

**REVISED 2012 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
23 May 2013**

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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 – *Revised PRR*
711 North Street
Scottsville, New York

Ladies and Gentlemen:

Haley & Aldrich, Inc. is pleased to provide this *revised* annual Periodic Review Report (PRR) for the CooperVision Facility (VCA #V00175) located in Scottsville, New York on behalf of CooperVision, Inc. *All revisions in this report are shown in italics.* This report summarizes activities performed during the period 31 January 2012 through 31 January 2013, and *additional activities in April and May 2013 to address your letter dated April 16, 2013 requesting revision and resubmittal of the 2012 PRR.* *This revised PRR includes copies of the groundwater sampling field forms and the laboratory data; a more complete description of the areas where you requested revision to address deviation from design criteria; and a complete set of sub slab vacuum readings from all seventeen sub-slab depressurization system monitoring points to address absence of some of the monitoring point data from the original PRR.*

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 23 January 2013. An additional copy of the *Revised* 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



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



Vincent B. Dick
Senior Vice President

Enclosures

c: CooperVision; Chuck Rogers
CooperVision; Bernard Hallatt
BakerHostetler; Christopher H. Marraro, Esq.

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EXECUTIVE SUMMARY

The CooperVision Site is located at 711 North Road in Scottsville, New York (See Figures 1 and 2) (the “Site”). The Site 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 contain certain 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 at the site without prior approval of the state, and other measures required by NYSDEC, such as adherence to this Site Management Plan for long-term management of the Site to maintain protection of human health and the environment

Following submittal and approval of a 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 2012 period *with the following exception. There were a few monitoring points that had become inaccessible and not tested during 2012, and therefore were not reported in the original 2012 PRR for this site. Those points have had impediments that created the problems with access (floor tile, carpet, equipment) removed, they have been monitored and the complete 17 points of data are included in this Revised PRR. A Corrective Action Plan was required by NYSDEC. It was prepared, dated 16 May 2013, submitted to NYSDEC and approved by NYSDEC letter dated 05/17/2013.*

In addition, semi-annual groundwater sampling was conducted to monitor effectiveness of the Site remedy. The groundwater results indicate that the Site conditions are stable *with the exception of results of trend analysis for one well. The results of MW-202 show an increasing trend based on the criteria established in the SMP. As required by the SMP an evaluation is to be conducted as per Section 3.4.2 of the SMP; the results of the evaluation will be submitted to NYSDEC under separate cover.*

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.

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1. SITE OVERVIEW

The CooperVision Site is located at 711 North Road in Scottsville, New York (See Figures 1 and 2) (the “Site”). The Site 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 contain certain 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 at the site without prior approval of the state, and other measures required by NYSDEC, such as adherence to this Site Management Plan for long-term management of the Site to maintain protection of human health and the environment.

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

One Periodic Review Report (PRR) has been prepared and submitted to NYSDEC in the past, dated 29 February 2012, *and covering the period of time until the end of 2011. A submittal comprising the second PRR was originally submitted dated 28 February 2013. NYSDEC reviewed and rejected that PRR with requests that are addressed by this Revised PRR. The requests are shown in italicized font.*

2. COMPLIANCE REPORT

2.1 Institutional Controls - Requirements and Compliance

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

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

2.2 Engineering Controls - Requirements and Compliance

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

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

2.2.1 Existing Cover

Exposure to residual contamination at the Site is prevented by an existing cover, which consists of the CooperVision building slab, pavement, and vegetative cover. The existing cover is required to be maintained in accordance 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 that would result in soil management did not occur during the reporting period. A pavement resurfacing project was conducted between 2 August 2012 and 12 August 2012, wherein parking lots were resealed and striped. In addition to sealing, areas of small cracking within the top layers of pavement were milled, filled with new asphalt, and then sealed. This project was completed within the limitations of the SMP and no soils beneath the asphalt cover were breached and/or disturbances occurred which would have resulted in the need to manage contaminated materials. The resurfaced cover remains 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, *including updates provided with this Revised PRR*.

2.2.3 Soil-Bentonite-Cement Utility Trench Collars

In order to reduce the potential for onsite and offsite utility lines (natural gas and water) to act as preferred pathways for offsite migration of soil vapor, five (5) soil-bentonite-cement (SBC) trench collars were installed along both the natural gas and water lines on the CooperVision Site and in the adjacent eastern right-of-way (Figure 2). The trench collars are monitored via visual inspection at the time of utility excavations if and when such excavations 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 2012 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 12 and 13 April 2012, and 18 and 19 October 2012. 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 14 June 2012 and 03 January 2012.

Overall, the data appear consistent with previous sampling events; *although a trend is identified by this Revised PRR that has triggered further evaluation per the SMP*. 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 a slight increase in 1,1,1-TCA in this well during the spring and fall sampling events over prior sampling. As with past monitoring result, it has been anticipated that concentrations 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 2011. These conditions indicate that this compound is not “stacking” within the aquifer and appears to be degrading completely. The 1,1-DCA results are consistent with historical seasonal trends.
- Chloroethane continues to be detected in OWS-302S. In addition, chloride ion, a completion product of the reductive dechlorination process (see below) was 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 suggesting complete dechlorination rather than stalling at these compounds (see further immediately below).
- Chloroethane, the breakdown product of 1,1-DCA, continues to be present in the sampled wells, most notably in MW-502. Levels of the compound decreased slightly from 2011 values, though they remain above historic levels. 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, with the exception of in MW-204 during Spring 2012, when it was detected near the detection limit and slightly above groundwater standards.
- 1,1-DCA was detected in wells MW-202 and MW-204 during both 2012 sampling events. 1,1-DCE was also detected in wells MW-202 and MW-204 during both sampling events. The detections were slightly higher than the groundwater standard, with slightly more elevated detections at MW-202, where there appeared to be an increase from the 2011 sampling events. Specifically, 1,1-DCA was detected at 0.05 ppm and 1,1-DCE was detected at 0.04 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 2012 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 the compounds 1,1-DCA and 1,1-DCE for these *two* sampling events. *Per the SMP, if an increasing trend is indicated for the same compound and well in two consecutive sampling events then an evaluation must be performed. This evaluation is underway and shall be submitted under separate cover.*

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 MW-202 for 1,1-DCE and 1,1-DCA have increased *so as to trigger evaluation per the SMP*. In addition, 1,1-DCE and 1,1-DCA are degradation products of the parent compound 1,1,1-TCA, which continues to remain non-detect in that well. As 1,1,1-TCA continues to degrade from the source area, it is expected that the daughter compounds will continue to increase in concentration for individual or even multiple sampling events prior to showing a decreasing trend and evidence of degrading towards completion. *While we do not view an increasing trend of 1,1-DCE and 1,1-DCA per the Mann-Kendall analysis in these downgradient results as indicative of plume expansion but rather of an indication that degradation is continuing, an evaluation of potential response alternatives consistent with the SMP has been initiated.*

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. No maintenance was performed on the system in 2012, and system operation maintained as intended.

The system was evaluated on 12 April 2012 and 18 October 2012 by Haley & Aldrich. *The system was re-evaluated in April 2013 since a few of the test points were not monitored during 2012 because of accessibility issues. A Corrective Measures Plan (CMP) was prepared and accepted by the Department on May 17, 2013.*

The system evaluation included vacuum testing of *the seventeen* 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 *and the Injection Molding Room*. *The switchgear room* was noted during the initial installation and is caused by the negative pressure created by the facility's vacuum pumps located in this room. *The Injection Molding Room is similar in that it has a large ventilation fan that when the door is closed the interior pressure goes negative and then switches the sub slab differential pressure to be positive.* Vacuum testing results are included in the Revised 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, *with the exception of building barriers (floor tile and carpet changes, equipment changes) that prevented access to a limited number of sub-slab depressurization monitoring points. These points were re-exposed in April 2013, sampled and the system has been verified to be operating as intended.* 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. Pavement re-surfacing occurred within parking lot areas in order to maintain the existing site cover. *As indicated above, restoration of access to a limited number of monitoring points was performed to return an engineering control to its originally constructed state.*
- 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 remains stable and that degradation is continuing; *an apparent increasing trend in two compounds in well MW-202 has been indicated by Mann-Kendall evaluation. It will be evaluated per the SMP and results submitted to NYSDEC under separate cover.*
- 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	4/13/12	10/19/12	
Compound:																															
VOLATILE ORGANICS	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. 500x Dil.																														
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	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	ND	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	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	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	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	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	52	41	
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	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	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	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	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	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	ND	ND	ND
SEMI-VOLATILE ORGANICS																															
Bis(2-ethylhexyl) phtalate	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	NA	NA	
DISSOLVED GASES	20x Dil. 2.5x Dil. 10x Dil. 10x Dil. 10x Dil. 20x Dil. 125x Dil. 125x 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	13	17	
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	ND	ND	
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	ND	ND	

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.

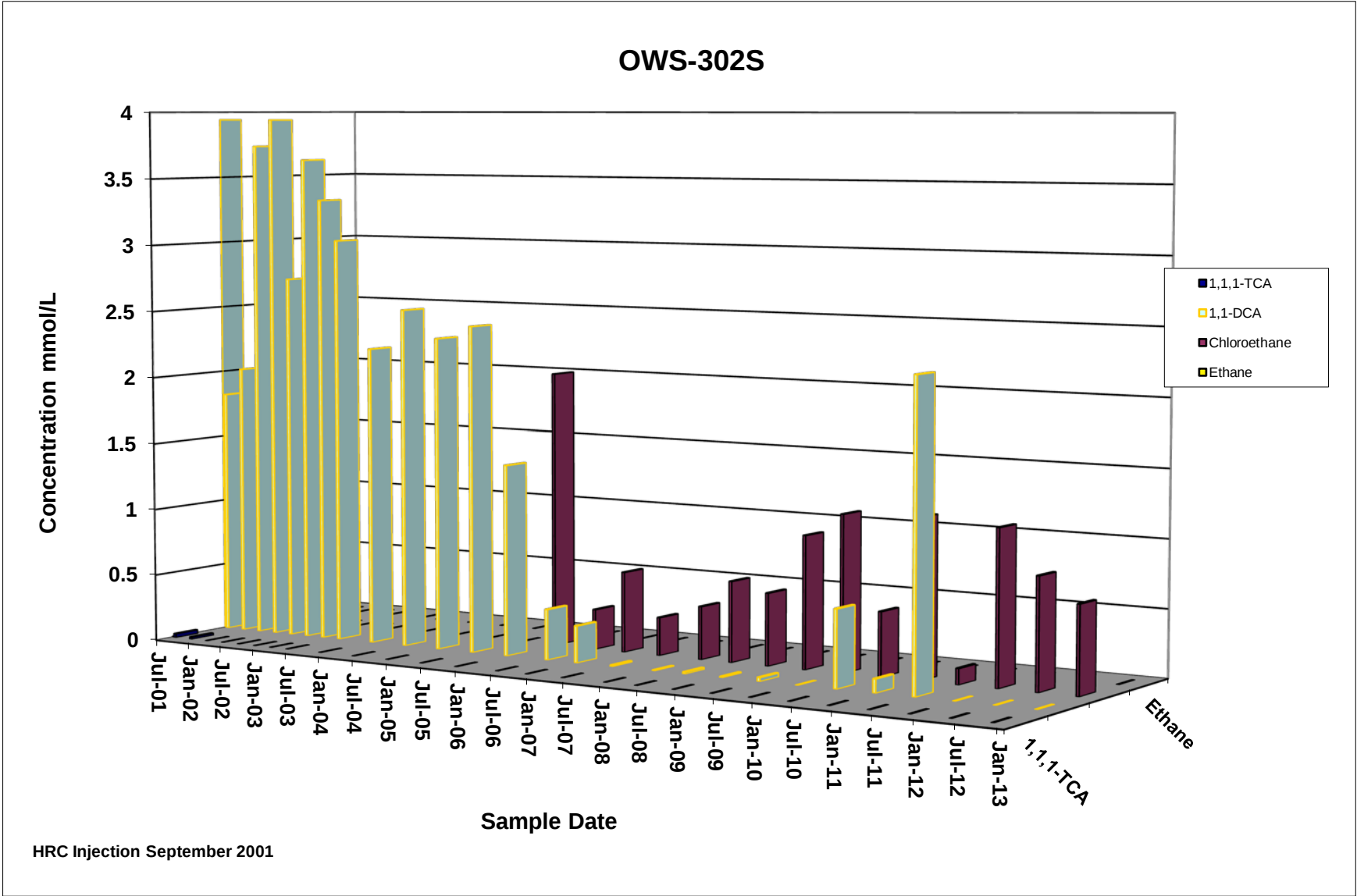


TABLE I
COOPERVISION, INC.
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES
SOURCE AREA WELLS

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	4/13/12	10/19/12
Compound:																															
VOLATILE ORGANICS	2000x Dil. 2000x 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	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	250	250
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	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	120	210
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	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	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	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	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	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	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	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	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	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	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	0.021	0.015
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	0.021	0.012
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	0.014	0.012

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.

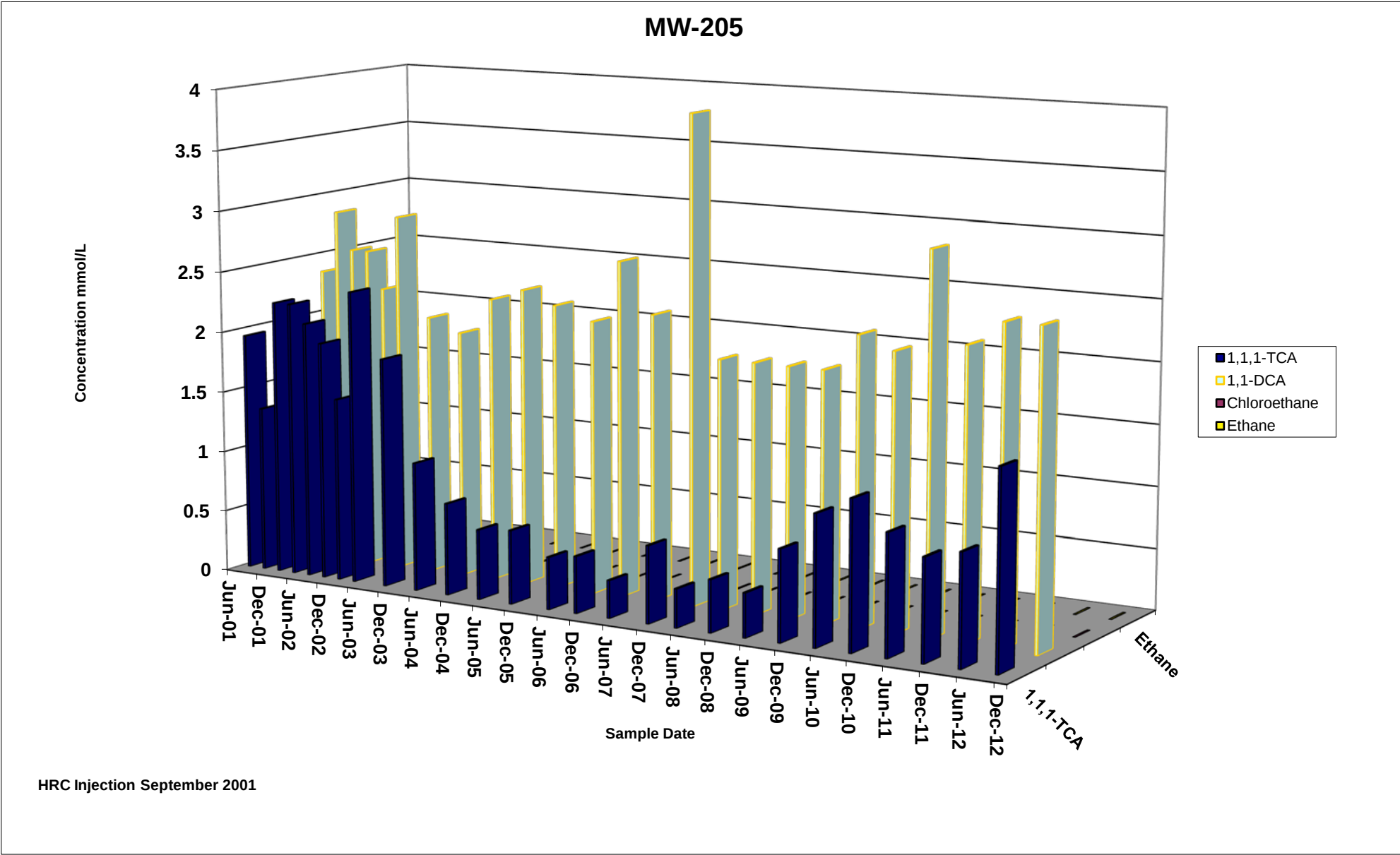


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

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	4/13/2012	10/19/2012	
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. 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	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	0.096	0.067	
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	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	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	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	ND	ND	
Trichloroethene	ND	ND	ND	0.037	ND	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	ND	
Chloroethane	ND	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	1.7	1.0
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	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	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	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	0.29	0.14	
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	NA	NA	
DISSOLVED GASES	10x Dil. 10x Dil. 10x Dil. 20x Dil 20x Dil. 20x Dil. 20x Dil. 10x 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	4.3	3.5	
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	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	0.110	0.083	

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.

