



19 October 2009  
File No. 70665-016

Frank Sowers, P.E.  
New York State Department of Environmental Conservation  
6274 East Avon-Lima Rd.  
Avon, NY 14414

Subject: CooperVision – **Remediation Progress Report**  
711 North Road  
Scottsville, NY  
VCA #V00175-8

Dear Mr. Sowers:

This letter constitutes the eleventh remediation progress report under the Voluntary Cleanup Agreement (VCA) between Coopervision, Inc. and the New York State Department of Environmental Conservation (NYSDEC) for the site's remediation operation and maintenance. This report covers the period of January 2009 through June 2009.

#### **ACTIVITIES PERFORMED DURING PAST 6 MONTHS:**

##### **Groundwater Sampling**

Groundwater samples were collected during the period 23 – 24 April 2009 and the results are summarized in this report.

Samples were analyzed according to the Proposed 2004 Remediation Groundwater Schedule submitted with the remediation progress report dated 10 December 2003. A copy of the analytical results of the April 2009 sampling event is attached and is summarized in Tables 1 through 4. Groundwater contours are shown in Figure 1.

##### **Indoor Air/Sub-Slab Vapor Intrusion Investigation**

A vapor intrusion investigation was performed within selected tenant spaces in the two apartment/townhouse complexes located across Briarwood Lane (east side of the CooperVision Property) in accordance with the CooperVision Sub Slab Vapor & Indoor Air Investigation Work Plan dated 4 February 2009.

Field work was conducted in three events (28-30 January 2009, 8-10 February 2009, and 25-27 February 2009) as per access agreements with the property owners. Note that due to those access restrictions, the 28-30 January sampling event occurred before the Sub Slab Vapor & Indoor Air Investigation Work Plan was approved.

The results of that sampling indicated that target VOCs (vinyl chloride, Chloroethane, 1,1-DCE, 1,1-DCA, and 1,1,1-TCA), were not detected above laboratory reporting limits. According to the Soil

Vapor/Indoor Air Matrices included as part of the NYSDOH Guidance, no further action is necessary with respect to vapor intrusion monitoring or mitigating at the adjacent residential properties. The indoor air and sub-slab vapor testing events, as well as all previously conducted soil vapor testing events are further summarized in the following reports previously submitted to and approved by the NYSDEC:

- *Revised* Soil Vapor Investigation Results Report, dated 11 September 2009.
- *Revised* Soil Vapor Investigation Results Report Addendum, dated 11 September 2009.

## **RESULTS OF SAMPLING TO DATE:**

### **Groundwater Sampling**

This report provides a summary of the analytical results from the April 2009 sampling event. Updated summary tables, associated time series charts, groundwater contours, and laboratory analytical reports are attached.

Overall and consistent with previous sampling events, site data indicate that enhanced biodegradation processes continue to be active as evidenced the overall trends in contaminants (decreases in parent compounds and corresponding increases in daughter product concentrations, plus trends and stability of other biodegradation indicator parameters).

Metabolic acids (HRC biological breakdown products) remain present in the source and mid-gradient areas which indicate that hydrogen (electron donor) remains available to fuel the reductive dechlorination process.

The following paragraphs describe specific results:

#### Source Area (Refer to Table 1 and Table 4)

Wells in the source area continue to show evidence that biological degradation continues to be active. In lieu of discussing each source area well separately, the following discussion focuses on well MW-205. The conditions present at this well have historically been representative of the conditions in the source area as a whole and streamlines the discussion of the data.

- MW-205 is the only site well with remaining higher than detectable concentrations of the source contaminant 1,1,1-TCA. The concentration of 1,1,1-TCA decreased slightly in MW-205 since the previous sampling event. This result concurs with the general observable trend over time that 1,1,1-TCA increases during the fall sampling event and decreases during the spring event. This could be a result of seasonal fluctuations, natural “saw-toothing” associated with biological degradation (contaminants desorb and then biodegrade, etc.), or a combination of both. What is important to note, is that overall, the concentration of 1,1,1-TCA has decreased significantly over time since, and due to, the HRC injection.
- Since April 2004, 1,1-DCA has generally shown an increase over time, which is expected as 1,1-DCA is a biological breakdown product of 1,1,1-TCA and is generated as this biodegradation occurs. However, the trends for 1,1-DCA since November 2007 show a decrease in concentration indicating this compound is not “stacking” within the aquifer and appears to be degrading completely. As with

previous sampling events, chloroethane, the daughter product of 1,1-DCA has not been detected in MW-205, though this is likely due to possible detections being “masked” by high laboratory detection limits. Both chloride ion and ethane were detected in MW-205, however, which are the completion products of the reductive dechlorination process for 1,1,1-TCA as shown below:

**Dechlorination of 1,1,1-Trichloroethane:**

*1,1,1-TCA → DCA → Chloroethane → Ethane & Chloride*

- Metabolic acids continue to be present in significant amounts indicating that the Hydrogen Release Compound continues to effectively liberate hydrogen into the groundwater for enhancement of the biodegradation processes.
- Also notable in the source area is the continued presence of dissolved organic carbon in high levels (increased since the previous sampling event) and high alkalinity, as well as the low redox values. The high dissolved organic carbon is an indicator that the effects of the Hydrogen Release Compound continues to be dispersed within the aquifer, and the low redox values indicate that aquifer conditions continue to be anaerobic in the source area, which is conducive to reductive dechlorination. MW-205 has historically also had low dissolved oxygen values, though during the April 2009 sampling event, it was noted to be uncharacteristically high. This is probably due to interference from atmospheric air during sampling. This condition will continue to be monitored.
- In other indicator source area wells OWD-302-D and OWS-302-S, metabolic acids continue to be detected, particularly in OWS-302-S. This is further indication the Hydrogen Release Compound-stimulated conditions continue to be effective in the source area.
- Note that in indicator source area wells OWD-302-D and OWS-302S, several parameters including redox values, and/or inorganic compounds could not be analyzed during this sampling event because those wells did not have adequate water volume remaining to allow for measurements and/or sample collection for those parameters.

Mid-gradient Area (Refer to Table 2 and Table 4)

- Overall, mid-gradient conditions are steady and are similar to recent groundwater monitoring events.
- 1,1,1-TCA was detected in one mid-gradient well (MW-2) very low (0.0059 mg/L) and near regulatory criteria values.
- In the mid-gradient area, 1,1-DCA concentrations remain steady or declining with three mid-gradient wells exhibiting detectable concentrations. The concentrations of 1,1-DCA remained steady in well MW-3, decreased by two orders of magnitude in MW-2, and continued to be not detected in MW-502.
- Chloroethane, the breakdown product of 1,1-DCA, continues to be present in all wells. Ethane was not detected in mid-gradient wells during this sampling event, though chloride ion was detected in the three 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.

- Metabolic acids are still present in the mid-gradient area in MW-3 and MW-502, though they continue to decrease in concentration. As with the source area, dissolved organic carbon continues to be present in the mid-gradient area (Table 4). These are both indicators that the effects of the HRC are still present in the mid-gradient area.

#### Down-gradient Area (Refer to Table 3)

- Overall, down-gradient conditions are steady and are similar to recent groundwater monitoring events.
- 1,1,1-TCA concentrations were not detected above laboratory reporting limits in the downgradient wells sampled.
- 1,1-DCA was detected in wells MW-202 and MW-204 at concentrations slightly higher than groundwater standards (0.0093 and 0.0056 ug/L respectively).
- Chloroethane was not detected in the down-gradient wells.
- VOCs were not detected above laboratory reporting limits in B304-OW, MW-203 and MW-402.

In summary, results of the April 2009 sampling indicate dechlorination remains ongoing, and as supported by past results, is not indicative of plume expansion. Because dechlorination processes remain active and productive, additional injections of the HRC are not necessary nor are they recommended.

#### **Indoor Air & Sub-Slab Vapor Sampling**

The results of the January and February indoor air and sub-slab vapor sampling (described above) indicated that target VOCs (vinyl chloride, Chloroethane, 1,1-DCE, 1,1-DCA, and 1,1,1-TCA), were not detected above laboratory reporting limits. According to the Soil Vapor/Indoor Air Matrices included as part of the NYSDOH Guidance, no further action is necessary with respect to vapor intrusion monitoring or mitigating with in the adjacent residential properties. Further details and summary data tables associated with the indoor air and sub-slab vapor testing events, as well as all previously conducted soil vapor testing events were included in the following reports submitted to and approved by the NYSDEC:

- *Revised* Soil Vapor Investigation Results Report, dated 11 September 2009.
- *Revised* Soil Vapor Investigation Results Report Addendum, dated 11 September 2009.

#### **REPORTS AND DELIVERABLES:**

The following reports and deliverables were prepared and submitted to the NYSDEC during the reporting period:

- “Sub Slab Vapor & Indoor Air Investigation Work Plan” dated 4 February 2009 (approved 5 February 2009)

- “Soil Vapor Investigation Results Addendum” dated 12 June 2009.
- “Final Engineering Report” dated 19 June 2009
- “Site Management Plan” dated 29 July 2009

Per comments received from the NYSDEC in a letter dated, 28 August 2009, the following reports were revised and resubmitted to the NYSDEC in final form as directed by NYSDEC:

- *Revised* Soil Vapor Investigation Results Report, dated 11 September 2009.
- *Revised* Soil Vapor Investigation Results Report Addendum, dated 11 September 2009.

#### UPCOMING SCHEDULE:

A Final Engineering Report and Site Management Plan were submitted for the property in June 2009. Comments from the NYSDEC are pending.

Please do not hesitate to call if you have any questions or comments.

Sincerely yours,

HALEY & ALDRICH OF NEW YORK



Mark N. Ramsdell, P.E.  
Senior Engineer



Vincent B. Dick  
Vice President

Attachments: Distribution  
Table 1 – Summary of Volatile Gases and Dissolved Gases – Source Area Wells  
Table 2 – Summary of Volatile Gases and Dissolved Gases – Mid-gradient Wells  
Table 3 – Summary of Volatile Gases and Dissolved Gases – Down-gradient Wells  
Table 4 – Additional Analytical Parameter Summary  
Figure 1 – Groundwater Contour Plan  
Laboratory Analytical Reports

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TABLE 1  
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):	OWD-302D 32.5 - 33.5																						
Date Sampled:	6/1/99	10/26/99	4/28/00	7/19/01	10/18/01	1/30/02	4/9/02	7/31/02	10/15/02	1/28/03	4/7/03	10/29/03	4/8/04	10/27/04	4/8/05	10/11/05	5/16/06	10/19/06	4/24/07	11/14/07	4/30/08	10/15/08	4/23/09
Compound:															2X Dil.	5x Dil.	2x Dil.	5x Dil.	5x Dil.	2x Dil.	5x Dil.		
<b>VOLATILE ORGANICS</b>																							
Acetone	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	54 D	1	0.63	3.1 D	1.7 D	0.57	1.2 D	0.24	0.97 D	0.51	12 D	0.46	0.76 D	ND	0.65	0.4 E	0.48	0.2	0.44 D	0.96 D	ND	0.11	0.51
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	110 D	0.021	ND	0.016	ND	ND	0.046	ND	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	0.24	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
Trichloroethene	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	0.0059	ND	ND	ND	ND	ND	ND	0.025	ND	ND	3.2	ND	0.041	0.046	0.021	0.048	0.016	ND	0.024	0.069
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
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
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
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1 D	ND	ND	15	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
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>SEMI-VOLATILE ORGANICS</b>																							
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																				5x Dil.	100x Dil.		
Methane	NA	NA	NA	0.038	0.016	0.013	NA	ND	0.0062	0.03	0.014	NA	0.002	0.77	0.013	0.031	0.043	0.05	0.056	0.036	0.3	0.033	3.4
Ethane	NA	NA	NA	0.015	0.0045	0.0041	NA	ND	0.0012	0.0083	0.0038	NA	0.001	ND	ND	0.0068	0.0056	0.0012	0.0051	0.0036	ND	0.0017	ND
Ethene	NA	NA	NA	0.0013	ND	ND	NA	ND	ND	ND	0.0015	NA	ND	ND	ND	0.001	ND	ND	ND	ND	ND	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.

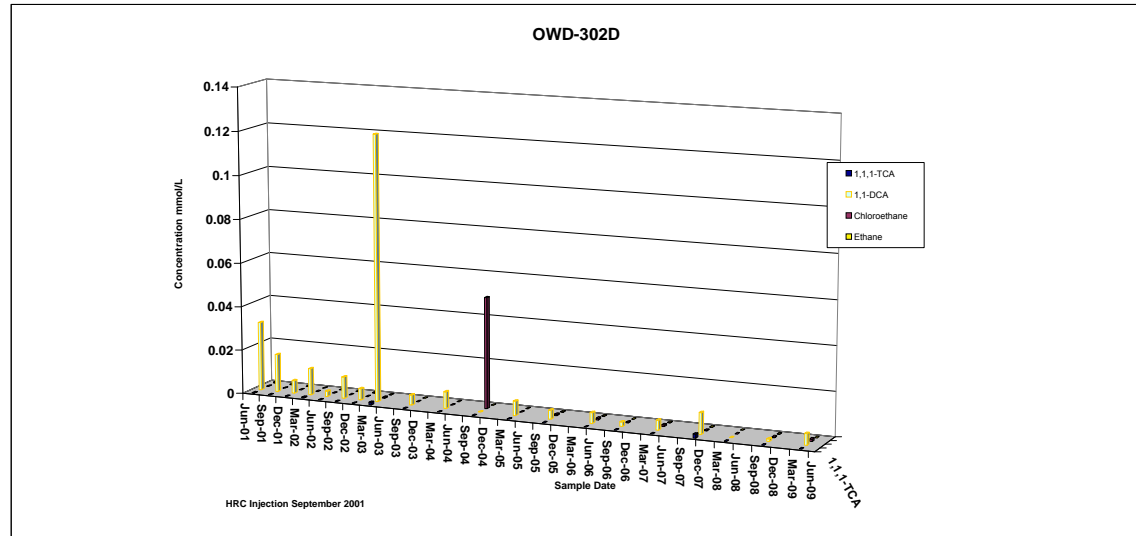


TABLE 1  
COOPERVISION, INC.  
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES  
SOURCE AREA WELLS

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
Compound:															2000x Dil.	1000x Dil.	250x Dil.	250x Dil.	100x Dil.	200x Dil.	200x Dil.	200x Dil.	500x Dil.
<b>VOLATILE ORGANICS</b>																							
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
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
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
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
Tetrachloroethene	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
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
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
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
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
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
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
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>SEMI-VOLATILE ORGANICS</b>																							
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																				20x Dil.	2.5x Dil.	10x 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
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
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

**Notes & Abbreviations:**

- ND: Not Detected
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- DRY: Insufficient Recharge
- D: Diluted Result
- J: Estimated Result
- B: Blank Contamination

1. The tables represent all data as reported from the lab in concentration format (mg/L).
2. The time-trend graphs concentrations have been converted to mmol/L to provide better stoichiometric representation of relative mass of parent (TCA) to daughter (DCA, chloroethane, etc.) compounds. Also note that scale varies between graphs in order to depict ranges of values for each well.

