S Value	
Neg	Pos
25	11
S Value	-14
n	10
P Value	0.108
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	11	1.5	0.25	0.25	0.016	0.125	0.125	0.125	0.25	0.25
	11	-9.5	-10.75	-10.75	-10.984	-10.875	-10.875	-10.875	-10.75	-10.75
	1.5		-1.25	-1.25	-1.484	-1.375	-1.375	-1.375	-1.25	-1.25
	0.25			0	-0.234	-0.125	-0.125	-0.125	0	0
	0.25				-0.234	-0.125	-0.125	-0.125	0	0
	0.016					0.109	0.109	0.109	0.234	0.234
	0.125						0	0	0.125	0.125
	0.125							0	0.125	0.125
	0.125								0.125	0.125
	0.25									0
	0.25									0



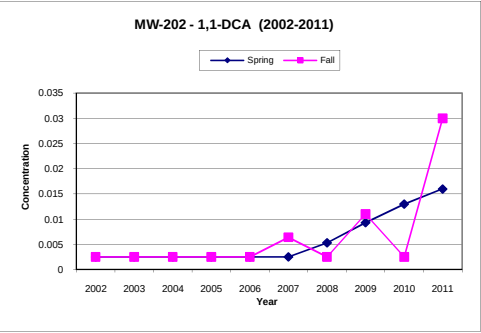
MW-202

S Value	
Neg	Pos
0	30
S Value	30
n	10
P Value	0.0023
Evaluation	Increasing

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0053	0.0093	0.013	0.016
	0.0025	0	0	0	0	0	0.0028	0.0068	0.0105	0.0135
	0.0025		0	0	0	0	0.0028	0.0068	0.0105	0.0135
	0.0025			0	0	0	0.0028	0.0068	0.0105	0.0135
	0.0025				0	0	0.0028	0.0068	0.0105	0.0135
	0.0025					0	0.0028	0.0068	0.0105	0.0135
	0.0025						0.0028	0.0068	0.0105	0.0135
	0.0053							0.004	0.0077	0.0107
	0.0093								0.0037	0.0067
	0.013									0.003
	0.016									

S Value	
Neg	Pos
3	21
S Value	18
n	10
P Value	0.054
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0064	0.0025	0.011	0.0025	0.03
	0.0025	0	0	0	0	0.0039	0	0.0085	0	0.0275
	0.0025		0	0	0	0.0039	0	0.0085	0	0.0275
	0.0025			0	0	0.0039	0	0.0085	0	0.0275
	0.0025				0	0.0039	0	0.0085	0	0.0275
	0.0025					0.0039	0	0.0085	0	0.0275
	0.0064						-0.0039	0.0046	-0.0039	0.0236
	0.0025							0.0085	0	0.0275
	0.011								-0.0085	0.019
	0.0025									0.0275
	0.03									



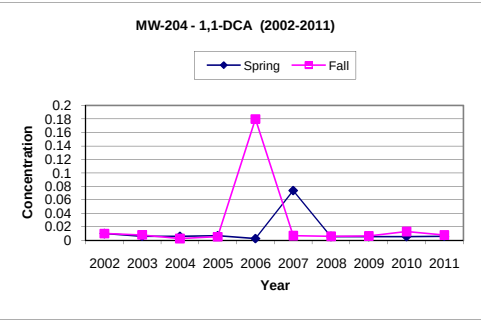
MW-204

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

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.01	0.006	0.006	0.0068	0.0025	0.074	0.0056	0.0056	0.0055	0.0059
	0.01	-0.004	-0.004	-0.0032	-0.0075	0.064	-0.0044	-0.0044	-0.0045	-0.0041
	0.006		0	0.0008	-0.0035	0.068	-0.0004	-0.0004	-0.0005	-0.0001
	0.006			0.0008	-0.0035	0.068	-0.0004	-0.0004	-0.0005	-0.0001
	0.0068				-0.0043	0.0672	-0.0012	-0.0012	-0.0013	-0.0009
	0.0025					0.0715	0.0031	0.0031	0.003	0.0034
	0.074						-0.0684	-0.0684	-0.0685	-0.0681
	0.0056							0	-0.0001	0.0003
	0.0056								-0.0001	0.0003
	0.0055									0.0004
	0.0059									

S Value	
Neg	Pos
21	24
S Value	3
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.01	0.008	0.0025	0.0053	0.18	0.007	0.006	0.0063	0.013	0.0077
	0.01	-0.002	-0.0075	-0.0047	0.17	-0.003	-0.004	-0.0037	0.003	-0.0023
	0.008		-0.0055	-0.0027	0.172	-0.001	-0.002	-0.0017	0.005	-0.0003
	0.0025			0.0028	0.1775	0.0045	0.0035	0.0038	0.0105	0.0052
	0.0053				0.1747	0.0017	0.0007	0.001	0.0077	0.0024
	0.18					-0.173	-0.174	-0.1737	-0.167	-0.1723
	0.007						-0.001	-0.0007	0.006	0.0007
	0.006							0.0003	0.007	0.0017
	0.0063								0.0067	0.0014
	0.013									-0.0053
	0.0077									



MW-205

Mann-Kendall Trend: Spring

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

Mann-Kendall Trend: Fall

MW-205 - 1,1-DCE (2002-2011)

Year	Spring	Fall
2002	0.02	0.02
2003	0.02	0.02
2004	0.02	0.02
2005	0.02	0.02
2006	0.02	0.02
2007	0.02	0.02
2008	0.02	0.02
2009	0.02	0.02
2010	0.02	0.02
2011	0.02	0.02

S Value	
Neg	Pos
38	0
S Value	-38
n	10
P Value	--
Evaluation	No Trend

Mann-Kendall Trend: Spring

S Value	
Neg	Pos
38	0
S Value	-38
n	10
P Value	--
Evaluation	No Trend

Mann-Kendall Trend: Fall

MW-3 - 1,1-DCE (2002-2011)

Year	Spring Concentration	Fall Concentration
2002	2.0	1.4
2003	1.2	0.6
2004	0.4	0.35
2005	0.1	0.1
2006	0.05	0.05
2007	0.05	0.05
2008	0.05	0.05
2009	0.05	0.05
2010	0.05	0.05
2011	0.05	0.05

S Value	
Neg	Pos
21	9
S Value	-12
n	10
P Value	0.146
Evaluation	No Trend

Mann-Kendall Trend: Spring

S Value	
Neg	Pos
24	8
S Value	-16
n	10
P Value	0.078
Evaluation	No Trend

Mann-Kendall Trend: Fall

MW-501 - 1,1-DCE (2002-2011)

Year	Spring Concentration	Fall Concentration
2002	0.012	0.025
2003	0.125	0.012
2004	0.012	0.012
2005	0.012	0.012
2006	0.025	0.005
2007	0.005	0.012
2008	0.012	0.005
2009	0.012	0.005
2010	0.005	0.005
2011	0.012	0.012

Mann-Kendall Analysis: 1,1-DCE (2002-2011)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

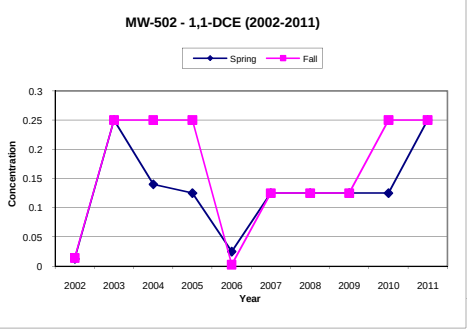
MW-502

S Value	
Neg	Pos
14	20
S Value	6
n	10
P Value	0.3
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0125	0.25	0.14	0.125	0.025	0.125	0.125	0.125	0.125	0.25
	0.0125	0.2375	0.1275	0.1125	0.0125	0.1125	0.1125	0.1125	0.1125	0.2375
	0.25		-0.11	-0.125	-0.225	-0.125	-0.125	-0.125	-0.125	0
	0.14			-0.015	-0.115	-0.015	-0.015	-0.015	-0.015	0.11
	0.125				-0.1	0	0	0	0	0.125
	0.025					0.1	0.1	0.1	0.1	0.225
	0.125						0	0	0	0.125
	0.125							0	0	0.125
	0.125								0	0.125
	0.125									0.125
	0.25									

S Value	
Neg	Pos
13	19
S Value	6
n	10
P Value	0.3
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.014	0.25	0.25	0.25	0.0025	0.125	0.125	0.125	0.25	0.25
	0.014	0.236	0.236	0.236	-0.0115	0.111	0.111	0.111	0.236	0.236
	0.25		0	0	-0.2475	-0.125	-0.125	-0.125	0	0
	0.25			0	-0.2475	-0.125	-0.125	-0.125	0	0
	0.25				-0.2475	-0.125	-0.125	-0.125	0	0
	0.0025					0.1225	0.1225	0.1225	0.2475	0.2475
	0.125						0	0	0.125	0.125
	0.125							0	0.125	0.125
	0.125								0.125	0.125
	0.25									0
	0.25									



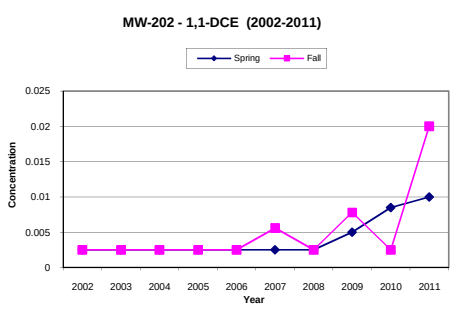
MW-202

S Value	
Neg	Pos
0	24
S Value	24
n	10
P Value	0.014
Evaluation	Increasing

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.005	0.0085	0.01
	0.0025	0	0	0	0	0	0	0.0025	0.006	0.0075
	0.0025		0	0	0	0	0	0.0025	0.006	0.0075
	0.0025			0	0	0	0	0.0025	0.006	0.0075
	0.0025				0	0	0	0.0025	0.006	0.0075
	0.0025					0	0	0.0025	0.006	0.0075
	0.0025						0	0.0025	0.006	0.0075
	0.0025							0.0025	0.006	0.0075
	0.005								0.0035	0.005
	0.0085									0.0015
	0.01									

S Value	
Neg	Pos
3	21
S Value	18
n	10
P Value	0.054
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0056	0.0025	0.0078	0.0025	0.02
	0.0025	0	0	0	0	0.0031	0	0.0053	0	0.0175
	0.0025		0	0	0	0.0031	0	0.0053	0	0.0175
	0.0025			0	0	0.0031	0	0.0053	0	0.0175
	0.0025				0	0.0031	0	0.0053	0	0.0175
	0.0025					0.0031	0	0.0053	0	0.0175
	0.0056						-0.0031	0.0022	-0.0031	0.0144
	0.0025							0.0053	0	0.0175
	0.0078								-0.0053	0.0122
	0.0025									0.0175
	0.02									



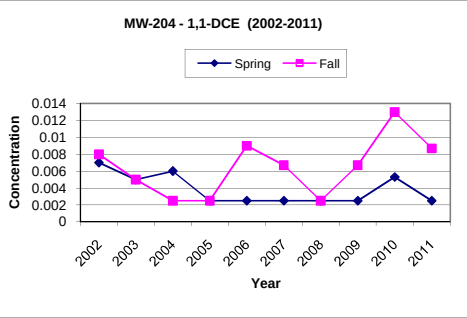
MW-204

S Value	
Neg	Pos
23	7
S Value	-16
n	10
P Value	0.078
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.007	0.005	0.006	0.0025	0.0025	0.0025	0.0025	0.0025	0.0053	0.0025
	0.007	-0.002	-0.001	-0.0045	-0.0045	-0.0045	-0.0045	-0.0045	-0.0017	-0.0045
	0.005		0.001	-0.0025	-0.0025	-0.0025	-0.0025	-0.0025	0.0003	-0.0025
	0.006			-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0007	-0.0035
	0.0025				0	0	0	0	0.0028	0
	0.0025					0	0	0	0.0028	0
	0.0025						0	0	0.0028	0
	0.0025							0	0.0028	0
	0.0025								0.0028	0
	0.0025									-0.0028
	0.0053									
	0.0025									

S Value	
Neg	Pos
15	26
S Value	11
n	10
P Value	0.019
Evaluation	Increasing

Mann-Kendall Trend: Fall										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Data	0.008	0.005	0.0025	0.0025	0.009	0.0067	0.0025	0.0067	0.013	0.0087
	0.008	-0.003	-0.0055	-0.0055	0.001	-0.0013	-0.0055	-0.0013	0.005	0.0007
	0.005		-0.0025	-0.0025	0.004	0.0017	-0.0025	0.0017	0.008	0.0037
	0.0025			0	0.0065	0.0042	0	0.0042	0.0105	0.0062
	0.0025				0.0065	0.0042	0	0.0042	0.0105	0.0062
	0.009					-0.0023	-0.0065	-0.0023	0.004	-0.0003
	0.0067						-0.0042	0	0.0063	0.002
	0.0025							0.0042	0.0105	0.0062
	0.0067								0.0063	0.002
	0.013									-0.0043
	0.0087									



APPENDIX C

SSD System Maintenance and Monitoring Documentation

John Hogan

Mark, we had to replace one fan in 2011. It was in location # 1 (cafeteria) But that fan was never down. I heard it making a load noise and got it replaced before it failed. Attached is the invoice for the fan.