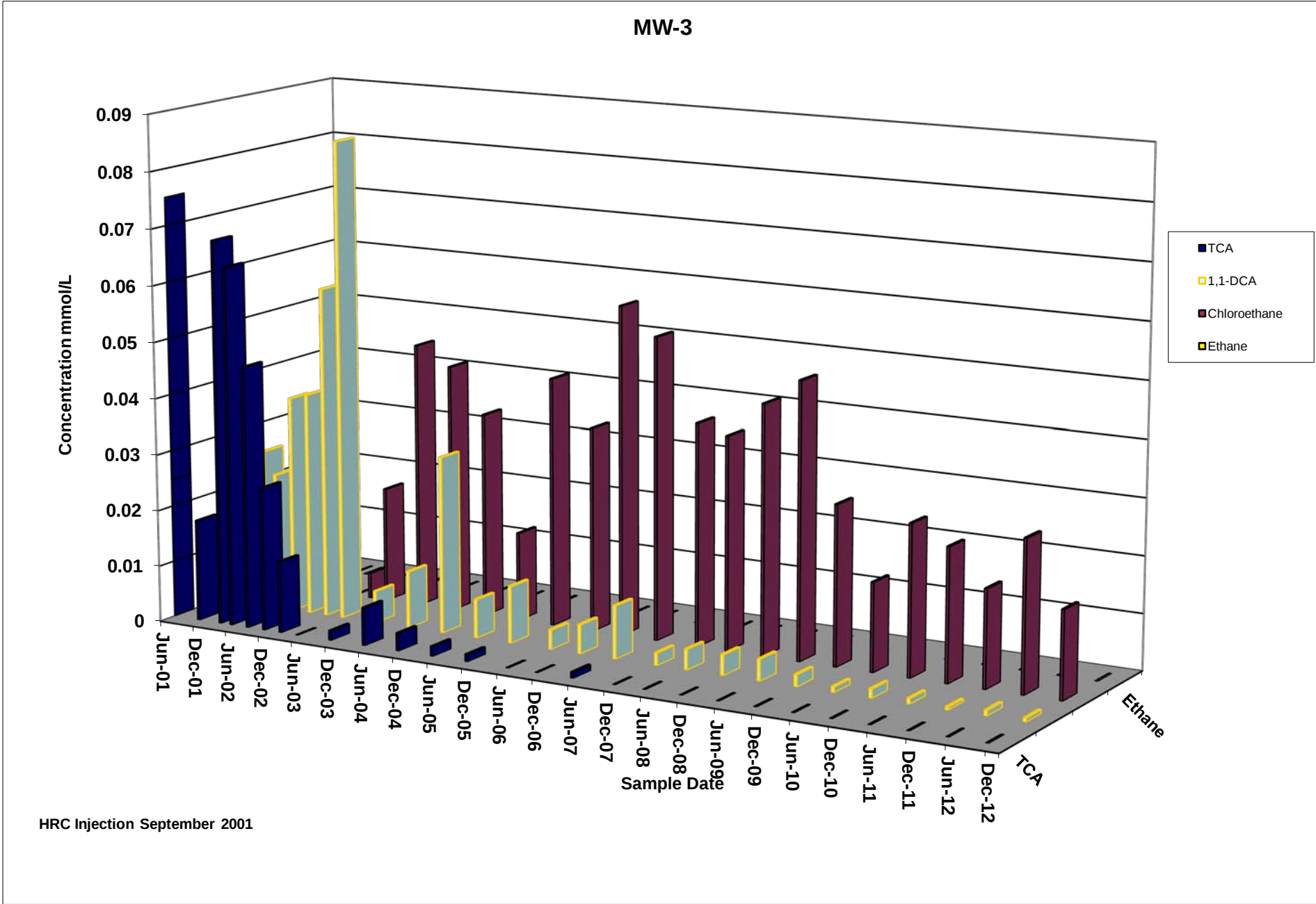


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

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	4/13/2012	10/19/2012
Compound:																													
VOLATILE ORGANICS																													
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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.	5x Dil.	5x Dil.	5x Dil.	5x Dil.
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	0.17	0.16
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	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	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	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	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	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	0.98 D	1.4 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	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	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	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	0.079	0.09
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	NA	NA
DISSOLVED GASES																													
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	17	12
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	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	ND	ND

Notes & Abbreviations:
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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.

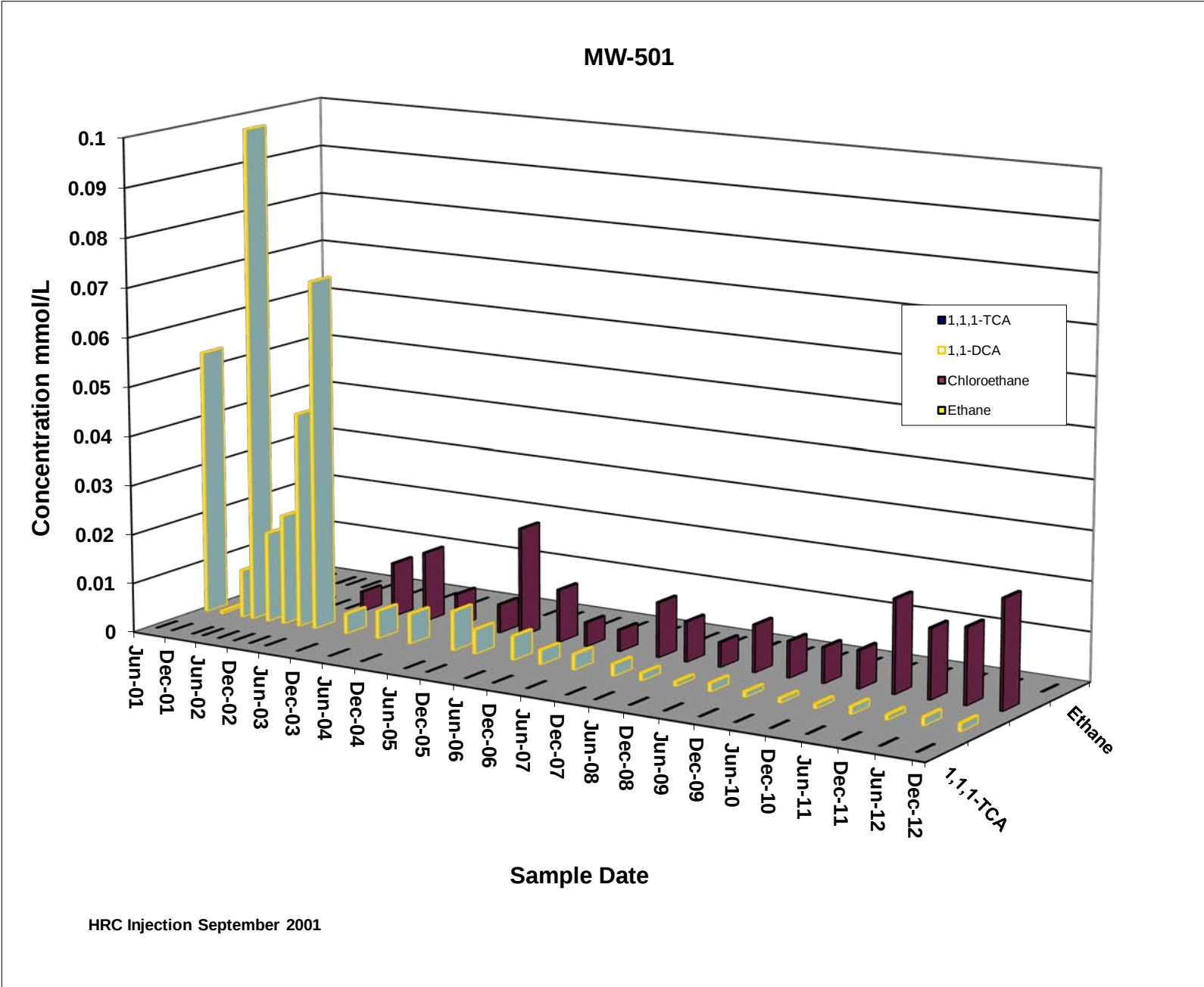


TABLE II
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
MID-GRADIENT WELLS

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	4/13/2012	10/19/2012
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. 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	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	0.016	0.054	ND	ND	ND	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	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	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	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	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	15	11
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	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	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	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	0.6	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	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. 250x 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	ND	12	4.8	5.8	12	9.4	15	44 D	8.8	10	15	11	18	17	20	21
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	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	ND	ND

Notes & Abbreviations:

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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.

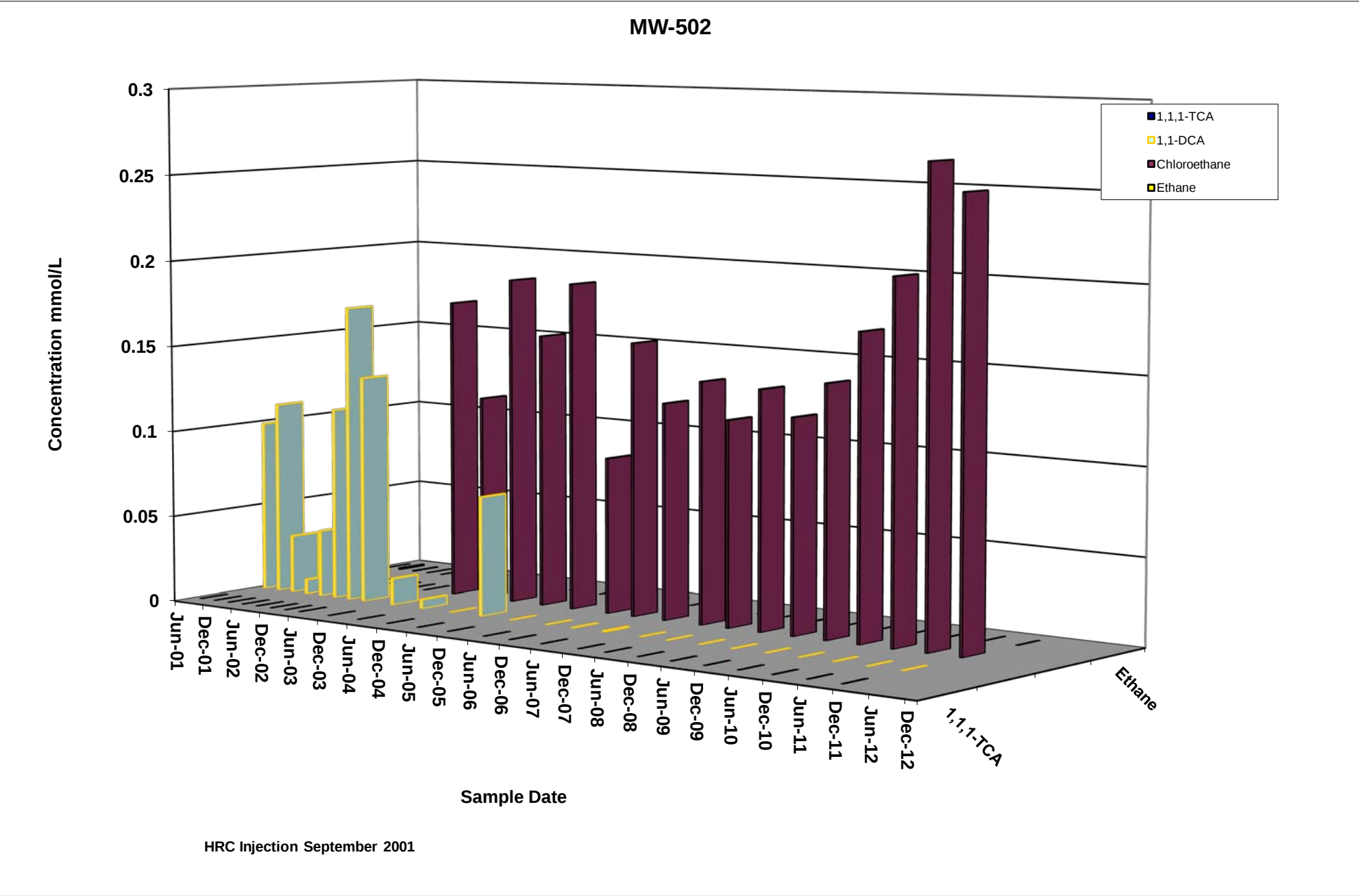


TABLE III
COOPERVISION, INC.
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES
DOWN-GRADIENT WELLS

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	4/12/12	10/19/12	
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	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	0.0180	0.0510	
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	0.0140	0.0400	
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	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	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	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	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	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	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	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	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	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	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	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	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-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	4/12/12	10/18/12
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	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	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	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	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	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	ND	NA	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	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:
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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	4/12/12	10/19/12
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	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	0.0082	0.0071
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	0.0084	0.0067
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	0.0051	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	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	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	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	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	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	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	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	NA	0.030 D	NA	0.022	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	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	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	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-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	4/12/12	10/19/12	
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	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	0.0180	0.0510	
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	0.0140	0.0400	
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	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	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	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	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	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	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	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	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	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	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	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	NA	NA	

Notes & Abbreviations:
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NA: Not Analyzed
DRY: Insufficient Recharge
D: Diluted Result
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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	4/12/12	10/18/12
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NA

Notes & Abbreviations:
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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	4/12/12	10/19/12
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	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	0.0082	0.0071
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	0.0084	0.0067
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	0.0051	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	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	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	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	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	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	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	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	NA	0.030 D	NA	0.022	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	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	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	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):	OW-306 4.0 - 14.0					
Date Sampled:	4/21/10	10/19/10	4/11/11	10/13/11	4/12/12	10/18/12
Compound:						
VOLATILE ORGANICS						
Acetone	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA
DISSOLVED GASES						
Methane	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	NA
Ethene	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 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	4/13/12	10/19/12				
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	<20	<10				
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	<0.01	<1.0				
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	720	748				
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	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	NA	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	2900	2980				
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	10.4	14.9				
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	1.2	1.2				
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	NA	NA				
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	NA	NA				
HRC COMPONENTS (mg/L)	5X Dil.											10x Dil.				5x Dil	10x Dil	10x 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	<1.0	<1.0	<10	<1.0	<10	<10	<5.0	<10	<20	<1.0	<20	<25	<25	<20				
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	480	550				
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	790	860				
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	<13	<10				
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	2400	2500				
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	0.33	0.62				
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	-105	-22				
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	10.52	7.19				
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	3	NA				
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	195	NA				
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	NA	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	4/13/12	10/19/12				
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	<0.1	<0.1				
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	<0.010	<0.1				
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	516	656				
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	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	NA	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	183	185				
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	2.9	3.3				
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	<1.0	1.1				
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	NA	NA				
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	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	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	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	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	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	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	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	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	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	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	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	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	4/13/12	10/19/12				
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	<60	<2.0				
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	<0.05	<1	<1.0					
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	2820	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	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	NA	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	309	365				
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	31.1	8.1				
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	6.2	<1.0				
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	NA	NA				
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	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	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	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	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	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	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	2.11	0.32				
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	-82	-149				
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	9.31	6.69				
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	NA	NA				
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	60	NA				
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	217.5	NA				

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	4/12/12	10/19/12			
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	<20	<1.0			
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	<1	<1.0			
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	744	884			
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	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	NA	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	656	722			
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	<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	1.3	<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	NA	NA			
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	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	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	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	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	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	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	0.2	0.11			
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	-93	-102.5			
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	3.17	3.34			
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	1	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	1820	NA			
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	NA	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	4/13/12	10/19/12		
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	<1.0	<0.020		
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	<0.050	<0.060	<0.010			
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	3300	3090		
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	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	<5.0	<0.020	<2.0	<0.050	NA	NA		
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	772	608		
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	<2.0	<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	<1.0	<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	NA	NA		
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	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	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	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	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	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	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	4.71	0.48		
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	-17	-71.8		
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	7.12	9.84		
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	5	NA		
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	315	NA		
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	NA	NA		

Notes & Abbreviations

NS - Not Sampled

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

ND - Not detected in field tests

TOC - Total Organic Carbon

D - Diluted

* - 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: week of: 22 April 2013
Performed By: M. Ramsdell
Job Number: 70665-018

Test Point	10/14/2011 Vacuum Reading ("WC)	4/12/2012 Vacuum Reading ("WC)	10/18/2012 Vacuum Reading ("WC)	4/22-4/25/2013 Vacuum Reading ("WC)
T-1	0.022	0.020	Covered by Cupboards	0.021
T-2	*	*	*	*
T-3	0.654	0.655	0.392	0.446
T-4	0.033	0.018	covered by ventilation box	0.042
T-5	0.062	0.055	0.067	0.045
T-6	0.076	0.071	0.080	0.057
T-7**	-0.027	-0.024	0.007	0.007
T-8	0.007	0.002	0.031	0.028
T-9***	-0.018	-0.014	0.013	0.026
T-10	0.020	0.019	0.022	0.027
T-11	0.980	covered by carpet	covered by carpet	0.402
T-12	0.025	0.018	0.015	0.011
T-13	0.008	covered by carpet	covered by carpet	0.009
T-14	0.011	0.015	0.010	0.014
T-15	0.032	0.028	0.030	0.029
T-16	0.024	0.019	0.023	0.021
T-17	0.015	0.023	0.018	0.019
T-18	0.004	0.011	blocked by vending machines	0.040

* T-2 is not a valid test point
** with exterior doors closed
*** with interior doors open

Suction Point	10/14/2011 Vacuum Reading ("WC)	4/12/2012 Vacuum Reading ("WC)	10/18/2012 Vacuum Reading ("WC)	4/22-4/25/2013 Vacuum Reading ("WC)
S-1	3.80	3.90	3.80	3.80
S-2	3.50	3.70	3.70	3.70
S-3	1.60	2.60	2.70	1.60
S-4/5	2.30	3.20	2.40	2.40
S-6	3.50	3.60	3.60	3.60
S-7	1.60	1.60	1.70	1.70

Visual Inspection of System: * The Bio Lab has been converted into the Human Resources Director's Office, and has been covered with wall-to-wall carpet. Carpet was removed to access points. * Cafeteria (T-1 and T-18) was renovated, but points were made accessible. * Injection Molding Room (T-9) and Switchgear Room (T-7) are under considerable negative pressure and when doors are open, vacuum is achieved in the subslab.
Recommendation Actions: None
Description of Past Year Activities:

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 No. V00175

Site Details

Box 1

Site Name 711 North Road (CooperVision)

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

Reporting Period: January 31, 2012 to January 31, 2013

1. Is the information above correct?

YES NO

☒ ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

☐ ☒

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development?