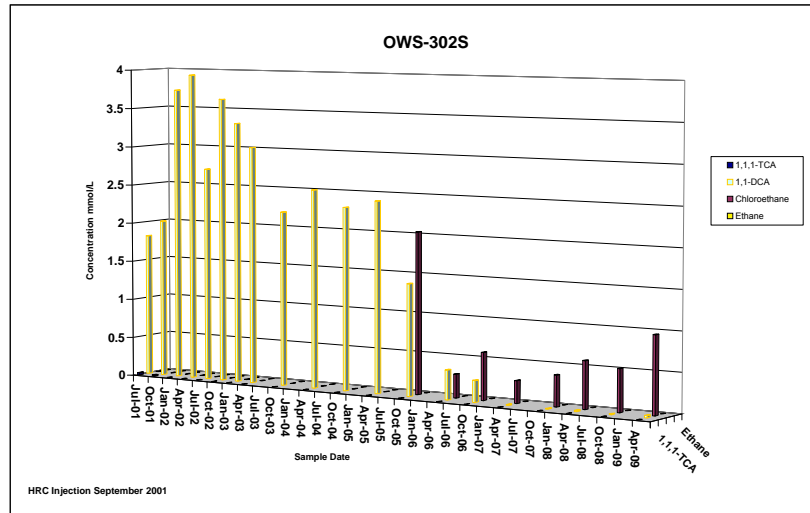


TABLE 1  
COOPERVISION, INC.  
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES  
SOURCE AREA WELLS

All values expressed in mg/L (ppm)

Sample ID: Well Screen Interval (ft):	OWS-302D 29.5 - 30.5			OWD-302S 21.0 - 22.0	B303-OWD-S 19.5 - 20.5	B303-OWD-D 31.0 - 32.0	B303-OWS-S 12.5 - 13.5	MW-1 4.0 - 14.0	
Date Sampled:	6/1/99	10/26/99	4/28/00	4/28/00	6/1/99	6/1/99	6/1/99	4/16/97	6/2/99
<b>Compound:</b>									
<b>VOLATILE ORGANICS</b>									
Acetone	ND	NA	ND	ND	0.18	0.073	0.16	ND	ND
1,1-Dichloroethane	1.5	220	23	350	ND	ND	ND	36	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	12	13
1,1,1-Trichloroethane	0.22	ND	8.8	2.4	ND	ND	ND	370	320
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	NA	NA	NA	NA	NA
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>SEMI-VOLATILE ORGANICS</b>									
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>									
Methane	NA	NA	NA	DRY	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	DRY	NA	NA	NA	NA	NA
Ethene	NA	NA	NA	DRY	NA	NA	NA	NA	NA

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ND: Not Detected

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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 1  
COOPERVISION, INC.  
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES  
SOURCE AREA WELLS

All values expressed in mg/L (ppm)

Sample ID:	MW-205																							
Well Screen Interval (ft):	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
Compound:	2000x Dil. 2000x Dil.																							
<b>VOLATILE ORGANICS</b>																								
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
1,1-Dichloroethane	153	190 D	ND	180 D	160 D	240	290	260	260	230	290	210	200 D	180	230	240	230	220	270	230	390	200	200	200
1,1-Dichloroethene	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	421	480 D	ND	260 D	180 D	300	300	280	260	200	320	250	140 D	150	100	76	80	57	62	41	84	42	57	48
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	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	0.075	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
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
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	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	0.11	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	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>SEMI-VOLATILE ORGANICS</b>																								
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
<b>DISSOLVED GASES</b>																								
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
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
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

**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.

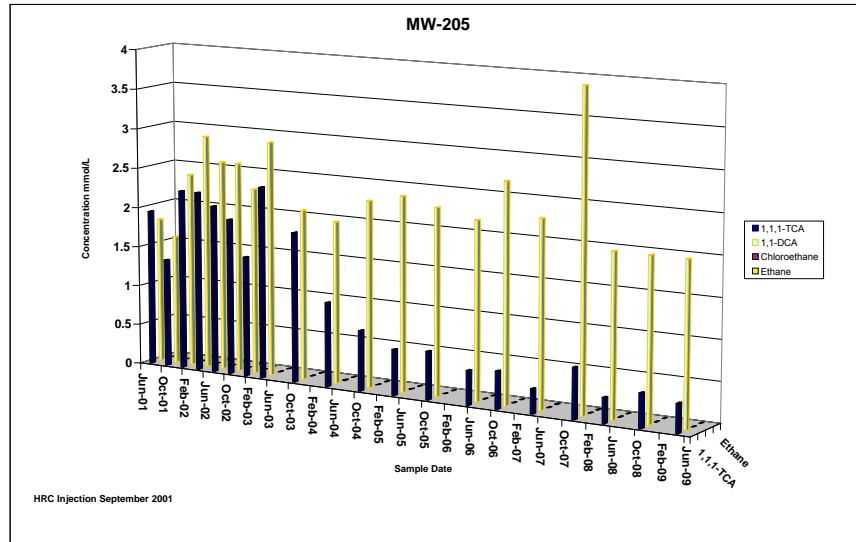


TABLE 1  
COOPERVISION, INC.  
SUMMARY OF VOLATILE GASES AND DISSOLVED GASES  
SOURCE AREA WELLS

All values expressed in mg/L (ppm)

Sample ID:	OW-401																					
Well Screen Interval (ft):	44.0 - 46.0																					
Date Sampled:	10/26/99	4/28/00	7/19/01	10/18/01	1/29/02	4/10/02	7/30/02	10/15/02	1/29/03	4/7/03	10/29/03	4/7/04	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	4/22/09
<b>Compound:</b>																						
<b>VOLATILE ORGANICS</b>	2.5x Dil. 5x Dil. 5x Dil.																					
Acetone	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.22	ND	0.5	0.43	0.7 D	0.5 D	0.5	2.2 D	0.31	0.17	0.036	0.33 D	0.65	0.74	0.46	0.47 D	0.62	0.23	0.15	0.091	0.16	0.094
1,1-Dichloroethene	0.014	ND	0.045	0.028	0.057	0.044	0.032	0.066	0.025	0.011	ND	0.026	0.042	0.044	0.019	0.028	0.025	0.012	0.011	ND	0.0072	ND
1,1,1-Trichloroethane	0.21	ND	0.36	0.14	0.021	0.0075	0.025	1.5	ND	0.0076	0.0071	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	0.048	ND	0.014	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	0.18	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
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>SEMI-VOLATILE ORGANICS</b>																						
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																						
Methane	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	0.0013	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

**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.

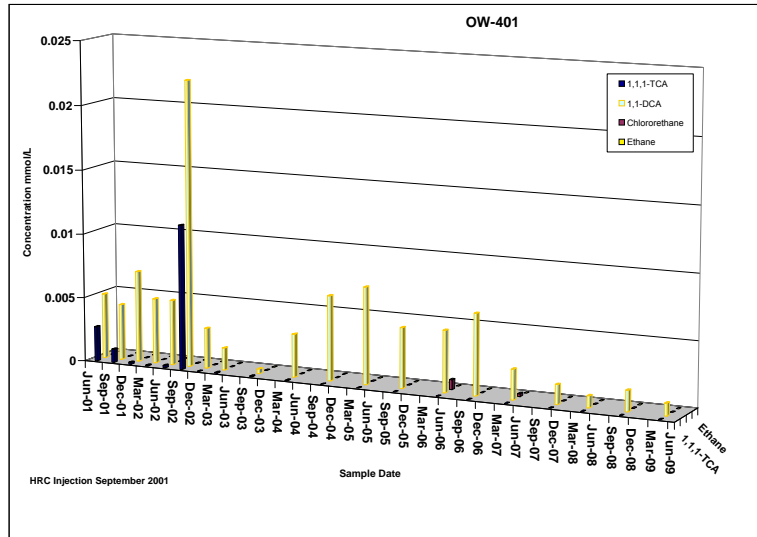


TABLE 2  
 COOPERVISION, INC.  
 SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
 MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-2 2.0 - 10.0																								
Date Sampled:	4/16/1997	6/2/1999	7/19/2001	10/18/2001	1/28/2002	4/9/2002	7/29/2002	10/15/2002	1/29/2003	4/7/2003	10/28/2003	4/6/2004	10/28/2004	4/7/2005	10/11/2005	5/17/2006	10/18/2006	4/25/2007	11/14/2007	4/30/2008	10/15/2008	4/24/2009			
<b>Compound:</b>																									
<b>VOLATILE ORGANICS</b>																									
Acetone	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	0.372	0.1	0.17	0.3	0.19	0.26	0.26	4.9 D	1.1	0.8	0.33	0.46	0.0088	0.028	0.21	ND	ND	0.044	ND	0.035	ND	0.095	0.023	0.14	0.0041 J
1,1-Dichloroethene	0.182	0.41	0.21 D	0.46	0.27	0.38	0.27	0.88	0.21	0.17	0.047	0.12	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
1,1,1-Trichloroethane	0.519	3.7	1.2 D	3	2.1	2.7	1.8	1.1	0.29	0.29	0.032	ND	0.006	ND	0.067	0.0069	0.032	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.006	ND	0.022	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00051 J
Trichloroethene	0.039	ND	0.074	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	0.26	0.1	0.1	0.086	0.62	0.012	0.78	1.3 E	0.078	0.022	0.022	2.3 D	0.18	0.72 D	0.0094	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
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
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
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.089	0.18	0.01	ND	ND	0.36 D	0.031	0.18	0.18	0.0030 J	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																									
Methane	NA	NA	NA	NA	NA	NA	0.083	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	0.0025	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	0.0026	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

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.

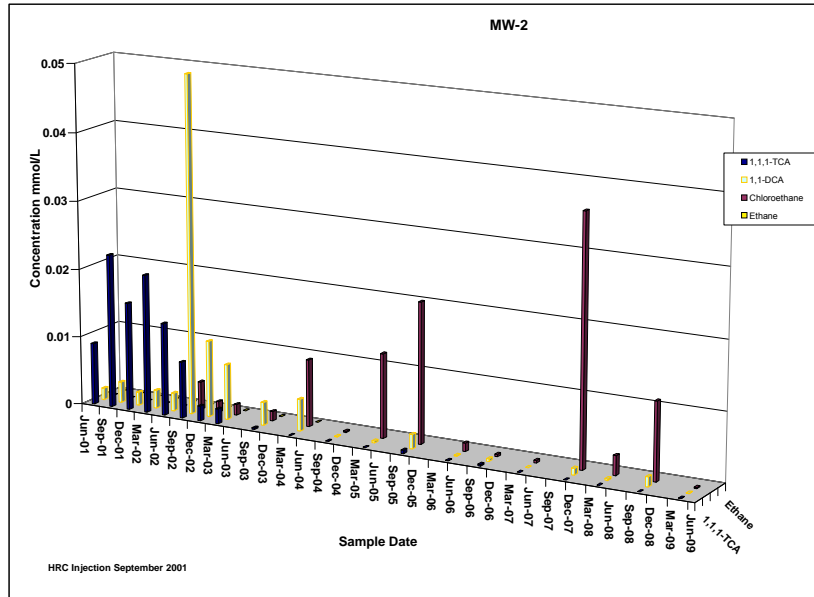


TABLE 2  
COOPERVISION, INC.  
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
MID-GRADIENT WELLS

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	#####	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	
Compound:																20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x Dil.		
<b>VOLATILE ORGANICS</b>																20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x Dil.	20x 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
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	
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	
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	
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	
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	
Trichloroethene	ND	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	0.026	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	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		
1,2-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	
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	
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	
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	
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058	0.660	NA	ND	NA	NA	NA	NA	NA	0.088 D	NA	0.075	
<b>DISSOLVED GASES</b>																10x Dil.	10x Dil.	10x Dil.	20x Dil.	20x 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	
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	
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	

**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.

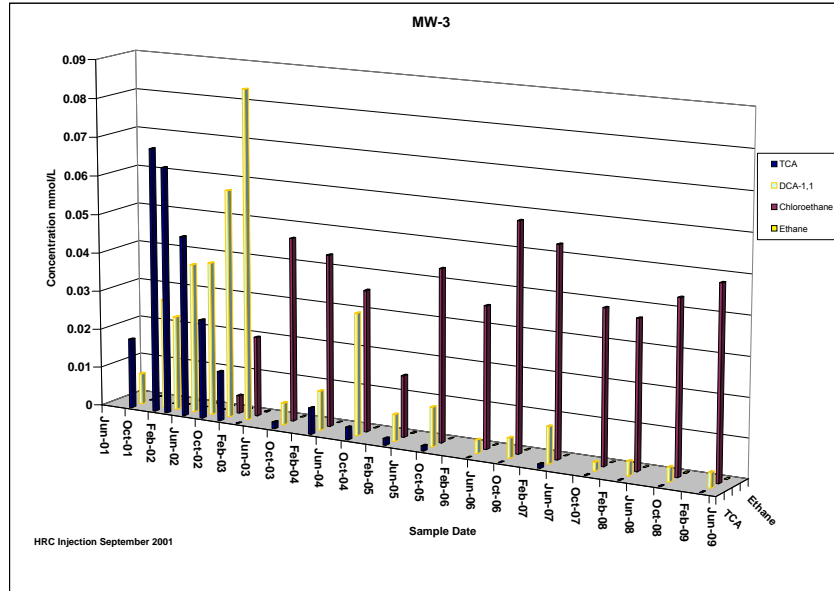


TABLE 2  
COOPERVISION, INC.  
SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
MID-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	MW-403 38.5 - 43.5		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	
<b>Compound:</b>																									
<b>VOLATILE ORGANICS</b>																									
Acetone	ND	0.062 B	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	0.0059	0.001 J	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	
1,1-Dichloroethene	ND	ND	ND	0.0098	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	
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	
Tetrachloroethene	ND	0.001 J	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	
Chloroethane	ND	ND	ND	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
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	
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	
2-Butanone (MEK)	ND	0.005 J	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	0.028	0.029	ND	0.041	0.046	0.06	0.054	0.051	0.051	0.058	0.018	0.071	
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>DISSOLVED GASES</b>																									
Methane	NA	NA	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	
Ethane	NA	NA	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	
Ethene	NA	NA	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	

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.

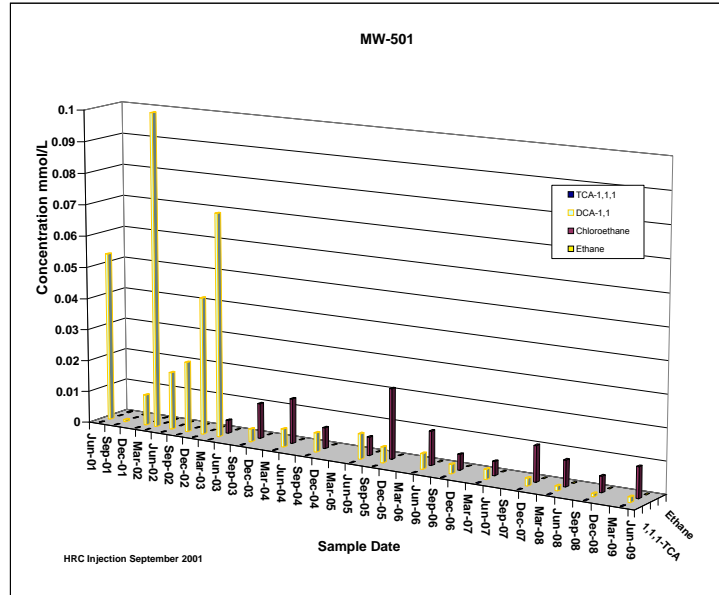


TABLE 2  
 COOPERVISION, INC.  
 SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
 MID-GRADIENT WELLS

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
Compound:																					
100x Dil.	100x Dil.	40x Dil.	100X Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	50x Dil.	
<b>VOLATILE ORGANICS</b>																					
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
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
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
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
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
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	0.011	ND	0.0455	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	
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
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
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
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	5.6	ND	0.12	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																					
Methane	DRY	0.018	NA	0.0027	NA	0.32	0.78	3.4	1.5	6.3	6.9	7.4	8.5	12	4.8	5.8	12	9.4	15	44 D	8.8
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
Ethene	DRY	0.0066	NA	0.002	NA	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.