CooperVision™

John Hogan, *Manager Facilities & Maintenance*
711 North Road, Scottsville, NY 14546
P(585) 264-3226 | f: (585) 889-5688
ihogan@coopervision.com

INVOICE

September 2, 2011

Mr. John Hogan
Manager Facilities & Maintenance
Coopervision, Inc.
711 North Road
Scottsville, NY 14546
Via email: jhogan@coopervision.com

Re: **Sub-slab Vent System Fan** -711 North Road
 Cafeteria System – Roof mount fan

Furnished and Installed – (September 2, 2011)

- (1) RADONAWAY GP-501 inline centrifugal fan
- Three year warranty

Balance Due	\$485.00
-------------	----------

Thank you.

Nicholas E. Mouganis EPA listing # 15415-I; NEHA ID# 100722

[illegible]

Note: # 4 & # 5 are on the same system

[illegible]

[illegible]

[illegible]

Note: # 4 & # 5 are on the same system

[illegible]

[illegible]

Sub-Slab system Form 142-1-30

SUB - SLAB		DEPRESSURIZATION SYSTEM	READING ARE	INCHES OF WATER (in.w.c.)
Date	Location #	Manometer readings (in.w.c)	Preformed By	Comments/Remarks
5/13/11	W, 5	2.4	MS	
6/11/11	W, 5	2.4	MS	
7/11/11	W, 5	2.4	MS	
8/10/11	W, 5	2.2	MS	
9/8/11	W, 5	2.4	MS	
10/3/11	W, 5	2.4	MS	
11/16/11	W, 5	2.4	MS	
12/5/11	W, 5	2.4	MS	
Location # 1 Rochester (aka Cafeteria) # 2 Honeoye Falls (aka Compressor Room) # 3 Hilton (aka Utility Room) # 4 & 5 Greece / Palmyra (aka Molding / Switch Gear) # 6 Spencerport (aka MicroBio Lab) # 7 Brockport (aka Bevel Mill Room) Note: # 4 & # 5 are on the same system				

[illegible]

Note: # 4 & # 5 are on the same system

[illegible]

[illegible]

Note: # 4 & # 5 are on the same system

[illegible]

Maintenance Form

Work Order Number 28641
Date Enacted 11/7/2011

Due Date: 12/6/2011

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

Procedure to Reference: 142-X-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:

Estimated Cost:

Parts Used:

12/6/2011
45 min

Remarks:

Mary J. Lay

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
12/5/11	mgf	3.9						OK	
			3.7					OK	
				1.7				OK	
					2.4			OK	
						3.6		OK	
							1.8	OK	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 28483
Date Enacted 10/10/2011

Due Date: 11/6/2011

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: Plant
Location: All Locations
Contact Person: John Hogan

Procedure to Reference: 142-X-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 mins.

Estimated Cost:

Parts Used:

Remarks:

11/6/11 Rene Scheuing

ms

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
11/6/11	MS	3.9	3.8	1.7	2.4	3.7	1.7	MS	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 28333
Date Enacted 9/12/2011

Due Date: 10/8/2011

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

Procedure to Reference: 142-X-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: 45 mins
Parts Used:

Estimated Cost:

Remarks:

10/7/11 Rene Schenning

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
10/7/11	MS	3.8	3.7	1.7	2.4	3.6	1.7	MS	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

Maintenance Form

Work Order Number 28175
Date Enacted 8/15/2011

Due Date: 9/9/2011

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

Procedure to Reference: 142-X-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 1/2 hr

Estimated Cost:

Parts Used:

Remarks:

9/8/11 Mary Jo Fay

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicroBio lab	S-7 Bevel Mill Room		
9/8/11	mgf	3.7						OK	
			3.6					OK	
						3.5		OK	
							1.7	OK	
					2.4			OK	
				1.6				OK	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 27983
Date Enacted 7/18/2011

Due Date: 8/10/2011

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

Procedure to Reference: 142-X-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: 45 min

Estimated Cost:

Parts Used:

Remarks:

Mary J. Fay 8/10/11

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
8/10/11	mgj	3.6						OK	
8/10/11	mgj		3.5					OK	
8/10/11	mgj			1.6	2.2	3.5		OK	
8/10/11	mgj							OK	
8/10/11	mgj						1.6	OK	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 27833
Date Enacted 6/21/2011

Due Date: 7/11/2011

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

Procedure to Reference: 142-X-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: 20 mins.

Estimated Cost:

Parts Used:

Remarks:

7/11/11 Rene Schewing

MS

Monthly SSD System Monitoring

Location (Site/Facility Name)

CooperVision

Location (Address)

Scottsville, NY

Client:

CooperVision

[illegible]

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

Maintenance Form

Work Order Number 27711
Date Enacted 5/31/2011

Due Date: 6/12/2011

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

Procedure to Reference: 142-X-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 mins.

Estimated Cost:

Parts Used:

Remarks:

6/11/11 Rene Scheuing

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
6/11/11	MS	3.6	3.6	1.6	2.4	3.5	1.6	MS	All Visual OK

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

Maintenance Form

Work Order Number 27508
Date Enacted 4/18/2011

Due Date: 5/13/2011

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

Procedure to Reference: 142-X-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.
Parts Used:

Estimated Cost:

Remarks:

5/13/11 Rene Scheuring

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
5/13/11	ms	3.6	3.6	1.624 ^{ms}	.24	3.4	1.6	ms	all visually ok

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

Maintenance Form

Work Order Number 27332
Date Enacted 3/21/2011

Due Date: 4/15/2011

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

Procedure to Reference: 142-X-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:

Mary Jo Fay 4/13/11

MS

Monthly SSD System Monitoring

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

[illegible]

Notes:

- *Document Monthly Readings
*Email results Yearly to Contacts
*Readings are in inches of Water Column (in.w.c.)
*See figure for suction points and fan locations

Contacts:

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

Maintenance Form

Work Order Number 27142
Date Enacted 2/14/2011

Due Date: 3/16/2011

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

Procedure to Reference: 142-X-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: 55 min

Estimated Cost:

Parts Used:

Remarks:

3/16/11
mje Fay

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Utility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
3/16/11	mgf	3.8						✓	
	mgf		3.8					✓	
	mgf							✓	OK mgf Jay
	mgf				2.4			✓	
	mgf					3.7		✓	
	mgf						1.8	✓	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 26937
Date Enacted 1/17/2011

Due Date: 2/12/2011

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

Scheduled Person: *Duane Pierson*
Event Name: Monthly
Department: Plant
Location: All Locations
Contact Person: John Hogan

Procedure to Reference: 142-X-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: *45 min.*

Estimated Cost:

Parts Used:

Remarks:

*Procedure completed per S.O.P 142-X-30
2-11-11
SOP - Sub-Slab re-checked on 2/14/11
during training Mr. Jay 2/14/11*

[illegible]

Monthly SSD System Monitoring

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

Date	Initials	Vacuum Reading ("wc)						Visual Inspection	Comments / Remarks
		S-1 Cafeteria	S-2 Compressor Room	S-3 Ulility Room	S-4/5 Molding / Switchgear	S-6 MicrBio lab	S-7 Bevel Mill Room		
2/14/11	gmg	3.8						OK	
2/14/11	gmg		3.7					OK	
2/14/11	gmg			1.7				OK	
2/14/11	gmg				2.2			OK	
2/14/11	gmg					3.6		OK	
2/14/11	gmg						1.7	OK	

Notes:

- *Document Monthly Readings
- *Email results Yearly to Contacts
- *Readings are in inches of Water Column (in.w.c.)
- *See figure for suction points and fan locations

Contacts:

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

FM00916

Maintenance Form

Work Order Number 26768
Date Enacted 12/20/2010

Due Date: 1/13/2011

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

Scheduled Person: *Duane Pierson*
Event Name: Monthly
Department: Plant
Location: All Locations
Contact Person: John Hogan

Procedure to Reference: 142-X-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: *45 min.*

Estimated Cost:

Parts Used:

Remarks:

*Procedure completed per S.O.P 142-X-30
1-13-11*

[illegible]