☐ ☒

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below?
Commercial and Industrial

☒ ☐

7. Are all ICs/ECs in place and functioning as designed?

☒ ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

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

Signature of Owner, Remedial Party or Designated Representative

Date

SITE NO. V00175

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
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

Box 4

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
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,
print name print business address Scottsville, NY,
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

5/23/13
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I Mark N. Ramsdell at Haley & Aldrich of New York, Rochester, NY,
print name print business address

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

Mark N. Ramsdell

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



Stamp
(Required for PE)

9/23/13
Date

APPENDIX B

Mann-Kendall Analysis Results

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

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

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	120	0.025 U	0.0125 U	0.25 U	0.0025 U	0.0051	Fall 2012	210	0.025 U	0.0125 U	0.25 U	0.0025 U	0.0025 U
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	250	0.096	0.17	0.25 U	0.018	0.0082	Fall 2012	250	0.067	0.16	0.25 U	0.051	0.0071
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	--	0.025 U	0.0125 U	0.25 U	0.014	0.0084	Fall 2012	--	0.025 U	0.0125 U	0.25 U	0.04	0.0067
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 (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

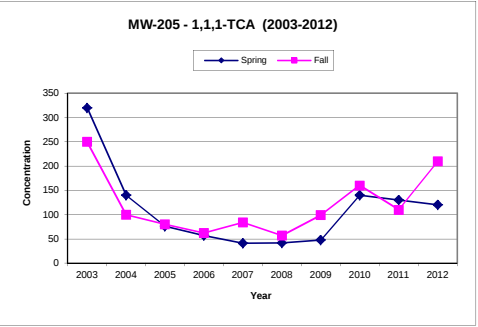
MW-205

S Value	
Neg	Pos
26	18
S Value	-8
n	10
P Value	0.242
Evaluation	No Trend

Mann-Kendall Trend: Spring											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	320	140	76	57	41	42	48	140	130	120	
	320	-180	-244	-263	-279	-278	-272	-180	-190	-200	
	140		-64	-83	-99	-98	-92	0	-10	-20	
	76			-19	-35	-34	-28	64	54	44	
	57				-16	-15	-9	83	73	63	
	41					1	7	99	89	79	
	42						6	98	88	78	
	48							92	82	72	
	140								-10	-20	
	130									-10	
	120										

S Value	
Neg	Pos
19	26
S Value	7
n	10
P Value	0.3
Evaluation	No Trend

Mann-Kendall Trend: Fall											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	250	100	80	62	84	57	99	160	110	210	
	250	-150	-170	-188	-166	-193	-151	-90	-140	-40	
	100		-20	-38	-16	-43	-1	60	10	110	
	80			-18	4	-23	19	80	30	130	
	62				22	-5	37	98	48	148	
	84					-27	15	76	26	126	
	57						42	103	53	153	
	99							61	11	111	
	160								-50	50	
	110									100	
	210										



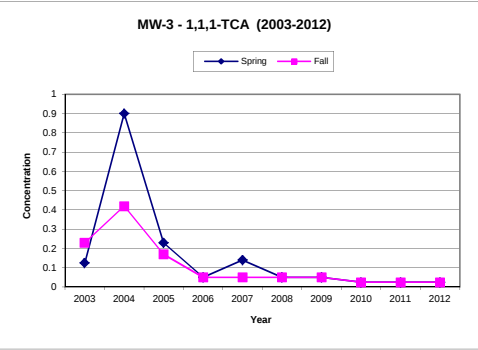
MW-3

S Value	
Neg	Pos
35	4
S Value	-31
n	10
P Value	0.0023
Evaluation	Decreasing

Mann-Kendall Trend: Spring											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	0.125	0.9	0.23	0.05	0.14	0.05	0.05	0.025	0.025	0.025	
	0.125	0.775	0.105	-0.075	0.015	-0.075	-0.075	-0.1	-0.1	-0.1	
	0.9		-0.67	-0.85	-0.76	-0.85	-0.85	-0.875	-0.875	-0.875	
	0.23			-0.18	-0.09	-0.18	-0.18	-0.205	-0.205	-0.205	
	0.05				0.09	0	0	-0.025	-0.025	-0.025	
	0.14					-0.09	-0.09	-0.115	-0.115	-0.115	
	0.05						0	-0.025	-0.025	-0.025	
	0.05							-0.025	-0.025	-0.025	
	0.025								0	0	
	0.025									0	
	0.025										

S Value	
Neg	Pos
35	1
S Value	-34
n	10
P Value	0.00047
Evaluation	Decreasing

Mann-Kendall Trend: Fall											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	0.23	0.42	0.17	0.05	0.05	0.05	0.05	0.025	0.025	0.025	
	0.23	0.19	-0.06	-0.18	-0.18	-0.18	-0.18	-0.205	-0.205	-0.205	
	0.42		-0.25	-0.37	-0.37	-0.37	-0.37	-0.395	-0.395	-0.395	
	0.17			-0.12	-0.12	-0.12	-0.12	-0.145	-0.145	-0.145	
	0.05				0	0	0	-0.025	-0.025	-0.025	
	0.05					0		-0.025	-0.025	-0.025	
	0.05						0	-0.025	-0.025	-0.025	
	0.025							-0.025	-0.025	-0.025	
	0.05							-0.025	-0.025	-0.025	
	0.025								0	0	
	0.025									0	
	0.025										



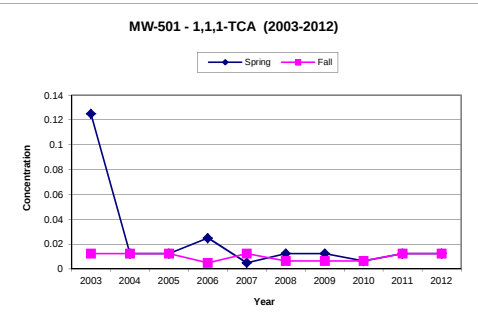
MW-501

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

Mann-Kendall Trend: Spring											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	0.125	0.0125	0.0125	0.025	0.005	0.0125	0.0125	0.0065	0.0125	0.0125	
	0.125	-0.1125	-0.1125	-0.1	-0.12	-0.1125	-0.1125	-0.1185	-0.1125	-0.1125	
	0.0125		0	0.0125	-0.0075	0	0	-0.006	0	0	
	0.0125			0.0125	-0.0075	0	0	-0.006	0	0	
	0.025				-0.02	-0.0125	-0.0125	-0.0185	-0.0125	-0.0125	
	0.005					0.0075	0.0075	0.0015	0.0075	0.0075	
	0.0125						0	-0.006	0	0	
	0.0125						-0.006		0	0	
	0.0065							0.006	0.006	0.006	
	0.0125									0	
	0.0125										

S Value	
Neg	Pos
15	12
S Value	-3
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall											
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Data	0.0125	0.0125	0.0125	0.005	0.0125	0.0065	0.0065	0.0065	0.0125	0.0125	
	0.0125	0	0	-0.0075	0	-0.006	-0.006	-0.006	0	0	
	0.0125		0	-0.0075	0	-0.006	-0.006	-0.006	0	0	
	0.0125			-0.0075	0	-0.006	-0.006	-0.006	0	0	
	0.005				0.0075	0.0015	0.0015	0.0015	0.0075	0.0075	
	0.0125					-0.006	-0.006	-0.006	0	0	
	0.0065						0	0	0.006	0.006	
	0.0065							0	0.006	0.006	
	0.0125								0.006	0.006	
	0.0125									0	
	0.0125										



Mann-Kendall Analysis: 1,1,1-TCA (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

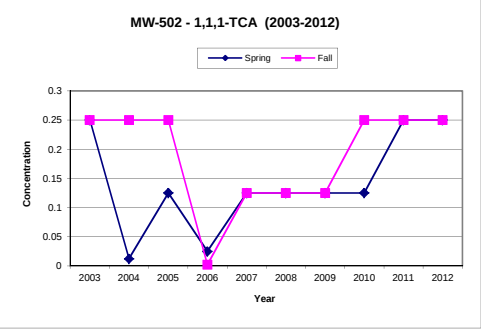
MW-502

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.25	0.0125	0.125	0.025	0.125	0.125	0.125	0.125	0.25	0.25
0.25		-0.2375							0	0
0.0125			0.1125	0.0125	0.1125	0.1125	0.1125	0.1125	0.2375	0.2375
0.125				-0.1	0	0	0	0	0.125	0.125
0.025					0.1	0.1	0.1	0.1	0.225	0.225
0.125						0	0	0	0.125	0.125
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										

S Value	
Neg	Pos
12	15
S Value	3
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.25	0.25	0.25	0.0025	0.125	0.125	0.125	0.25	0.25	0.25
0.25			0	-0.2475	-0.125	-0.125	-0.125	0	0	0
0.25			0	-0.2475	-0.125	-0.125	-0.125	0	0	0
0.25				-0.2475	-0.125	-0.125	-0.125	0	0	0
0.0025					0.1225	0.1225	0.1225	0.2475	0.2475	0.2475
0.125							0	0.125	0.125	0.125
0.125								0	0.125	0.125
0.125									0.125	0.125
0.125										0.125
0.25									0	0
0.25										0
0.25										



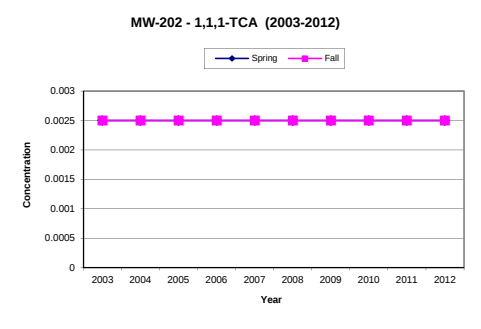
MW-202

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
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



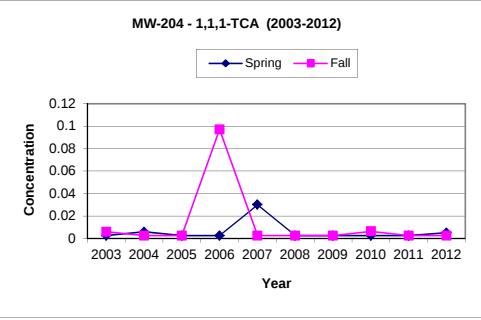
MW-204

S Value	
Neg	Pos
12	12
S Value	0
n	10
P Value	0.5
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0025	0.006	0.0025	0.0025	0.03	0.0025	0.0025	0.0025	0.0025	0.0051
0.0025		0.0035	0	0	0.0275	0	0	0	0	0.0026
0.006			-0.0035	-0.0035	0.024	-0.0035	-0.0035	-0.0035	-0.0035	-0.0009
0.0025				0	0.0275	0	0	0	0	0.0026
0.0025					0.0275	0	0	0	0	0.0026
0.03						-0.0275	-0.0275	-0.0275	-0.0275	-0.0249
0.0025							0	0	0	0.0026
0.0025								0	0	0.0026
0.0025									0	0.0026
0.0025										0.0026
0.0051										

S Value	
Neg	Pos
15	9
S Value	-6
n	10
P Value	0.3
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.006	0.0025	0.0025	0.097	0.0025	0.0025	0.0025	0.0063	0.0025	0.0025
0.006		-0.0035	-0.0035	0.091	-0.0035	-0.0035	-0.0035	0.0003	-0.0035	-0.0035
0.0025			0	0.0945	0	0	0	0.0038	0	0
0.0025				0.0945	0	0	0	0.0038	0	0
0.097					-0.0945	-0.0945	-0.0945	-0.0907	-0.0945	-0.0945
0.0025						0	0	0.0038	0	0
0.0025							0	0.0038	0	0
0.0025								0.0038	0	0
0.0063									-0.0038	-0.0038
0.0025										0
0.0025										



Mann-Kendall Analysis: 1,1-DCA (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

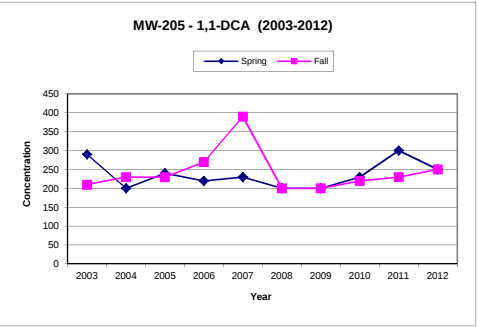
MW-205

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	290	200	240	220	230	200	200	230	300	250
	290	-90	-50	-70	-60	-90	-90	-60	10	-40
	200		40	20	30	0	0	30	100	50
	240			-20	-10	-40	-40	-10	60	10
	220				10	-20	-20	10	80	30
	230					-30	-30	0	70	20
	200						0	30	100	50
	200							30	100	50
	230								70	20
	300									-50
	250									

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

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	210	230	230	270	390	200	200	220	230	250
	210	20	20	60	180	-10	-10	10	20	40
	230		0	40	160	-30	-30	-10	0	20
	230			40	160	-30	-30	-10	0	20
	270				120	-70	-70	-50	-40	-20
	390					-190	-190	-170	-160	-140
	200						0	20	30	50
	200							20	30	50
	220								10	30
	230									20
	250									



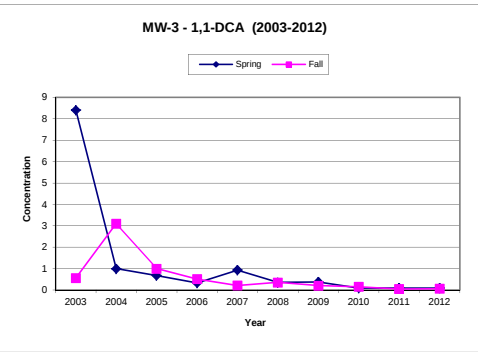
MW-3

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	8.4	1	0.68	0.34	0.93	0.36	0.38	0.1	0.098	0.096
	8.4	-7.4	-7.72	-8.06	-7.47	-8.04	-8.02	-8.3	-8.302	-8.304
	1		-0.32	-0.66	-0.07	-0.64	-0.62	-0.9	-0.902	-0.904
	0.68			-0.34	0.25	-0.32	-0.3	-0.58	-0.582	-0.584
	0.34				0.59	0.02	0.04	-0.24	-0.242	-0.244
	0.93					-0.57	-0.55	-0.83	-0.832	-0.834
	0.36						0.02	-0.26	-0.262	-0.264
	0.38							-0.28	-0.282	-0.284
	0.1								-0.002	-0.004
	0.098									-0.002
	0.096									

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

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.56	3.1	1	0.51	0.22	0.36	0.21	0.16	0.052	0.067
	0.56	2.54	0.44	-0.05	-0.34	-0.2	-0.35	-0.4	-0.508	-0.493
	3.1		-2.1	-2.59	-2.88	-2.74	-2.89	-2.94	-3.048	-3.033
	1			-0.49	-0.78	-0.64	-0.79	-0.84	-0.948	-0.933
	0.51				-0.29	-0.15	-0.3	-0.35	-0.458	-0.443
	0.22					0.14	-0.01	-0.06	-0.168	-0.153
	0.36						-0.15	-0.2	-0.308	-0.293
	0.21							-0.05	-0.158	-0.143
	0.16								-0.108	-0.093
	0.052									0.015
	0.067									



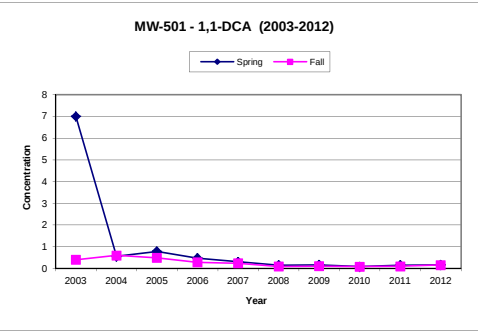
MW-501

S Value	
Neg	Pos
37	6
S Value	-31
n	10
P Value	0.0023
Evaluation	Decreasing

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	7	7	0.56	0.79	0.48	0.31	0.15	0.17	0.088	0.15
	7	-6.44	-6.21	-6.52	-6.69	-6.85	-6.83	-6.912	-6.85	-6.83
	0.56		0.23	-0.08	-0.25	-0.41	-0.39	-0.472	-0.41	-0.39
	0.79			-0.31	-0.48	-0.64	-0.62	-0.702	-0.64	-0.62
	0.48				-0.17	-0.33	-0.31	-0.392	-0.33	-0.31
	0.31					-0.16	-0.14	-0.222	-0.16	-0.14
	0.15						0.02	-0.062	0	0.02
	0.17							-0.082	-0.02	0
	0.088								0.062	0.082
	0.15									0.02
	0.17									

S Value	
Neg	Pos
36	9
S Value	-27
n	10
P Value	0.0083
Evaluation	Decreasing

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.4	0.6	0.49	0.29	0.24	0.09	0.11	0.089	0.1	0.16
	0.4	0.2	0.09	-0.11	-0.16	-0.31	-0.29	-0.311	-0.3	-0.24
	0.6		-0.11	-0.31	-0.36	-0.51	-0.49	-0.511	-0.5	-0.44
	0.49			-0.2	-0.25	-0.4	-0.38	-0.401	-0.39	-0.33
	0.29				-0.05	-0.2	-0.18	-0.201	-0.19	-0.13
	0.24					-0.15	-0.13	-0.151	-0.14	-0.08
	0.09						0.02	-0.001	0.01	0.07
	0.11							-0.021	-0.01	0.05
	0.089								0.011	0.071
	0.1									0.06
	0.16									



Mann-Kendall Analysis: 1,1-DCA (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

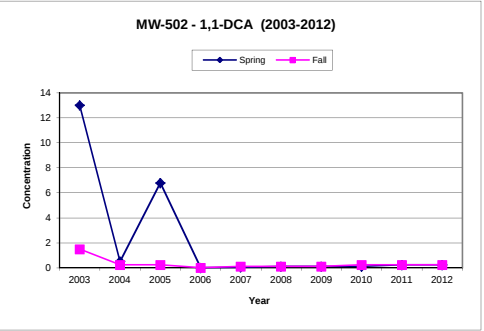
MW-502

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	13	0.52	6.8	0.025	0.054	0.125	0.125	0.125	0.25	0.25
	13	-12.48	-6.2	-12.975	-12.946	-12.875	-12.875	-12.875	-12.75	-12.75
	0.52		6.28	-0.495	-0.466	-0.395	-0.395	-0.395	-0.27	-0.27
	6.8			-6.775	-6.746	-6.675	-6.675	-6.675	-6.55	-6.55
	0.025				0.029	0.1	0.1	0.1	0.225	0.225
	0.054					0.071	0.071	0.071	0.196	0.196
	0.125						0	0	0.125	0.125
	0.125							0	0.125	0.125
	0.125							0	0.125	0.125
	0.25									0
	0.25									

S Value	
Neg	Pos
17	15
S Value	-2
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	1.5	0.25	0.25	0.016	0.125	0.125	0.125	0.25	0.25	0.25
	1.5	-1.25	-1.25	-1.484	-1.375	-1.375	-1.375	-1.25	-1.25	-1.25
	0.25		0	-0.234	-0.125	-0.125	-0.125	0	0	0
	0.25			-0.234	-0.125	-0.125	-0.125	0	0	0
	0.016				0.109	0.109	0.109	0.234	0.234	0.234
	0.125					0	0	0.125	0.125	0.125
	0.125						0	0.125	0.125	0.125
	0.125							0.125	0.125	0.125
	0.25								0	0
	0.25									0
	0.25									