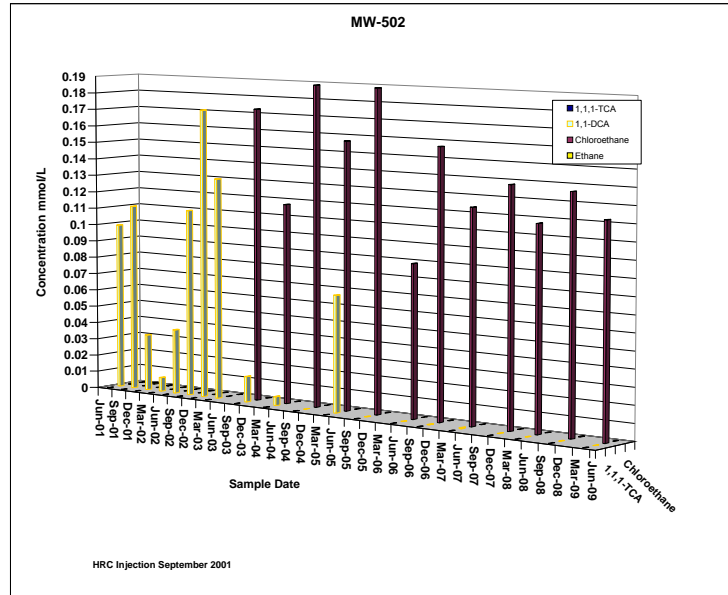


TABLE 3  
 COOPERVISION, INC.  
 SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
 DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID: Well Screen Interval (ft):	B304-OW 4.0 - 14.0																				
Date Sampled:	6/1/99	7/18/01	10/18/01	1/29/02	4/8/02	7/29/02	10/14/02	1/30/03	4/7/03	10/30/03	4/7/04	10/27/04	4/7/05	10/10/05	5/17/06	10/19/06	4/26/07	11/14/07	4/30/08	10/13/08	4/23/09
Compound:																					
<b>VOLATILE ORGANICS</b>																					
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.012	0.024	0.044	ND	ND	0.007	0.014	ND	ND	0.008	ND	ND	ND	ND	0.099	0.007	0.035	0.0078	ND	0.0052	ND
1,1-Dichloroethene	0.006	0.014	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.036	0.028	0.037	0.010	0.009	0.014	0.017	0.006	0.006	0.011	0.007	ND	ND	0.006	0.013	0.008	0.021	0.0068	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	0.062	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																					
Methane	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NA	NA	NA	NA	NA	ND	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).

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.

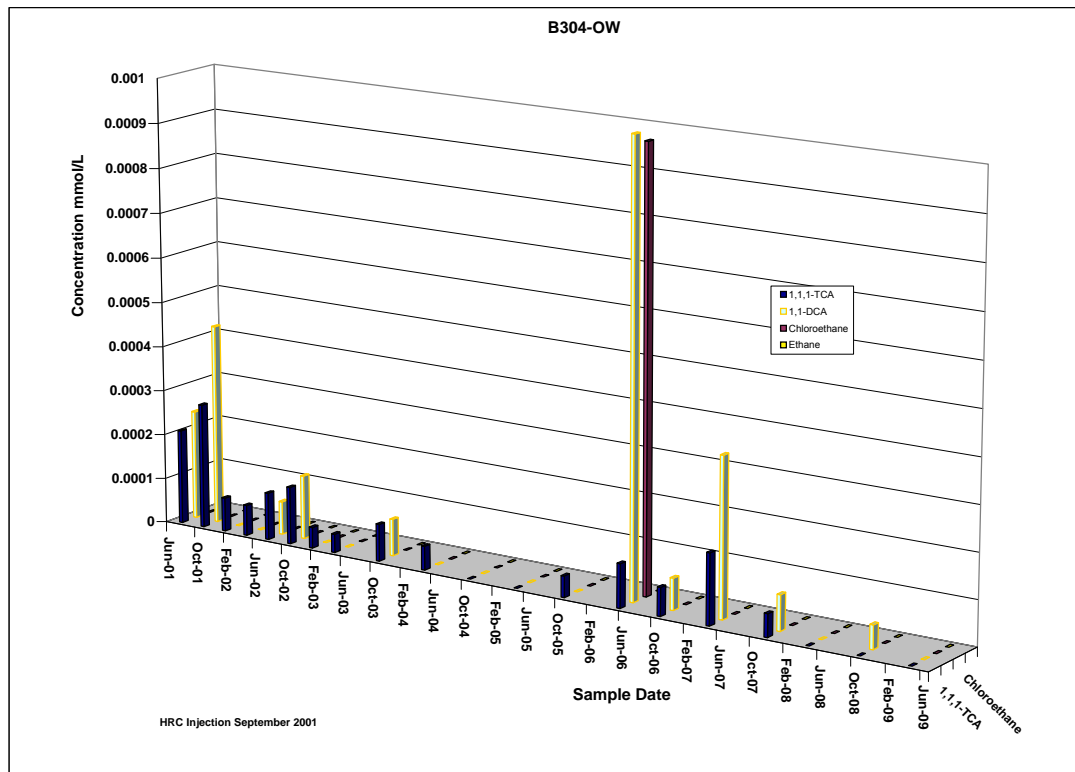


TABLE 3  
 COOPERVISION, INC.  
 SUMMARY OF VOLATILE ORGANICS AND DISSOLVED GASES  
 DOWN-GRADIENT WELLS

All values expressed in mg/l (ppm)

Sample ID:	MW-202																							
Well Screen Interval (ft):	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	
Compound:																								
<b>VOLATILE ORGANICS</b>																								
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
1,1-Dichloroethane	0.008	ND	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
1,1-Dichloroethene	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0056	ND	ND	0.0050
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
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
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
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
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
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
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
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
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
<b>DISSOLVED GASES</b>																								
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
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
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

**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).

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 3  
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
<b>Compound:</b>																						
<b>VOLATILE ORGANICS</b>																						
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>1,1-Dichloroethane</b>	<b>0.118</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<b>0.018</b>	ND	ND	ND
<b>1,1-Dichloroethene</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>1,1,1-Trichloroethane</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<b>0.009</b>	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Chloroethane</b>	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
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>1,4-Dioxane</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																						
Methane	NA	NA	NA	NA	NA	NA	ND	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
Ethene	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Notes & Abbreviations:**

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- 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).

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 3  
 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
Compound:																							
<b>VOLATILE ORGANICS</b>																							
Acetone	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
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
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
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
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
Chloroethane	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
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
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
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
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090	0.086	NA	0.047	NA	NA	NA	NA	NA	0.030 D	NA	0.022
<b>DISSOLVED GASES</b>																							
Methane	NA	NA	NA	NA	NA	NA	ND	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
Ethene	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes & Abbreviations:

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- E: Estimated Result

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 3  
 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-402 38.5 - 43.5																				
Date Sampled:	10/26/99	7/18/01	10/18/01	1/28/02	6/21/02	7/29/02	10/14/02	1/29/03	4/7/03	10/28/03	4/5/04	10/26/04	4/6/05	10/10/05	5/15/06	10/17/06	4/24/07	11/14/07	4/28/08	10/13/08	4/23/09
<b>Compound:</b>																					
<b>VOLATILE ORGANICS</b>																					
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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
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
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
<b>DISSOLVED GASES</b>																					
Methane	NA	NA	NA	NA	NA	0.0038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NA	NA	NA	NA	NA	0.0014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Notes & Abbreviations:**

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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 4  
 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
<b>INORGANICS (mg/L)</b>																						
Nitrite Nitrogen	0.0265	NS	ND	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	
Nitrate/Nitrite Nitrogen	ND	NS	NA	NA	NA	ND	NA	NA	0.135	NA	<0.0500	NA	<0.100	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05	
Chloride	750	NS	708	NA	NA	741	NA	NA	729	NA	746	613	689	677	684	705	690	671	697	834	705	
Dissolved Organic Carbon	52.2	NS	55.2	NA	NA	201	NA	NA	354	NA	497 <sup>TOC</sup>	NA	667	1630	979	1020	1420	1270	1690	1620	2220	
Nitrate Nitrogen	0.0514	NS	ND	NA	NA	ND	NA	NA	0.12	NA	<0.0500	<1.0	<0.200	<0.0500	<0.0500 J	<0.0500	<0.0500	<0.500	<1.0	<0.5	<0.05	
Total Alkalinity	404	NS	378	NA	NA	619	NA	NA	1010	NA	1400	NA	1380	1470	1500	1440	1650	1820	1980	2100	2350	
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	
Total Sulfide	ND	NS	ND	NA	NA	ND	NA	NA	ND	NA	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.25	3.05	<1.0	2	<1.0
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	
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	
<b>HRC COMPONENTS (mg/L)</b>																						
Lactic Acid (C3)	ND	NS	NA	23.6	NA	39.1	59.5	41	81.3	117	72.9	<10	<1.0	<1.0	<10	<1.0	<10	<1.0	<10	<10	<5.0	
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	
Propionic Acid (C3)	ND	NS	NA	ND	NA	34.9	62.1	134	138	202	158	210	190	320 E	470	530 D	730	600 D	670	800	900	
Pyruvic Acid (C3)	ND	NS	NA	ND	NA	ND	ND	ND	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	
Butyric Acid (C4)	ND	NS	NA	ND	NA	ND	ND	13.1	26.4	68.6	177	420	400	470 E	540	700 D	1000	950	1200	1200	1900	
<b>FIELD PARAMETERS</b>																						
Dissolved Oxygen (mg/L)	ND	ND	MIS	0.29	0.014	0.1	0.63	0.5	1.07	0.39	1.18	NS	0.76	NA	0.61	0.27	1.04	0.7	0.18	0	5.11	
Redox (mV)	-53	-26	MIS	-88	-61	-182	-166	-103	-42	-174	-395	NS	-189	NA	-295	-517	-112	-105	-89	-85	-90	
Conductivity (mS)	2.41	3	MIS	2.31	2.48	2.49	2.9	2.7	2.7	4.69	4.81	NS	4.87	NA	4.99	5.21	5.59	5.43	5.58	5.86	5.46	
Iron, dissolved (mg/L)	0.2	NA	MIS	2.6	3.2	4.9	5.8	5.0	5.8	5.8	4.2	NS	5.4	NA	2.8	2.2	2.2	2.4	2.4	2.5	5	
Alkalinity (mg/L)	500	NA	MIS	580	580	630	680	600	1300	760	1320	NS	920	NA	200	1700	1600	1760	1620	2320	1500	
Carbon Dioxide (mg/L)	182	NA	MIS	140	330	220	59	418	1.07	1275	too turbid	NS	TBC from Alk	NA	160	Precip	Precip	Precip	Precip	Precip	272	

TABLE 4  
 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
<b>INORGANICS (mg/L)</b>																					
Nitrite Nitrogen	NS	0.13	NA	NA	ND	NA	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
Nitrate/Nitrite Nitrogen	NS	NA	NA	NA	ND	NA	NA	NA	0.093	NA	<0.0500	NA	<0.05	<0.05	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05
Chloride	NS	139	NA	NA	171	NA	NA	NA	269	NA	253	330	391	369	381	382	367	345	251	305	288
Dissolved Organic Carbon	NS	2.19	NA	NA	287	NA	NA	NA	52.7	NA	5.67 <sup>TOC</sup>	NA	3.51	5.49	19.9	21.8	11.8	10.8	12.5	5.45	5.8
Nitrate Nitrogen	NS	2.21	NA	NA	ND	NA	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
Total Alkalinity	NS	197	NA	NA	610	NA	NA	NA	349	NA	218	NA	207	230	251	265	241	266	248	270	242
Sulfate	NS	15.1	NA	NA	2.08	NA	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
Total Sulfide	NS	ND	NA	NA	ND	NA	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
Total Iron	NS	14.1	NA	NA	181	NA	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
Total Manganese	NS	NA	NA	NA	8.01	NA	NA	NA	6.28	NA	1.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>HRC COMPONENTS (mg/L)</b>																					
Lactic Acid (C3)	NS	NA	ND	ND	8.2	ND	12.5	ND	<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
Acetic Acid (C2)	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	
Propionic Acid (C3)	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
Pyruvic Acid (C3)	NS	NA	ND	0.2	0.1	ND	ND	ND	<0.1	<0.1	<1.0	<5.0	<0.5	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5
Butyric Acid (C4)	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
<b>FIELD PARAMETERS</b>																					
Dissolved Oxygen (mg/L)	NS	MIS	5.19	*4.95	1.34	2.86	2.40	3.58	1.11	5.68	NS	6.91	NA	1.42	1.98	0.93	DRY	DRY	DRY	DRY	DRY
Redox (mV)	NS	MIS	-116	35	-127	-70	-79	-80	-37	54	NS	-68	NA	194	61	-38	DRY	DRY	DRY	DRY	DRY
Conductivity (mS)	NS	MIS	0.07	0.06	0.12	0.25	0.00	1.10	1.33	1.20	NS	1.58	NA	1.61	1.76	1.72	DRY	DRY	DRY	DRY	DRY
Iron, dissolved (mg/L)	NS	MIS	NA**	0.2	0.9	4.4	4.5	4.5	3	1.2	NS	0.2	NA	0.01	0.2	1.2	0	0.4	0.2	DRY	DRY
Alkalinity (mg/L)	NS	MIS	NA**	240	680	1000	280	560	480	280	NS	160	NA	60	320	300	280	220	400	400	DRY
Carbon Dioxide (mg/L)	NS	MIS	NA**	61.7	84	268	220	356	242	460	NS	TBC from Alk	NA	23.5	220	160	194	140	212	DRY	DRY