Show All History Records - Page 2

	History Date	Due Date	Event Name	Event Type	Future Date	Component ID	Department
	07/13/2009	07/13/2009	Weekly	Maintenance	07/20/2009	SUB-SLAB	Plant
	07/20/2009	07/20/2009	Weekly	Maintenance	07/27/2009	SUB-SLAB	Plant
	07/27/2009	07/27/2009	Weekly	Maintenance	08/03/2009	SUB-SLAB	Plant
	08/03/2009	08/03/2009	Weekly	Maintenance	08/10/2009	SUB-SLAB	Plant
	08/10/2009	08/10/2009	Weekly	Maintenance	08/17/2009	SUB-SLAB	Plant
	08/17/2009	08/17/2009	Weekly	Maintenance	08/24/2009	SUB-SLAB	Plant
	08/24/2009	08/31/2009	Weekly	Maintenance	09/07/2009	SUB-SLAB	Plant
	08/24/2009	08/24/2009	Weekly	Maintenance	08/31/2009	SUB-SLAB	Plant
	08/31/2009	08/31/2009	Weekly	Maintenance	09/07/2009	SUB-SLAB	Plant
	09/07/2009	09/07/2009	Weekly	Maintenance	09/14/2009	SUB-SLAB	Plant
	09/14/2009	09/14/2009	Weekly	Maintenance	09/21/2009	SUB-SLAB	Plant
	09/21/2009	09/21/2009	Weekly	Maintenance	09/28/2009	SUB-SLAB	Plant
	09/28/2009	09/28/2009	Weekly	Maintenance	10/05/2009	SUB-SLAB	Plant
	10/05/2009	10/05/2009	Weekly	Maintenance	10/12/2009	SUB-SLAB	Plant
	10/12/2009	10/12/2009	Weekly	Maintenance	10/19/2009	SUB-SLAB	Plant
	10/19/2009	10/19/2009	Weekly	Maintenance	10/26/2009	SUB-SLAB	Plant
	10/26/2009	10/26/2009	Weekly	Maintenance	11/02/2009	SUB-SLAB	Plant
	11/02/2009	11/02/2009	Weekly	Maintenance	11/09/2009	SUB-SLAB	Plant
	11/09/2009	11/09/2009	Weekly	Maintenance	11/16/2009	SUB-SLAB	Plant
	11/16/2009	11/16/2009	Weekly	Maintenance	11/23/2009	SUB-SLAB	Plant
	11/23/2009	11/23/2009	Weekly	Maintenance	11/30/2009	SUB-SLAB	Plant
	11/30/2009	11/30/2009	Weekly	Maintenance	12/07/2009	SUB-SLAB	Plant
	12/07/2009	12/07/2009	Weekly	Maintenance	12/14/2009	SUB-SLAB	Plant
	12/14/2009	12/14/2009	Weekly	Maintenance	12/21/2009	SUB-SLAB	Plant
	12/21/2009	12/21/2009	Weekly	Maintenance	12/28/2009	SUB-SLAB	Plant
	12/28/2009	12/28/2009	Weekly	Maintenance	01/04/2010	SUB-SLAB	Plant
	01/04/2010	01/04/2010	Weekly	Maintenance	01/11/2010	SUB-SLAB	Plant
	01/11/2010	01/11/2010	Weekly	Maintenance	01/18/2010	SUB-SLAB	Plant
	01/18/2010	01/18/2010	Weekly	Maintenance	01/25/2010	SUB-SLAB	Plant
	01/25/2010	01/25/2010	Weekly	Maintenance	02/01/2010	SUB-SLAB	Plant
	02/01/2010	02/01/2010	Weekly	Maintenance	02/08/2010	SUB-SLAB	Plant
	02/08/2010	02/08/2010	Weekly	Maintenance	02/15/2010	SUB-SLAB	Plant
	02/15/2010	02/15/2010	Weekly	Maintenance	02/22/2010	SUB-SLAB	Plant
	02/22/2010	02/22/2010	Weekly	Maintenance	03/01/2010	SUB-SLAB	Plant
	03/01/2010	03/01/2010	Weekly	Maintenance	03/08/2010	SUB-SLAB	Plant
	03/08/2010	03/08/2010	Weekly	Maintenance	03/15/2010	SUB-SLAB	Plant
	03/15/2010	03/15/2010	Weekly	Maintenance	03/22/2010	SUB-SLAB	Plant
	03/22/2010	03/22/2010	Weekly	Maintenance	03/29/2010	SUB-SLAB	Plant
	03/29/2010	03/29/2010	Weekly	Maintenance	04/05/2010	SUB-SLAB	Plant
	04/05/2010	04/05/2010	Weekly	Maintenance	04/12/2010	SUB-SLAB	Plant

Show All History Records - Page 2

		04/12/2010	04/12/2010	Weekly	Maintenance	04/19/2010	SUB-SLAB	Plant
		04/19/2010	04/19/2010	Weekly	Maintenance	04/26/2010	SUB-SLAB	Plant
		04/26/2010	04/26/2010	Weekly	Maintenance	05/03/2010	SUB-SLAB	Plant
		05/03/2010	05/03/2010	Weekly	Maintenance	05/10/2010	SUB-SLAB	Plant
		05/10/2010	05/10/2010	Weekly	Maintenance	05/17/2010	SUB-SLAB	Plant
		05/17/2010	05/17/2010	Weekly	Maintenance	05/24/2010	SUB-SLAB	Plant
		05/24/2010	05/24/2010	Weekly	Maintenance	05/31/2010	SUB-SLAB	Plant
		05/31/2010	05/31/2010	Weekly	Maintenance	06/07/2010	SUB-SLAB	Plant
		06/07/2010	06/07/2010	Weekly	Maintenance	06/14/2010	SUB-SLAB	Plant
		06/14/2010	06/14/2010	Weekly	Maintenance	06/21/2010	SUB-SLAB	Plant
		06/21/2010	06/21/2010	Weekly	Maintenance	06/28/2010	SUB-SLAB	Plant
		06/28/2010	06/28/2010	Weekly	Maintenance	07/05/2010	SUB-SLAB	Plant
		07/07/2010	07/05/2010	Weekly	Maintenance	07/12/2010	SUB-SLAB	Plant
		07/14/2010	07/14/2010	Weekly	Maintenance	07/21/2010	SUB-SLAB	Plant
		07/21/2010	07/21/2010	Weekly	Maintenance	07/28/2010	SUB-SLAB	Plant
		07/28/2010	07/28/2010	Weekly	Maintenance	08/04/2010	SUB-SLAB	Plant
		08/04/2010	08/04/2010	Weekly	Maintenance	08/11/2010	SUB-SLAB	Plant
		08/11/2010	08/11/2010	Weekly	Maintenance	08/18/2010	SUB-SLAB	Plant
		08/18/2010	08/18/2010	Weekly	Maintenance	08/25/2010	SUB-SLAB	Plant
		08/25/2010	08/25/2010	Weekly	Maintenance	09/01/2010	SUB-SLAB	Plant
		09/01/2010	09/01/2010	Weekly	Maintenance	09/08/2010	SUB-SLAB	Plant
		09/08/2010	09/08/2010	Weekly	Maintenance	09/15/2010	SUB-SLAB	Plant
		09/15/2010	09/15/2010	Weekly	Maintenance	09/22/2010	SUB-SLAB	Plant
		09/22/2010	09/22/2010	Monthly	Maintenance	10/22/2010	SUB-SLAB	Plant
		10/21/2010	10/22/2010	Monthly	Maintenance	11/21/2010	SUB-SLAB	Plant
		11/19/2010	11/20/2010	Monthly	Maintenance	12/20/2010	SUB-SLAB	Plant
		12/14/2010	12/19/2010	Monthly	Maintenance	01/18/2011	SUB-SLAB	Plant
		01/13/2011	01/13/2011	Monthly	Maintenance	02/12/2011	SUB-SLAB	Plant
		02/11/2011	02/12/2011	Monthly	Maintenance	03/14/2011	SUB-SLAB	Plant
		02/14/2011	03/13/2011	Monthly	Maintenance	04/12/2011	SUB-SLAB	Plant
		03/16/2011	03/16/2011	Monthly	Maintenance	04/15/2011	SUB-SLAB	Plant
		04/13/2011	04/15/2011	Monthly	Maintenance	05/15/2011	SUB-SLAB	Plant
		05/13/2011	05/13/2011	Monthly	Maintenance	06/12/2011	SUB-SLAB	Plant
		06/11/2011	06/12/2011	Monthly	Maintenance	07/12/2011	SUB-SLAB	Plant
		07/11/2011	07/11/2011	Monthly	Maintenance	08/10/2011	SUB-SLAB	Plant
		08/10/2011	08/10/2011	Monthly	Maintenance	09/09/2011	SUB-SLAB	Plant
		09/08/2011	09/09/2011	Monthly	Maintenance	10/09/2011	SUB-SLAB	Plant
		10/07/2011	10/08/2011	Monthly	Maintenance	11/07/2011	SUB-SLAB	Plant
		11/06/2011	11/06/2011	Monthly	Maintenance	12/06/2011	SUB-SLAB	Plant
		12/06/2011	12/06/2011	Monthly	Maintenance	01/05/2012	SUB-SLAB	Plant

May 02, 2011

Service Request No: R1102043

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 on April 14, 2011. For your reference, these analyses have been assigned our service request number **R1102043**.

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 Columbia Analytical Services, Inc. (CAS) 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 134. You may also contact me via email at KBunker@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.



Karen Bunker
Project Manager

CC: Claire DeBergalis

Page 1 of 63

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Haley & Aldrich of New York
Project: Coopervision #70665-001 4/11
Sample Matrix: Water

Service Request No.: R1102043
Date Received: 4/14/11

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). 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

Ten (10) water samples were collected on 4/11-13/11 by H&A and received for analysis at Columbia Analytical Services on 4/14/11. The samples were received in good condition and consistent with the accompanying chain of custody form. The cooler temperature upon receipt at the laboratory was 5°C within guidelines of 0-6°C.

General Chemistry Parameters & Metals

Five (5) water samples were analyzed for a client specific list of Anion and Cation parameters: Chloride, Sulfate, Total Alkalinity, Nitrate, Nitrite, Sulfide, Ferrous Iron, and Total Iron

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

All Initial and Continuing Calibration Criteria was met for all analyses.

Metals analyses are reported in ug/L in this report.

All holding times were met for these analyses except for the following samples: all Ferrous Iron samples were received outside the 24 hour holding time, NO3 and NO2 aliquots were received outside of the 48 hr hold time for locations MW-3 (CAS Submission # R1102043-006) and MW-502 (-007) and were run as soon as possible upon receipt in the lab, Nitrate and Nitrite aliquots were run outside the 48 hour holding time for locations MW-501 (-08), MW-205 (-009), and OW-302S (-010). All samples were run the same day as received. Exceedences are flagged as "*" on the data forms.

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

All Laboratory Method Blanks were free from contamination.

No problems were encountered during the analysis of these samples.

Approved by



Date

5/3/11

00002

Organic Compounds

Ten (10) water samples including one (1) Trip Blank were analyzed for the TCL of Volatile Organics by GC/MS Method 8260C from SW-846. Five (5) water samples were analyzed for Dissolved Gases by modified GC Method RSK-175. One (1) water was analyzed for Metabolic Acids by HPLC methodology.

All Initial and Continuing Calibration Criteria was met for these samples.

Batch QC is included in the report. All Laboratory Control Samples (LCS), Laboratory Control Sample Duplicate (LCSD) recoveries, and Relative Percent Difference (RPD) calculations were within QC acceptance limits.

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. All samples were found to be preserved to a pH of <2 or the samples were analyzed within 7 days from collection for unpreserved aliquots except for the RSK-175 for locations MW-205 (R1102043-009). This aliquot was found to be unpreserved and was run on the 9th day from sample collection. All CAS vials are certified as preserved therefore matrix interference is suspected.

The Trip Blank and Laboratory Method Blanks were free from contamination.

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

Approved by



Date

5/3/12

000003

CASE NARRATIVE

This report contains analytical results for the following samples:

Service Request Number: R1102043

<u>Lab ID</u>	<u>Client ID</u>
R1102043-001	TB-1
R1102043-002	OW-306
R1102043-003	MW-203
R1102043-004	MW-202
R1102043-005	MW-204
R1102043-006	MW-3
R1102043-007	MW-502
R1102043-008	MW-501
R1102043-009	MW-205
R1102043-010	OW-302S

REPORT QUALIFIERS

- 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/Aroclors).
- 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 ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.