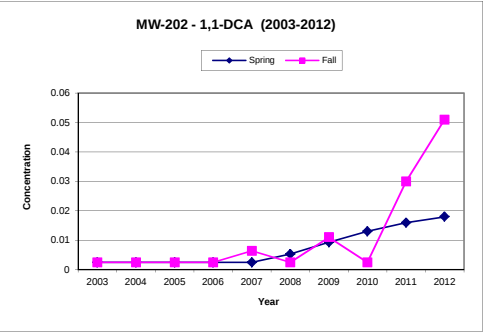
MW-202

S Value	
Neg	Pos
0	35
S Value	35
n	10
P Value	0.00047
Evaluation	Increasing

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0053	0.0093	0.013	0.016	0.018
	0.0025	0	0	0	0	0.0028	0.0068	0.0105	0.0135	0.0155
	0.0025		0	0	0	0.0028	0.0068	0.0105	0.0135	0.0155
	0.0025			0	0	0.0028	0.0068	0.0105	0.0135	0.0155
	0.0025				0	0.0028	0.0068	0.0105	0.0135	0.0155
	0.0025					0.0028	0.0068	0.0105	0.0135	0.0155
	0.0053						0.004	0.0077	0.0107	0.0127
	0.0093							0.0037	0.0067	0.0087
	0.013								0.003	0.005
	0.016									0.002
	0.018									

S Value	
Neg	Pos
3	27
S Value	24
n	10
P Value	0.014
Evaluation	Increasing

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0025	0.0025	0.0025	0.0025	0.0064	0.0025	0.011	0.0025	0.03	0.051
	0.0025	0	0	0	0.0039	0	0.0085	0	0.0275	0.0485
	0.0025		0	0	0.0039	0	0.0085	0	0.0275	0.0485
	0.0025			0	0.0039	0	0.0085	0	0.0275	0.0485
	0.0025				0.0039	0	0.0085	0	0.0275	0.0485
	0.0064					-0.0039	0.0046	-0.0039	0.0236	0.0446
	0.0025						0.0085	0	0.0275	0.0485
	0.011							-0.0085	0.019	0.04
	0.0025								0.0275	0.0485
	0.03									0.021
	0.051									



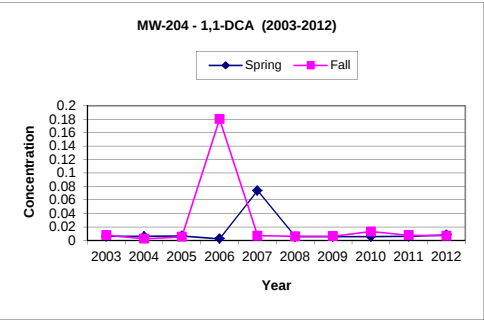
MW-204

S Value	
Neg	Pos
22	21
S Value	-1
n	10
P Value	0.5
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.006	0.006	0.0068	0.0025	0.074	0.0056	0.0056	0.0055	0.0059	0.0082
	0.006	0	0.0008	-0.0035	0.068	-0.0004	-0.0004	-0.0005	-0.0001	0.0022
	0.0068		0.0008	-0.0035	0.068	-0.0004	-0.0004	-0.0005	-0.0001	0.0022
	0.0068			-0.0043	0.0672	-0.0012	-0.0012	-0.0013	-0.0009	0.0014
	0.0025				0.0715	0.0031	0.0031	0.003	0.0034	0.0057
	0.074					-0.0684	-0.0684	-0.0685	-0.0681	-0.0658
	0.0056						0	-0.0001	0.0003	0.0026
	0.0056							-0.0001	0.0003	0.0026
	0.0055								0.0004	0.0027
	0.0059									0.0023
	0.0082									

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

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.008	0.0025	0.0053	0.18	0.007	0.006	0.0063	0.013	0.0077	0.0071
	0.008	-0.0055	-0.0027	0.172	-0.001	-0.002	-0.0017	0.005	-0.0003	-0.0009
	0.0025		0.0028	0.1775	0.0045	0.0035	0.0038	0.0105	0.0052	0.0046
	0.0053			0.1747	0.0017	0.0007	0.001	0.0077	0.0024	0.0018
	0.18				-0.173	-0.174	-0.1737	-0.167	-0.1723	-0.1729
	0.007					-0.001	-0.0007	0.006	0.0007	0.0001
	0.006						0.0003	0.007	0.0017	0.0011
	0.0063							0.0067	0.0014	0.0008
	0.013								-0.0053	-0.0059
	0.0077									-0.0006
	0.0071									



Mann-Kendall Analysis: 1,1-DCE (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

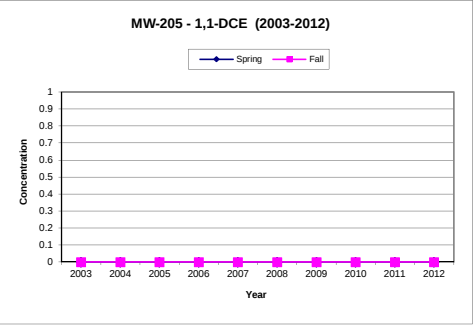
MW-205

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0
					0	0	0	0	0	0
						0	0	0	0	0
							0	0	0	0
								0	0	0
									0	0
										0

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

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0
					0	0	0	0	0	0
						0	0	0	0	0
							0	0	0	0
								0	0	0
									0	0
										0



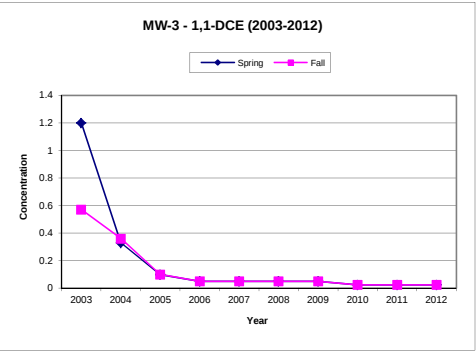
MW-3

S Value	
Neg	Pos
36	0
S Value	-36
n	10
P Value	0.00018
Evaluation	Decreasing

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	1.2	0.33	0.099	0.05	0.05	0.05	0.05	0.025	0.025	0.025
	1.2	-0.87	-1.101	-1.15	-1.15	-1.15	-1.15	-1.175	-1.175	-1.175
	0.33		-0.231	-0.28	-0.28	-0.28	-0.28	-0.305	-0.305	-0.305
	0.099			-0.049	-0.049	-0.049	-0.049	-0.074	-0.074	-0.074
	0.05				0	0	0	-0.025	-0.025	-0.025
	0.05					0	0	-0.025	-0.025	-0.025
	0.05						0	-0.025	-0.025	-0.025
	0.025							-0.025	-0.025	-0.025
	0.025								0	0
	0.025									0

S Value	
Neg	Pos
36	0
S Value	-36
n	10
P Value	0.00018
Evaluation	Decreasing

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.57	0.36	0.1	0.05	0.05	0.05	0.05	0.025	0.025	0.025
	0.57	-0.21	-0.47	-0.52	-0.52	-0.52	-0.52	-0.545	-0.545	-0.545
	0.36		-0.26	-0.31	-0.31	-0.31	-0.31	-0.335	-0.335	-0.335
	0.1			-0.05	-0.05	-0.05	-0.05	-0.075	-0.075	-0.075
	0.05				0	0	0	-0.025	-0.025	-0.025
	0.05					0	0	-0.025	-0.025	-0.025
	0.05						0	-0.025	-0.025	-0.025
	0.025							-0.025	-0.025	-0.025
	0.025								0	0
	0.025									0



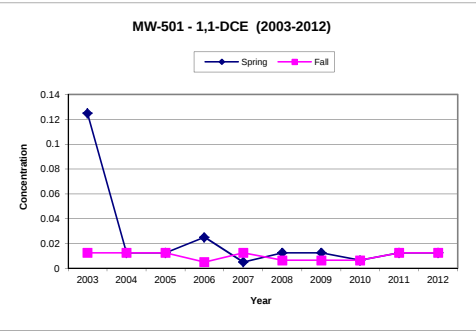
MW-501

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.125	0.0125	0.0125	0.025	0.005	0.0125	0.0125	0.0065	0.0125	0.0125
	0.125	-0.1125	-0.1125	-0.1	-0.12	-0.1125	-0.1125	-0.1185	-0.1125	-0.1125
	0.0125		0	0.0125	-0.0075	0	0	-0.006	0	0
	0.0125			0.0125	-0.0075	0	0	-0.006	0	0
	0.025				-0.02	-0.0125	-0.0125	-0.0185	-0.0125	-0.0125
	0.005					0.0075	0.0075	0.0015	0.0075	0.0075
	0.0125						0	-0.006	0	0
	0.0125							-0.006	0	0
	0.0065								0.006	0.006
	0.0125									0
	0.0125									

S Value	
Neg	Pos
15	12
S Value	-3
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0125	0.0125	0.0125	0.005	0.0125	0.0065	0.0065	0.0065	0.0125	0.0125
	0.0125	0	0	-0.0075	0	-0.006	-0.006	-0.006	0	0
	0.0125		0	-0.0075	0	-0.006	-0.006	-0.006	0	0
	0.0125			-0.0075	0	-0.006	-0.006	-0.006	0	0
	0.005				0.0075	0.0015	0.0015	0.0015	0.0075	0.0075
	0.0125					-0.006	-0.006	-0.006	0	0
	0.0065						0	0	0.006	0.006
	0.0065							0	0.006	0.006
	0.0125								0.006	0.006
	0.0125									0
	0.0125									



Mann-Kendall Analysis: 1,1-DCE (2003-2012)
CooperVision, Inc.
Scottsville, New York
VCA V00157-8

Degree of Confidence (Alpha): 0.05

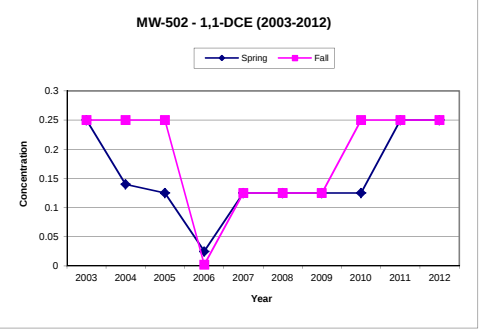
MW-502

S Value	
Neg	Pos
14	18
S Value	4
n	10
P Value	0.364
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.25	0.14	0.125	0.025	0.125	0.125	0.125	0.125	0.25	0.25
0.25		-0.11	-0.125	-0.225	-0.125	-0.125	-0.125	-0.125	0	0
0.14			-0.015	-0.115	-0.015	-0.015	-0.015	-0.015	0.11	0.11
0.125				-0.1	0	0	0	0	0.125	0.125
0.025					0.1	0.1	0.1	0.1	0.225	0.225
0.125						0	0	0	0.125	0.125
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										
0.25										

S Value	
Neg	Pos
12	15
S Value	3
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.25	0.25	0.25	0.0025	0.125	0.125	0.125	0.25	0.25	0.25
0.25			0	-0.2475	-0.125	-0.125	-0.125	0	0	0
0.25			0	-0.2475	-0.125	-0.125	-0.125	0	0	0
0.0025					-0.125	-0.125	-0.125	0	0	0
0.125					0.1225	0.1225	0.1225	0.2475	0.2475	0.2475
0.125						0	0	0.125	0.125	0.125
0.125							0	0.125	0.125	0.125
0.125								0.125	0.125	0.125
0.25									0	0
0.25										0
0.25										



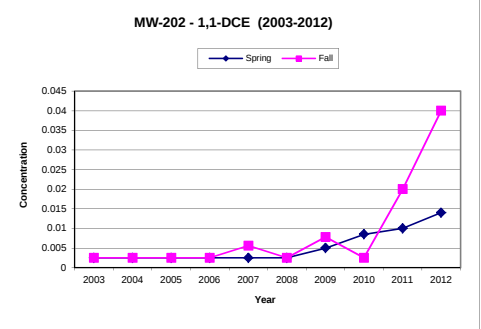
MW-202

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

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.005	0.0085	0.01	0.014
0.0025		0	0	0	0	0	0.0025	0.006	0.0075	0.0115
0.0025			0	0	0	0	0.0025	0.006	0.0075	0.0115
0.0025				0	0	0	0.0025	0.006	0.0075	0.0115
0.0025					0	0	0.0025	0.006	0.0075	0.0115
0.0025						0	0.0025	0.006	0.0075	0.0115
0.0025							0.0025	0.006	0.0075	0.0115
0.005								0.0035	0.005	0.009
0.0085									0.0015	0.0055
0.01										0.004
0.014										

S Value	
Neg	Pos
3	27
S Value	24
n	10
P Value	0.014
Evaluation	Increasing

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.0025	0.0025	0.0025	0.0025	0.0056	0.0025	0.0078	0.0025	0.02	0.04
0.0025		0	0	0	0.0031	0	0.0053	0	0.0175	0.0375
0.0025			0	0	0.0031	0	0.0053	0	0.0175	0.0375
0.0025				0	0.0031	0	0.0053	0	0.0175	0.0375
0.0025					0.0031	0	0.0053	0	0.0175	0.0375
0.0056						-0.0031	0.0022	-0.0031	0.0144	0.0344
0.0025							0.0053	0	0.0175	0.0375
0.0078								-0.0053	0.0122	0.0322
0.0025									0.0175	0.0375
0.02										0.02
0.04										



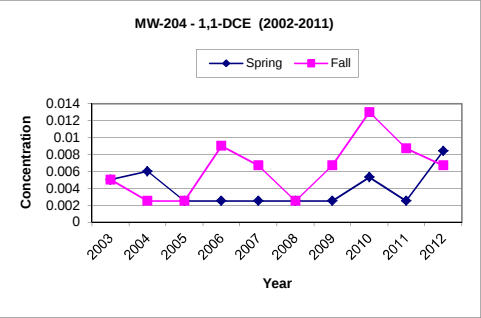
MW-204

S Value	
Neg	Pos
14	16
S Value	2
n	10
P Value	0.431
Evaluation	No Trend

Mann-Kendall Trend: Spring										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.005	0.006	0.0025	0.0025	0.0025	0.0025	0.0025	0.0053	0.0025	0.0084
0.005		0.001	-0.0025	-0.0025	-0.0025	-0.0025	-0.0025	0.0003	-0.0025	0.0034
0.006			-0.0035	-0.0035	-0.0035	-0.0035	-0.0035	-0.0007	-0.0035	0.0024
0.0025				0	0	0	0	0.0028	0	0.0059
0.0025					0	0	0	0.0028	0	0.0059
0.0025						0	0	0.0028	0	0.0059
0.0025							0	0.0028	0	0.0059
0.0025								0.0028	0	0.0059
0.0053									-0.0028	0.0031
0.0025										0.0059
0.0084										

S Value	
Neg	Pos
12	27
S Value	15
n	10
P Value	0.108
Evaluation	No Trend

Mann-Kendall Trend: Fall										
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Data	0.005	0.0025	0.0025	0.009	0.0067	0.0025	0.0067	0.013	0.0087	0.0067
0.005		-0.0025	-0.0025	0.004	0.0017	-0.0025	0.0017	0.008	0.0037	0.0017
0.0025			0	0.0065	0.0042	0	0.0042	0.0105	0.0062	0.0042
0.0025				0.0065	0.0042	0	0.0042	0.0105	0.0062	0.0042
0.009					-0.0023	-0.0065	-0.0023	0.004	-0.0003	-0.0023
0.0067						-0.0042	0	0.0063	0.002	0
0.0025							0.0042	0.0105	0.0062	0.0042
0.0067								0.0063	0.002	0
0.013									-0.0043	-0.0063
0.0087										-0.002
0.0067										



APPENDIX C

SSD System Maintenance and Monitoring Documentation

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Maintenance Form

Work Order Number 28888
Date Enacted 12/7/2011

Due Date: 1/5/2012

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: 1/2 hr
Parts Used:

Estimated Cost:

Remarks:

1/5/2012
Mary Jo Fay

ms

CooperVision

FM00916

Maintenance Form

Work Order Number 29131
Date Enacted 1/9/2012

Due Date: 2/4/2012

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: 35 min

Estimated Cost:

Parts Used:

Remarks:

2/3/2012

Mary Jo Fay

CooperVision

FM00916

Maintenance Form

Work Order Number 29383
Date Enacted 2/6/2012

Due Date: 3/4/2012

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:

20 min

Estimated Cost:

Parts Used:

Remarks:

3/2/2012 Mary Jo Gay

Maintenance Form

Work Order Number 29568
Date Enacted 3/5/2012

Due Date: 4/1/2012

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: 1 hr.

Estimated Cost:

Parts Used:

Remarks:

4/1/12
Rene Schering

MS

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

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 29860
Date Enacted 4/2/2012

Due Date: 5/1/2012

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:

1 hr

Estimated Cost:

Parts Used:

Remarks:

5/1/2012 Mary Jo Fay

Maintenance Form

Work Order Number 30106
Date Enacted 5/7/2012

Due Date: 5/31/2012

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

Procedure to Reference: 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
Parts Used:

Estimated Cost:

Remarks:

5/31/2012 Mary Jo Fay

Maintenance Form

Work Order Number 30288
Date Enacted 6/4/2012

Due Date: 6/30/2012

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

Procedure to Reference: 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.

Estimated Cost:

Parts Used:

Remarks:

6/29/12
Rene Schewing

Maintenance Form

Work Order Number 30528
Date Enacted 7/2/2012

Due Date: 7/29/2012

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

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

Procedure to Reference: 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 min

Estimated Cost:

Parts Used:

Remarks:

7/25/2012 Mary Jo Gay

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

[illegible]

Contacts:

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

*See figure for suction points and fan locations

Maintenance Form

Work Order Number 30775
Date Enacted 7/30/2012

Due Date: 8/24/2012

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

Procedure to Reference: 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: 40 min
Parts Used:

Estimated Cost:

Remarks:

8/24/12 Mary Jo Fay

MS

CooperVision

FM00916

Maintenance Form

Work Order Number 30971
Date Enacted 8/27/2012

Due Date: 9/23/2012

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

Procedure to Reference: 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:

9/21/2012 Mary Jo Fay

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

Client:

CooperVision	CooperVision
Scottsville, NY	Scottsville, NY
CooperVision	CooperVision

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

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

Maintenance Form

Work Order Number 31199
Date Enacted 9/24/2012

Due Date: 10/21/2012

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

Procedure to Reference: 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.