TABLE 4  
 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
<b>INORGANICS (mg/L)</b>																					
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
Nitrate/Nitrite Nitrogen	0.063	NS	NA	NA	NA	ND	ND	NA	0.16	NA	<0.0500	NA	<0.100	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NA	NA	<0.05
Chloride	355	NS	85.6	NA	NA	208	NA	NA	1840	NA	3870	2180	2130	1860	1700	1200	1060	418	3500	1140	2240
Dissolved Organic Carbon	3.38	NS	141	NA	NA	15.7	NA	NA	173	NA	4.72 <sup>TOC</sup>	NA	4.7	5.69	5.19	7.3	6.88	7.91	4.82	9.17	5.7
Nitrate Nitrogen	0.063	NS	0.634	NA	NA	ND	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
Total Alkalinity	201	NS	167	NA	NA	259	NA	NA	575	NA	229	NA	270	289	296	349	402	359	231	439	318
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
Total Sulfide	ND	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
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
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
<b>HRC COMPONENTS (mg/L)</b>																					
Lactic Acid (C3)	ND	NS	NA	ND	34.3	8.7	ND	ND	D	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetic Acid (C2)	ND	NS	NA	ND	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
Propionic Acid (C3)	ND	NS	NA	ND	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
Pyruvic Acid (C3)	ND	NS	NA	ND	1.1	ND	2.4	ND	ND	<0.1	<0.1	<1.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5
Butyric Acid (C4)	ND	NS	NA	ND	8.2	ND	ND	ND	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
<b>FIELD PARAMETERS</b>																					
Dissolved Oxygen (mg/L)	0.3	0.01	MIS	0.27	1.07	0.49	2.18	0.46	0.38	0.4	3.39	NS	3.63	NA	1.19	2.85	1.39	DRY	DRY	DRY	DRY
Redox (mV)	-280	-205	MIS	-108	5	-196	-141	-131	-208	-36	211	NS	-106	NA	92	61	85	DRY	DRY	DRY	DRY
Conductivity (nS)	1.61	0.68	MIS	12.03	1.55	0.76	1.01	8.08	8.47	1.55	12.2	NS	7.73	NA	5.7	4.28	4.03	DRY	DRY	DRY	DRY
Iron, dissolved (mg/L)	ND	NA	MIS	0.2	ND	ND	0.5	0.9	2.8	1.8	1.8	NS	0.8	NA	1.5	0.2	0	0.9	0.8	0	2.4
Alkalinity (mg/L)	920	NA	MIS	200	210	320	360	280	960	440	260	NS	100	NA	150	400	360	340	180	500	400
Carbon Dioxide (mg/L)	34	NA	MIS	90	60	38	32.6	104	284	188	230	NS	TBC from Alk	NA	24	148	210	150	90	100	160

TABLE 4  
 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
<b>INORGANICS (mg/L)</b>																					
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
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
Chloride	246	NS	241	NA	NA	84.6	NA	NA	281	NA	310	366	347	360	382	434	505	523	522	493	476
Dissolved Organic Carbon	5.21	NS	26.7	NA	NA	34.7	NA	NA	284	NA	639 <sup>TOC</sup>	NA	903	545	190	167	87.4	59.6	54	14.3	13.9
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
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
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
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
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
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
<b>HRC COMPONENTS (mg/L)</b>																					
Lactic Acid (C3)	ND	NS	NA	ND	ND	ND	ND	ND	ND	23.8	<1.0	<1.0	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetic Acid (C2)	ND	NS	NA	ND	3.5	38.5	70.5	236	220	451	635	<1.0	400	660	120 D	150	75	79	87	7.8	7.7
Propionic Acid (C3)	ND	NS	NA	ND	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
Pyruvic Acid (C3)	ND	NS	NA	ND	ND	ND	ND	ND	<0.1	<0.1	<1.0	ND	<5.0	<0.5	<0.5	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5
Butyric Acid (C4)	ND	NS	NA	ND	ND	20.2	54.8	62.9	99.7	113	<2.0	ND	74	<2.0	<2.0	3.9	<2.0	<2.0	<2.0	<2.0	<2.0
<b>FIELD PARAMETERS</b>																					
Dissolved Oxygen (mg/L)	2.9	0.51	MIS	2.93	0.13	0.00	0.21	0.93	1.03	0.21	1.18	NS	0.41	NA	0.36	0.25	0	0.38	0	0	3.13
Redox (mV)	-264	-262	MIS	28	-103	-117	-196	-118	-121	-13	-164	NS	-145	NA	93	88	-105	-112	-124	-168	-160
Conductivity (mS)	0.64	0.98	MIS	0.33	2.79	0.1	0.93	1.06	1.38	2.83	2.93	NS	13.42	NA	2.9	3.36	3.24	2.99	3.06	2.27	2.27
Iron, dissolved (mg/L)	ND	NA	MIS	ND	ND	ND	ND	1.5	0.8	2.7	2.2	NS	2.8	NA	0.1	3	1	1.4	too turbid	1.5	0.5
Alkalinity (mg/L)	120	NA	MIS	75	54	220	200	140	440	1100	too turbid	NS	280	NA	No Reading	2300	1160	920	960	No Reading	820
Carbon Dioxide (mg/L)	27.2	NA	MIS	37.4	180	72	32.6	114	182	240	too turbid	NS	TBC from Alk	NA	200	802	800	600	too turbid	too turbid	336

TABLE 4  
 COOPERVISION INCORPORATED  
 ADDITIONAL ANALYTICAL  
 PARAMETER SUMMARY

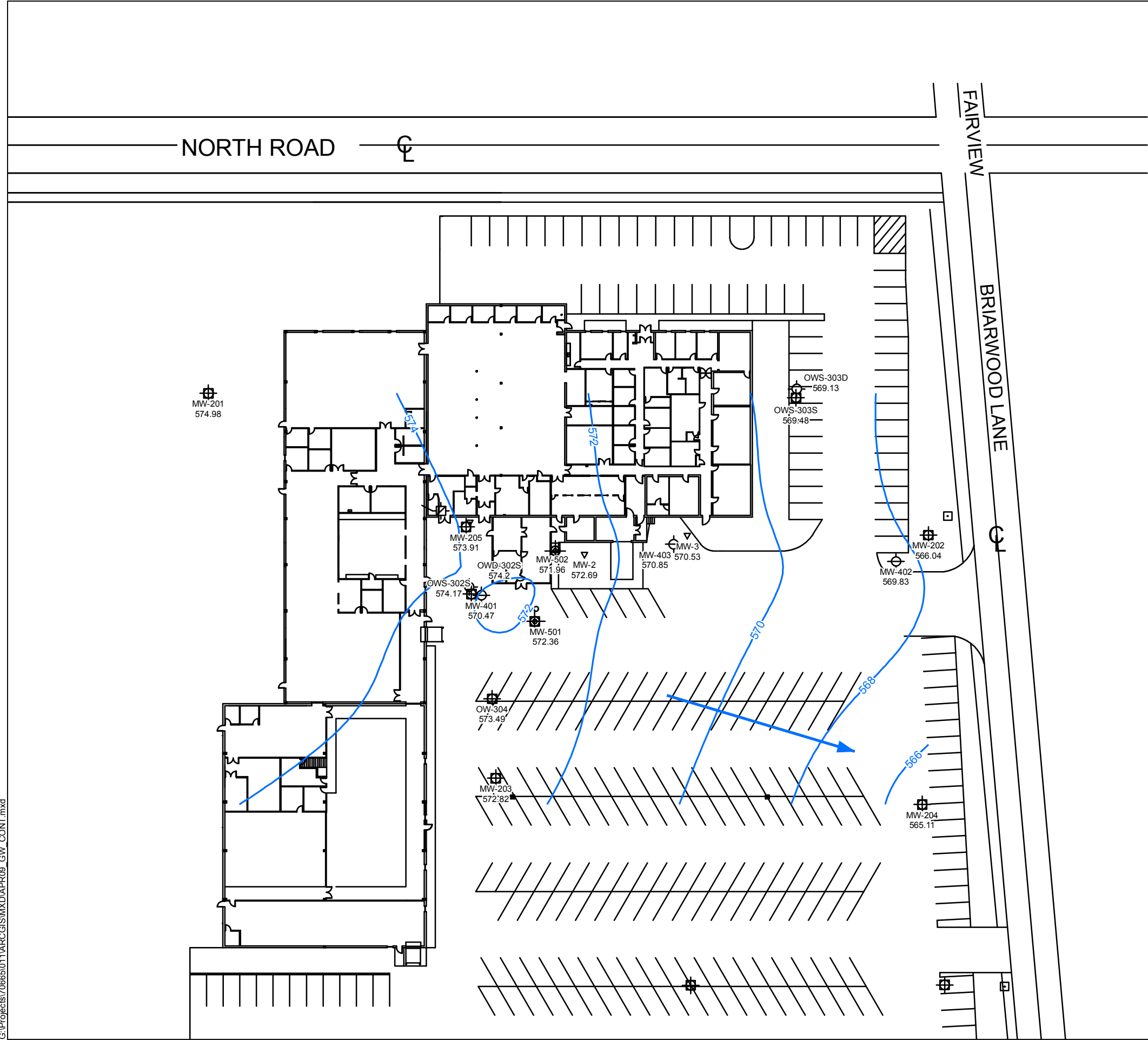
Sample ID	OWD-302-D																				
Analyte	7/19/01	9/26/01	10/18/01	1/28/02	4/9/02	7/29/02	10/15/02	1/28/03	4/7/03	10/30/03	4/8/04	10/27/04	4/6/05	10/12/05	5/16/06	10/17/06	4/24/07	11/15/07	4/30/08	10/16/08	4/23/09
<b>INORGANICS (mg/L)</b>																					
Nitrite Nitrogen	ND	NS	0.0823	NA	NA	0.0386	NA	NA	0.014	NA	0.104	NA	0.631	<0.0100	0.079	0.0318	0.0498	0.0397	<0.0100	2.74	<0.05
Nitrate/Nitrite Nitrogen	0.204	NS	NA	NA	NA	0.0571	NA	NA	0.181	NA	<0.0500	NA	0.226	<0.0500	<0.0500	0.283	0.0916	0.791	NA	NA	<0.05
Chloride	NA	NS	37.2	NA	NA	27	NA	NA	2750	NA	2930	1070	9050	567	756	8.54	8870	776	536	590	1830
Dissolved Organic Carbon	4.23	NS	16.8	NA	NA	4.64	NA	NA	290	NA	5.70 <sup>TOC</sup>	NA	4.35	4.62	10.3	4.97	9.26	6.98	9.44	11	4.9
Nitrate Nitrogen	NA	NS	ND	NA	NA	0	NA	NA	0.167	NA	<0.0500	<1.0	<0.0500	<0.0500	<0.0500	0.251	<0.0500	0.791	<0.500	2.74	<0.05
Total Alkalinity	NA	NS	NA	NA	NA	67	NA	NA	801	NA	50	NA	265	79.7	163	74.3	50	103	212	210	240
Sulfate	850	NS	740	NA	NA	634	NA	NA	219	NA	550	<2.0	249	491	367	7.42	256	160	202	161	153
Total Sulfide	ND	NS	ND	NA	NA	ND	NA	NA	7.96	NA	<1.00	<1.0	<1.0	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	2.64	<1.0
Total Iron	5.47	NS	2.9	NA	NA	0.858	NA	NA	177	NA	3.15	130	34.1	15	435	98.5	353	322	20.2	2.61	152
Total Manganese	0.0589	NS	NA	NA	NA	0.0504	NA	NA	3.85	NA	0.0429	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>HRC COMPONENTS (mg/L)</b>																					
Lactic Acid (C3)	ND	NS	NA	ND	ND	ND	ND	ND	ND	18.1	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetic Acid (C2)	ND	NS	NA	ND	ND	ND	ND	ND	344	<1.0	<1.0	1900	<1.0	<1.0	<1.0	<1.0	5.4	<1.0	12	<1.0	5.1
Propionic Acid (C3)	ND	NS	NA	ND	ND	ND	41.8	ND	ND	<1.0	<1.0	1100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pyruvic Acid (C3)	ND	NS	NA	ND	0.3	ND	ND	ND	ND	<1.0	<0.1	<25	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Butyric Acid (C4)	ND	NS	NA	ND	ND	ND	D	ND	22.7	<0.1	<1.0	500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<b>FIELD PARAMETERS</b>																					
Dissolved Oxygen (mg/L)	1.42	DRY	MIS	7.2*	*1.29	0.77	2.86	0.87	9.68	^3.98	5.03	NS	5.2	NA	2.38	0.95	1.3	DRY	DRY	DRY	DRY
Redox (mV)	-68	DRY	MIS	162*	*-23	-141	-70	84	-132	55	255	NS	-154	NA	61	-95	-78	DRY	DRY	DRY	DRY
Conductivity (mS)	1.58	DRY	MIS	1.1	1.34	1.13	0.25	2.81	NA	4.16	10.57	NS	30.4	NA	0.49	1.81	34.6	DRY	DRY	DRY	DRY
Iron, dissolved (mg/L)	ND	DRY	MIS	ND	ND	ND	4.4	ND	4.6	0.2	too turbid	NS	3.5	NA	too turbid	0.0	0.0	0.1	0.0	0.0	DRY
Alkalinity (mg/L)	120	DRY	MIS	85	100	100	1000	240	1200	160	too turbid	NS	360	NA	too turbid	160	200	680	280	380	DRY
Carbon Dioxide (mg/L)	20.8	DRY	MIS	49.8	50	40	268	26	2200	220	too turbid	NS	TBC from Alk	NA	too turbid	64	0	380	170	100	DRY











TABLE 4  
 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
<b>INORGANICS (mg/L)</b>																					
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
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
Chloride	NA	NS	1600	NA	NA	NA	NA	NA	2370	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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
Nitrate Nitrogen	NA	NS	ND	NA	NA	ND	NA	NA	0.119	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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
Sulfate	NA	NS	228	NA	NA	NS	NA	NA	407	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Sulfide	NA	NS	3	NA	NA	NS	NA	NA	2.49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Total Iron	NA	NS	NA	NA	NA	NS	NA	NA	260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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
<b>HRC COMPONENTS (mg/L)</b>																					
Lactic Acid (C3)	NA	NS	NA	ND	13.4	4.6	ND	ND	ND	<1.0	<1.0	<1.0	<10	<10	<10	<1.0	<1.0	<1.0	<5.0	NA	3.2
Acetic Acid (C2)	NA	NS	NA	ND	293	286	240	297	90.8	443	623	65	290	1000	890	100	110	190	910	NA	770
Propionic Acid (C3)	NA	NS	NA	ND	9.8	ND	ND	ND	ND	<1.0	<1.0	<1.0	<10	150	120	17	6	24	190	NA	220
Pyruvic Acid (C3)	NA	NS	NA	ND	0.5	1.4	ND	ND	ND	<0.1	<0.1	<1.0	<50	<5.0	<5.0	<0.5	<0.5	<0.5	<2.5	NA	<1.0
Butyric Acid (C4)	NA	NS	NA	ND	ND	ND	ND	ND	ND	<1.0	35.3	<2.0	23	100	77	14	7.9	9.8	88	NA	110
<b>FIELD PARAMETERS</b>																					
Dissolved Oxygen (mg/L)	DRY	DRY	MIS	NA	*1.74	1.24	2.23	*8.50	0.11	1.7	*6.88	NS	7.26	NA	NS	8.19	1.46	DRY	DRY	DRY	DRY
Redox (mV)	DRY	DRY	MIS	NA	*-59	-133	-122	-51	-158	9	78	NS	-62	NA	NS	38	-126	DRY	DRY	DRY	DRY
Conductivity (mS)	DRY	DRY	MIS	NA	6.45	0.94	4.22	5.03	5.03	4.43	7.86	NS	13.09	NA	NS	1.65	24.4	DRY	DRY	DRY	DRY
Iron, dissolved (mg/L)	ND	DRY	MIS	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	DRY
Alkalinity (mg/L)	640	DRY	MIS	580	600	720	820	520	NA	960	1200	NS	NA	NA	NS	720	520	320	1040	1160	DRY
Carbon Dioxide (mg/L)	DRY	DRY	MIS	NA	358	260	38	475	NA	730	390	NS	NA	NA	NS	320	234	Precip	600	264	DRY