CAS/Rochester Lab ID # for State Certifications¹

NELAP Accredited
 Connecticut ID # PH0556
 Delaware Accredited
 DoD ELAP #65817
 Florida ID # E87674
 Illinois ID #200047
 Maine ID #NY0032

Nebraska Accredited
 Nevada ID # NY-00032
 New Jersey ID # NY004
 New York ID # 10145
 New Hampshire ID # 294100 A/B
 Pennsylvania ID# 68-786
 Rhode Island ID # 158

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/11/11
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 01:52

Sample Name: TB-1
 Lab Code: R1102043-001

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1977.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/11/11
Date Received: 4/14/11
Date Analyzed: 4/19/11 01:52

Sample Name: TB-1
Lab Code: R1102043-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\01977.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	4/19/11 01:52	
Toluene-d8	108	87-121	4/19/11 01:52	
Dibromofluoromethane	103	89-119	4/19/11 01:52	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/11/11 1442
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 02:21

Sample Name: OW-306
 Lab Code: R1102043-002

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1978.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/11/11 1442
Date Received: 4/14/11
Date Analyzed: 4/19/11 02:21

Sample Name: OW-306
Lab Code: R1102043-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1978.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	4/19/11 02:21	
Toluene-d8	106	87-121	4/19/11 02:21	
Dibromofluoromethane	103	89-119	4/19/11 02:21	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/11/11 1540
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 02:51

Sample Name: MW-203
 Lab Code: R1102043-003

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1979.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/11/11 1540
Date Received: 4/14/11
Date Analyzed: 4/19/11 02:51

Sample Name: MW-203
Lab Code: R1102043-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1979.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	4/19/11 02:51	
Toluene-d8	105	87-121	4/19/11 02:51	
Dibromofluoromethane	100	89-119	4/19/11 02:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/12/11 1130
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 09:41

Sample Name: MW-202
 Lab Code: R1102043-004

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1991.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	16	5.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	
75-35-4	1,1-Dichloroethene	10	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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1130
Date Received: 4/14/11
Date Analyzed: 4/19/11 09:41

Sample Name: MW-202
Lab Code: R1102043-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1991.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85-122	4/19/11 09:41	
Toluene-d8	110	87-121	4/19/11 09:41	
Dibromofluoromethane	105	89-119	4/19/11 09:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/12/11 1230
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 03:51

Sample Name: MW-204
 Lab Code: R1102043-005

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1981.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	5.9	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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1230
Date Received: 4/14/11
Date Analyzed: 4/19/11 03:51

Sample Name: MW-204
Lab Code: R1102043-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1981.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	4/19/11 03:51	
Toluene-d8	106	87-121	4/19/11 03:51	
Dibromofluoromethane	101	89-119	4/19/11 03:51	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R1102043-006

Service Request: R1102043
Date Collected: 4/12/11 1030
Date Received: 4/14/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	188		mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	331		mg/L	20	100	NA	4/15/11 13:31	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	4/14/11 16:11	*
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/15/11 11:05	*
Nitrite as Nitrogen	9056A	10	U	mg/L	10	100	NA	4/15/11 13:31	*
Sulfate	9056A	3.4		mg/L	2.0	10	NA	4/15/11 11:05	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R1102043-006

Service Request: R1102043
Date Collected: 4/12/11 1030
Date Received: 4/14/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	7790	µg/L	100	1	4/21/11	4/28/11 08:48	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/12/11 1030
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 04:20

Sample Name: MW-3
 Lab Code: R1102043-006

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1982.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	200 U	200	
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	1500	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	98	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	320	50	
95-47-6	o-Xylene	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1030
Date Received: 4/14/11
Date Analyzed: 4/19/11 04:20

Sample Name: MW-3
Lab Code: R1102043-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\VD1982.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	50	U	50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	4/19/11 04:20	
Toluene-d8	108	87-121	4/19/11 04:20	
Dibromofluoromethane	101	89-119	4/19/11 04:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1030
Date Received: 4/14/11
Date Analyzed: 4/22/11 11:02

Sample Name: MW-3
Lab Code: R1102043-006

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star188.run

Analysis Lot: 243146
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	32	25	
74-82-8	Methane	1400	50	
74-98-6	Propane	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-502
Lab Code: R1102043-007

Service Request: R1102043
Date Collected: 4/12/11 1310
Date Received: 4/14/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	670		mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	693		mg/L	40	200	NA	4/15/11 13:44	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.32		mg/L	0.10	1	NA	4/14/11 16:11	*
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/15/11 11:18	*
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	4/15/11 13:44	*
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	4/15/11 11:18	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-502
Lab Code: R1102043-007

Service Request: R1102043
Date Collected: 4/12/11 1310
Date Received: 4/14/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	571000	µg/L	100	1	4/21/11	4/28/11 08:53	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/12/11 1310
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 04:50

Sample Name: MW-502
 Lab Code: R1102043-007

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1983.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 100

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	2000	U	2000	
71-43-2	Benzene	500	U	500	
75-27-4	Bromodichloromethane	500	U	500	
75-25-2	Bromoform	500	U	500	
74-83-9	Bromomethane	500	U	500	
78-93-3	2-Butanone (MEK)	1000	U	1000	
75-15-0	Carbon Disulfide	1000	U	1000	
56-23-5	Carbon Tetrachloride	500	U	500	
108-90-7	Chlorobenzene	500	U	500	
75-00-3	Chloroethane	17000		500	
67-66-3	Chloroform	500	U	500	
74-87-3	Chloromethane	500	U	500	
124-48-1	Dibromochloromethane	500	U	500	
75-34-3	1,1-Dichloroethane	500	U	500	
107-06-2	1,2-Dichloroethane	500	U	500	
75-35-4	1,1-Dichloroethene	500	U	500	
156-59-2	cis-1,2-Dichloroethene	500	U	500	
156-60-5	trans-1,2-Dichloroethene	500	U	500	
78-87-5	1,2-Dichloropropane	500	U	500	
10061-01-5	cis-1,3-Dichloropropene	500	U	500	
10061-02-6	trans-1,3-Dichloropropene	500	U	500	
100-41-4	Ethylbenzene	500	U	500	
591-78-6	2-Hexanone	1000	U	1000	
75-09-2	Methylene Chloride	500	U	500	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000	U	1000	
100-42-5	Styrene	500	U	500	
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	
127-18-4	Tetrachloroethene	500	U	500	
108-88-3	Toluene	500	U	500	
71-55-6	1,1,1-Trichloroethane	500	U	500	
79-00-5	1,1,2-Trichloroethane	500	U	500	
79-01-6	Trichloroethene	500	U	500	
75-01-4	Vinyl Chloride	500	U	500	
95-47-6	o-Xylene	500	U	500	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1310
Date Received: 4/14/11
Date Analyzed: 4/19/11 04:50

Sample Name: MW-502
Lab Code: R1102043-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1983.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 100

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	500	U	500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85-122	4/19/11 04:50	
Toluene-d8	110	87-121	4/19/11 04:50	
Dibromofluoromethane	103	89-119	4/19/11 04:50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/12/11 1310
Date Received: 4/14/11
Date Analyzed: 4/22/11 12:41

Sample Name: MW-502
Lab Code: R1102043-007

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star194.run

Analysis Lot: 243146
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	18000		500	
74-98-6	Propane	250	U	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-501
Lab Code: R1102043-008

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	262		mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	7500		mg/L	200	1000	NA	4/15/11 13:57	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	2.63		mg/L	0.10	1	NA	4/14/11 16:11	*
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/15/11 11:31	*
Nitrite as Nitrogen	9056A	100	U	mg/L	100	1000	NA	4/15/11 13:57	*
Sulfate	9056A	64.1		mg/L	2.0	10	NA	4/15/11 11:31	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-501
Lab Code: R1102043-008

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	11800	µg/L	100	1	4/21/11	4/28/11 08:59	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11
Date Analyzed: 4/19/11 05:20

Sample Name: MW-501
Lab Code: R1102043-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\VD1984.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	100 U	100	
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	1100 E	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	150	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	100	25	
95-47-6	o-Xylene	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11
Date Analyzed: 4/19/11 05:20

Sample Name: MW-501
Lab Code: R1102043-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1984.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	25	U	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85-122	4/19/11 05:20	
Toluene-d8	105	87-121	4/19/11 05:20	
Dibromofluoromethane	104	89-119	4/19/11 05:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/13/11 0858
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 10:11

Sample Name: MW-501
 Lab Code: R1102043-008
 Run Type: Dilution

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1992.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	200	U	200	
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	1200	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	160	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	110	D	50	
95-47-6	o-Xylene	50	U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11
Date Analyzed: 4/19/11 10:11

Sample Name: MW-501
Lab Code: R1102043-008
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1992.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	50	U	50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85-122	4/19/11 10:11	
Toluene-d8	107	87-121	4/19/11 10:11	
Dibromofluoromethane	104	89-119	4/19/11 10:11	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11
Date Analyzed: 4/22/11 11:31

Sample Name: MW-501
Lab Code: R1102043-008

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star190.run

Analysis Lot: 243146
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	18000	E	200	
74-98-6	Propane	100	U	100	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0858
Date Received: 4/14/11
Date Analyzed: 4/22/11 11:59

Sample Name: MW-501
Lab Code: R1102043-008
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star191.run

Analysis Lot: 243146
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	19000	D	500	
74-98-6	Propane	250	U	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-205
Lab Code: R1102043-009

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	830		mg/L	40	200	NA	4/15/11 14:24	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	74.1		mg/L	4.0	40	NA	4/14/11 16:11	*
Nitrate as Nitrogen	9056A	5.0	U	mg/L	5.0	50	NA	4/15/11 19:55	*
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	4/15/11 14:24	*
Sulfate	9056A	10.5		mg/L	2.0	10	NA	4/15/11 11:44	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-205
Lab Code: R1102043-009

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	103000	µg/L	100	1	4/21/11	4/28/11 09:04	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/13/11 0955
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 05:50

Sample Name: MW-205
 Lab Code: R1102043-009

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1985.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 2000

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	40000	U	40000	
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	300000		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	130000		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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11
Date Analyzed: 4/19/11 05:50

Sample Name: MW-205
Lab Code: R1102043-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1985.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 2000

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	10000	U	10000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85-122	4/19/11 05:50	
Toluene-d8	108	87-121	4/19/11 05:50	
Dibromofluoromethane	104	89-119	4/19/11 05:50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11
Date Analyzed: 4/22/11 12:10

Sample Name: MW-205
Lab Code: R1102043-009

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star192.run

Analysis Lot: 243146
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	11	1.0	
74-85-1	Ethylene	7.7	1.0	
74-82-8	Methane	130 E	2.0	
74-98-6	Propane	1.0 U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11
Date Analyzed: 4/22/11 12:24

Sample Name: MW-205
Lab Code: R1102043-009
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star193.run

Analysis Lot: 243146
Instrument Name: R-GC-02
Dilution Factor: 2

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	11 D	2.0	
74-85-1	Ethylene	7.9 D	2.0	
74-82-8	Methane	130 D	4.0	
74-98-6	Propane	2.0 U	2.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 0955
Date Received: 4/14/11
Date Analyzed: 4/20/11 21:09

Sample Name: MW-205
Lab Code: R1102043-009

Units: mg/L
Basis: NA

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

Analytical Method: Organic Acids
Data File Name: J:\ACQUDATA\HPLC05\DATA\042011\X0005740.D\

Analysis Lot: 243131
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	400	20	
107-92-6	Butanoic Acid (Butyric Acid)	2400	40	
50-21-5	Lactic Acid	20 U	20	
79-09-4	Propionic Acid	700	20	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: OW-302S
Lab Code: R1102043-010

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	622		mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	3670		mg/L	200	1000	NA	4/15/11 14:50	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	4/14/11 16:11	*
Nitrate as Nitrogen	9056A	2.0	U	mg/L	2.0	20	NA	4/15/11 14:37	*
Nitrite as Nitrogen	9056A	100	U	mg/L	100	1000	NA	4/15/11 14:50	*
Sulfate	9056A	8.7		mg/L	2.0	10	NA	4/15/11 11:58	
Sulfide, Acid-Soluble	9034	4.2		mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: OW-302S
Lab Code: R1102043-010

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	52500	µg/L	100	1	4/21/11	4/28/11 09:10	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
 Date Collected: 4/13/11 1330
 Date Received: 4/14/11
 Date Analyzed: 4/19/11 06:19