Estimated Cost:

Parts Used:

Remarks:

10/21/12 Mary Jo Fay

#3 located in utility room was
purple - replaced

CooperVision
 Scottsville, NY
 CooperVision

FM00916

Maintenance Form

Work Order Number 31448
Date Enacted 10/29/2012

Due Date: 11/20/2012

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

Procedure to Reference: 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:

30 min

Remarks:

11/20/2012 Mary Jo Gay

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

CooperVision
Scottsville, NY
CooperVision

[illegible]

Contacts:

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

*Email results Yearly to Contacts

*Readings are in inches of Water Column (in.w.c.)

*See figure for suction points and fan locations

Maintenance Form

Work Order Number 31649
Date Enacted 11/26/2012

Due Date: 12/20/2012

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

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

Procedure to Reference: 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 min

Estimated Cost:

Parts Used:

Remarks:

12/20/12 mg Lay

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

CooperVision
Scottsville, NY
CooperVision

[illegible]

Contacts:

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

*Email results Yearly to Contacts

*Readings are in inches of Water Column (in.w.c.)

*See figure for suction points and fan locations

Maintenance Form

Work Order Number 31885
Date Enacted 12/20/2012

Due Date: 1/19/2013

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

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

Procedure to Reference: 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: 50min.

Estimated Cost:

Parts Used:

Remarks:

1/18/2013 Mary Jo Fidy

Maintenance Form

Work Order Number 32137
Date Enacted 1/29/2013

Due Date: 2/17/2013

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

Procedure to Reference: 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:

2/15/12
Rene Schewing

CooperVision

FM00916

APPENDIX D

Groundwater Sampling Field Forms

Coopervision
Water Sampling Event
Apr-12

Well ID	Previous DTW	Depth To Water (TOR)	Depth to Bottom	PID Reading
MW-1	BLOCKED @ 2.5 FT			
MW-2	5.52	6.17		0.1
MW-3	3.88	4.3		
MW-201	2.34	2.38		0.0
MW-202	5.99	6.82		0.0
MW-203	3.22	5.52		0.0
MW-204	5.48	5.68		0.0
MW-205	3.39	4.20		1.0
OW-304	3.28	3.50		0.0
MW-401	4.55	6.72		0.0
MW-402	3.75	2.97		0.0
MW-403	4.97	4.29		0.0
MW-501	4.47	4.46		0.0
MW-502	no cap	5.07	5.31	0.0
OWD-302S	2.68	3.20		0.0
OWD-302D	5.02	3.81		0.0
OWS-302	7.7	3.43		0.8
OWS-303S	5.33	5.67		0.0
OWS-303D	5.01	5.23		0.0
OW-306	3.13	3.29		0.0

abt. 2 Liters purged from casing

needs to be fixed

6 ft frozen, pry off

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

Job Number: 70665-018
Well ID: MW-203
Field Crew: MK/ES

Date: 4/12/12
Start Time: 1342
Finished Time: 1442
Sample Time: 1445

Initial Depth to Water: 4.0
Well Depth: _____
Depth to top of screen: _____
Depth to bottom of screen: _____
Depth of Pump Intake: _____

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

Sample ID-4552-MW 203-041212-1445

[illegible]

CO₂ 97.5 mg/L
Alkalinity mg/L 12 drops
Ferrous Iron 0.0 mg/L

Comments:

Location (Site/Facility Name):

Coopervision

70665-018

MW-202

MK/ES

Date: 4/2/12

Start Time: _____

Finished Time: _____

Sample Time: _____

Initial Depth to Water: 7.54

Well Depth: _____

Depth to top of screen:

Depth to bottom of screen: _____

Depth of Pump Intake: _____

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

[illegible]

Extra Parameters:

CO₂
Alkalinity
Ferrous Iron

0 mg/L
6 drops mg/L at 10 mL
16 drops mg/L at 5 mL per drop

Comments:

VOAs on 4/

Location (Site/Facility Name):

Coopervision

Job Number:

70665-018

Well ID:

MW-204

Field Crew:

MK/ES

Date: 4/12/17

Start Time: 1530

Finished Time: 119-75

Sample Time: 16.40

Initial Depth to Water: 5.91

Well Depth: 19.55

Depth to top of screen: 9.35

Depth to bottom of screen: 19.35

Depth of Pump Intake: 14.00

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

[illegible]

Extra Parameters:

CO ₂	153.75	mg/L
Alkalinity	200	mg/L
Ferrous Iron	70	mg/L

Comments:

Sample 10 3215 MW 204-041212-1640

Location (Site/Facility Name):

Coopervision

70665-018

44-502

MK/ES

Date: 4/13/12

Start Time: 8:31

Finished Time: _____

Sample Time: _____

Initial Depth to Water: 3.40

Well Depth: 33.66

Depth to top of screen:

Depth to bottom of screen:

Depth of Pump Intake: _____

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

[illegible]

Extra Parameters:

CO ₂		mg/L
Alkalinity	91.20	mg/L
Ferrous Iron		mg/L

Comments:

Location (Site/Facility Name):

Job Number:

70665-018

Well ID:

MW-5101

Field Crew:

MK/ES

Date: 4/13/12

Start Time: 0830

Finished Time: 1200

Sample Time: 1130

Initial Depth to Water: 4.39

Well Depth: 10.26

Depth to top of screen:

Depth to bottom of screen:

Depth of Pump Intake:

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

[illegible]

Extra Parameters:

CO ₂	217.5 mg/L
Alkalinity	60 mg/L
Ferrous Iron	mg/L

Comments:

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

Job Number:	70665-018
Well ID:	MW 205
Field Crew:	MK/ES

Date: 4/13/12
Start Time: 11:24
Finished Time: 12:50
Sample Time:

Initial Depth to Water: 4.13
Well Depth: 27.6
Depth to top of screen:
Depth to bottom of screen:
Depth of Pump Intake:

Tubing in well: No

Tubing Type: PVC[illegible]

Extra Parameters:

CO₂
Alkalinity
Ferrous Iron

mg/L No more sodium hydroxide to do Test with.
mg/L
mg/L

Comments:

Location (Site/Facility Name):

Job Number:

70665-018

Well ID:

OWC 302

Field Crew:

MK/ES

Date: 4/13/12

Start Time: 1215

Finished Time: 1315

Sample Time: 1315

Initial Depth to Water: 3.40

Well Depth: 1482

Depth to top of screen:

Depth to bottom of screen:

Depth of Pump Intake: 12

Purging Device: Waterra

Tubing in well; No

Tubing Type: PVC

Extra Parameters:

 CO_2

>1725 mg/L ran out of Sodium hydroxide

Alkalinity

195 mg/L

Ferrous Iron

3 mg/L

Comments:

Coopervision
Water Sampling Event

~~APR-12~~
OCT-12

Well ID	Previous DTW	Depth To Water (TOR)	Depth to Bottom	PID Reading
MW-1	BLOCKED @ 2.5 FT			
MW-2	5.52	6.55		0.0
MW-3	3.88	4.43		0.0
MW-201	2.34	4.8		0.0
MW-202	5.99	6.85		0.0
MW-203	3.22	3.7		0.0
MW-204	5.48	6.40		0.0
MW-205	3.39	4.15		0.0
OW-304	3.28	4.24		0.0
MW-401	4.55	4.54 3.5		0.0
MW-402	3.75	5.93		0.0
MW-403	4.97	4.72		
MW-501	4.47	4.65		0.0
MW-502	5.07	6.00		0.0
OWD-302 S	2.68	buried		
OWD-302D	5.02	buried		
OWS-302	7.7	8.5 9.54		0.0
OWS-303S	5.33	5.80		0.0
OWS-303D	5.01	5.65		0.0
OW-306	3.13	3.9		0.0

needs new cap

needs new cap

Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-9052
Field Crew: TFR

Date: 10/19/12
Start Time: 0836
Finished Time: _____
Sample Time: _____

Initial Depth to Water: _____
Well Depth: _____
Depth to top of screen: _____
Depth to bottom of screen: _____
Depth of Pump Intake: _____

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

[illegible]

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: NW-203
Field Crew: BHS

Date: 10/18/12
Start Time: 12:00
Finished Time: _____
Sample Time: 12:30

Initial Depth to Water: _____
Well Depth: _____
Depth to top of screen: _____
Depth to bottom of screen: _____
Depth of Pump Intake: _____

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

[illegible]

Extra Parameters:

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

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

Date: 10/19/12
Start Time: 9:35
Finished Time: 10:00
Sample Time: 10:05

Initial Depth to Water: _____
Well Depth: _____
Depth to top of screen: _____
Depth to bottom of screen: _____
Depth of Pump Intake: _____

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

[illegible]

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

70665-018

Mr. [REDACTED]

TRM

Date: 10/19/12

Start Time:

Finished Time:

Sample Time:

Initial Depth to Water:

Well Depth:

Depth to top of screen:

Depth to bottom of screen:

Depth of Pump Intake:

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

Extra Parameters:

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-50
Field Crew:

Date: 10/19/12 Initial Depth to Water: _____
 Start Time: 10:25 Well Depth: _____
 Finished Time: 10:50 Depth to top of screen: _____
 Sample Time: 10:55 Depth to bottom of screen: _____
 Depth of Pump Intake: _____

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

[illegible]

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: MW-807
Field Crew: TCB

Date: 10/17/12
Start Time: 0947
Finished Time:
Sample Time:

Initial Depth to Water: _____
Well Depth: _____
Depth to top of screen: _____
Depth to bottom of screen: _____
Depth of Pump Intake: _____

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

[illegible]

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

Location (Site/Facility Name): Coopervision

Job Number: 70665-018
Well ID: OWG-302
Field Crew: TFR

Date: 10/19/12
Start Time: 1046
Finished Time: _____
Sample Time: _____

Initial Depth to Water: _____	Purging Device: <u>Waterra</u>
Well Depth: _____	Tubing in well: <u>No</u>
Depth to top of screen: _____	Tubing Type: <u>PVC</u>
Depth to bottom of screen: _____	
Depth of Pump Intake: _____	

Extra Parameters:

CO ₂	mg/L
Alkalinity	mg/L
Ferrous Iron	mg/L

Comments:

purge Dry G 11/19

Sample L @ 1/30

Location (Site/Facility Name):

Coopervision

70665-018

AW - 306

TRB

Date: 10/18/12

Start Time: 1108

Finished Time:

Sample Time:

Initial Depth to Water:

Well Depth:

Depth to top of screen:

Depth to bottom of screen:

Depth of Pump Intake:

Purging Device: Waterra

Tubing in well: No

Tubing Type: PVC

Extra Parameters:

CO₂ mg/L

Alkalinity mg/L

Ferrous Iron mg/L

Comments:

Sampled G 1205

APPENDIX E

Laboratory Data Packages



May 07, 2012

Service Request No: R1202376

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

Laboratory Results for: Coopervision/ 70665-018

Dear Mr. Ramsdell:

Enclosed are the results of the sample(s) submitted to our laboratory on April 13, 2012. For your reference, these analyses have been assigned our service request number **R1202376**.

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. dba ALS Environmental

Karen Bunker
Project Manager

CC: Claire DeBergalis

Page 1 of 61



ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623

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Columbia Analytical Services, Inc.

Part of the ALS Group A Campbell Brothers Limited Company

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Haley & Aldrich of New York
Project: Coopervision #70665-018 4/12
Sample Matrix: Water

Service Request No.: R1202376
Date Received: 4/13/12

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 4/12-13/12 by H&A and received for analysis at Columbia Analytical Services on 4/13/12. 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 6.0°C within the 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, and Sulfide.

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

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

All holding times were met for these analyses.

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

All Laboratory Method Blanks were free from contamination.

No problems were encountered during the analysis of these samples.

Approved by



Date

5/7/12

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 -26.4% on the 4/18/12 analytical run. Hits for this compound on samples associated with this CCV 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 VOC and RSK samples were found to be preserved to a pH of < 2 or the samples were analyzed within 7 days from collection for unpreserved aliquots (samples R1202379-004 & -008 were at a pH of 5 for both aliquots). 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



000003

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1202376

<u>Lab ID</u>	<u>Client ID</u>
R1202376-001	4552-MW203-041212-1445
R1202376-002	2191-MW202-041212-1615
R1202376-003	3215-MW204-041212-1640
R1202376-004	2191-MW502-041212-0915
R1202376-005	3215-MW501-041312-1130
R1202376-006	3215-MW3-041312-1415
R1202376-007	2191-OW306-041212-1415
R1202376-008	2191-MW205-041312-1250
R1202376-009	4552-OWS302-041312-1315
R1202376-010	Trip Blank

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
North Carolina #676
Pennsylvania ID# 68-786
Rhode Island ID # 158
Virginia #460167

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.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 1445
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 18:14

Sample Name: 4552-MW203-041212-1445
 Lab Code: R1202376-001

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8048.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 1445
Date Received: 4/13/12
Date Analyzed: 4/19/12 18:14

Sample Name: 4552-MW203-041212-1445
Lab Code: R1202376-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8048.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	4/19/12 18:14	
Toluene-d8	98	87-121	4/19/12 18:14	
Dibromofluoromethane	103	89-119	4/19/12 18:14	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 1615
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 18:47

Sample Name: 2191-MW202-041212-1615
 Lab Code: R1202376-002

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8049.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	10 U	10	
71-43-2	Benzene	5.0 U	5.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	
75-25-2	Bromoform	5.0 U	5.0	
74-83-9	Bromomethane	5.0 U	5.0	
78-93-3	2-Butanone (MEK)	10 U	10	
75-15-0	Carbon Disulfide	10 U	10	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	
108-90-7	Chlorobenzene	5.0 U	5.0	
75-00-3	Chloroethane	5.0 U	5.0	
67-66-3	Chloroform	5.0 U	5.0	
74-87-3	Chloromethane	5.0 U	5.0	
124-48-1	Dibromochloromethane	5.0 U	5.0	
75-34-3	1,1-Dichloroethane	18	5.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	
75-35-4	1,1-Dichloroethene	14	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.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 1615
Date Received: 4/13/12
Date Analyzed: 4/19/12 18:47

Sample Name: 2191-MW202-041212-1615
Lab Code: R1202376-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8049.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	4/19/12 18:47	
Toluene-d8	100	87-121	4/19/12 18:47	
Dibromofluoromethane	104	89-119	4/19/12 18:47	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 1640
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 19:20

Sample Name: 3215-MW204-041212-1640
 Lab Code: R1202376-003

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8050.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	10 U	10	
71-43-2	Benzene	5.0 U	5.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	
75-25-2	Bromoform	5.0 U	5.0	
74-83-9	Bromomethane	5.0 U	5.0	
78-93-3	2-Butanone (MEK)	10 U	10	
75-15-0	Carbon Disulfide	10 U	10	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	
108-90-7	Chlorobenzene	5.0 U	5.0	
75-00-3	Chloroethane	5.0 U	5.0	
67-66-3	Chloroform	5.0 U	5.0	
74-87-3	Chloromethane	5.0 U	5.0	
124-48-1	Dibromochloromethane	5.0 U	5.0	
75-34-3	1,1-Dichloroethane	8.2	5.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	
75-35-4	1,1-Dichloroethene	8.4	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	5.1	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.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 1640
Date Received: 4/13/12
Date Analyzed: 4/19/12 19:20

Sample Name: 3215-MW204-041212-1640
Lab Code: R1202376-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8050.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	100	85-122	4/19/12 19:20	
Toluene-d8	100	87-121	4/19/12 19:20	
Dibromofluoromethane	103	89-119	4/19/12 19:20	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: 2191-MW502-041212-0915
Lab Code: R1202376-004

Service Request: R1202376
Date Collected: 4/12/12 0915
Date Received: 4/13/12

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	656		mg/L	2.0	1	NA	4/24/12 09:00	
Chloride	9056A	744		mg/L	40	200	NA	4/14/12 08:09	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/13/12 17:29	
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	4/14/12 08:09	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	4/13/12 17:29	
Sulfide, Acid-Soluble	9034	1.3		mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 0915
 Date Received: 4/13/12
 Date Analyzed: 4/18/12 20:53

Sample Name: 2191-MW502-041212-0915
 Lab Code: R1202376-004

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8010.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 100

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	1000	U	1000	
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	15000		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	600		500	
95-47-6	o-Xylene	500	U	500	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 0915
Date Received: 4/13/12
Date Analyzed: 4/18/12 20:53

Sample Name: 2191-MW502-041212-0915
Lab Code: R1202376-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8010.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	103	85-122	4/18/12 20:53	
Toluene-d8	100	87-121	4/18/12 20:53	
Dibromofluoromethane	103	89-119	4/18/12 20:53	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 0915
Date Received: 4/13/12
Date Analyzed: 4/17/12 09:57

Sample Name: 2191-MW502-041212-0915
Lab Code: R1202376-004

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1544.run

Analysis Lot: 287650
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	20000	500	
74-98-6	Propane	250 U	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: 3215-MW501-041312-1130
Lab Code: R1202376-005

Service Request: R1202376
Date Collected: 4/13/12 1130
Date Received: 4/13/12

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	309		mg/L	2.0	1	NA	4/24/12 09:00	
Chloride	9056A	2820		mg/L	120	600	NA	4/14/12 07:18	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/13/12 17:04	
Nitrite as Nitrogen	9056A	60	U	mg/L	60	600	NA	4/14/12 07:18	
Sulfate	9056A	31.1		mg/L	2.0	10	NA	4/13/12 17:04	
Sulfide, Acid-Soluble	9034	6.2		mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/13/12 1130
 Date Received: 4/13/12
 Date Analyzed: 4/18/12 19:47

Sample Name: 3215-MW501-041312-1130
 Lab Code: R1202376-005

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoal2\Data\041812\U8008.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 5

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	50 U	50	
71-43-2	Benzene	25 U	25	
75-27-4	Bromodichloromethane	25 U	25	
75-25-2	Bromoform	25 U	25	
74-83-9	Bromomethane	25 U	25	
78-93-3	2-Butanone (MEK)	50 U	50	
75-15-0	Carbon Disulfide	50 U	50	
56-23-5	Carbon Tetrachloride	25 U	25	
108-90-7	Chlorobenzene	25 U	25	
75-00-3	Chloroethane	980	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	170	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	79	25	
95-47-6	o-Xylene	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1130
Date Received: 4/13/12
Date Analyzed: 4/18/12 19:47

Sample Name: 3215-MW501-041312-1130
Lab Code: R1202376-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8008.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	100	85-122	4/18/12 19:47	
Toluene-d8	94	87-121	4/18/12 19:47	
Dibromofluoromethane	102	89-119	4/18/12 19:47	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1130
Date Received: 4/13/12
Date Analyzed: 4/17/12 10:07

Sample Name: 3215-MW501-041312-1130
Lab Code: R1202376-005

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1545.run

Analysis Lot: 287650
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.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: 3215-MW3-041312-1415
Lab Code: R1202376-006