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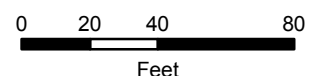
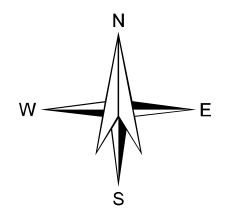


**LEGEND:**

-  SHALLOW GROUND WATER MONITORING WELL, INSTALLED BY NOTHNAGLE DRILLING, 22-23 MAY 1999, UNDER OBSERVATION OF HALEY & ALDRICH OF NEW YORK.
-  DEEP GROUND WATER MONITORING WELL, INSTALLED BY NOTHNAGLE DRILLING, 22-23 MAY 1999, UNDER OBSERVATION OF HALEY & ALDRICH OF NEW YORK.
-  ANGLE BORING COMPLETED BY NOTHNAGLE DRILLING 22 MAY 1999, UNDER OBSERVATION OF HALEY & ALDRICH OF NEW YORK.
-  MW-501 PROPOSED WELL LOCATION TO BE COMPLETED DURING HRC INJECTION.
-  MW-202 SUBSURFACE BORING AND WELL INSTALLED UNDER THE OBSERVATION OF HALEY & ALDRICH OF NEW YORK, JULY 1997.
-  MW-3 GEOPROBE EXPLORATION AND WELL INSTALLED UNDER THE OBSERVATION OF LABELLA ASSOCIATES.
-  MW-402 SUBSURFACE BORING & WELL INSTALLED BY NOTHNAGLE DRILLING, OCTOBER 1999, UNDER OBSERVATION OF HALEY & ALDRICH OF NEW YORK.
-  GROUNDWATER FLOW DIRECTION

**NOTES:**

1. PLAN BASED ON "ALTA/ASCM LAND TITLE SURVEY MAY" PREPARED BY RONALD W. STAUB LAND SURVEYORS, ROCHESTER, NEW YORK, DATED 17 DECEMBER 1996.
2. GROUNDWATER CONTOURS ARE BASED ON DATA COLLECTED ON 22 APRIL 2009.
3. EXPLORATION LOCATIONS ARE APPROXIMATE.



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

**GROUNDWATER CONTOUR PLAN**

SCALE: AS SHOWN  
SEPTEMBER 2009

**FIGURE 1**

May 13, 2009

Service Request No: R0902294

Susan Boyle  
Haley & Aldrich, Inc.  
200 Town Centre Drive  
Suite 2  
Rochester, NY 14623-4264

**Laboratory Results for: Coopervision/70665-013**

Dear Susan:

Enclosed are the results of the sample(s) submitted to our laboratory on April 24, 2009. For your reference, these analyses have been assigned our service request number **R0902294**.

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.

Please contact me if you have any questions. My extension is 134. You may also contact me via email at [KBunker@caslab.com](mailto:KBunker@caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Karen Bunker  
Project Manager

Page 1 of 78

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Haley & Aldrich of New York  
Project: Coopervision #70665-013 5/09  
Sample Matrix: Water

Service Request No.: R0902297  
Date Received: 4/24/09

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

Fourteen (14) water samples were collected on 4/22-24/09 by H&A and received for analysis at Columbia Analytical Services on 4/24/09. 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 6-7°C. Temperature guidelines are 0-6°C. The client was notified of the exceedence on the Sample Receipt Acknowledgement sent via PDF on 4/27/09. It is also noted on the Cooler Preservation Form in the report.

General Chemistry Parameters & Metals

Five (5) water samples were analyzed for a client specific list of Anion and Cation parameters: Chloride, Sulfate, Total Alkalinity, Nitrate, Nitrite, Sulfide, Ferrous Iron, Total Iron and Dissolved Organic Carbon (DOC). The DOC samples were filtered in the laboratory. The Nitrate/Nitrite analysis and Nitrite analysis was run by alternative method 353.2 instead of IC method 9056 due to the receipt time/holding time for these analyses. The holding times were met for the alternative methods.

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

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

Four (4) of the 5 Ferrous Iron samples were received and analyzed within the 24 hour holding time for this analysis. One location, OWD-302D (CAS #R0902297-012) was received outside of the holding time guidelines and analyzed upon receipt. The same location was analyzed outside the 7 day holding time for Sulfide analysis due to a laboratory error. It was analyzed on the 8<sup>th</sup> day from collection. All other analytes were analyzed within the proper holding times.

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

Batch QC is included in the report. All Blank Spike 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

5/13/09

Volatile Organic Compounds

Thirteen (13) water samples and one (1) Trip Blank were analyzed for the TCL of Volatile Organics by GC/MS Method 8260B from SW-846. Six (6) water samples were analyzed for Dissolved Gases by modified GC Method RSK-175. Six (6) waters were analyzed for Metabolic Acids by HPLC methodology.

All Initial and Continuing Calibration Criteria was met for the analytical runs.

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

Hits below the Method Reporting Limit (MRL) have been flagged as "J", estimated.

All surrogate recoveries were within acceptance limits.

All samples were analyzed within the appropriate holding times. All vials are checked for preservation after analysis. All samples were found to be preserved to a pH of <2 or the sample analyzed within 7 days from collection for unpreserved aliquots.

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

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

Semivolatile Organic Compounds

Three (3) water samples were analyzed for 1,4 Dioxane by GC/MS method 8270.

All Initial and Continuing Calibration Criteria was met for the analytical runs.

Batch QC is included in the report. All Laboratory Control Samples (LCS) and Blank Spike/ Blank Spike Duplicate (BS/BSD) recoveries were within QC acceptance limits.

All surrogate recoveries were within acceptance limits except for MW-205 and MW-3 (CAS # R0902294-004 &-009) which were diluted out and flagged as "\*" and "D". MW-205 required a dilution due to high levels of non-target compounds in the sample.

All samples were extracted and analyzed within the appropriate holding times. .

The Laboratory Method Blanks were free from contamination.

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

Approved by Kevin Benke Date 5/13/09

## CASE NARRATIVE

This report contains analytical results for the following samples:  
Service Request Number: R0902294

<u>Lab ID</u>	<u>Client ID</u>
R0902294-001	MW-202
R0902294-002	MW-203
R0902294-003	MW-204
R0902294-004	MW-205
R0902294-005	MW-2
R0902294-006	MW-304
R0902294-007	MW-401
R0902294-008	MW-402
R0902294-009	MW-3
R0902294-010	MW-501
R0902294-011	MW-502
R0902294-012	OWD-302D
R0902294-013	OWS-302S
R0902294-014	Trip Blank



## REPORT QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds, or when the concentration is less than the reporting limit and greater than the MDL (concentrations are not verified within the initial calibration range).  

For DoD reports, the J-flag may also be used to indicate that the concentration between two columns for pesticides/Aroclors is greater than 40% difference.
- B - Indicates this compound was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- B- Metals - Indicates an estimated value. The concentration is less than the reporting limit and greater than the MDL (concentrations are not verified within the initial calibration range).
- E - Indicates that the sample concentration had exceeded the calibration range for that specific analysis.
- D - Indicates the sample concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range.
- \* - Indicates that a quality control parameter has exceeded laboratory limits.
- X - See Case Narrative for discussion.
- P - This flag is used for a pesticide/Aroclor target concentration when there is a greater than 40% (25% for CLP) difference for detected concentrations between the two GC columns.  

For DoD reports, the J-flag is used instead of "P".
- N - Inorganics- Indicates the matrix spike recovery was outside laboratory limits.
- N- Organics- Indicates presumptive evidence of a compound (reported as a tentatively identified compound) based on the mass spectral library search.



### **CAS/Rochester Lab ID # for State Certifications<sup>1</sup>**

NELAP Accredited	Nevada ID # NY-00032
Delaware Accredited	New Jersey ID # NY004
Connecticut ID # PH0556	New York ID # 10145
Florida ID # E87674	New Hampshire ID # 294100 A/B
Illinois ID #200047	Pennsylvania ID# 68-786
Maine ID #NY0032	Rhode Island ID # 158
Nebraska Accredited	West Virginia ID # 292
Navy Facilities Engineering Service Center Approved	

<sup>1</sup> 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](http://www.caslab.com).

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-202  
**Lab Code:** R0902294-001

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1505  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 13:05		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 13:05		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 13:05		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,1-Dichloroethane	9.3		5.0	1	NA	5/5/09 13:05		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,1-Dichloroethene	5.0		5.0	1	NA	5/5/09 13:05		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
2-Hexanone	10	U	10	1	NA	5/5/09 13:05		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 13:05		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 13:05		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 13:05		152379

**Comments:**

00006



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-202  
**Lab Code:** R0902294-001

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1505  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 13:05		152379
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 13:05		152379

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	109	80-123	5/5/09 13:05		
Toluene-d8	96	88-124	5/5/09 13:05		
Dibromofluoromethane	106	89-115	5/5/09 13:05		

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-203  
**Lab Code:** R0902294-002

**Service Request:** R0902294  
**Date Collected:** 4/22/09 1604  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 13:33		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 13:33		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 13:33		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,1-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
2-Hexanone	10	U	10	1	NA	5/5/09 13:33		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 13:33		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 13:33		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 13:33		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 13:33		152379

**Comments:**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-203  
**Lab Code:** R0902294-002

**Service Request:** R0902294  
**Date Collected:** 4/22/09 1604  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 13:33	152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 13:33	152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	80-123	5/5/09 13:33		
Toluene-d8	96	88-124	5/5/09 13:33		
Dibromofluoromethane	103	89-115	5/5/09 13:33		

**Comments:**

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-204  
**Lab Code:** R0902294-003

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1315  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 14:01	152379	
Benzene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Bromoform	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Bromomethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 14:01	152379	
Carbon Disulfide	10	U	10	1	NA	5/5/09 14:01	152379	
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Chloroethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Chloroform	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Chloromethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,1-Dichloroethane	5.6		5.0	1	NA	5/5/09 14:01	152379	
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
2-Hexanone	10	U	10	1	NA	5/5/09 14:01	152379	
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 14:01	152379	
Styrene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Toluene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 14:01	152379	
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 14:01	152379	

**Comments:**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-204  
**Lab Code:** R0902294-003

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1315  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 14:01		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 14:01		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	5/5/09 14:01		
Toluene-d8	95	88-124	5/5/09 14:01		
Dibromofluoromethane	106	89-115	5/5/09 14:01		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-204  
**Lab Code:** R0902294-003

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1315  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Low Level Semivolatile Organic Compounds by GC/MS**

**Analytical Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,4-Dioxane	22		0.94	5	4/28/09	4/30/09 14:18	86422	152039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
2-Fluorobiphenyl	83	27-114	4/30/09 14:18		
Nitrobenzene-d5	83	22-124	4/30/09 14:18		
p-Terphenyl-d14	83	23-139	4/30/09 14:18		

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09

**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	2350		mg/L	40	1	NA	4/28/09 16:31
Carbon, Dissolved Organic (DOC)	9060	2040		mg/L	100	100	NA	5/7/09 20:22
Carbon, Dissolved Organic (DOC)	9060	2100		mg/L	100	100	NA	5/7/09 20:30
Carbon, Dissolved Organic (DOC)	9060	2210		mg/L	100	100	NA	5/7/09 20:38
Carbon, Dissolved Organic (DOC)	9060	2220		mg/L	100	100	NA	5/7/09 20:47
Chloride	9056	705		mg/L	20	100	NA	5/6/09 22:41
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	5.0	U	mg/L	5.0	50	NA	4/24/09 17:10
Nitrate as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	5/1/09 14:07
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	4/24/09 17:14
Sulfate	9056	5.7		mg/L	2.0	10	NA	5/5/09 07:35
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	5/ 1/09	5/1/09 08:30

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated  
Project: Coopervision/70665-013  
Sample Matrix: Water  
Sample Name: MW-205  
Lab Code: R0902294-004

Service Request: R0902294  
Date Collected: 4/24/09 1355  
Date Received: 4/24/09

Basis: NA

Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	89800	µg/L	100	1	4/28/09	5/1/09 09:05

Comments:

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	40000	U	40000	2000	NA	5/5/09 14:29	152379	
Benzene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Bromodichloromethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Bromoform	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Bromomethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
2-Butanone (MEK)	20000	U	20000	2000	NA	5/5/09 14:29	152379	
Carbon Disulfide	20000	U	20000	2000	NA	5/5/09 14:29	152379	
Carbon Tetrachloride	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Chlorobenzene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Chloroethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Chloroform	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Chloromethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Dibromochloromethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
1,1-Dichloroethane	<b>200000</b>		10000	2000	NA	5/5/09 14:29	152379	
1,2-Dichloroethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
1,1-Dichloroethene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
cis-1,2-Dichloroethene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
trans-1,2-Dichloroethene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
1,2-Dichloropropane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
cis-1,3-Dichloropropene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
trans-1,3-Dichloropropene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Ethylbenzene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
2-Hexanone	20000	U	20000	2000	NA	5/5/09 14:29	152379	
Methylene Chloride	10000	U	10000	2000	NA	5/5/09 14:29	152379	
4-Methyl-2-pentanone (MIBK)	20000	U	20000	2000	NA	5/5/09 14:29	152379	
Styrene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
1,1,2,2-Tetrachloroethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Tetrachloroethene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Toluene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
1,1,1-Trichloroethane	<b>48000</b>		10000	2000	NA	5/5/09 14:29	152379	
1,1,2-Trichloroethane	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Trichloroethene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
Vinyl Chloride	10000	U	10000	2000	NA	5/5/09 14:29	152379	

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Note
o-Xylene	10000	U	10000	2000	NA	5/5/09 14:29	152379	
m,p-Xylenes	10000	U	10000	2000	NA	5/5/09 14:29	152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	105	80-123	5/5/09 14:29		
Toluene-d8	93	88-124	5/5/09 14:29		
Dibromofluoromethane	101	89-115	5/5/09 14:29		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Low Level Semivolatile Organic Compounds by GC/MS**

**Analytical Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
1,4-Dioxane	7.5	U	7.5	20	4/28/09	4/30/09 14:57	86422	152039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
Nitrobenzene-d5	0	*	22-124	4/30/09 14:57	D
p-Terphenyl-d14	0	*	23-139	4/30/09 14:57	D

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Ethane	20		1.0	1	NA	4/28/09 14:51	151421	
Ethylene	15		1.0	1	NA	4/28/09 14:51	151421	
Methane	14		2.0	1	NA	4/28/09 14:51	151421	
Propane	1.0	U	1.0	1	NA	4/28/09 14:51	151421	

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-205  
**Lab Code:** R0902294-004