Sample Name: OW-302S
 Lab Code: R1102043-010

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1986.D\

Analysis Lot: 242791
 Instrument Name: R-MS-10
 Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10000	U	10000	
71-43-2	Benzene	2500	U	2500	
75-27-4	Bromodichloromethane	2500	U	2500	
75-25-2	Bromoform	2500	U	2500	
74-83-9	Bromomethane	2500	U	2500	
78-93-3	2-Butanone (MEK)	5000	U	5000	
75-15-0	Carbon Disulfide	5000	U	5000	
56-23-5	Carbon Tetrachloride	2500	U	2500	
108-90-7	Chlorobenzene	2500	U	2500	
75-00-3	Chloroethane	7500		2500	
67-66-3	Chloroform	2500	U	2500	
74-87-3	Chloromethane	2500	U	2500	
124-48-1	Dibromochloromethane	2500	U	2500	
75-34-3	1,1-Dichloroethane	220000	E	2500	
107-06-2	1,2-Dichloroethane	2500	U	2500	
75-35-4	1,1-Dichloroethene	2500	U	2500	
156-59-2	cis-1,2-Dichloroethene	2500	U	2500	
156-60-5	trans-1,2-Dichloroethene	2500	U	2500	
78-87-5	1,2-Dichloropropane	2500	U	2500	
10061-01-5	cis-1,3-Dichloropropene	2500	U	2500	
10061-02-6	trans-1,3-Dichloropropene	2500	U	2500	
100-41-4	Ethylbenzene	2500	U	2500	
591-78-6	2-Hexanone	5000	U	5000	
75-09-2	Methylene Chloride	2500	U	2500	
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	
100-42-5	Styrene	2500	U	2500	
79-34-5	1,1,2,2-Tetrachloroethane	2500	U	2500	
127-18-4	Tetrachloroethene	2500	U	2500	
108-88-3	Toluene	2500	U	2500	
71-55-6	1,1,1-Trichloroethane	2500	U	2500	
79-00-5	1,1,2-Trichloroethane	2500	U	2500	
79-01-6	Trichloroethene	2500	U	2500	
75-01-4	Vinyl Chloride	2500	U	2500	
95-47-6	o-Xylene	2500	U	2500	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11
Date Analyzed: 4/19/11 06:19

Sample Name: OW-302S
Lab Code: R1102043-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1986.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	2500	U	2500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	4/19/11 06:19	
Toluene-d8	110	87-121	4/19/11 06:19	
Dibromofluoromethane	105	89-119	4/19/11 06:19	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11
Date Analyzed: 4/19/11 10:41

Sample Name: OW-302S
Lab Code: R1102043-010
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1993.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 2500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	50000	U	50000	
71-43-2	Benzene	13000	U	13000	
75-27-4	Bromodichloromethane	13000	U	13000	
75-25-2	Bromoform	13000	U	13000	
74-83-9	Bromomethane	13000	U	13000	
78-93-3	2-Butanone (MEK)	25000	U	25000	
75-15-0	Carbon Disulfide	25000	U	25000	
56-23-5	Carbon Tetrachloride	13000	U	13000	
108-90-7	Chlorobenzene	13000	U	13000	
75-00-3	Chloroethane	13000	U	13000	
67-66-3	Chloroform	13000	U	13000	
74-87-3	Chloromethane	13000	U	13000	
124-48-1	Dibromochloromethane	13000	U	13000	
75-34-3	1,1-Dichloroethane	220000	D	13000	
107-06-2	1,2-Dichloroethane	13000	U	13000	
75-35-4	1,1-Dichloroethene	13000	U	13000	
156-59-2	cis-1,2-Dichloroethene	13000	U	13000	
156-60-5	trans-1,2-Dichloroethene	13000	U	13000	
78-87-5	1,2-Dichloropropane	13000	U	13000	
10061-01-5	cis-1,3-Dichloropropene	13000	U	13000	
10061-02-6	trans-1,3-Dichloropropene	13000	U	13000	
100-41-4	Ethylbenzene	13000	U	13000	
591-78-6	2-Hexanone	25000	U	25000	
75-09-2	Methylene Chloride	13000	U	13000	
108-10-1	4-Methyl-2-pentanone (MIBK)	25000	U	25000	
100-42-5	Styrene	13000	U	13000	
79-34-5	1,1,2,2-Tetrachloroethane	13000	U	13000	
127-18-4	Tetrachloroethene	13000	U	13000	
108-88-3	Toluene	13000	U	13000	
71-55-6	1,1,1-Trichloroethane	13000	U	13000	
79-00-5	1,1,2-Trichloroethane	13000	U	13000	
79-01-6	Trichloroethene	13000	U	13000	
75-01-4	Vinyl Chloride	13000	U	13000	
95-47-6	o-Xylene	13000	U	13000	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11
Date Analyzed: 4/19/11 10:41

Sample Name: OW-302S
Lab Code: R1102043-010
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1993.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 2500

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	13000	U	13000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	4/19/11 10:41	
Toluene-d8	109	87-121	4/19/11 10:41	
Dibromofluoromethane	103	89-119	4/19/11 10:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: 4/13/11 1330
Date Received: 4/14/11
Date Analyzed: 4/22/11 14:46

Sample Name: OW-302S
Lab Code: R1102043-010

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star201.run

Analysis Lot: 243146
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	18		1.0	
74-85-1	Ethylene	26		1.0	
74-82-8	Methane	54		2.0	
74-98-6	Propane	1.0	U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1102043-MB1

Service Request: R1102043
Date Collected: NA
Date Received: NA

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	4/21/11 08:17	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	4/15/11 10:08	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	4/14/11 16:11	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/15/11 10:08	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/15/11 10:08	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	4/15/11 10:08	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/15/11	4/15/11 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1102043-MB2

Service Request: R1102043
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Nitrate as Nitrogen	9056A	0.10 U	mg/L	0.10	1	NA	4/15/11 15:56	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1102043-MB

Service Request: R1102043
Date Collected: NA
Date Received: NA
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	4/21/11	4/28/11 08:25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: NA
Date Received: NA
Date Analyzed: 4/19/11 01:22

Sample Name: Method Blank
Lab Code: RQ1103563-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1976.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: NA
Date Received: NA
Date Analyzed: 4/19/11 01:22

Sample Name: Method Blank
Lab Code: RQ1103563-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\041811\D1976.D\

Analysis Lot: 242791
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85-122	4/19/11 01:22	
Toluene-d8	108	87-121	4/19/11 01:22	
Dibromofluoromethane	100	89-119	4/19/11 01:22	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: NA
Date Received: NA
Date Analyzed: 4/22/11 10:14

Sample Name: Method Blank
Lab Code: RQ1103472-01

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star186.run

Analysis Lot: 243146
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	2.0	U	2.0	
74-98-6	Propane	1.0	U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1102043
Date Collected: NA
Date Received: NA
Date Analyzed: 4/20/11 18:04

Sample Name: Method Blank
Lab Code: RQ1103450-01

Units: mg/L
Basis: NA

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

Analytical Method: Organic Acids
Data File Name: J:\ACQU\DATA\HPLC05\DATA\042011\X0005737.D\

Analysis Lot: 243131
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	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/14/11 -
4/21/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample R1102043-LCS1					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	2.07	2.00	103	80 - 120
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.416	0.40	104	77 - 129
Sulfate	9056A	2.04	2.00	102	80 - 120
Alkalinity as CaCO ₃ , Total	SM 2320 B	19.2	20.0	96	72 - 115
Nitrate as Nitrogen	9056A	1.04	1.00	104	80 - 120
Nitrite as Nitrogen	9056A	1.03	1.00	103	80 - 120
Sulfide, Acid-Soluble	9034	9.86	14.1	70	51 - 105

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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/15/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L**Basis:** NA

Lab Control Sample R1102043-LCS2					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	9056A	1.01	1.00	101	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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/28/11

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Lab Control Sample R1102043-LCS					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Total	6010C	975	1000	98	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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
 Date Analyzed: 4/19/11

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 242791

Lab Control Sample
 RQ1103563-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	22.5	20.0	112	59 - 140
Benzene	19.6	20.0	98	78 - 121
Bromodichloromethane	19.6	20.0	98	80 - 125
Bromoform	19.3	20.0	96	73 - 132
Bromomethane	20.8	20.0	104	57 - 144
2-Butanone (MEK)	20.3	20.0	101	60 - 133
Carbon Disulfide	21.8	20.0	109	59 - 138
Carbon Tetrachloride	18.2	20.0	91	69 - 135
Chlorobenzene	19.0	20.0	95	80 - 121
Chloroethane	22.2	20.0	111	71 - 130
Chloroform	19.2	20.0	96	78 - 125
Chloromethane	22.4	20.0	112	62 - 133
Dibromochloromethane	19.5	20.0	98	78 - 133
1,1-Dichloroethane	20.0	20.0	100	76 - 122
1,2-Dichloroethane	20.7	20.0	103	78 - 126
1,1-Dichloroethene	18.1	20.0	90	72 - 129
cis-1,2-Dichloroethene	18.5	20.0	92	78 - 122
trans-1,2-Dichloroethene	18.6	20.0	93	75 - 121
1,2-Dichloropropane	21.3	20.0	107	80 - 123
cis-1,3-Dichloropropene	18.8	20.0	94	77 - 125
trans-1,3-Dichloropropene	18.5	20.0	93	69 - 127
Ethylbenzene	20.0	20.0	100	78 - 123
2-Hexanone	21.1	20.0	105	61 - 131
Methylene Chloride	18.9	20.0	94	75 - 125
4-Methyl-2-pentanone (MIBK)	22.3	20.0	111	61 - 132
Styrene	19.7	20.0	99	80 - 132
1,1,2,2-Tetrachloroethane	20.2	20.0	101	72 - 131
Tetrachloroethene	19.2	20.0	96	72 - 131
Toluene	19.6	20.0	98	78 - 122
1,1,1-Trichloroethane	17.7	20.0	88	72 - 128
1,1,2-Trichloroethane	19.5	20.0	98	80 - 122
Trichloroethene	19.8	20.0	99	74 - 127

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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/19/11

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 242791

Lab Control Sample
RQ1103563-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	25.2	20.0	126	71 - 136
o-Xylene	19.3	20.0	96	79 - 126
m,p-Xylenes	40.3	40.0	101	79 - 126

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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/22/11

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L

Basis: NA

Analysis Lot: 243146

Lab Control Sample
RQ1103472-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Ethane	26.3	26.1	101	55 - 165
Ethylene	23.7	24.3	97	48 - 163
Methane	25.8	26.2	98	61 - 154
Propane	25.5	25.4	100	26 - 186

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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1102043
Date Analyzed: 4/20/11

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: 243131

Analyte Name	Lab Control Sample RQ1103450-02			Duplicate Lab Control Sample RQ1103450-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Pyruvic Acid	1.08	0.998	108	1.10	0.998	110	70 - 130	2	30
Acetic Acid	9.59	9.97	96	9.66	9.97	97	70 - 135	<1	30
Butanoic Acid (Butyric Acid)	9.32	9.98	93	9.99	9.98	100	82 - 118	7	30
Lactic Acid	9.52	10.0	95	9.57	10.0	95	70 - 117	<1	30
Propionic Acid	10.2	9.97	102	9.74	9.97	98	80 - 125	5	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.