Service Request: R1202376
Date Collected: 4/13/12 1020
Date Received: 4/13/12

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	183		mg/L	2.0	1	NA	4/24/12 09:00	
Chloride	9056A	516		mg/L	20	100	NA	4/14/12 07:31	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/13/12 17:17	
Nitrite as Nitrogen	9056A	10	U	mg/L	10	100	NA	4/14/12 07:31	
Sulfate	9056A	2.9		mg/L	2.0	10	NA	4/13/12 17:17	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/13/12 1020
 Date Received: 4/13/12
 Date Analyzed: 4/18/12 20:20

Sample Name: 3215-MW3-041312-1415
 Lab Code: R1202376-006

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8009.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	100 U	100	
71-43-2	Benzene	50 U	50	
75-27-4	Bromodichloromethane	50 U	50	
75-25-2	Bromoform	50 U	50	
74-83-9	Bromomethane	50 U	50	
78-93-3	2-Butanone (MEK)	100 U	100	
75-15-0	Carbon Disulfide	100 U	100	
56-23-5	Carbon Tetrachloride	50 U	50	
108-90-7	Chlorobenzene	50 U	50	
75-00-3	Chloroethane	1700	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	96	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	290	50	
95-47-6	o-Xylene	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1020
Date Received: 4/13/12
Date Analyzed: 4/18/12 20:20

Sample Name: 3215-MW3-041312-1415
Lab Code: R1202376-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8009.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	102	85-122	4/18/12 20:20	
Toluene-d8	100	87-121	4/18/12 20:20	
Dibromofluoromethane	102	89-119	4/18/12 20:20	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1020
Date Received: 4/13/12
Date Analyzed: 4/17/12 10:33

Sample Name: 3215-MW3-041312-1415
Lab Code: R1202376-006

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1546.run

Analysis Lot: 287650
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	110	25	
74-82-8	Methane	4400 E	50	
74-98-6	Propane	25 U	25	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1020
Date Received: 4/13/12
Date Analyzed: 4/17/12 10:44

Sample Name: 3215-MW3-041312-1415
Lab Code: R1202376-006
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1547.run

Analysis Lot: 287650
Instrument Name: R-GC-02
Dilution Factor: 50

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	50 U	50	
74-85-1	Ethylene	100 D	50	
74-82-8	Methane	4300 D	100	
74-98-6	Propane	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 1415
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 19:53

Sample Name: 2191-OW306-041212-1415
 Lab Code: R1202376-007

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8051.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 1415
Date Received: 4/13/12
Date Analyzed: 4/19/12 19:53

Sample Name: 2191-OW306-041212-1415
Lab Code: R1202376-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8051.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	4/19/12 19:53	
Toluene-d8	98	87-121	4/19/12 19:53	
Dibromofluoromethane	103	89-119	4/19/12 19:53	

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: 2191-MW205-041312-1250
Lab Code: R1202376-008

Service Request: R1202376
Date Collected: 4/13/12 1250
Date Received: 4/13/12

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	4/24/12 09:00	
Chloride	9056A	720		mg/L	40	200	NA	4/14/12 07:05	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/13/12 16:51	
Nitrite as Nitrogen	9056A	20	U	mg/L	20	200	NA	4/14/12 07:05	
Sulfate	9056A	10.4		mg/L	2.0	10	NA	4/13/12 16:51	
Sulfide, Acid-Soluble	9034	1.2		mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/13/12 1250
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 01:49

Sample Name: 2191-MW205-041312-1250
 Lab Code: R1202376-008

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8019.D\

Analysis Lot: 287967
 Instrument Name: R-MS-12
 Dilution Factor: 1000

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10000	U	10000	
71-43-2	Benzene	5000	U	5000	
75-27-4	Bromodichloromethane	5000	U	5000	
75-25-2	Bromoform	5000	U	5000	
74-83-9	Bromomethane	5000	U	5000	
78-93-3	2-Butanone (MEK)	10000	U	10000	
75-15-0	Carbon Disulfide	10000	U	10000	
56-23-5	Carbon Tetrachloride	5000	U	5000	
108-90-7	Chlorobenzene	5000	U	5000	
75-00-3	Chloroethane	5000	U	5000	
67-66-3	Chloroform	5000	U	5000	
74-87-3	Chloromethane	5000	U	5000	
124-48-1	Dibromochloromethane	5000	U	5000	
75-34-3	1,1-Dichloroethane	230000	E	5000	
107-06-2	1,2-Dichloroethane	5000	U	5000	
75-35-4	1,1-Dichloroethene	5000	U	5000	
156-59-2	cis-1,2-Dichloroethene	5000	U	5000	
156-60-5	trans-1,2-Dichloroethene	5000	U	5000	
78-87-5	1,2-Dichloropropane	5000	U	5000	
10061-01-5	cis-1,3-Dichloropropene	5000	U	5000	
10061-02-6	trans-1,3-Dichloropropene	5000	U	5000	
100-41-4	Ethylbenzene	5000	U	5000	
591-78-6	2-Hexanone	10000	U	10000	
75-09-2	Methylene Chloride	5000	U	5000	
108-10-1	4-Methyl-2-pentanone (MIBK)	10000	U	10000	
100-42-5	Styrene	5000	U	5000	
79-34-5	1,1,2,2-Tetrachloroethane	5000	U	5000	
127-18-4	Tetrachloroethene	5000	U	5000	
108-88-3	Toluene	5000	U	5000	
71-55-6	1,1,1-Trichloroethane	110000		5000	
79-00-5	1,1,2-Trichloroethane	5000	U	5000	
79-01-6	Trichloroethene	5000	U	5000	
75-01-4	Vinyl Chloride	5000	U	5000	
95-47-6	o-Xylene	5000	U	5000	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1250
Date Received: 4/13/12
Date Analyzed: 4/19/12 01:49

Sample Name: 2191-MW205-041312-1250
Lab Code: R1202376-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8019.D\

Analysis Lot: 287967
Instrument Name: R-MS-12
Dilution Factor: 1000

CAS No.	Analyte Name	Result Q	MRL	Note
179601-23-1	m,p-Xylenes	5000 U	5000	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85-122	4/19/12 01:49	
Toluene-d8	98	87-121	4/19/12 01:49	
Dibromofluoromethane	102	89-119	4/19/12 01:49	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/13/12 1250
 Date Received: 4/13/12
 Date Analyzed: 4/19/12 20:26

Sample Name: 2191-MW205-041312-1250
 Lab Code: R1202376-008
 Run Type: Dilution

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8052.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 2000

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20000	U	20000	
71-43-2	Benzene	10000	U	10000	
75-27-4	Bromodichloromethane	10000	U	10000	
75-25-2	Bromoform	10000	U	10000	
74-83-9	Bromomethane	10000	U	10000	
78-93-3	2-Butanone (MEK)	20000	U	20000	
75-15-0	Carbon Disulfide	20000	U	20000	
56-23-5	Carbon Tetrachloride	10000	U	10000	
108-90-7	Chlorobenzene	10000	U	10000	
75-00-3	Chloroethane	10000	U	10000	
67-66-3	Chloroform	10000	U	10000	
74-87-3	Chloromethane	10000	U	10000	
124-48-1	Dibromochloromethane	10000	U	10000	
75-34-3	1,1-Dichloroethane	250000	D	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	120000	D	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.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1250
Date Received: 4/13/12
Date Analyzed: 4/19/12 20:26

Sample Name: 2191-MW205-041312-1250
Lab Code: R1202376-008
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8052.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	99	85-122	4/19/12 20:26	
Toluene-d8	99	87-121	4/19/12 20:26	
Dibromofluoromethane	101	89-119	4/19/12 20:26	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1250
Date Received: 4/13/12
Date Analyzed: 4/17/12 11:04

Sample Name: 2191-MW205-041312-1250
Lab Code: R1202376-008

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1549.run

Analysis Lot: 287650
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	21		1.0	
74-85-1	Ethylene	14		1.0	
74-82-8	Methane	21		2.0	
74-98-6	Propane	19		1.0	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1250
Date Received: 4/13/12
Date Analyzed: 4/18/12 18:05

Sample Name: 2191-MW205-041312-1250
Lab Code: R1202376-008

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\041812\X0007922.D\

Analysis Lot: 288051
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	480	25	
107-92-6	Butanoic Acid (Butyric Acid)	2400	50	
50-21-5	Lactic Acid	25 U	25	
79-09-4	Propionic Acid	790	25	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: 4552-OWS302-041312-1315
Lab Code: R1202376-009

Service Request: R1202376
Date Collected: 4/13/12 1315
Date Received: 4/13/12

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	772		mg/L	2.0	1	NA	4/24/12 09:00	
Chloride	9056A	3300		mg/L	120	600	NA	4/14/12 08:22	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	4/13/12 17:42	
Nitrite as Nitrogen	9056A	60	U	mg/L	60	600	NA	4/14/12 08:22	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	4/13/12 17:42	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/13/12 1315
 Date Received: 4/13/12
 Date Analyzed: 4/18/12 19:14

Sample Name: 4552-OWS302-041312-1315
 Lab Code: R1202376-009

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8007.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	5000	U	5000	
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	52000		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.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1315
Date Received: 4/13/12
Date Analyzed: 4/18/12 19:14

Sample Name: 4552-OWS302-041312-1315
Lab Code: R1202376-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8007.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	4/18/12 19:14	
Toluene-d8	101	87-121	4/18/12 19:14	
Dibromofluoromethane	104	89-119	4/18/12 19:14	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/13/12 1315
Date Received: 4/13/12
Date Analyzed: 4/17/12 10:54

Sample Name: 4552-OWS302-041312-1315
Lab Code: R1202376-009

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1548.run

Analysis Lot: 287650
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	13000	250	
74-98-6	Propane	130 U	130	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: 4/12/12 0000
 Date Received: 4/13/12
 Date Analyzed: 4/18/12 18:41

Sample Name: Trip Blank
 Lab Code: R1202376-010

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8006.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: 4/12/12 0000
Date Received: 4/13/12
Date Analyzed: 4/18/12 18:41

Sample Name: Trip Blank
Lab Code: R1202376-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8006.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	101	85-122	4/18/12 18:41	
Toluene-d8	96	87-121	4/18/12 18:41	
Dibromofluoromethane	101	89-119	4/18/12 18:41	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1202376-MB1

Service Request: R1202376
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	4/24/12 09:00	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	4/14/12 05:23	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/13/12 10:58	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	4/14/12 05:23	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	4/13/12 10:58	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	4/18/12	4/18/12 10:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1202376-MB2

Service Request: R1202376
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	4/24/12 09:00	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 4/18/12 12:40

Sample Name: Method Blank
 Lab Code: RQ1203887-04

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U7995.D\

Analysis Lot: 287920
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: NA
Date Received: NA
Date Analyzed: 4/18/12 12:40

Sample Name: Method Blank
Lab Code: RQ1203887-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U7995.D\

Analysis Lot: 287920
Instrument Name: R-MS-12
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	101	85-122	4/18/12 12:40	
Toluene-d8	99	87-121	4/18/12 12:40	
Dibromofluoromethane	101	89-119	4/18/12 12:40	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 4/19/12 14:55

Sample Name: Method Blank
 Lab Code: RQ1203981-05

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8042.D\

Analysis Lot: 288067
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: NA
Date Received: NA
Date Analyzed: 4/19/12 14:55

Sample Name: Method Blank
Lab Code: RQ1203981-05

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041912\U8042.D\

Analysis Lot: 288067
Instrument Name: R-MS-12
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	101	85-122	4/19/12 14:55	
Toluene-d8	99	87-121	4/19/12 14:55	
Dibromofluoromethane	99	89-119	4/19/12 14:55	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 4/19/12 01:16

Sample Name: Method Blank
 Lab Code: RQ1204039-04

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8018.D\

Analysis Lot: 287967
 Instrument Name: R-MS-12
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: NA
Date Received: NA
Date Analyzed: 4/19/12 01:16

Sample Name: Method Blank
Lab Code: RQ1204039-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: J:\ACQUDATA\msvoa12\Data\041812\U8018.D\

Analysis Lot: 287967
Instrument Name: R-MS-12
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	4/19/12 01:16	
Toluene-d8	99	87-121	4/19/12 01:16	
Dibromofluoromethane	100	89-119	4/19/12 01:16	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: NA
Date Received: NA
Date Analyzed: 4/17/12 09:28

Sample Name: Method Blank
Lab Code: RQ1203712-01

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: star1541.run

Analysis Lot: 287650
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.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Collected: NA
Date Received: NA
Date Analyzed: 4/18/12 11:46

Sample Name: Method Blank
Lab Code: RQ1203854-01

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:\ACQUDATA\HPLC05\DATA\041812\X0007910.D\

Analysis Lot: 288051
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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376
Date Analyzed: 4/13/12 -
4/24/12

Lab Control Sample Summary
General Chemistry Parameters

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

Lab Control Sample R1202376-LCS1					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Chloride	9056A	2.07	2.00	104	80 - 120
Sulfate	9056A	1.96	2.00	98	80 - 120
Alkalinity as CaCO ₃ , Total	SM 2320 B	20.1	20.0	101	72 - 115
Nitrate as Nitrogen	9056A	1.02	1.00	102	80 - 120
Nitrite as Nitrogen	9056A	1.01	1.0	101	80 - 120
Sulfide, Acid-Soluble	9034	6.25	12.7	49	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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376**Date Analyzed:** 4/24/12

Lab Control Sample Summary
General Chemistry Parameters

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

Lab Control Sample R1202376-LCS2					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity as CaCO ₃ , Total	SM 2320 B	950	1000	95	72 - 115

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

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376

Date Analyzed: 4/18/12

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 287920

Analyte Name	Lab Control Sample RQ1203887-02			Duplicate Lab Control Sample RQ1203887-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Acetone	18.5	20.0	93	18.6	20.0	93	54 - 139	<1	30
Benzene	19.5	20.0	98	19.2	20.0	96	78 - 121	2	30
Bromodichloromethane	19.8	20.0	99	19.5	20.0	97	80 - 125	2	30
Bromoform	20.1	20.0	101	20.1	20.0	101	68 - 130	<1	30
Bromomethane	19.6	20.0	98	18.8	20.0	94	57 - 144	4	30
2-Butanone (MEK)	16.9	20.0	85	17.9	20.0	89	60 - 133	5	30
Carbon Disulfide	25.7	20.0	128	25.2	20.0	126	52 - 140	2	30
Carbon Tetrachloride	22.0	20.0	110	21.0	20.0	105	68 - 133	5	30
Chlorobenzene	19.9	20.0	99	19.2	20.0	96	80 - 121	3	30
Chloroethane	19.9	20.0	100	20.9	20.0	105	71 - 130	5	30
Chloroform	20.7	20.0	104	20.3	20.0	101	78 - 125	2	30
Chloromethane	20.3	20.0	102	20.2	20.0	101	61 - 138	<1	30
Dibromochloromethane	20.8	20.0	104	20.2	20.0	101	78 - 133	3	30
1,1-Dichloroethane	20.4	20.0	102	20.0	20.0	100	76 - 124	2	30
1,2-Dichloroethane	19.8	20.0	99	19.4	20.0	97	73 - 127	2	30
1,1-Dichloroethene	21.3	20.0	106	20.3	20.0	101	72 - 129	5	30
cis-1,2-Dichloroethene	20.5	20.0	102	20.1	20.0	101	78 - 122	2	30
trans-1,2-Dichloroethene	20.3	20.0	102	19.6	20.0	98	75 - 121	4	30
1,2-Dichloropropane	19.6	20.0	98	19.5	20.0	97	80 - 123	<1	30
cis-1,3-Dichloropropene	19.3	20.0	96	18.7	20.0	94	77 - 125	3	30
trans-1,3-Dichloropropene	19.4	20.0	97	18.8	20.0	94	69 - 127	3	30
Ethylbenzene	20.0	20.0	100	19.8	20.0	99	78 - 123	1	30
2-Hexanone	18.0	20.0	90	18.3	20.0	91	61 - 131	1	30
Methylene Chloride	19.3	20.0	97	19.2	20.0	96	75 - 125	<1	30
4-Methyl-2-pentanone (MIBK)	18.5	20.0	93	18.3	20.0	92	61 - 132	<1	30
Styrene	20.0	20.0	100	19.7	20.0	98	80 - 132	2	30
1,1,2,2-Tetrachloroethane	18.9	20.0	94	18.6	20.0	93	72 - 131	1	30
Tetrachloroethene	19.7	20.0	99	19.7	20.0	99	72 - 131	<1	30
Toluene	19.5	20.0	98	19.5	20.0	97	78 - 122	<1	30
1,1,1-Trichloroethane	20.6	20.0	103	20.4	20.0	102	72 - 128	<1	30
1,1,2-Trichloroethane	19.2	20.0	96	19.2	20.0	96	80 - 122	<1	30
Trichloroethene	19.9	20.0	100	19.0	20.0	95	74 - 127	5	30

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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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376**Date Analyzed:** 4/18/12

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C**Units:** µg/L**Basis:** NA**Analysis Lot:** 287920

Analyte Name	Lab Control Sample RQ1203887-02			Duplicate Lab Control Sample RQ1203887-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Vinyl Chloride	20.7	20.0	104	20.6	20.0	103	72 - 138	<1	30
o-Xylene	19.8	20.0	99	19.9	20.0	99	77 - 118	<1	30
m,p-Xylenes	39.4	40.0	99	38.6	40.0	97	79 - 126	2	30