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1355  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Pyruvic Acid	2.5	U	2.5	5	NA	5/6/09 11:12			152527
Acetic Acid	270		5.0	5	NA	5/6/09 11:12			152527
Butyric Acid	1900		10	5	NA	5/6/09 11:12			152527
Lactic Acid	5.0	U	5.0	5	NA	5/6/09 11:12			152527
Propionic Acid	900		5.0	5	NA	5/6/09 11:12			152527

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

Client: Haley & Aldrich, Incorporated  
 Project: Coopervision/70665-013  
 Sample Matrix: Water  
 Sample Name: MW-2  
 Lab Code: R0902294-005

Service Request: R0902294  
 Date Collected: 4/24/09 1130  
 Date Received: 4/24/09

Units: µg/L  
 Basis: NA

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Acetone	20	U	20	1.2	1	NA	5/5/09 14:56		152379	
Benzene	5.0	U	5.0	0.42	1	NA	5/5/09 14:56		152379	
Bromodichloromethane	5.0	U	5.0	0.84	1	NA	5/5/09 14:56		152379	
Bromoform	5.0	U	5.0	0.32	1	NA	5/5/09 14:56		152379	
Bromomethane	5.0	U	5.0	0.58	1	NA	5/5/09 14:56		152379	
2-Butanone (MEK)	10	U	10	1.0	1	NA	5/5/09 14:56		152379	
Carbon Disulfide	10	U	10	0.52	1	NA	5/5/09 14:56		152379	
Carbon Tetrachloride	5.0	U	5.0	0.36	1	NA	5/5/09 14:56		152379	
Chlorobenzene	5.0	U	5.0	0.44	1	NA	5/5/09 14:56		152379	
Chloroethane	9.4		5.0	0.36	1	NA	5/5/09 14:56		152379	
Chloroform	5.0	U	5.0	0.22	1	NA	5/5/09 14:56		152379	
Chloromethane	5.0	U	5.0	0.96	1	NA	5/5/09 14:56		152379	
Dibromochloromethane	5.0	U	5.0	0.43	1	NA	5/5/09 14:56		152379	
1,1-Dichloroethane	4.1	J	5.0	0.64	1	NA	5/5/09 14:56		152379	
1,2-Dichloroethane	5.0	U	5.0	0.42	1	NA	5/5/09 14:56		152379	
1,1-Dichloroethene	5.0	U	5.0	0.59	1	NA	5/5/09 14:56		152379	
cis-1,2-Dichloroethene	5.0	U	5.0	0.48	1	NA	5/5/09 14:56		152379	
trans-1,2-Dichloroethene	5.0	U	5.0	0.45	1	NA	5/5/09 14:56		152379	
1,2-Dichloropropane	5.0	U	5.0	0.36	1	NA	5/5/09 14:56		152379	
cis-1,3-Dichloropropene	5.0	U	5.0	0.38	1	NA	5/5/09 14:56		152379	
trans-1,3-Dichloropropene	5.0	U	5.0	0.25	1	NA	5/5/09 14:56		152379	
Ethylbenzene	5.0	U	5.0	0.43	1	NA	5/5/09 14:56		152379	
2-Hexanone	10	U	10	0.78	1	NA	5/5/09 14:56		152379	
Methylene Chloride	5.0	U	5.0	0.50	1	NA	5/5/09 14:56		152379	
4-Methyl-2-pentanone (MIBK)	10	U	10	0.71	1	NA	5/5/09 14:56		152379	
Styrene	5.0	U	5.0	0.37	1	NA	5/5/09 14:56		152379	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.44	1	NA	5/5/09 14:56		152379	
Tetrachloroethene	0.51	J	5.0	0.43	1	NA	5/5/09 14:56		152379	
Toluene	5.0	U	5.0	0.42	1	NA	5/5/09 14:56		152379	
1,1,1-Trichloroethane	5.9		5.0	0.45	1	NA	5/5/09 14:56		152379	
1,1,2-Trichloroethane	5.0	U	5.0	0.45	1	NA	5/5/09 14:56		152379	
Trichloroethene	5.0	U	5.0	0.63	1	NA	5/5/09 14:56		152379	
Vinyl Chloride	3.0	J	5.0	0.52	1	NA	5/5/09 14:56		152379	

Comments:

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-2  
**Lab Code:** R0902294-005

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1130  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 14:56		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 14:56		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	107	80-123	5/5/09 14:56		
Toluene-d8	93	88-124	5/5/09 14:56		
Dibromofluoromethane	104	89-115	5/5/09 14:56		

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-304  
**Lab Code:** R0902294-006

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1558  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 15:24		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 15:24		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 15:24		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,1-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
2-Hexanone	10	U	10	1	NA	5/5/09 15:24		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 15:24		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 15:24		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 15:24		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 15:24		152379

**Comments:**



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-304  
**Lab Code:** R0902294-006

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1558  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 15:24		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 15:24		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	104	80-123	5/5/09 15:24		
Toluene-d8	92	88-124	5/5/09 15:24		
Dibromofluoromethane	102	89-115	5/5/09 15:24		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-401  
**Lab Code:** R0902294-007

**Service Request:** R0902294  
**Date Collected:** 4/22/09 1345  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Acetone	20	U	20	1	NA	5/5/09 15:52		152379	
Benzene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Bromoform	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Bromomethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 15:52		152379	
Carbon Disulfide	10	U	10	1	NA	5/5/09 15:52		152379	
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Chloroethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Chloroform	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Chloromethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,1-Dichloroethane	94		5.0	1	NA	5/5/09 15:52		152379	
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
2-Hexanone	10	U	10	1	NA	5/5/09 15:52		152379	
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 15:52		152379	
Styrene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Toluene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 15:52		152379	
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 15:52		152379	

**Comments:**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-401  
**Lab Code:** R0902294-007

**Service Request:** R0902294  
**Date Collected:** 4/22/09 1345  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 15:52		152379
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 15:52		152379

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	105	80-123	5/5/09 15:52		
Toluene-d8	93	88-124	5/5/09 15:52		
Dibromofluoromethane	102	89-115	5/5/09 15:52		

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-402  
**Lab Code:** R0902294-008

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1410  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 16:23		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 16:23		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 16:23		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,1-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
2-Hexanone	10	U	10	1	NA	5/5/09 16:23		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 16:23		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 16:23		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 16:23		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 16:23		152379

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-402  
**Lab Code:** R0902294-008

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1410  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 16:23		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 16:23		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	100	80-123	5/5/09 16:23		
Toluene-d8	89	88-124	5/5/09 16:23		
Dibromofluoromethane	97	89-115	5/5/09 16:23		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 08:18  
**Date Received:** 4/24/09

**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO <sub>3</sub> , Total	SM 2320 B	242	mg/L	20	1	NA	4/28/09 10:36
Carbon, Dissolved Organic (DOC)	9060	7.0	mg/L	1.0	1	NA	5/8/09 04:23
Carbon, Dissolved Organic (DOC)	9060	6.0	mg/L	1.0	1	NA	5/8/09 04:31
Carbon, Dissolved Organic (DOC)	9060	6.2	mg/L	1.0	1	NA	5/8/09 04:39
Carbon, Dissolved Organic (DOC)	9060	5.8	mg/L	1.0	1	NA	5/8/09 04:48
Chloride	9056	288	mg/L	20	100	NA	5/6/09 22:55
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.32	mg/L	0.10	1	NA	4/24/09 17:10
Nitrate as Nitrogen	353.2	0.050 U	mg/L	0.050	1	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.050 U	mg/L	0.050	1	NA	5/1/09 14:08
Nitrite as Nitrogen	353.2	0.010 U	mg/L	0.010	1	NA	4/24/09 17:17
Sulfate	9056	2.0 U	mg/L	2.0	10	NA	5/5/09 07:52
Sulfide, Acid-Soluble	9034	1.0 U	mg/L	1.0	1	5/ 1/09	5/1/09 08:30

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0818  
**Date Received:** 4/24/09

**Basis:** NA

Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	36400	µg/L	100	1	4/28/09	5/1/09 09:35

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated  
 Project: Coopervision/70665-013  
 Sample Matrix: Water  
 Sample Name: MW-3  
 Lab Code: R0902294-009

Service Request: R0902294  
 Date Collected: 4/24/09 0818  
 Date Received: 4/24/09  
 Units: µg/L  
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Acetone	400	U	400	20	NA	5/5/09 16:51		152379	
Benzene	100	U	100	20	NA	5/5/09 16:51		152379	
Bromodichloromethane	100	U	100	20	NA	5/5/09 16:51		152379	
Bromoform	100	U	100	20	NA	5/5/09 16:51		152379	
Bromomethane	100	U	100	20	NA	5/5/09 16:51		152379	
2-Butanone (MEK)	200	U	200	20	NA	5/5/09 16:51		152379	
Carbon Disulfide	200	U	200	20	NA	5/5/09 16:51		152379	
Carbon Tetrachloride	100	U	100	20	NA	5/5/09 16:51		152379	
Chlorobenzene	100	U	100	20	NA	5/5/09 16:51		152379	
Chloroethane	3100		100	20	NA	5/5/09 16:51		152379	
Chloroform	100	U	100	20	NA	5/5/09 16:51		152379	
Chloromethane	100	U	100	20	NA	5/5/09 16:51		152379	
Dibromochloromethane	100	U	100	20	NA	5/5/09 16:51		152379	
1,1-Dichloroethane	380		100	20	NA	5/5/09 16:51		152379	
1,2-Dichloroethane	100	U	100	20	NA	5/5/09 16:51		152379	
1,1-Dichloroethene	100	U	100	20	NA	5/5/09 16:51		152379	
cis-1,2-Dichloroethene	100	U	100	20	NA	5/5/09 16:51		152379	
trans-1,2-Dichloroethene	100	U	100	20	NA	5/5/09 16:51		152379	
1,2-Dichloropropane	100	U	100	20	NA	5/5/09 16:51		152379	
cis-1,3-Dichloropropene	100	U	100	20	NA	5/5/09 16:51		152379	
trans-1,3-Dichloropropene	100	U	100	20	NA	5/5/09 16:51		152379	
Ethylbenzene	100	U	100	20	NA	5/5/09 16:51		152379	
2-Hexanone	200	U	200	20	NA	5/5/09 16:51		152379	
Methylene Chloride	100	U	100	20	NA	5/5/09 16:51		152379	
4-Methyl-2-pentanone (MIBK)	200	U	200	20	NA	5/5/09 16:51		152379	
Styrene	100	U	100	20	NA	5/5/09 16:51		152379	
1,1,2,2-Tetrachloroethane	100	U	100	20	NA	5/5/09 16:51		152379	
Tetrachloroethene	100	U	100	20	NA	5/5/09 16:51		152379	
Toluene	100	U	100	20	NA	5/5/09 16:51		152379	
1,1,1-Trichloroethane	100	U	100	20	NA	5/5/09 16:51		152379	
1,1,2-Trichloroethane	100	U	100	20	NA	5/5/09 16:51		152379	
Trichloroethene	100	U	100	20	NA	5/5/09 16:51		152379	
Vinyl Chloride	690		100	20	NA	5/5/09 16:51		152379	

Comments:

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0818  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
o-Xylene	100	U	100	20	NA	5/5/09 16:51		152379
m,p-Xylenes	100	U	100	20	NA	5/5/09 16:51		152379

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	5/5/09 16:51		
Toluene-d8	95	88-124	5/5/09 16:51		
Dibromofluoromethane	107	89-115	5/5/09 16:51		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0818  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Low Level Semivolatile Organic Compounds by GC/MS**

**Analytical Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,4-Dioxane	75		3.8	20	4/28/09	4/30/09 16:55	86422	152039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
2-Fluorobiphenyl	0	* 27-114	4/30/09 16:55	D	
Nitrobenzene-d5	0	* 22-124	4/30/09 16:55	D	
p-Terphenyl-d14	0	* 23-139	4/30/09 16:55	D	

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0818  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Ethane	20	U	20	20	NA	4/29/09 13:27			151694
Ethylene	20	U	20	20	NA	4/29/09 13:27			151694
Methane	1000		40	20	NA	4/29/09 13:27			151694
Propane	20	U	20	20	NA	4/29/09 13:27			151694

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-3  
**Lab Code:** R0902294-009

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0818  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Pyruvic Acid	0.50	U	0.50	1	NA	5/6/09 12:15	152527	
Acetic Acid	<b>12</b>		1.0	1	NA	5/6/09 12:15	152527	
Butyric Acid	2.0	U	2.0	1	NA	5/6/09 12:15	152527	
Lactic Acid	1.0	U	1.0	1	NA	5/6/09 12:15	152527	
Propionic Acid	1.0	U	1.0	1	NA	5/6/09 12:15	152527	

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-501  
**Lab Code:** R0902294-010

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0846  
**Date Received:** 4/24/09

**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	318		mg/L	20	1	NA	4/28/09 10:36
Carbon, Dissolved Organic (DOC)	9060	5.1		mg/L	1.0	1	NA	5/6/09 23:35
Carbon, Dissolved Organic (DOC)	9060	5.2		mg/L	1.0	1	NA	5/6/09 23:43
Carbon, Dissolved Organic (DOC)	9060	5.3		mg/L	1.0	1	NA	5/6/09 23:53
Carbon, Dissolved Organic (DOC)	9060	5.7		mg/L	1.0	1	NA	5/6/09 23:27
Chloride	9056	2240		mg/L	80	400	NA	5/7/09 17:25
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.66		mg/L	0.10	1	NA	4/24/09 17:10
Nitrate as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	5/1/09 14:09
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	4/24/09 17:17
Sulfate	9056	9.4		mg/L	2.0	10	NA	5/5/09 08:10
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	5/ 1/09	5/1/09 08:30

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-501  
**Lab Code:** R0902294-010

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0846  
**Date Received:** 4/24/09

**Basis:** NA

**Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry**

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	8890	µg/L	100	1	4/28/09	5/1/09 09:41

**Comments:** \_\_\_\_\_

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

Client: Haley & Aldrich, Incorporated  
 Project: Coopervision/70665-013  
 Sample Matrix: Water  
 Sample Name: MW-501  
 Lab Code: R0902294-010

Service Request: R0902294  
 Date Collected: 4/24/09 0846  
 Date Received: 4/24/09