Project Name		Project Number		ANALYSIS REQUESTED (Include Method Number and Container Preservative)	
CooperVision		70665-3018			
Project Manager		Report CC			
M. Ramsdell / Mondello					
Company/Address					
Haley + Aldrich					
200 Town Centre Dr.					
Rochester NY 14623					
Phone #		E-mail			
585.321.4219		mondello@haleyaldrich.com			
Sample's Signature		Sample's Printed Name			
Sharon B. Bittler		Thom			
FOR OFFICE USE ONLY		SAMPLING DATE		SAMPLING TIME	
CLIENT SAMPLE ID	LAB ID	DATE	TIME	MATRIX	
TB-1	-001	4/11/11	14:42	GW	
OW-306	-002	4/11/11	15:40	"	
MW-203	-003	4/12/11	11:30	"	
MW-202	-004	4/12/11	12:30	"	
MW-204	-005	4/12/11	10:30	"	
MW-3	-006	4/12/11	13:10	"	
MW-502	-007	4/13/11	8:58	"	
MW-501	-008	4/13/11	9:55	"	
MW-205	-009	4/13/11	13:30	"	
OW-302S	-010	4/13/11	15:18	"	
SPECIAL INSTRUCTIONS/COMMENTS					
Metals Wet Chem: Fe ²⁺ ; NO ₂ ; NO ₃ ; CO; SO ₄ EDS Please report to Equiss standard.					
PRESERVATIVE		NUMBER OF CONTAINERS		REMARKS/ALTERNATE DESCRIPTION	
1		3		trip blank	
GC/MS VOAs		3			
GC/MS SVOAs		3			
GC/MS CLP		3			
GC/MS 8260		3			
GC/MS 8270		3			
GC/MS 825		3			
PESTICIDES		3			
PCBs		3			
METALS, TOTAL		3			
METALS, DISSOLVED		3			
ALKALINITY		3			
Fe		3			
Wet Chem		3			
Metals		3			
Preservative Key		3			
0. NONE		3			
1. HCL		3			
2. HNO ₃		3			
3. H ₂ SO ₄		3			
4. NaOH		3			
5. Zn. Acetate		3			
6. MeOH		3			
7. NaHSO ₄		3			
8. Other		3			
R1102043		R1102043			
Haley & Aldrich, Inc.		Haley & Aldrich, Inc.			
Cooperation		Cooperation			
Edata		Edata			
Yes		Yes			
No		No			
RECEIVED BY		RECEIVED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			
Date/Time		Date/Time			
11/14/11 1520		4/14/11 1518			
STATE WHERE SAMPLES WERE COLLECTED:		STATE WHERE SAMPLES WERE COLLECTED:			
NY		NY			
RELINQUISHED BY		RELINQUISHED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			
Date/Time		Date/Time			
11/14/11 1520		4/14/11 1518			
RELINQUISHED BY		RELINQUISHED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			
Date/Time		Date/Time			
11/14/11 1520		4/14/11 1518			
RELINQUISHED BY		RELINQUISHED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			
Date/Time		Date/Time			
11/14/11 1520		4/14/11 1518			
RELINQUISHED BY		RELINQUISHED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			
Date/Time		Date/Time			
11/14/11 1520		4/14/11 1518			
RELINQUISHED BY		RELINQUISHED BY			
Signature		Signature			
Printed Name		Printed Name			
Firm		Firm			

Cooler Receipt And Preservation Check Form

Project/Client Copestia Folder Number R1102043

Cooler received on 4/14/11 by: JO COURIER: CAS UPS FEDEX VELOCITY CLIENT

- Were custody seals on outside of cooler? YES NO
- Were custody papers properly filled out (ink, signed, etc.)? YES NO
- Did all bottles arrive in good condition (unbroken)? YES NO
- Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO N/A
- Were Ice or Ice packs present? YES NO
- Where did the bottles originate? CAS/ROC, CLIENT
- Temperature of cooler(s) upon receipt: 5°

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below No No No No No

Date/Time Temperatures Taken: 4/14/11 1530

Thermometer ID: IR GUN#3 IR GUN#4 Reading From: Temp Blank / Sample Bottle

If out of Temperature, note packing/ice condition; Client Approval to Run Samples: _____

PC Secondary Review: KB 4/15/11

Cooler Breakdown: Date: 4/15/11 Time: 0913 by: AKH

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- 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			WC103051F	2/16				
≤2	HNO ₃		X	BDB26108F	2/12	MW-502 MW-205	1mL	BDB26109H	>2
≤2	H ₂ SO ₄								
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid					
	Na ₂ S ₂ O ₃	-	-			*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet			
	Zn Aceta	-	-	BDB26109E	3/12				
	HCl	*	*	4110020	3/12				

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: OK

Bottle lot numbers: H3804 - WC92115F exp 11/14
0-235-003, 0-319-004, 031411-2K, 122710-2ZZ
 Other Comments: _____

PC Secondary Review: KB 5/3/11

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

November 02, 2011

Service Request No: R1105754

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 on October 15, 2011. For your reference, these analyses have been assigned our service request number **R1105754**.

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 Columbia Analytical Services, Inc. (CAS) 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 KBunker@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.



Karen Bunker
Project Manager

Page 1 of 62

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Haley & Aldrich of New York
Project: Coopervision #70665-001 10/11
Sample Matrix: Water

Service Request No.: R1105754
Date Received: 10/15/11

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). 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

Nine (9) water samples were collected on 10/13-14/11 by H&A and received for analysis at Columbia Analytical Services on 10/15/11. The samples were received in good condition and consistent with the accompanying chain of custody form. The cooler temperatures upon receipt at the laboratory were 9.3 & 8.8°C outside the guidelines of 0-6°C. The client was notified via the sample acknowledgement on 10/17/11.

General Chemistry Parameters & Metals

Five (5) water samples were analyzed for a client specific list of Anion and Cation parameters: Chloride, Sulfate, Total Alkalinity, Nitrate, Nitrite, Sulfide, Ferrous Iron, and Total Iron

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

All Initial and Continuing Calibration Criteria was met for all analyses.

Metals analyses are reported in ug/L in this report.

All holding times were met for these analyses except for the following samples: 3 Ferrous Iron samples were received outside the 24 hour holding time. MW-501 (CAS Submission # R1105757-007), MW-502 (-008) and MW-3 (-009) were run as soon as possible upon receipt in the lab. All samples were run the same day as received. Exceedences are flagged as "H" on the data forms.

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

All Laboratory Method Blanks were free from contamination.

No problems were encountered during the analysis of these samples.

Approved by



Date

11/2/11

00002

Organic Compounds

Nine (9) water samples were analyzed for the TCL of Volatile Organics by GC/MS Method 8260C from SW-846. Five (5) water samples were analyzed for Dissolved Gases by modified GC Method RSK-175. One (1) water was analyzed for Metabolic Acids by HPLC methodology.

All Initial and Continuing Calibration Criteria was met for these samples except for %D for Bromomethane which was outside the $\pm 20\%$ at -27.1% on the 10/19/11 analytical run. Hits for this compound on associated samples should be considered as estimated.

Batch QC is included in the report. All Laboratory Control Samples (LCS), Laboratory Control Sample Duplicate (LCSD) recoveries, and Relative Percent Difference (RPD) calculations were within QC acceptance limits.

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. All samples were found to be preserved to a pH of < 2 or the samples were analyzed within 7 days from collection for unpreserved aliquots except for the RSK-175 for locations MW-205 and MW-502 (R1105754-005 and -008 respectively). These aliquots were found to be unpreserved and were run within holding time. All CAS vials are certified as preserved therefore matrix interference is suspected.

The Laboratory Method Blanks were free from contamination.

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

Approved by



Date

11/2/11

000003

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1105754

<u>Lab ID</u>	<u>Client ID</u>
R1105754-001	OW-306
R1105754-002	MW-203
R1105754-003	MW-202
R1105754-004	MW-204
R1105754-005	MW-205
R1105754-006	OW-302S
R1105754-007	MW-501
R1105754-008	MW-502
R1105754-009	MW-3

REPORT QUALIFIERS

- 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/Aroclors).
- 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 ($\geq 100\%$ Difference between two GC columns).
- X See Case Narrative for discussion.



CAS/Rochester Lab ID # for State Certifications¹

NELAP Accredited
Connecticut ID # PH0556
Delaware Accredited
DoD ELAP #65817
Florida ID # E87674
Illinois ID #200047
Maine ID #NY0032

Nebraska Accredited
Nevada ID # NY-00032
New Jersey ID # NY004
New York ID # 10145
New Hampshire ID # 294100 A/B
Pennsylvania ID# 68-786
Rhode Island ID # 158

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/13/11 1305
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 15:12

Sample Name: OW-306
 Lab Code: R1105754-001

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\05339.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/13/11 1305
Date Received: 10/15/11
Date Analyzed: 10/19/11 15:12

Sample Name: OW-306
Lab Code: R1105754-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5339.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/19/11 15:12	
Toluene-d8	103	87-121	10/19/11 15:12	
Dibromofluoromethane	102	89-119	10/19/11 15:12	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/13/11 1435
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 15:42

Sample Name: MW-203
 Lab Code: R1105754-002

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5340.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/13/11 1435
Date Received: 10/15/11
Date Analyzed: 10/19/11 15:42

Sample Name: MW-203
Lab Code: R1105754-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5340.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/19/11 15:42	
Toluene-d8	103	87-121	10/19/11 15:42	
Dibromofluoromethane	102	89-119	10/19/11 15:42	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/13/11 1600
 Date Received: 10/15/11
 Date Analyzed: 10/20/11 15:44

Sample Name: MW-202
 Lab Code: R1105754-003

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5366.D\

Analysis Lot: 266151
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
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	30		5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	20		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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/13/11 1600
Date Received: 10/15/11
Date Analyzed: 10/20/11 15:44

Sample Name: MW-202
Lab Code: R1105754-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5366.D\

Analysis Lot: 266151
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85-122	10/20/11 15:44	
Toluene-d8	103	87-121	10/20/11 15:44	
Dibromofluoromethane	102	89-119	10/20/11 15:44	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 1705
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 16:42

Sample Name: MW-204
 Lab Code: R1105754-004

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5342.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
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	7.7		5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	8.7		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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1705
Date Received: 10/15/11
Date Analyzed: 10/19/11 16:42

Sample Name: MW-204
Lab Code: R1105754-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5342.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/19/11 16:42	
Toluene-d8	103	87-121	10/19/11 16:42	
Dibromofluoromethane	102	89-119	10/19/11 16:42	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-205
Lab Code: R1105754-005

Service Request: R1105754
Date Collected: 10/14/11 1545
Date Received: 10/15/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	2900		mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	821		mg/L	40	200	NA	10/17/11 23:32	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	119		mg/L	10	100	NA	10/15/11 13:58	
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 12:01	
Nitrite as Nitrogen	353.2	0.058		mg/L	0.010	1	NA	10/15/11 13:43	
Sulfate	9056A	10.0		mg/L	2.0	10	NA	10/18/11 01:36	
Sulfide, Acid-Soluble	9034	2.6		mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-205
Lab Code: R1105754-005

Service Request: R1105754
Date Collected: 10/14/11 1545
Date Received: 10/15/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	106000	µg/L	1000	10	10/19/11	10/28/11 22:08	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 1545
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 17:11

Sample Name: MW-205
 Lab Code: R1105754-005

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5343.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 2500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	50000	U	50000	
71-43-2	Benzene	13000	U	13000	
75-27-4	Bromodichloromethane	13000	U	13000	
75-25-2	Bromoform	13000	U	13000	
74-83-9	Bromomethane	13000	U	13000	
78-93-3	2-Butanone (MEK)	25000	U	25000	
75-15-0	Carbon Disulfide	25000	U	25000	
56-23-5	Carbon Tetrachloride	13000	U	13000	
108-90-7	Chlorobenzene	13000	U	13000	
75-00-3	Chloroethane	13000	U	13000	
67-66-3	Chloroform	13000	U	13000	
74-87-3	Chloromethane	13000	U	13000	
124-48-1	Dibromochloromethane	13000	U	13000	
75-34-3	1,1-Dichloroethane	230000		13000	
107-06-2	1,2-Dichloroethane	13000	U	13000	
75-35-4	1,1-Dichloroethene	13000	U	13000	
156-59-2	cis-1,2-Dichloroethene	13000	U	13000	
156-60-5	trans-1,2-Dichloroethene	13000	U	13000	
78-87-5	1,2-Dichloropropane	13000	U	13000	
10061-01-5	cis-1,3-Dichloropropene	13000	U	13000	
10061-02-6	trans-1,3-Dichloropropene	13000	U	13000	
100-41-4	Ethylbenzene	13000	U	13000	
591-78-6	2-Hexanone	25000	U	25000	
75-09-2	Methylene Chloride	13000	U	13000	
108-10-1	4-Methyl-2-pentanone (MIBK)	25000	U	25000	
100-42-5	Styrene	13000	U	13000	
79-34-5	1,1,2,2-Tetrachloroethane	13000	U	13000	
127-18-4	Tetrachloroethene	13000	U	13000	
108-88-3	Toluene	13000	U	13000	
71-55-6	1,1,1-Trichloroethane	110000		13000	
79-00-5	1,1,2-Trichloroethane	13000	U	13000	
79-01-6	Trichloroethene	13000	U	13000	
75-01-4	Vinyl Chloride	13000	U	13000	
95-47-6	o-Xylene	13000	U	13000	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1545
Date Received: 10/15/11
Date Analyzed: 10/19/11 17:11