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376

Date Analyzed: 4/19/12

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 288067

Analyte Name	Lab Control Sample RQ1203981-03			Duplicate Lab Control Sample RQ1203981-04			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Acetone	18.5	20.0	93	18.1	20.0	90	54 - 139	3	30
Benzene	22.2	20.0	111	22.3	20.0	112	78 - 121	<1	30
Bromodichloromethane	22.6	20.0	113	22.6	20.0	113	80 - 125	<1	30
Bromoform	22.2	20.0	111	21.5	20.0	108	68 - 130	3	30
Bromomethane	23.4	20.0	117	22.3	20.0	112	57 - 144	5	30
2-Butanone (MEK)	16.0	20.0	80	16.1	20.0	81	60 - 133	<1	30
Carbon Disulfide	20.5	20.0	103	20.7	20.0	103	52 - 140	<1	30
Carbon Tetrachloride	25.2	20.0	126	25.8	20.0	129	68 - 133	2	30
Chlorobenzene	22.2	20.0	111	22.5	20.0	112	80 - 121	1	30
Chloroethane	23.9	20.0	120	24.2	20.0	121	71 - 130	1	30
Chloroform	23.0	20.0	115	23.5	20.0	117	78 - 125	2	30
Chloromethane	23.0	20.0	115	23.0	20.0	115	61 - 138	<1	30
Dibromochloromethane	23.3	20.0	117	23.0	20.0	115	78 - 133	1	30
1,1-Dichloroethane	22.9	20.0	114	23.5	20.0	118	76 - 124	3	30
1,2-Dichloroethane	22.4	20.0	112	21.6	20.0	108	73 - 127	4	30
1,1-Dichloroethene	24.0	20.0	120	24.1	20.0	121	72 - 129	<1	30
cis-1,2-Dichloroethene	23.5	20.0	118	24.0	20.0	120	78 - 122	2	30
trans-1,2-Dichloroethene	23.1	20.0	115	23.2	20.0	116	75 - 121	<1	30
1,2-Dichloropropane	22.4	20.0	112	22.0	20.0	110	80 - 123	2	30
cis-1,3-Dichloropropene	22.0	20.0	110	22.0	20.0	110	77 - 125	<1	30
trans-1,3-Dichloropropene	21.8	20.0	109	21.5	20.0	108	69 - 127	1	30
Ethylbenzene	22.7	20.0	113	22.5	20.0	112	78 - 123	<1	30
2-Hexanone	16.7	20.0	84	16.4	20.0	82	61 - 131	2	30
Methylene Chloride	21.3	20.0	106	22.1	20.0	111	75 - 125	4	30
4-Methyl-2-pentanone (MIBK)	17.5	20.0	88	16.9	20.0	85	61 - 132	4	30
Styrene	22.9	20.0	114	23.1	20.0	115	80 - 132	<1	30
1,1,2,2-Tetrachloroethane	20.2	20.0	101	19.8	20.0	99	72 - 131	2	30
Tetrachloroethene	22.4	20.0	112	22.3	20.0	112	72 - 131	<1	30
Toluene	23.0	20.0	115	22.7	20.0	114	78 - 122	1	30
1,1,1-Trichloroethane	23.9	20.0	120	24.2	20.0	121	72 - 128	1	30
1,1,2-Trichloroethane	21.5	20.0	107	21.1	20.0	105	80 - 122	2	30
Trichloroethene	22.9	20.0	114	22.4	20.0	112	74 - 127	2	30

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

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376**Date Analyzed:** 4/19/12

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C**Units:** µg/L**Basis:** NA**Analysis Lot:** 288067

Analyte Name	Lab Control Sample RQ1203981-03			Duplicate Lab Control Sample RQ1203981-04			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Vinyl Chloride	24.2	20.0	121	23.9	20.0	119	72 - 138	1	30
o-Xylene	22.5	20.0	112	23.3	20.0	117	77 - 118	4	30
m,p-Xylenes	44.5	40.0	111	45.3	40.0	113	79 - 126	2	30

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

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision/ 70665-018
 Sample Matrix: Water

Service Request: R1202376

Date Analyzed: 4/19/12

Lab Control Sample Summary
 Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L

Basis: NA

Analysis Lot: 287967

Lab Control Sample
 RQ1204039-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	19.3	20.0	96	54 - 139
Benzene	18.4	20.0	92	78 - 121
Bromodichloromethane	19.3	20.0	96	80 - 125
Bromoform	20.1	20.0	101	68 - 130
Bromomethane	16.8	20.0	84	57 - 144
2-Butanone (MEK)	17.8	20.0	89	60 - 133
Carbon Disulfide	21.4	20.0	107	52 - 140
Carbon Tetrachloride	19.6	20.0	98	68 - 133
Chlorobenzene	18.3	20.0	92	80 - 121
Chloroethane	19.1	20.0	96	71 - 130
Chloroform	19.2	20.0	96	78 - 125
Chloromethane	19.3	20.0	97	61 - 138
Dibromochloromethane	20.5	20.0	102	78 - 133
1,1-Dichloroethane	19.1	20.0	95	76 - 124
1,2-Dichloroethane	19.4	20.0	97	73 - 127
1,1-Dichloroethene	19.1	20.0	95	72 - 129
cis-1,2-Dichloroethene	19.5	20.0	97	78 - 122
trans-1,2-Dichloroethene	18.6	20.0	93	75 - 121
1,2-Dichloropropane	18.7	20.0	93	80 - 123
cis-1,3-Dichloropropene	18.3	20.0	91	77 - 125
trans-1,3-Dichloropropene	18.3	20.0	92	69 - 127
Ethylbenzene	17.9	20.0	89	78 - 123
2-Hexanone	18.8	20.0	94	61 - 131
Methylene Chloride	18.7	20.0	94	75 - 125
4-Methyl-2-pentanone (MIBK)	19.1	20.0	95	61 - 132
Styrene	18.9	20.0	94	80 - 132
1,1,2,2-Tetrachloroethane	17.5	20.0	87	72 - 131
Tetrachloroethene	17.5	20.0	88	72 - 131
Toluene	18.5	20.0	93	78 - 122
1,1,1-Trichloroethane	18.4	20.0	92	72 - 128
1,1,2-Trichloroethane	18.7	20.0	93	80 - 122
Trichloroethene	19.1	20.0	95	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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376**Date Analyzed:** 4/19/12

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C**Units:** µg/L**Basis:** NA**Analysis Lot:** 287967

Lab Control Sample
RQ1204039-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	19.3	20.0	96	72 - 138
o-Xylene	18.8	20.0	94	77 - 118
m,p-Xylenes	36.9	40.0	92	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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376**Date Analyzed:** 4/17/12

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175**Units:** µg/L**Basis:** NA**Analysis Lot:** 287650

Analyte Name	Lab Control Sample RQ1203712-02			Duplicate Lab Control Sample RQ1203712-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Ethane	25.6	26.0	98	25.0	26.0	96	56 - 148	3	20
Ethylene	22.3	24.3	92	22.0	24.3	90	58 - 155	1	20
Methane	25.7	26.2	98	25.2	26.2	96	55 - 150	2	20
Propane	24.5	25.5	96	23.8	25.5	93	56 - 154	3	20

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

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision/ 70665-018
Sample Matrix: Water

Service Request: R1202376

Date Analyzed: 4/18/12

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: 288051

Analyte Name	Lab Control Sample RQ1203854-02			Duplicate Lab Control Sample RQ1203854-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Pyruvic Acid	1.09	1.00	109	1.08	1.00	108	70 - 130	<1	30
Acetic Acid	10.4	10.3	101	10.5	10.3	102	70 - 135	<1	30
Butanoic Acid (Butyric Acid)	9.26	10.1	91	9.37	10.1	93	78 - 113	1	30
Lactic Acid	10.0	10.0	100	10.0	10.0	100	61 - 109	<1	30
Propionic Acid	9.74	10.1	97	9.83	10.1	98	80 - 125	<1	30

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

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



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1565 Jefferson Rd., Bldg. 300, Suite 360, Rochester, NY 14623 | 585.288.5380 | 800.695.7222 | 585.288.8475 (fax) PAGE 05 OF 05

Project Name CooperVision		Project Number 70665-018		ANALYSIS REQUESTED (Include Method Number and Container Preservative)											
Project Manager Mark Ramsdell		Report CC Chaire Mondello		PRESERVATIVE 1											
Company/Address 200 Town Centre Dr Suite 2 Rochester NY 14623															
Phone # 585-321-4219		E-mail cmondello@haleyaldrich.com													
Sampler's Signature		Sampler's Printed Name													
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAS 8260 624 CLP	GC/MS SVOAS 8270 625	PESTICIDES 8021 601/602	PCBs 8082 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Methane, Ethane, Ethyne Nitrate, Nitrite, Nitrogen, Acetylene, Aldehyde, Ketone, Pyruvic acid, Lactic acid, butyric, propionic	Preservative Key 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other	REMARKS/ ALTERNATE DESCRIPTION	
4552-H10203-041212-1445	001	04/12/12	1445	GW	3	X									
2191-H10202-041212-1615	002	04/12/12	1615	GW	3	X									
3215-H10204-041212-1640	003	04/12/12	1640	GW	3	X									
2191-H10502-041212-0915	004	04/12/12	0915	GW	9	X									
3215-H10501-041212-1130	005	04/13/12	1130	GW	9	X									
3215-H103-041312-1020	006	04/13/12	1020	GW	9	X									
2191-010300-041212-1415	007	04/12/12	1415	GW	3	X									
2191-H10205-041312-1250	008	04/13/12	1250	GW	10	X									
4155Z-003302-041312-1315	009	04/13/12	1315	GW	9	X									
SPECIAL INSTRUCTIONS/COMMENTS Metals															
TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) 1 day 2 day 3 day 4 day 5 day Standard															
REPORT REQUIREMENTS I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data															
INVOICE INFORMATION PO #: BILL TO: SUMMARIES															
R1202376 5 N Haley & Aldrich, Inc. Cooperation															
RECEIVED BY Signature Printed Name Firm Date/Time															
RELINQUISHED BY Signature Printed Name Firm Date/Time															



Cooler Receipt and Preservation Check Form

Project/Client H+A Folder Number R12-2376

Cooler received on 4/13/12 by: SW COURIER: 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? ALS/ROC, CLIENT
- Temperature of cooler(s) upon receipt: 6.0°

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: 4/13/12 / 1524

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:

All Samples held in storage location Row 2 by SW on 4/13/12 at 1531
5035 samples placed in storage location by on at

PC Secondary Review: KE 4/17/12

Cooler Breakdown: Date: 4/16/12 Time: 0924 by: SW

- 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			WC103238H	2/13				
≤2	HNO ₃								
≤2	H ₂ SO ₄								
<4	NaHSO ₄								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	Na ₂ S ₂ O ₃	-	-			*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet H ₃ PO ₄ - WC103104G exp 3/13			
	Zn Aceta	-	-	WC1032658	2/13				
	HCl	*	*	4111060	3/13				

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust:

Bottle lot numbers: 1-315-002, 030512-2J, 020612-2F, 110711-1SS,
Other Comments:

PC Secondary Review: KE 5/7/12
H:\SMODOCS\Cooler Receipt 5.docx

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

00061



November 06, 2012

Service Request No: R1207183

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

Laboratory Results for: Coopervision 10/2012/70665-018

Dear Mr. Ramsdell:

Enclosed are the results of the sample(s) submitted to our laboratory on October 19, 2012. For your reference, these analyses have been assigned our service request number **R1207183**.

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. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

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

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental

Karen Bunker
Project Manager

Page 1 of 57



ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623

PHONE 585-288-5380 | FAX 585-288-8475

Columbia Analytical Services, Inc.

Part of the ALS Group A Campbell Brothers Limited Company

Environmental

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RIGHT SOLUTIONS RIGHT PARTNER

00001

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Haley & Aldrich of New York
Project: Coopervision #70665-018 10/12
Sample Matrix: Water

Service Request No.: R1207183
Date Received: 10/19/12

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 and one (1) Trip Blank were collected on 10/18-19/12 by H&A and received for analysis at Columbia Analytical Services on 10/19/12. 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 2.4°C within the 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, and Sulfide.

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

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

All holding times were initially met for these analyses. The Nitrite analyses for samples OW-302S, M-501 and MW-205 (R1207183-004, -007, and -009) were repeated outside of the 48 hour holding time due to interferences with the Chloride peak on the initial run. The samples were reanalyzed at a dilution to overcome the interference. The data has been flagged as "*" for these samples.

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

11/6/12

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. The Trip Blank was analyzed for Volatile Organics only.

All Initial and Continuing Calibration Criteria was met for these samples except for %D for Dibromochloromethane which was outside the $\pm 20\%$ at 27.0% on the 10/25/12 analytical run. Hits for this compound on samples associated with this CCV should be considered as estimated.

Batch QC is included in the report. All Laboratory Control Samples (LCS), Laboratory Control Sample Duplicate (LCSD) recoveries were within acceptance limits except for Pyruvic Acid and Butanoic Acid on a 10/26/12 run (LCS's only). An LCS and LCSD from this date were acceptable. The exceedences are flagged as "***". The 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 VOC and RSK samples were found to be preserved to a pH of <2 or the samples were analyzed within 7 days from collection for unpreserved aliquots (samples R1207183-009 and R1207183-010 were at pH's of >2 for the RSK and 8260 aliquots respectively). All CAS vials are certified as preserved therefore matrix interference is suspected.

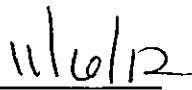
The Laboratory Method Blanks were free from contamination.

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

Approved by



Date



00003

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1207183

<u>Lab ID</u>	<u>Client ID</u>
R1207183-001	MW-203
R1207183-002	OW-306
R1207183-003	MW-3
R1207183-004	OW-302S
R1207183-005	MW-502
R1207183-006	MW-202
R1207183-007	MW-501
R1207183-008	MW-204
R1207183-009	MW-205
R1207183-010	TRIP BLANK

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.



Rochester Lab ID # for State Certifications¹

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

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to <http://alsglobal.com/environmental/laboratories/rochester-environmental-lab.aspx>

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/18/12 1230
Date Received: 10/19/12
Date Analyzed: 10/25/12 04:24

Sample Name: MW-203
Lab Code: R1207183-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\B4265.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/18/12 1230
Date Received: 10/19/12
Date Analyzed: 10/25/12 04:24

Sample Name: MW-203
Lab Code: R1207183-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4265.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	98	85-122	10/25/12 04:24		
Toluene-d8	94	87-121	10/25/12 04:24		
Dibromofluoromethane	106	89-119	10/25/12 04:24		

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/18/12 1205
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 04:54

Sample Name: OW-306
 Lab Code: R1207183-002

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4266.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 1

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

Now part of the ALS Group
Analytical Report

Units: µg/L
Basis: NA

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: MW-3
Lab Code: R1207183-003

Service Request: R1207183
Date Collected: 10/19/12 0900
Date Received: 10/19/12

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	185		mg/L	2.0	1	NA	10/24/12 11:34	
Chloride	9056A	656		mg/L	20	100	NA	10/30/12 19:57	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 22:23	
Nitrite as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 22:23	
Sulfate	9056A	3.3		mg/L	2.0	10	NA	10/19/12 22:23	
Sulfide, Acid-Soluble	9034	1.1		mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 0900
Date Received: 10/19/12
Date Analyzed: 10/25/12 05:23

Sample Name: MW-3
Lab Code: R1207183-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4267.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	100 U	100	
71-43-2	Benzene	50 U	50	
75-27-4	Bromodichloromethane	50 U	50	
75-25-2	Bromoform	50 U	50	
74-83-9	Bromomethane	50 U	50	
78-93-3	2-Butanone (MEK)	100 U	100	
75-15-0	Carbon Disulfide	100 U	100	
56-23-5	Carbon Tetrachloride	50 U	50	
108-90-7	Chlorobenzene	50 U	50	
75-00-3	Chloroethane	990	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	67	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	140	50	
95-47-6	o-Xylene	50 U	50	
179601-23-1	m,p-Xylenes	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 0900
Date Received: 10/19/12
Date Analyzed: 10/25/12 05:23

Sample Name: MW-3
Lab Code: R1207183-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4267.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	99	85-122	10/25/12 05:23		
Toluene-d8	96	87-121	10/25/12 05:23		
Dibromofluoromethane	108	89-119	10/25/12 05:23		

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 0900
Date Received: 10/19/12
Date Analyzed: 10/23/12 10:20

Sample Name: MW-3
Lab Code: R1207183-003

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1001.run

Analysis Lot: 315109
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	Ethene	83	25	
74-82-8	Methane	3400 E	25	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 0900
Date Received: 10/19/12
Date Analyzed: 10/23/12 10:32

Sample Name: MW-3
Lab Code: R1207183-003
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1002.run

Analysis Lot: 315109
Instrument Name: R-GC-02
Dilution Factor: 50

CAS No.	Analyte Name	Result	Q	MRL	Note
74-84-0	Ethane	50	U	50	
74-85-1	Ethene	83	D	50	
74-82-8	Methane	3500	D	50	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: OW-302S
Lab Code: R1207183-004

Service Request: R1207183
Date Collected: 10/19/12 1130
Date Received: 10/19/12

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	608		mg/L	2.0	1	NA	10/26/12 08:30	
Chloride	9056A	3090		mg/L	200	1000	NA	10/25/12 01:23	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 21:44	
Nitrite as Nitrogen	9056A	2.0	U	mg/L	2.0	20	NA	10/22/12 18:56	*
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	10/19/12 21:44	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1130
Date Received: 10/19/12
Date Analyzed: 10/25/12 05:53

Sample Name: OW-302S
Lab Code: R1207183-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4268.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	5000	U	5000	
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	41000		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	
179601-23-1	m,p-Xylenes	2500	U	2500	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1130
Date Received: 10/19/12
Date Analyzed: 10/25/12 05:53

Sample Name: OW-302S
Lab Code: R1207183-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4268.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 500

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	97	85-122	10/25/12 05:53		
Toluene-d8	97	87-121	10/25/12 05:53		
Dibromofluoromethane	107	89-119	10/25/12 05:53		

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1130
Date Received: 10/19/12
Date Analyzed: 10/23/12 10:43

Sample Name: OW-302S
Lab Code: R1207183-004

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1003.run

Analysis Lot: 315109
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	Ethene	130	U	130	
74-82-8	Methane	16000	E	130	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1130
Date Received: 10/19/12
Date Analyzed: 10/23/12 11:00

Sample Name: OW-302S
Lab Code: R1207183-004
Run Type: Dilution

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1004.run

Analysis Lot: 315109
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	Ethene	250 U	250	
74-82-8	Methane	17000 D	250	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: MW-502
Lab Code: R1207183-005

Service Request: R1207183
Date Collected: 10/19/12 1025
Date Received: 10/19/12

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	722		mg/L	2.0	1	NA	10/26/12 08:30	
Chloride	9056A	884		mg/L	20	100	NA	10/30/12 19:20	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 21:57	
Nitrite as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 21:57	
Sulfate	9056A	2.0	U	mg/L	2.0	10	NA	10/19/12 21:57	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 1025
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 06:23

Sample Name: MW-502
 Lab Code: R1207183-005

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4269.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 100

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	1000	U	1000	
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	11000		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	
179601-23-1	m,p-Xylenes	500	U	500	

**Now part of the ALS Group
Analytical Report**

Service Request: R1207183
Date Collected: 10/19/12 1025
Date Received: 10/19/12
Date Analyzed: 10/25/12 06:23