Units: µg/L  
 Basis: NA

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Acetone	100	U	100	5	NA	5/5/09 17:19		152379	
Benzene	25	U	25	5	NA	5/5/09 17:19		152379	
Bromodichloromethane	25	U	25	5	NA	5/5/09 17:19		152379	
Bromoform	25	U	25	5	NA	5/5/09 17:19		152379	
Bromomethane	25	U	25	5	NA	5/5/09 17:19		152379	
2-Butanone (MEK)	50	U	50	5	NA	5/5/09 17:19		152379	
Carbon Disulfide	50	U	50	5	NA	5/5/09 17:19		152379	
Carbon Tetrachloride	25	U	25	5	NA	5/5/09 17:19		152379	
Chlorobenzene	25	U	25	5	NA	5/5/09 17:19		152379	
Chloroethane	610		25	5	NA	5/5/09 17:19		152379	
Chloroform	25	U	25	5	NA	5/5/09 17:19		152379	
Chloromethane	25	U	25	5	NA	5/5/09 17:19		152379	
Dibromochloromethane	25	U	25	5	NA	5/5/09 17:19		152379	
1,1-Dichloroethane	170		25	5	NA	5/5/09 17:19		152379	
1,2-Dichloroethane	25	U	25	5	NA	5/5/09 17:19		152379	
1,1-Dichloroethene	25	U	25	5	NA	5/5/09 17:19		152379	
cis-1,2-Dichloroethene	25	U	25	5	NA	5/5/09 17:19		152379	
trans-1,2-Dichloroethene	25	U	25	5	NA	5/5/09 17:19		152379	
1,2-Dichloropropane	25	U	25	5	NA	5/5/09 17:19		152379	
cis-1,3-Dichloropropene	25	U	25	5	NA	5/5/09 17:19		152379	
trans-1,3-Dichloropropene	25	U	25	5	NA	5/5/09 17:19		152379	
Ethylbenzene	25	U	25	5	NA	5/5/09 17:19		152379	
2-Hexanone	50	U	50	5	NA	5/5/09 17:19		152379	
Methylene Chloride	25	U	25	5	NA	5/5/09 17:19		152379	
4-Methyl-2-pentanone (MIBK)	50	U	50	5	NA	5/5/09 17:19		152379	
Styrene	25	U	25	5	NA	5/5/09 17:19		152379	
1,1,2,2-Tetrachloroethane	25	U	25	5	NA	5/5/09 17:19		152379	
Tetrachloroethene	25	U	25	5	NA	5/5/09 17:19		152379	
Toluene	25	U	25	5	NA	5/5/09 17:19		152379	
1,1,1-Trichloroethane	25	U	25	5	NA	5/5/09 17:19		152379	
1,1,2-Trichloroethane	25	U	25	5	NA	5/5/09 17:19		152379	
Trichloroethene	25	U	25	5	NA	5/5/09 17:19		152379	
Vinyl Chloride	71		25	5	NA	5/5/09 17:19		152379	

Comments:

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-501  
**Lab Code:** R0902294-010

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0846  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
o-Xylene	25	U	25	5	NA	5/5/09 17:19		152379
m,p-Xylenes	25	U	25	5	NA	5/5/09 17:19		152379

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	110	80-123	5/5/09 17:19		
Toluene-d8	98	88-124	5/5/09 17:19		
Dibromofluoromethane	109	89-115	5/5/09 17:19		

**Comments:** \_\_\_\_\_



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated  
 Project: Coopervision/70665-013  
 Sample Matrix: Water  
 Sample Name: MW-501  
 Lab Code: R0902294-010

Service Request: R0902294  
 Date Collected: 4/24/09 0846  
 Date Received: 4/24/09  
 Units: µg/L  
 Basis: NA

Dissolved Gases by GC/FID

Analytical Method: RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Ethane	250	U	250	250	NA	4/29/09 13:51	151694	
Ethylene	250	U	250	250	NA	4/29/09 13:51	151694	
Methane	15000		500	250	NA	4/29/09 13:51	151694	
Propane	250	U	250	250	NA	4/29/09 13:51	151694	

Comments:



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-501  
**Lab Code:** R0902294-010

**Service Request:** R0902294  
**Date Collected:** 4/24/09 0846  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Pyruvic Acid	0.50	U	0.50	1	NA	5/6/09 13:17		152527	
Acetic Acid	1.0	U	1.0	1	NA	5/6/09 13:17		152527	
Butyric Acid	2.0	U	2.0	1	NA	5/6/09 13:17		152527	
Lactic Acid	1.0	U	1.0	1	NA	5/6/09 13:17		152527	
Propionic Acid	1.0	U	1.0	1	NA	5/6/09 13:17		152527	

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09

**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO3, Total	SM 2320 B	742		mg/L	20	1	NA	4/28/09 10:36
Carbon, Dissolved Organic (DOC)	9060	10.6		mg/L	1.0	1	NA	5/7/09 00:10
Carbon, Dissolved Organic (DOC)	9060	11.8		mg/L	1.0	1	NA	5/7/09 00:18
Carbon, Dissolved Organic (DOC)	9060	12.5		mg/L	1.0	1	NA	5/7/09 00:27
Carbon, Dissolved Organic (DOC)	9060	13.9		mg/L	1.0	1	NA	5/7/09 00:01
Chloride	9056	476		mg/L	20	100	NA	5/6/09 23:23
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	2.40		mg/L	0.10	1	NA	4/24/09 17:10
Nitrate as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	5/1/09 14:13
Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	5	NA	4/24/09 17:50
Sulfate	9056	2.0	U	mg/L	2.0	10	NA	5/5/09 08:27
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	5/ 1/09	5/1/09 08:30

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09

**Basis:** NA

Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	987000	µg/L	2000	20	4/28/09	5/5/09 10:39

Comments:

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09

**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis	
								Lot	Note
Acetone	1000	U	1000	50	NA	5/5/09 17:46		152379	
Benzene	250	U	250	50	NA	5/5/09 17:46		152379	
Bromodichloromethane	250	U	250	50	NA	5/5/09 17:46		152379	
Bromoform	250	U	250	50	NA	5/5/09 17:46		152379	
Bromomethane	250	U	250	50	NA	5/5/09 17:46		152379	
2-Butanone (MEK)	500	U	500	50	NA	5/5/09 17:46		152379	
Carbon Disulfide	500	U	500	50	NA	5/5/09 17:46		152379	
Carbon Tetrachloride	250	U	250	50	NA	5/5/09 17:46		152379	
Chlorobenzene	250	U	250	50	NA	5/5/09 17:46		152379	
Chloroethane	7800		250	50	NA	5/5/09 17:46		152379	
Chloroform	250	U	250	50	NA	5/5/09 17:46		152379	
Chloromethane	250	U	250	50	NA	5/5/09 17:46		152379	
Dibromochloromethane	250	U	250	50	NA	5/5/09 17:46		152379	
1,1-Dichloroethane	250	U	250	50	NA	5/5/09 17:46		152379	
1,2-Dichloroethane	250	U	250	50	NA	5/5/09 17:46		152379	
1,1-Dichloroethene	250	U	250	50	NA	5/5/09 17:46		152379	
cis-1,2-Dichloroethene	250	U	250	50	NA	5/5/09 17:46		152379	
trans-1,2-Dichloroethene	250	U	250	50	NA	5/5/09 17:46		152379	
1,2-Dichloropropane	250	U	250	50	NA	5/5/09 17:46		152379	
cis-1,3-Dichloropropene	250	U	250	50	NA	5/5/09 17:46		152379	
trans-1,3-Dichloropropene	250	U	250	50	NA	5/5/09 17:46		152379	
Ethylbenzene	250	U	250	50	NA	5/5/09 17:46		152379	
2-Hexanone	500	U	500	50	NA	5/5/09 17:46		152379	
Methylene Chloride	250	U	250	50	NA	5/5/09 17:46		152379	
4-Methyl-2-pentanone (MIBK)	500	U	500	50	NA	5/5/09 17:46		152379	
Styrene	250	U	250	50	NA	5/5/09 17:46		152379	
1,1,2,2-Tetrachloroethane	250	U	250	50	NA	5/5/09 17:46		152379	
Tetrachloroethene	250	U	250	50	NA	5/5/09 17:46		152379	
Toluene	250	U	250	50	NA	5/5/09 17:46		152379	
1,1,1-Trichloroethane	250	U	250	50	NA	5/5/09 17:46		152379	
1,1,2-Trichloroethane	250	U	250	50	NA	5/5/09 17:46		152379	
Trichloroethene	250	U	250	50	NA	5/5/09 17:46		152379	
Vinyl Chloride	250	U	250	50	NA	5/5/09 17:46		152379	

**Comments:** \_\_\_\_\_

00043

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	250	U	250	50	NA	5/5/09 17:46		152379	
m,p-Xylenes	250	U	250	50	NA	5/5/09 17:46		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	106	80-123	5/5/09 17:46		
Toluene-d8	95	88-124	5/5/09 17:46		
Dibromofluoromethane	103	89-115	5/5/09 17:46		

**Comments:** \_\_\_\_\_

00044

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Ethane	150	U	150	150	NA	4/29/09 14:21	151694	
Ethylene	150	U	150	150	NA	4/29/09 14:21	151694	
Methane	<b>8800</b>		300	150	NA	4/29/09 14:21	151694	
Propane	150	U	150	150	NA	4/29/09 14:21	151694	

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** MW-502  
**Lab Code:** R0902294-011

**Service Request:** R0902294  
**Date Collected:** 4/24/09 1015  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Pyruvic Acid	0.50	U	0.50	1	NA	5/6/09 14:20		152527
Acetic Acid	7.7		1.0	1	NA	5/6/09 14:20		152527
Butyric Acid	2.0	U	2.0	1	NA	5/6/09 14:20		152527
Lactic Acid	1.0	U	1.0	1	NA	5/6/09 14:20		152527
Propionic Acid	1.0	U	1.0	1	NA	5/6/09 14:20		152527

**Comments:** \_\_\_\_\_



## Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWD-302D  
**Lab Code:** R0902294-012

**Service Request:** R0902294  
**Date Collected:** 4/23/09 0954  
**Date Received:** 4/24/09

**Basis:** NA

## General Chemistry Parameters

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO <sub>3</sub> , Total	SM 2320 B	240	mg/L	20	1	NA	4/28/09 10:36
Carbon, Dissolved Organic (DOC)	9060	5.1	mg/L	1.0	1	NA	5/7/09 00:44
Carbon, Dissolved Organic (DOC)	9060	4.8	mg/L	1.0	1	NA	5/7/09 00:52
Carbon, Dissolved Organic (DOC)	9060	5.0	mg/L	1.0	1	NA	5/7/09 01:01
Carbon, Dissolved Organic (DOC)	9060	4.9	mg/L	1.0	1	NA	5/7/09 00:36
Chloride	9056	1830	mg/L	80	400	NA	5/7/09 17:39
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.56	mg/L	0.10	1	NA	4/24/09 17:10
Nitrate as Nitrogen	353.2	0.050 U	mg/L	0.050	1	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.050 U	mg/L	0.050	1	NA	5/1/09 14:14
Nitrite as Nitrogen	353.2	0.010 U	mg/L	0.010	1	NA	4/24/09 17:18
Sulfate	9056	153	mg/L	4.0	20	NA	5/6/09 16:33
Sulfide, Acid-Soluble	9034	1.0 U	mg/L	1.0	1	5/1/09	5/1/09 08:30

Comments: \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWD-302D  
**Lab Code:** R0902294-012

**Service Request:** R0902294  
**Date Collected:** 4/23/09 0954  
**Date Received:** 4/24/09

**Basis:** NA

**Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry**

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	152000	µg/L	1000	10	4/28/09	5/5/09 10:51

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated  
 Project: Coopervision/70665-013  
 Sample Matrix: Water  
 Sample Name: OWD-302D  
 Lab Code: R0902294-012

Service Request: R0902294  
 Date Collected: 4/23/09 0954  
 Date Received: 4/24/09

Units: µg/L  
 Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	100	U	100	5	NA	5/5/09 18:14		152379
Benzene	25	U	25	5	NA	5/5/09 18:14		152379
Bromodichloromethane	25	U	25	5	NA	5/5/09 18:14		152379
Bromoform	25	U	25	5	NA	5/5/09 18:14		152379
Bromomethane	25	U	25	5	NA	5/5/09 18:14		152379
2-Butanone (MEK)	50	U	50	5	NA	5/5/09 18:14		152379
Carbon Disulfide	50	U	50	5	NA	5/5/09 18:14		152379
Carbon Tetrachloride	25	U	25	5	NA	5/5/09 18:14		152379
Chlorobenzene	25	U	25	5	NA	5/5/09 18:14		152379
Chloroethane	69		25	5	NA	5/5/09 18:14		152379
Chloroform	25	U	25	5	NA	5/5/09 18:14		152379
Chloromethane	25	U	25	5	NA	5/5/09 18:14		152379
Dibromochloromethane	25	U	25	5	NA	5/5/09 18:14		152379
1,1-Dichloroethane	510		25	5	NA	5/5/09 18:14		152379
1,2-Dichloroethane	25	U	25	5	NA	5/5/09 18:14		152379
1,1-Dichloroethene	25	U	25	5	NA	5/5/09 18:14		152379
cis-1,2-Dichloroethene	25	U	25	5	NA	5/5/09 18:14		152379
trans-1,2-Dichloroethene	25	U	25	5	NA	5/5/09 18:14		152379
1,2-Dichloropropane	25	U	25	5	NA	5/5/09 18:14		152379
cis-1,3-Dichloropropene	25	U	25	5	NA	5/5/09 18:14		152379
trans-1,3-Dichloropropene	25	U	25	5	NA	5/5/09 18:14		152379
Ethylbenzene	25	U	25	5	NA	5/5/09 18:14		152379
2-Hexanone	50	U	50	5	NA	5/5/09 18:14		152379
Methylene Chloride	25	U	25	5	NA	5/5/09 18:14		152379
4-Methyl-2-pentanone (MIBK)	50	U	50	5	NA	5/5/09 18:14		152379
Styrene	25	U	25	5	NA	5/5/09 18:14		152379
1,1,2,2-Tetrachloroethane	25	U	25	5	NA	5/5/09 18:14		152379
Tetrachloroethene	25	U	25	5	NA	5/5/09 18:14		152379
Toluene	25	U	25	5	NA	5/5/09 18:14		152379
1,1,1-Trichloroethane	25	U	25	5	NA	5/5/09 18:14		152379
1,1,2-Trichloroethane	25	U	25	5	NA	5/5/09 18:14		152379
Trichloroethene	25	U	25	5	NA	5/5/09 18:14		152379
Vinyl Chloride	25	U	25	5	NA	5/5/09 18:14		152379

Comments:

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWD-302D  
**Lab Code:** R0902294-012

**Service Request:** R0902294  
**Date Collected:** 4/23/09 0954  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
o-Xylene	25	U	25	5	NA	5/5/09 18:14			152379
m,p-Xylenes	25	U	25	5	NA	5/5/09 18:14			152379

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	5/5/09 18:14		
Toluene-d8	99	88-124	5/5/09 18:14		
Dibromofluoromethane	105	89-115	5/5/09 18:14		

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWD-302D  
**Lab Code:** R0902294-012

**Service Request:** R0902294  
**Date Collected:** 4/23/09 0954  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Ethane	50	U	50	50	NA	4/29/09 16:06			151694
Ethylene	50	U	50	50	NA	4/29/09 16:06			151694
Methane	3400		100	50	NA	4/29/09 16:06			151694
Propane	50	U	50	50	NA	4/29/09 16:06			151694

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWD-302D  
**Lab Code:** R0902294-012

**Service Request:** R0902294  
**Date Collected:** 4/23/09 0954  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution	Date	Date	Extraction	Analysis	Note
				Factor	Extracted	Analyzed	Lot	Lot	
Pyruvic Acid	0.50	U	0.50	1	NA	5/6/09 15:23			152527
Acetic Acid	<b>5.1</b>		1.0	1	NA	5/6/09 15:23			152527
Butyric Acid	2.0	U	2.0	1	NA	5/6/09 15:23			152527
Lactic Acid	1.0	U	1.0	1	NA	5/6/09 15:23			152527
Propionic Acid	1.0	U	1.0	1	NA	5/6/09 15:23			152527