Sample Name: MW-205
Lab Code: R1105754-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5343.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 2500

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	13000	U	13000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	10/19/11 17:11	
Toluene-d8	105	87-121	10/19/11 17:11	
Dibromofluoromethane	104	89-119	10/19/11 17:11	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1545
Date Received: 10/15/11
Date Analyzed: 10/18/11 11:10

Sample Name: MW-205
Lab Code: R1105754-005

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star280.run

Analysis Lot: 265794
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	24	1.0	
74-85-1	Ethylene	17	1.0	
74-82-8	Methane	24	2.0	
74-98-6	Propane	1.4	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1545
Date Received: 10/15/11
Date Analyzed: 10/17/11 15:54

Sample Name: MW-205
Lab Code: R1105754-005

Units: mg/L
Basis: NA

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

Analytical Method: Organic Acids
Data File Name: J:\ACQUDATA\HPLC05\DATA\101711\X0006507.D\

Analysis Lot: 265510
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	500	25	
107-92-6	Butanoic Acid (Butyric Acid)	3000	50	
50-21-5	Lactic Acid	25 U	25	
79-09-4	Propionic Acid	730	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: OW-302S
Lab Code: R1105754-006

Service Request: R1105754
Date Collected: 10/14/11 1400
Date Received: 10/15/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	958		mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	3200		mg/L	200	1000	NA	10/17/11 23:44	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	6.9		mg/L	1.0	10	NA	10/15/11 13:58	
Nitrate as Nitrogen	Calculation	0.05	U	mg/L	0.05	1	NA		
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 12:02	
Nitrite as Nitrogen	353.2	0.031		mg/L	0.010	1	NA	10/15/11 13:10	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	10/18/11 01:49	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: OW-302S
Lab Code: R1105754-006

Service Request: R1105754
Date Collected: 10/14/11 1400
Date Received: 10/15/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	50600	µg/L	500	5	10/19/11	10/28/11 22:14	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 1400
 Date Received: 10/15/11
 Date Analyzed: 10/20/11 16:14

Sample Name: OW-302S
 Lab Code: R1105754-006

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5367.D\

Analysis Lot: 266151
 Instrument Name: R-MS-10
 Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10000	U	10000	
71-43-2	Benzene	2500	U	2500	
75-27-4	Bromodichloromethane	2500	U	2500	
75-25-2	Bromoform	2500	U	2500	
74-83-9	Bromomethane	2500	U	2500	
78-93-3	2-Butanone (MEK)	5000	U	5000	
75-15-0	Carbon Disulfide	5000	U	5000	
56-23-5	Carbon Tetrachloride	2500	U	2500	
108-90-7	Chlorobenzene	2500	U	2500	
75-00-3	Chloroethane	72000		2500	
67-66-3	Chloroform	2500	U	2500	
74-87-3	Chloromethane	2500	U	2500	
124-48-1	Dibromochloromethane	2500	U	2500	
75-34-3	1,1-Dichloroethane	2500	U	2500	
107-06-2	1,2-Dichloroethane	2500	U	2500	
75-35-4	1,1-Dichloroethene	2500	U	2500	
156-59-2	cis-1,2-Dichloroethene	2500	U	2500	
156-60-5	trans-1,2-Dichloroethene	2500	U	2500	
78-87-5	1,2-Dichloropropane	2500	U	2500	
10061-01-5	cis-1,3-Dichloropropene	2500	U	2500	
10061-02-6	trans-1,3-Dichloropropene	2500	U	2500	
100-41-4	Ethylbenzene	2500	U	2500	
591-78-6	2-Hexanone	5000	U	5000	
75-09-2	Methylene Chloride	2500	U	2500	
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	
100-42-5	Styrene	2500	U	2500	
79-34-5	1,1,2,2-Tetrachloroethane	2500	U	2500	
127-18-4	Tetrachloroethene	2500	U	2500	
108-88-3	Toluene	2500	U	2500	
71-55-6	1,1,1-Trichloroethane	2500	U	2500	
79-00-5	1,1,2-Trichloroethane	2500	U	2500	
79-01-6	Trichloroethene	2500	U	2500	
75-01-4	Vinyl Chloride	2500	U	2500	
95-47-6	o-Xylene	2500	U	2500	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1400
Date Received: 10/15/11
Date Analyzed: 10/20/11 16:14

Sample Name: OW-302S
Lab Code: R1105754-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5367.D\

Analysis Lot: 266151
Instrument Name: R-MS-10
Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	2500	U	2500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85-122	10/20/11 16:14	
Toluene-d8	104	87-121	10/20/11 16:14	
Dibromofluoromethane	103	89-119	10/20/11 16:14	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1400
Date Received: 10/15/11
Date Analyzed: 10/18/11 11:27

Sample Name: OW-302S
Lab Code: R1105754-006

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star281.run

Analysis Lot: 265794
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	5.7	1.0	
74-85-1	Ethylene	5.2	1.0	
74-82-8	Methane	700 E	2.0	
74-98-6	Propane	1.0 U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1400
Date Received: 10/15/11
Date Analyzed: 10/18/11 13:37

Sample Name: OW-302S
Lab Code: R1105754-006
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star287.run

Analysis Lot: 265794
Instrument Name: R-GC-02
Dilution Factor: 125

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	130 U	130	
74-85-1	Ethylene	130 U	130	
74-82-8	Methane	11000 D	250	
74-98-6	Propane	130 U	130	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-501
Lab Code: R1105754-007

Service Request: R1105754
Date Collected: 10/14/11 1245
Date Received: 10/15/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	424		mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	1940		mg/L	200	1000	NA	10/17/11 23:57	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.26		mg/L	0.10	1	NA	10/15/11 13:58	H
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 12:03	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	10/15/11 13:10	
Sulfate	9056A	4.3		mg/L	2.0	10	NA	10/18/11 02:01	
Sulfide, Acid-Soluble	9034	2.2		mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-501
Lab Code: R1105754-007

Service Request: R1105754
Date Collected: 10/14/11 1245
Date Received: 10/15/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	4660	µg/L	100	I	10/19/11	10/28/11 22:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 12:45
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 18:11

Sample Name: MW-501
 Lab Code: R1105754-007

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5345.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	100 U	100	
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	1000 E	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	100	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	84	25	
95-47-6	o-Xylene	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 12:45
Date Received: 10/15/11
Date Analyzed: 10/19/11 18:11

Sample Name: MW-501
Lab Code: R1105754-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5345.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	25	U	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/19/11 18:11	
Toluene-d8	103	87-121	10/19/11 18:11	
Dibromofluoromethane	105	89-119	10/19/11 18:11	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 1245
 Date Received: 10/15/11
 Date Analyzed: 10/20/11 16:43

Sample Name: MW-501
 Lab Code: R1105754-007
 Run Type: Dilution

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5368.D\

Analysis Lot: 266151
 Instrument Name: R-MS-10
 Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	200	U	200	
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	900	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	92	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	72	D	50	
95-47-6	o-Xylene	50	U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 1245
Date Received: 10/15/11
Date Analyzed: 10/20/11 16:43

Sample Name: MW-501
Lab Code: R1105754-007
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5368.D\

Analysis Lot: 266151
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	50 U	50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/20/11 16:43	
Toluene-d8	103	87-121	10/20/11 16:43	
Dibromofluoromethane	103	89-119	10/20/11 16:43	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 12:45
Date Received: 10/15/11
Date Analyzed: 10/18/11 11:49

Sample Name: MW-501
Lab Code: R1105754-007

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star282.run

Analysis Lot: 265794
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	13000	500	
74-98-6	Propane	250 U	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-502
Lab Code: R1105754-008

Service Request: R1105754
Date Collected: 10/14/11 0945
Date Received: 10/15/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	730		mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	676		mg/L	40	200	NA	10/18/11 00:09	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.76		mg/L	0.10	1	NA	10/15/11 13:58	H
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 12:04	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	10/15/11 13:12	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	10/18/11 02:13	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-502
Lab Code: R1105754-008

Service Request: R1105754
Date Collected: 10/14/11 0945
Date Received: 10/15/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	637000	µg/L	5000	50	10/19/11	10/28/11 22:27	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 0945
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 18:41

Sample Name: MW-502
 Lab Code: R1105754-008

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5346.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 100

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	2000 U	2000	
71-43-2	Benzene	500 U	500	
75-27-4	Bromodichloromethane	500 U	500	
75-25-2	Bromoform	500 U	500	
74-83-9	Bromomethane	500 U	500	
78-93-3	2-Butanone (MEK)	1000 U	1000	
75-15-0	Carbon Disulfide	1000 U	1000	
56-23-5	Carbon Tetrachloride	500 U	500	
108-90-7	Chlorobenzene	500 U	500	
75-00-3	Chloroethane	16000	500	
67-66-3	Chloroform	500 U	500	
74-87-3	Chloromethane	500 U	500	
124-48-1	Dibromochloromethane	500 U	500	
75-34-3	1,1-Dichloroethane	500 U	500	
107-06-2	1,2-Dichloroethane	500 U	500	
75-35-4	1,1-Dichloroethene	500 U	500	
156-59-2	cis-1,2-Dichloroethene	500 U	500	
156-60-5	trans-1,2-Dichloroethene	500 U	500	
78-87-5	1,2-Dichloropropane	500 U	500	
10061-01-5	cis-1,3-Dichloropropene	500 U	500	
10061-02-6	trans-1,3-Dichloropropene	500 U	500	
100-41-4	Ethylbenzene	500 U	500	
591-78-6	2-Hexanone	1000 U	1000	
75-09-2	Methylene Chloride	500 U	500	
108-10-1	4-Methyl-2-pentanone (MIBK)	1000 U	1000	
100-42-5	Styrene	500 U	500	
79-34-5	1,1,2,2-Tetrachloroethane	500 U	500	
127-18-4	Tetrachloroethene	500 U	500	
108-88-3	Toluene	500 U	500	
71-55-6	1,1,1-Trichloroethane	500 U	500	
79-00-5	1,1,2-Trichloroethane	500 U	500	
79-01-6	Trichloroethene	500 U	500	
75-01-4	Vinyl Chloride	500 U	500	
95-47-6	o-Xylene	500 U	500	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 0945
Date Received: 10/15/11
Date Analyzed: 10/19/11 18:41

Sample Name: MW-502
Lab Code: R1105754-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5346.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 100

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	500 U	500	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/19/11 18:41	
Toluene-d8	104	87-121	10/19/11 18:41	
Dibromofluoromethane	104	89-119	10/19/11 18:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 0945
Date Received: 10/15/11
Date Analyzed: 10/18/11 12:07

Sample Name: MW-502
Lab Code: R1105754-008

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star283.run

Analysis Lot: 265794
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	17000	500	
74-98-6	Propane	250 U	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R1105754-009

Service Request: R1105754
Date Collected: 10/14/11 0800
Date Received: 10/15/11

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	184		mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	407		mg/L	20	100	NA	10/18/11 01:24	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	10/15/11 13:58	H
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 12:05	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	10/15/11 13:13	
Sulfate	9056A	2.7		mg/L	2.0	10	NA	10/18/11 02:51	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R1105754-009

Service Request: R1105754
Date Collected: 10/14/11 0800
Date Received: 10/15/11

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Iron, Total	6010C	18200	µg/L	100	1	10/19/11	10/28/11 22:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: 10/14/11 0800
 Date Received: 10/15/11
 Date Analyzed: 10/19/11 19:10

Sample Name: MW-3
 Lab Code: R1105754-009

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5347.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	200 U	200	
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	1100	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	52	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	190	50	
95-47-6	o-Xylene	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 0800
Date Received: 10/15/11
Date Analyzed: 10/19/11 19:10