Units: $\mu\text{g/L}$
Basis: NA

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4269.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 100

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	99	85-122	10/25/12 06:23		
Toluene-d8	96	87-121	10/25/12 06:23		
Dibromofluoromethane	109	89-119	10/25/12 06:23		

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COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1025
Date Received: 10/19/12
Date Analyzed: 10/23/12 11:25

Sample Name: MW-502
Lab Code: R1207183-005

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

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

Analysis Lot: 315109
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	Ethene	250	U	250	
74-82-8	Methane	21000		250	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 0920
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 06:53

Sample Name: MW-202
 Lab Code: R1207183-006

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4270.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	51		5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	40		5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Now part of the ALS Group
Analytical Report

Service Request: R1207183
Date Collected: 10/19/12 0920
Date Received: 10/19/12
Date Analyzed: 10/25/12 06:53

Units: $\mu\text{g/L}$
Basis: NA

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoal0\data\102412\E4270.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

Printed 11/6/12 12:45
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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: MW-501
Lab Code: R1207183-007

Service Request: R1207183
Date Collected: 10/19/12 1055
Date Received: 10/19/12

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	365		mg/L	2.0	1	NA	10/26/12 08:30	
Chloride	9056A	1940		mg/L	200	1000	NA	10/25/12 01:49	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 23:28	
Nitrite as Nitrogen	9056A	2.0	U	mg/L	2.0	20	NA	10/22/12 19:09	*
Sulfate	9056A	8.1		mg/L	2.0	10	NA	11/2/12 05:21	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 1055
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 07:23

Sample Name: MW-501
 Lab Code: R1207183-007

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4271.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	50	U	50	
71-43-2	Benzene	25	U	25	
75-27-4	Bromodichloromethane	25	U	25	
75-25-2	Bromoform	25	U	25	
74-83-9	Bromomethane	25	U	25	
78-93-3	2-Butanone (MEK)	50	U	50	
75-15-0	Carbon Disulfide	50	U	50	
56-23-5	Carbon Tetrachloride	25	U	25	
108-90-7	Chlorobenzene	25	U	25	
75-00-3	Chloroethane	1400	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	160		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	90		25	
95-47-6	o-Xylene	25	U	25	
179601-23-1	m,p-Xylenes	25	U	25	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1055
Date Received: 10/19/12
Date Analyzed: 10/25/12 07:23

Sample Name: MW-501
Lab Code: R1207183-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUADATA\msvoa10\data\102412\E4271.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	98	85-122	10/25/12 07:23		
Toluene-d8	91	87-121	10/25/12 07:23		
Dibromofluoromethane	109	89-119	10/25/12 07:23		

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 1055
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 09:34

Sample Name: MW-501
 Lab Code: R1207183-007
 Run Type: Dilution

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4275.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 10

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	100 U	100	
71-43-2	Benzene	50 U	50	
75-27-4	Bromodichloromethane	50 U	50	
75-25-2	Bromoform	50 U	50	
74-83-9	Bromomethane	50 U	50	
78-93-3	2-Butanone (MEK)	100 U	100	
75-15-0	Carbon Disulfide	100 U	100	
56-23-5	Carbon Tetrachloride	50 U	50	
108-90-7	Chlorobenzene	50 U	50	
75-00-3	Chloroethane	1400 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	150 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	87 D	50	
95-47-6	o-Xylene	50 U	50	
179601-23-1	m,p-Xylenes	50 U	50	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1055
Date Received: 10/19/12
Date Analyzed: 10/25/12 09:34

Sample Name: MW-501
Lab Code: R1207183-007
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUADATA\msvoa10\data\102412\E4275.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 10

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	96	85-122	10/25/12 09:34		
Toluene-d8	94	87-121	10/25/12 09:34		
Dibromofluoromethane	108	89-119	10/25/12 09:34		

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1055
Date Received: 10/19/12
Date Analyzed: 10/23/12 12:02

Sample Name: MW-501
Lab Code: R1207183-007

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1007.run

Analysis Lot: 315109
Instrument Name: R-GC-02
Dilution Factor: 200

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	200 U	200	
74-85-1	Ethene	200 U	200	
74-82-8	Methane	12000	200	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 1005
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 07:52

Sample Name: MW-204
 Lab Code: R1207183-008

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4272.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
67-64-1	Acetone	10 U	10	
71-43-2	Benzene	5.0 U	5.0	
75-27-4	Bromodichloromethane	5.0 U	5.0	
75-25-2	Bromoform	5.0 U	5.0	
74-83-9	Bromomethane	5.0 U	5.0	
78-93-3	2-Butanone (MEK)	10 U	10	
75-15-0	Carbon Disulfide	10 U	10	
56-23-5	Carbon Tetrachloride	5.0 U	5.0	
108-90-7	Chlorobenzene	5.0 U	5.0	
75-00-3	Chloroethane	5.0 U	5.0	
67-66-3	Chloroform	5.0 U	5.0	
74-87-3	Chloromethane	5.0 U	5.0	
124-48-1	Dibromochloromethane	5.0 U	5.0	
75-34-3	1,1-Dichloroethane	7.1	5.0	
107-06-2	1,2-Dichloroethane	5.0 U	5.0	
75-35-4	1,1-Dichloroethene	6.7	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	
179601-23-1	m,p-Xylenes	5.0 U	5.0	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1005
Date Received: 10/19/12
Date Analyzed: 10/25/12 07:52

Sample Name: MW-204
Lab Code: R1207183-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4272.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	99	85-122	10/25/12 07:52		
Toluene-d8	95	87-121	10/25/12 07:52		
Dibromofluoromethane	108	89-119	10/25/12 07:52		

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1226
Date Received: 10/19/12

Sample Name: MW-205
Lab Code: R1207183-009

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	2980		mg/L	2.0	1	NA	10/31/12 16:23	
Chloride	9056A	748		mg/L	80	400	NA	10/25/12 02:02	
Nitrate as Nitrogen	9056A	1.0	U	mg/L	1.0	10	NA	10/19/12 22:10	
Nitrite as Nitrogen	9056A	10	U	mg/L	10	100	NA	10/24/12 14:28	*
Sulfate	9056A	14.9		mg/L	2.0	10	NA	10/19/12 22:10	
Sulfide, Acid-Soluble	9034	1.2		mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: 10/19/12 1226
 Date Received: 10/19/12
 Date Analyzed: 10/25/12 08:22

Sample Name: MW-205
 Lab Code: R1207183-009

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoo10\data\102412\E4273.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 2000

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20000	U	20000	
71-43-2	Benzene	10000	U	10000	
75-27-4	Bromodichloromethane	10000	U	10000	
75-25-2	Bromoform	10000	U	10000	
74-83-9	Bromomethane	10000	U	10000	
78-93-3	2-Butanone (MEK)	20000	U	20000	
75-15-0	Carbon Disulfide	20000	U	20000	
56-23-5	Carbon Tetrachloride	10000	U	10000	
108-90-7	Chlorobenzene	10000	U	10000	
75-00-3	Chloroethane	10000	U	10000	
67-66-3	Chloroform	10000	U	10000	
74-87-3	Chloromethane	10000	U	10000	
124-48-1	Dibromochloromethane	10000	U	10000	
75-34-3	1,1-Dichloroethane	250000		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	210000		10000	
79-00-5	1,1,2-Trichloroethane	10000	U	10000	
79-01-6	Trichloroethene	10000	U	10000	
75-01-4	Vinyl Chloride	10000	U	10000	
95-47-6	o-Xylene	10000	U	10000	
179601-23-1	m,p-Xylenes	10000	U	10000	

Now part of the ALS Group
Analytical Report

Units: $\mu\text{g/L}$
Basis: NA

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 2000

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	97	85-122	10/25/12 08:22		
Toluene-d8	97	87-121	10/25/12 08:22		
Dibromofluoromethane	109	89-119	10/25/12 08:22		

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1226
Date Received: 10/19/12
Date Analyzed: 10/23/12 13:35

Sample Name: MW-205
Lab Code: R1207183-009

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1012.run

Analysis Lot: 315109
Instrument Name: R-GC-02
Dilution Factor: 1

CAS No.	Analyte Name	Result Q	MRL	Note
74-84-0	Ethane	12	1.0	
74-85-1	Ethene	12	1.0	
74-82-8	Methane	15	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/19/12 1226
Date Received: 10/19/12
Date Analyzed: 10/26/12 13:27

Sample Name: MW-205
Lab Code: R1207183-009

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: I:\ACQUADATA\HPLC05\DATA\102612\X0008698.D\

Analysis Lot: 315862
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	550	20	
107-92-6	Butanoic Acid (Butyric Acid)	2500	40	
50-21-5	Lactic Acid	20 U	20	
79-09-4	Propionic Acid	860	20	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/18/12
Date Received: 10/19/12
Date Analyzed: 10/25/12 08:52

Sample Name: TRIP BLANK
Lab Code: R1207183-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4274.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: 10/18/12
Date Received: 10/19/12
Date Analyzed: 10/25/12 08:52

Sample Name: TRIP BLANK
Lab Code: R1207183-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4274.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	97	85-122	10/25/12 08:52		
Toluene-d8	96	87-121	10/25/12 08:52		
Dibromofluoromethane	108	89-119	10/25/12 08:52		

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1207183-MB1

Service Request: R1207183
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	10/24/12 11:34	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/25/12 00:31	
Nitrate as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/19/12 20:25	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/19/12 20:25	
Sulfate	9056A	0.20	U	mg/L	0.20	1	NA	10/19/12 20:25	
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	10/23/12	10/23/12 09:45	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1207183-MB2

Service Request: R1207183
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	10/26/12 08:30	
Chloride	9056A	0.20 U	mg/L	0.20	1	NA	10/30/12 17:19	
Nitrite as Nitrogen	9056A	0.10 U	mg/L	0.10	1	NA	10/22/12 16:34	
Sulfate	9056A	0.20 U	mg/L	0.20	1	NA	11/2/12 01:07	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1207183-MB3

Service Request: R1207183
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	10/31/12 16:23	
Chloride	9056A	0.20	U	mg/L	0.20	1	NA	10/30/12 19:45	
Nitrite as Nitrogen	9056A	0.10	U	mg/L	0.10	1	NA	10/24/12 11:54	

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
 Project: Coopervision 10/2012/70665-018
 Sample Matrix: Water

Service Request: R1207183
 Date Collected: NA
 Date Received: NA
 Date Analyzed: 10/25/12 02:25

Sample Name: Method Blank
 Lab Code: RQ1212907-01

Units: µg/L
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
 Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4261.D\

Analysis Lot: 315317
 Instrument Name: R-MS-10
 Dilution Factor: 1

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

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: NA
Date Received: NA
Date Analyzed: 10/25/12 02:25

Sample Name: Method Blank
Lab Code: RQ1212907-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\102412\E4261.D\

Analysis Lot: 315317
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	
4-Bromofluorobenzene	97	85-122	10/25/12 02:25		
Toluene-d8	96	87-121	10/25/12 02:25		
Dibromofluoromethane	107	89-119	10/25/12 02:25		

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: NA
Date Received: NA
Date Analyzed: 10/23/12 09:21

Sample Name: Method Blank
Lab Code: RQ1212850-01

Units: µg/L
Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175
Data File Name: 1021.run

Analysis Lot: 315109
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	Ethene	1.0 U	1.0	
74-82-8	Methane	1.0 U	1.0	

COLUMBIA ANALYTICAL SERVICES, INC.Now part of the ALS Group
Analytical Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Collected: NA
Date Received: NA
Date Analyzed: 10/26/12 11:52

Sample Name: Method Blank
Lab Code: RQ1212932-01

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: I:\ACQUADATA\HPLC05\DATA\102612\X0008695.D\

Analysis Lot: 315862
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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/19/12 -
10/25/12

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample R1207183-LCS1					
Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity as CaCO ₃ , Total	SM 2320 B	20.9	20.0	105	83 - 117
Chloride	9056A	1.96	2.00	98	80 - 120
Nitrate as Nitrogen	9056A	0.995	1.00	99	80 - 120
Nitrite as Nitrogen	9056A	0.974	1.0	98	80 - 120
Sulfate	9056A	2.03	2.00	102	80 - 120
Sulfide, Acid-Soluble	9034	6.97	9.0	78	17 - 129

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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/22/12 -
11/2/12

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L**Basis:** NA**Lab Control Sample**

R1207183-LCS2

Analyte Name	Method	Result	Spike		% Rec	% Rec Limits
			Amount			
Alkalinity as CaCO ₃ , Total	SM 2320 B	19.0	20.0	95		83 - 117
Chloride	9056A	2.01	2.00	101		80 - 120
Nitrite as Nitrogen	9056A	0.933	1.0	93		80 - 120
Sulfate	9056A	1.81	2.00	90		80 - 120

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/24/12 -
10/31/12

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L**Basis:** NA**Lab Control Sample**

R1207183-LCS3

Analyte Name	Method	Result	Spike		% Rec	% Rec Limits
			Amount	% Rec		
Alkalinity as CaCO ₃ , Total	SM 2320 B	960	1000	96		83 - 117
Chloride	9056A	2.03	2.00	102		80 - 120
Nitrite as Nitrogen	9056A	0.979	1.0	98		80 - 120

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/25/12

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C**Units:** µg/L**Basis:** NA**Analysis Lot:** 315317**Lab Control Sample**

RQ1212907-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	19.4	20.0	97	64 - 133
Benzene	18.7	20.0	93	78 - 118
Bromodichloromethane	23.0	20.0	115	79 - 123
Bromoform	24.9	20.0	125	69 - 126
Bromomethane	24.4	20.0	122	49 - 124
2-Butanone (MEK)	20.6	20.0	103	60 - 133
Carbon Disulfide	18.2	20.0	91	67 - 138
Carbon Tetrachloride	20.2	20.0	101	64 - 129
Chlorobenzene	19.3	20.0	97	80 - 121
Chloroethane	18.0	20.0	90	72 - 130
Chloroform	20.2	20.0	101	75 - 123
Chloromethane	18.6	20.0	93	55 - 139
Dibromochloromethane	24.6	20.0	123	78 - 127
1,1-Dichloroethane	19.7	20.0	98	76 - 124
1,2-Dichloroethane	22.2	20.0	111	72 - 130
1,1-Dichloroethene	19.2	20.0	96	67 - 119
cis-1,2-Dichloroethene	18.5	20.0	93	77 - 123
trans-1,2-Dichloroethene	18.7	20.0	93	72 - 120
1,2-Dichloropropane	19.8	20.0	99	83 - 119
cis-1,3-Dichloropropene	19.0	20.0	95	77 - 125
trans-1,3-Dichloropropene	20.4	20.0	102	69 - 127
Ethylbenzene	19.0	20.0	95	75 - 123
2-Hexanone	20.4	20.0	102	61 - 131
Methylene Chloride	19.9	20.0	100	73 - 122
4-Methyl-2-pentanone (MIBK)	21.8	20.0	109	61 - 132
Styrene	21.0	20.0	105	80 - 121
1,1,2,2-Tetrachloroethane	18.0	20.0	90	72 - 124
Tetrachloroethene	18.5	20.0	93	71 - 127
Toluene	18.4	20.0	92	77 - 120
1,1,1-Trichloroethane	19.0	20.0	95	67 - 121
1,1,2-Trichloroethane	20.5	20.0	103	81 - 117
Trichloroethene	20.8	20.0	104	75 - 122

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.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/25/12

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C**Units:** µg/L**Basis:** NA**Analysis Lot:** 315317

Lab Control Sample
RQ1212907-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	18.2	20.0	91	68 - 139
o-Xylene	19.6	20.0	98	77 - 131
m,p-Xylenes	39.3	40.0	98	77 - 124

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

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/23/12

Lab Control Sample Summary
Dissolved Gases by GC/FID

Analytical Method: RSK 175**Units:** µg/L**Basis:** NA**Analysis Lot:** 315109

Lab Control Sample
RQ1212850-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Ethane	26.7	26.1	102	82 - 127
Ethene	24.0	24.3	99	76 - 119
Methane	27.3	26.2	104	82 - 126

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/26/12

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: 315862

Analyte Name	Lab Control Sample RQ1212932-02			Duplicate Lab Control Sample RQ1212932-03			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Pyruvic Acid	1.04	1.02	102	1.05	1.02	103	70 - 130	<1	30
Acetic Acid	10.2	10.2	101	10.6	10.2	104	70 - 135	3	30
Butanoic Acid (Butyric Acid)	11.0	10.2	108	10.8	10.2	106	78 - 113	2	30
Lactic Acid	10.2	9.98	102	10.2	9.98	102	61 - 109	<1	30
Propionic Acid	9.90	10.1	98	10.1	10.1	100	80 - 125	2	30

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

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

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: Haley & Aldrich, Incorporated
Project: Coopervision 10/2012/70665-018
Sample Matrix: Water

Service Request: R1207183
Date Analyzed: 10/26/12

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:** 315862**Lab Control Sample**

RQ1212932-04

Analyte Name	Result	Spike Amount	% Rec	% Rec	Limits
Pyruvic Acid	0.50 U	0.102	0	*	70 - 130
Acetic Acid	1.12	1.01	111		70 - 135
Butanoic Acid (Butyric Acid)	2.0 U	1.01	0	*	78 - 113
Lactic Acid	1.01	1.00	101		61 - 109
Propionic Acid	1.09	1.01	108		80 - 125

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.



Cooler Receipt and Preservation Check Form

Project/Client Haley + Aldrich Folder Number R1207183

Cooler received on 10/19/12 by: ALS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? ALS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 2.4°

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: 10/19/12 1549

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:

All Samples held in storage location R-002 by ALS on 10/19/12 at 1549
5035 samples placed in storage location by on at

PC Secondary Review: 10/22/12

Cooler Breakdown: Date: 10/22/12 Time: 1030 by: ALS

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	YES	NO	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH			<u>WC112041A</u>	<u>6/13</u>				
≤2	HNO ₃								
≤2	H ₂ SO ₄								
<4	NaHSO ₄								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	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	-	-	<u>WC112083B</u>	<u>7/13</u>				
	HCl	*	*	<u>4/11/100</u>	<u>10/13</u>				

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust:

Bottle lot numbers: 082112-1MM, 2-206-M2, 082712-2EE, 082012-2HH
Other Comments:

HP304 lot: WC10303PH Exp. 10/13

PC Secondary Review: YB 11/6/12
H:\SMODOCS\Cooler Receipt 5.doc

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

00057