Sample Name: MW-3
Lab Code: R1105754-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5347.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	50	U	50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/19/11 19:10	
Toluene-d8	105	87-121	10/19/11 19:10	
Dibromofluoromethane	104	89-119	10/19/11 19:10	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: 10/14/11 0800
Date Received: 10/15/11
Date Analyzed: 10/18/11 13:47

Sample Name: MW-3
Lab Code: R1105754-009

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star288.run

Analysis Lot: 265794
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	53	25	
74-82-8	Methane	2400	50	
74-98-6	Propane	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1105754-MB1

Service Request: R1105754
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/17/11 20:00	
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	10/15/11 13:58	
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	10/28/11 11:59	
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	10/15/11 13:08	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/18/11 00:59	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/18/11	10/18/11 08:30	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1105754-MB2

Service Request: R1105754
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity as CaCO ₃ , Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	10/21/11 09:00	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/18/11 00:59	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/70665-001
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1105754-MB

Service Request: R1105754
Date Collected: NA
Date Received: NA
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	10/19/11	10/28/11 20:37	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 10/19/11 11:44

Sample Name: Method Blank
 Lab Code: RQ1110483-01

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5332.D\

Analysis Lot: 265875
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: NA
Date Received: NA
Date Analyzed: 10/19/11 11:44

Sample Name: Method Blank
Lab Code: RQ1110483-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\101911\D5332.D\

Analysis Lot: 265875
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85-122	10/19/11 11:44	
Toluene-d8	104	87-121	10/19/11 11:44	
Dibromofluoromethane	103	89-119	10/19/11 11:44	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 10/20/11 11:15

Sample Name: Method Blank
 Lab Code: RQ1110565-01

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5357.D\

Analysis Lot: 266151
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	20 U	20	
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	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: NA
Date Received: NA
Date Analyzed: 10/20/11 11:15

Sample Name: Method Blank
Lab Code: RQ1110565-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa10\data\102011\D5357.D\

Analysis Lot: 266151
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0 U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85-122	10/20/11 11:15	
Toluene-d8	105	87-121	10/20/11 11:15	
Dibromofluoromethane	104	89-119	10/20/11 11:15	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: NA
Date Received: NA
Date Analyzed: 10/18/11 08:35

Sample Name: Method Blank
Lab Code: RQ1110434-01

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star275.run

Analysis Lot: 265794
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	2.0 U	2.0	
74-98-6	Propane	1.0 U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

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

Service Request: R1105754
Date Collected: NA
Date Received: NA
Date Analyzed: 10/17/11 11:24

Sample Name: Method Blank
Lab Code: RQ1110346-01

Units: mg/L
Basis: NA

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

Analytical Method: Organic Acids
Data File Name: J:\ACQU\DATA\HPLC05\DATA\101711\X0006502.D\

Analysis Lot: 265510
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	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/15/11 -
10/28/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample R1105754-LCS1					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	2.00	2.00	100	80 - 120
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.416	0.40	104	67 - 140
Nitrate+Nitrite as Nitrogen	353.2	0.513	0.500	103	90 - 110
Nitrite as Nitrogen	353.2	0.244	0.250	98	90 - 110
Sulfate	9056A	1.95	2.00	97	80 - 120
Alkalinity as CaCO ₃ , Total	SM 2320 B	19.9	20.0	100	72 - 115
Sulfide, Acid-Soluble	9034	8.02	11.9	68	29 - 115

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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/18/11 -
10/21/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample R1105754-LCS2					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	2.00	2.00	100	80 - 120
Alkalinity as CaCO ₃ , Total	SM 2320 B	950	1000	95	72 - 115

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/28/11

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Lab Control Sample R1105754-LCS					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Total	6010C	1040	1000	104	80 - 120

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
 Date Analyzed: 10/19/11

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 265875

Lab Control Sample
 RQ1110483-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	19.6	20.0	98	54 - 139
Benzene	18.1	20.0	90	78 - 121
Bromodichloromethane	18.9	20.0	94	80 - 125
Bromoform	19.4	20.0	97	68 - 130
Bromomethane	13.1	20.0	65	57 - 144
2-Butanone (MEK)	16.9	20.0	85	60 - 133
Carbon Disulfide	19.4	20.0	97	52 - 140
Carbon Tetrachloride	19.6	20.0	98	68 - 133
Chlorobenzene	19.5	20.0	98	80 - 121
Chloroethane	18.4	20.0	92	71 - 130
Chloroform	18.5	20.0	92	78 - 125
Chloromethane	15.7	20.0	79	61 - 138
Dibromochloromethane	19.9	20.0	100	78 - 133
1,1-Dichloroethane	18.1	20.0	91	76 - 124
1,2-Dichloroethane	18.9	20.0	94	73 - 127
1,1-Dichloroethene	18.8	20.0	94	72 - 129
cis-1,2-Dichloroethene	18.5	20.0	92	78 - 122
trans-1,2-Dichloroethene	17.6	20.0	88	75 - 121
1,2-Dichloropropane	18.7	20.0	94	80 - 123
cis-1,3-Dichloropropene	17.8	20.0	89	77 - 125
trans-1,3-Dichloropropene	18.0	20.0	90	69 - 127
Ethylbenzene	19.6	20.0	98	78 - 123
2-Hexanone	17.8	20.0	89	61 - 131
Methylene Chloride	17.4	20.0	87	75 - 125
4-Methyl-2-pentanone (MIBK)	17.7	20.0	89	61 - 132
Styrene	20.2	20.0	101	80 - 132
1,1,2,2-Tetrachloroethane	19.3	20.0	97	72 - 131
Tetrachloroethene	19.3	20.0	96	72 - 131
Toluene	18.5	20.0	92	78 - 122
1,1,1-Trichloroethane	17.7	20.0	89	72 - 128
1,1,2-Trichloroethane	18.8	20.0	94	80 - 122
Trichloroethene	18.4	20.0	92	74 - 127

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

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/19/11

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 265875

Lab Control Sample
RQ1110483-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	17.8	20.0	89	72 - 138
o-Xylene	20.0	20.0	100	77 - 118
m,p-Xylenes	40.3	40.0	101	79 - 126

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
 Date Analyzed: 10/20/11

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 266151

Lab Control Sample
 RQ1110565-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	16.9	20.0	84	54 - 139
Benzene	18.9	20.0	94	78 - 121
Bromodichloromethane	20.1	20.0	100	80 - 125
Bromoform	20.8	20.0	104	68 - 130
Bromomethane	15.3	20.0	76	57 - 144
2-Butanone (MEK)	18.5	20.0	93	60 - 133
Carbon Disulfide	16.9	20.0	84	52 - 140
Carbon Tetrachloride	21.3	20.0	107	68 - 133
Chlorobenzene	20.0	20.0	100	80 - 121
Chloroethane	19.7	20.0	99	71 - 130
Chloroform	19.2	20.0	96	78 - 125
Chloromethane	16.0	20.0	80	61 - 138
Dibromochloromethane	21.1	20.0	106	78 - 133
1,1-Dichloroethane	18.6	20.0	93	76 - 124
1,2-Dichloroethane	19.6	20.0	98	73 - 127
1,1-Dichloroethene	19.0	20.0	95	72 - 129
cis-1,2-Dichloroethene	19.0	20.0	95	78 - 122
trans-1,2-Dichloroethene	18.5	20.0	92	75 - 121
1,2-Dichloropropane	19.2	20.0	96	80 - 123
cis-1,3-Dichloropropene	18.3	20.0	91	77 - 125
trans-1,3-Dichloropropene	18.5	20.0	93	69 - 127
Ethylbenzene	20.2	20.0	101	78 - 123
2-Hexanone	18.4	20.0	92	61 - 131
Methylene Chloride	18.3	20.0	91	75 - 125
4-Methyl-2-pentanone (MIBK)	17.9	20.0	89	61 - 132
Styrene	20.4	20.0	102	80 - 132
1,1,2,2-Tetrachloroethane	19.2	20.0	96	72 - 131
Tetrachloroethene	20.4	20.0	102	72 - 131
Toluene	19.3	20.0	97	78 - 122
1,1,1-Trichloroethane	18.8	20.0	94	72 - 128
1,1,2-Trichloroethane	18.7	20.0	93	80 - 122
Trichloroethene	19.3	20.0	96	74 - 127

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/20/11

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 266151

Lab Control Sample
RQ1110565-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	18.7	20.0	93	72 - 138
o-Xylene	20.4	20.0	102	77 - 118
m,p-Xylenes	41.4	40.0	104	79 - 126

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

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/18/11

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175

Units: µg/L

Basis: NA

Analysis Lot: 265794

Analyte Name	Lab Control Sample RQ1110434-02			Duplicate Lab Control Sample RQ1110434-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Ethane	27.5	26.0	106	26.3	26.0	101	56 - 148	4	30
Ethylene	22.8	24.3	94	23.3	24.3	96	58 - 155	2	30
Methane	27.3	26.2	104	26.4	26.2	100	55 - 150	3	30
Propane	26.6	25.5	104	25.7	25.5	101	56 - 154	3	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.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

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

Service Request: R1105754
Date Analyzed: 10/17/11

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: 265510

Analyte Name	Lab Control Sample RQ1110346-02			Duplicate Lab Control Sample RQ1110346-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Pyruvic Acid	1.04	1.00	104	1.04	1.00	104	70 - 130	<1	30
Acetic Acid	9.97	10.0	100	9.94	10.0	99	70 - 135	<1	30
Butanoic Acid (Butyric Acid)	9.12	10.0	91	10.4	10.0	104	78 - 113	13	30
Lactic Acid	8.77	9.97	88	8.92	9.97	89	61 - 109	2	30
Propionic Acid	10.3	9.97	103	10.3	9.97	104	80 - 125	<1	30

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**Columbia
Analytical ServicesSM**

1565 Jefferson Rd., Bldg. 300, Suite 360, Rochester, NY 14623 | 585.288.5380

[illegible]

Cooler Receipt And Preservation Check Form

Project/Client Copper River Folder Number R1105734Cooler received on 10/15/11 by: (JR) COURIER: CAS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES (YES) NO (NO)
2. Were custody papers properly filled out (ink, signed, etc.)? YES (YES) NO (NO)
3. Did all bottles arrive in good condition (unbroken)? YES (YES) NO (NO)
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES (YES) NO (NO) N/A
5. Were Ice or Ice packs present? YES (YES) NO (NO) barley
6. Where did the bottles originate? CAS/ROC, CLIENT (CAS/ROC, CLIENT)
7. Temperature of cooler(s) upon receipt: 9.3° 8.8°

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below No No No No No

Date/Time Temperatures Taken: _____

Thermometer ID: IR GUN#3 / IR GUN#4 Reading From: Temp Blank / Sample BottleIf out of Temperature, note packing/ice condition, Client Approval to Run Samples: notified client on ack.
PC Secondary Review: KE 10/17/11Cooler Breakdown: Date: 10/17/11 Time: 1108 by: slw

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES (YES) NO (NO)
2. Did all bottle labels and tags agree with custody papers? YES (YES) NO (NO)
3. Were correct containers used for the tests indicated? YES (YES) NO (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	✓	✓	508261135	9/12	MW-502, MW-205	1.0 mL	508261135	≤2
≤2	H ₂ SO ₄								
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid					
	Na ₂ S ₂ O ₃	-	-			*Not to be tested before analysis - pH tested and recorded by VOAs or GenChem on a separate worksheet			
	Zn Aceta	-	-	W0103096L	5/12				
	HCl	*	*	4111010	9/12				

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 1-132-001, 091911-22L, 072511-2DD

Other Comments: _____

PC Secondary Review: KE 10/2/11

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

H:\SMODOCS\Cooler Receipt 3.doc

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