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWS-302S  
**Lab Code:** R0902294-013

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1010  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	10000	U	10000	500	NA	5/5/09 18:42		152379
Benzene	2500	U	2500	500	NA	5/5/09 18:42		152379
Bromodichloromethane	2500	U	2500	500	NA	5/5/09 18:42		152379
Bromoform	2500	U	2500	500	NA	5/5/09 18:42		152379
Bromomethane	2500	U	2500	500	NA	5/5/09 18:42		152379
2-Butanone (MEK)	5000	U	5000	500	NA	5/5/09 18:42		152379
Carbon Disulfide	5000	U	5000	500	NA	5/5/09 18:42		152379
Carbon Tetrachloride	2500	U	2500	500	NA	5/5/09 18:42		152379
Chlorobenzene	2500	U	2500	500	NA	5/5/09 18:42		152379
Chloroethane	<b>62000</b>		2500	500	NA	5/5/09 18:42		152379
Chloroform	2500	U	2500	500	NA	5/5/09 18:42		152379
Chloromethane	2500	U	2500	500	NA	5/5/09 18:42		152379
Dibromochloromethane	2500	U	2500	500	NA	5/5/09 18:42		152379
1,1-Dichloroethane	<b>2900</b>		2500	500	NA	5/5/09 18:42		152379
1,2-Dichloroethane	2500	U	2500	500	NA	5/5/09 18:42		152379
1,1-Dichloroethene	2500	U	2500	500	NA	5/5/09 18:42		152379
cis-1,2-Dichloroethene	2500	U	2500	500	NA	5/5/09 18:42		152379
trans-1,2-Dichloroethene	2500	U	2500	500	NA	5/5/09 18:42		152379
1,2-Dichloropropane	2500	U	2500	500	NA	5/5/09 18:42		152379
cis-1,3-Dichloropropene	2500	U	2500	500	NA	5/5/09 18:42		152379
trans-1,3-Dichloropropene	2500	U	2500	500	NA	5/5/09 18:42		152379
Ethylbenzene	2500	U	2500	500	NA	5/5/09 18:42		152379
2-Hexanone	5000	U	5000	500	NA	5/5/09 18:42		152379
Methylene Chloride	2500	U	2500	500	NA	5/5/09 18:42		152379
4-Methyl-2-pentanone (MIBK)	5000	U	5000	500	NA	5/5/09 18:42		152379
Styrene	2500	U	2500	500	NA	5/5/09 18:42		152379
1,1,2,2-Tetrachloroethane	2500	U	2500	500	NA	5/5/09 18:42		152379
Tetrachloroethene	2500	U	2500	500	NA	5/5/09 18:42		152379
Toluene	2500	U	2500	500	NA	5/5/09 18:42		152379
1,1,1-Trichloroethane	2500	U	2500	500	NA	5/5/09 18:42		152379
1,1,2-Trichloroethane	2500	U	2500	500	NA	5/5/09 18:42		152379
Trichloroethene	2500	U	2500	500	NA	5/5/09 18:42		152379
Vinyl Chloride	2500	U	2500	500	NA	5/5/09 18:42		152379

**Comments:**

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWS-302S  
**Lab Code:** R0902294-013

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1010  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	2500	U	2500	500	NA	5/5/09 18:42		152379	
m,p-Xylenes	2500	U	2500	500	NA	5/5/09 18:42		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	111	80-123	5/5/09 18:42		
Toluene-d8	99	88-124	5/5/09 18:42		
Dibromofluoromethane	106	89-115	5/5/09 18:42		

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWS-302S  
**Lab Code:** R0902294-013

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1010  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Ethane	10	U	10	10	NA	4/29/09 16:25		151694
Ethylene	10	U	10	10	NA	4/29/09 16:25		151694
Methane	<b>830</b>		20	10	NA	4/29/09 16:25		151694
Propane	10	U	10	10	NA	4/29/09 16:25		151694

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** OWS-302S  
**Lab Code:** R0902294-013

**Service Request:** R0902294  
**Date Collected:** 4/23/09 1010  
**Date Received:** 4/24/09  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Pyruvic Acid	1.0	U	1.0	2	NA	5/6/09 16:26			152527
Acetic Acid	770		2.0	2	NA	5/6/09 16:26			152527
Butyric Acid	110		4.0	2	NA	5/6/09 16:26			152527
Lactic Acid	3.2		2.0	2	NA	5/6/09 16:26			152527
Propionic Acid	220		2.0	2	NA	5/6/09 16:26			152527

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Trip Blank  
**Lab Code:** R0902294-014

**Service Request:** R0902294  
**Date Collected:** 4/22/09  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 19:10		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 19:10		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 19:10		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,1-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
2-Hexanone	10	U	10	1	NA	5/5/09 19:10		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 19:10		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 19:10		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 19:10		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 19:10		152379

**Comments:**

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Trip Blank  
**Lab Code:** R0902294-014

**Service Request:** R0902294  
**Date Collected:** 4/22/09  
**Date Received:** 4/24/09  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 19:10		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 19:10		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	108	80-123	5/5/09 19:10		
Toluene-d8	97	88-124	5/5/09 19:10		
Dibromofluoromethane	106	89-115	5/5/09 19:10		

**Comments:** \_\_\_\_\_

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**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** R0902294-MB1

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
  
**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO <sub>3</sub> , Total	SM 2320 B	2.0	U	mg/L	2.0	1	NA	4/28/09 10:36
Carbon, Dissolved Organic (DOC)	9060	1.0	U	mg/L	1.0	1	NA	5/6/09 18:52
Carbon, Dissolved Organic (DOC)	9060	1.0	U	mg/L	1.0	1	NA	5/6/09 19:00
Carbon, Dissolved Organic (DOC)	9060	1.0	U	mg/L	1.0	1	NA	5/6/09 19:08
Carbon, Dissolved Organic (DOC)	9060	1.0	U	mg/L	1.0	1	NA	5/6/09 19:17
Chloride	9056	0.20	U	mg/L	0.20	1	NA	5/6/09 17:29
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	0.10	U	mg/L	0.10	1	NA	4/24/09 17:10
Nitrate+Nitrite as Nitrogen	353.2	0.050	U	mg/L	0.050	1	NA	5/1/09 13:45
Nitrite as Nitrogen	353.2	0.010	U	mg/L	0.010	1	NA	4/24/09 17:12
Sulfate	9056	0.20	U	mg/L	0.20	1	NA	5/5/09 00:59
Sulfide, Acid-Soluble	9034	1.0	U	mg/L	1.0	1	5/ 1/09	5/1/09 08:30

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** R0902294-MB2

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
  
**Basis:** NA

**General Chemistry Parameters**

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Alkalinity as CaCO <sub>3</sub> , Total	SM 2320 B	2.0 U	mg/L	2.0	1	NA	4/28/09 16:31
Carbon, Dissolved Organic (DOC)	9060	1.0 U	mg/L	1.0	1	NA	5/7/09 14:04
Carbon, Dissolved Organic (DOC)	9060	1.0 U	mg/L	1.0	1	NA	5/7/09 14:12
Carbon, Dissolved Organic (DOC)	9060	1.0 U	mg/L	1.0	1	NA	5/7/09 14:20
Carbon, Dissolved Organic (DOC)	9060	1.0 U	mg/L	1.0	1	NA	5/7/09 14:30
Chloride	9056	0.20 U	mg/L	0.20	1	NA	5/7/09 11:31

Comments: \_\_\_\_\_



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Haley & Aldrich, Incorporated  
Project: Coopervision/70665-013  
Sample Matrix: Water  
Sample Name: Method Blank  
Lab Code: R0902294-MB

Service Request: R0902294  
Date Collected: NA  
Date Received: NA  
Basis: NA

Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry

Analyte Name	Method	Result Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed
Iron, Total	6010B	100 U	µg/L	100	1	4/28/09	5/1/09 08:48

Comments:

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0903267-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis	
							Lot	Lot Note
Acetone	20	U	20	1	NA	5/5/09 12:10		152379
Benzene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Bromodichloromethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Bromoform	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Bromomethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
2-Butanone (MEK)	10	U	10	1	NA	5/5/09 12:10		152379
Carbon Disulfide	10	U	10	1	NA	5/5/09 12:10		152379
Carbon Tetrachloride	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Chlorobenzene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Chloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Chloroform	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Chloromethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Dibromochloromethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,1-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,2-Dichloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,1-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
cis-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
trans-1,2-Dichloroethene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,2-Dichloropropane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
cis-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
trans-1,3-Dichloropropene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Ethylbenzene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
2-Hexanone	10	U	10	1	NA	5/5/09 12:10		152379
Methylene Chloride	5.0	U	5.0	1	NA	5/5/09 12:10		152379
4-Methyl-2-pentanone (MIBK)	10	U	10	1	NA	5/5/09 12:10		152379
Styrene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Tetrachloroethene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Toluene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,1,1-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
1,1,2-Trichloroethane	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Trichloroethene	5.0	U	5.0	1	NA	5/5/09 12:10		152379
Vinyl Chloride	5.0	U	5.0	1	NA	5/5/09 12:10		152379

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0903267-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** µg/L  
**Basis:** NA

**Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
o-Xylene	5.0	U	5.0	1	NA	5/5/09 12:10		152379	
m,p-Xylenes	5.0	U	5.0	1	NA	5/5/09 12:10		152379	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
4-Bromofluorobenzene	110	80-123	5/5/09 12:10		
Toluene-d8	98	88-124	5/5/09 12:10		
Dibromofluoromethane	108	89-115	5/5/09 12:10		

**Comments:** \_\_\_\_\_

00063

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0903007-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** µg/L  
**Basis:** NA

**Low Level Semivolatile Organic Compounds by GC/MS**

**Analytical Method:** 8270C  
**Prep Method:** EPA 3510C

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
1,4-Dioxane	0.20	U	0.20	1	4/28/09	4/30/09 12:21	86422	152039	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q	Note
2-Fluorobiphenyl	81	27-114	4/30/09 12:21		
Nitrobenzene-d5	86	22-124	4/30/09 12:21		
p-Terphenyl-d14	98	23-139	4/30/09 12:21		

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0903324-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** mg/L  
**Basis:** NA

**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

Analyte Name	Result	Q	MRL	Dilution	Date	Date	Extraction	Analysis
				Factor	Extracted	Analyzed	Lot	Lot
Pyruvic Acid	0.50	U	0.50	1	NA	5/6/09 09:41		152527
Acetic Acid	1.0	U	1.0	1	NA	5/6/09 09:41		152527
Butyric Acid	2.0	U	2.0	1	NA	5/6/09 09:41		152527
Lactic Acid	1.0	U	1.0	1	NA	5/6/09 09:41		152527
Propionic Acid	1.0	U	1.0	1	NA	5/6/09 09:41		152527

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0902986-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Ethane	1.0	U	1.0	1	NA	4/28/09 10:15			151421
Ethylene	1.0	U	1.0	1	NA	4/28/09 10:15			151421
Methane	2.0	U	2.0	1	NA	4/28/09 10:15			151421
Propane	1.0	U	1.0	1	NA	4/28/09 10:15			151421

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** RQ0903045-01

**Service Request:** R0902294  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** µg/L  
**Basis:** NA

**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Analysis		
							Lot	Lot	Note
Ethane	1.0	U	1.0	1	NA	4/29/09 10:58		151694	
Ethylene	1.0	U	1.0	1	NA	4/29/09 10:58		151694	
Methane	2.0	U	2.0	1	NA	4/29/09 10:58		151694	
Propane	1.0	U	1.0	1	NA	4/29/09 10:58		151694	

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 4/24/09 -  
 5/ 6/09

**Lab Control Sample Summary  
 General Chemistry Parameters**

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

Analyte Name	Method	Lab Control Sample R0902294-LCS1			% Rec Limits
		Result	Expected	% Rec	
Carbon, Dissolved Organic (DOC)	9060	<b>10.6</b>	10.0	106	87 - 120
Carbon, Dissolved Organic (DOC)	9060	<b>10.3</b>	10.0	103	87 - 120
Carbon, Dissolved Organic (DOC)	9060	<b>10.1</b>	10.0	101	87 - 120
Carbon, Dissolved Organic (DOC)	9060	<b>9.60</b>	10.0	96	87 - 120
Chloride	9056	<b>1.93</b>	2.00	97	90 - 110
Iron, Divalent (Ferrous Iron)	SM 3500-Fe B.4.c	<b>0.380</b>	0.40	95	86 - 114
Nitrate+Nitrite as Nitrogen	353.2	<b>0.541</b>	0.500	108	90 - 110
Nitrite as Nitrogen	353.2	<b>0.243</b>	0.250	97	90 - 110
Sulfate	9056	<b>1.81</b>	2.00	91	90 - 110
Alkalinity as CaCO3, Total	SM 2320 B	<b>19.0</b>	20.0	95	93 - 111
Sulfide, Acid-Soluble	9034	<b>9.10</b>	13.3	68	61 - 111

**Comments:** \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 4/28/09 -  
 5/ 7/09

**Lab Control Sample Summary  
 General Chemistry Parameters**

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

Analyte Name	Method	Lab Control Sample			% Rec	Limits
		Result	Expected	% Rec		
Carbon, Dissolved Organic (DOC)	9060	<b>9.47</b>	10.0	95	87 - 120	
Carbon, Dissolved Organic (DOC)	9060	<b>10.2</b>	10.0	102	87 - 120	
Carbon, Dissolved Organic (DOC)	9060	<b>9.92</b>	10.0	99	87 - 120	
Carbon, Dissolved Organic (DOC)	9060	<b>9.77</b>	10.0	98	87 - 120	
Chloride	9056	<b>1.94</b>	2.00	97	90 - 110	
Nitrate+Nitrite as Nitrogen	353.2	<b>0.540</b>	0.500	108	90 - 110	
Alkalinity as CaCO <sub>3</sub> , Total	SM 2320 B	<b>962</b>	1000	96	93 - 111	

**Comments:** \_\_\_\_\_



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 5/ 1/09

**Lab Control Sample Summary**  
**Iron, Total, by Inductively Coupled Plasma-Atomic Emission Spectrometry**

**Units:** µg/L

**Basis:** NA

Analyte Name	Method	Lab Control Sample			% Rec Limits
		Result	Expected	% Rec	
Iron, Total	6010B	989	1000	99	80 - 120

Comments: \_\_\_\_\_



**COLUMBIA ANALYTICAL SERVICES, INC.**

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 5/ 5/09

**Lab Control Sample Summary  
 Volatile Organic Compounds by GC/MS**

**Analytical Method:** 8260B

**Units:** µg/L

**Basis:** NA

**Analysis Lot:** 152379

Analyte Name	Lab Control Sample RQ0903267-02			% Rec Limits
	Result	Expected	% Rec	
Acetone	26.4	20.0	132	50 - 150
Benzene	20.5	20.0	103	70 - 130
Bromodichloromethane	23.1	20.0	115	70 - 130
Bromoform	23.7	20.0	118	70 - 130
Bromomethane	18.6	20.0	93	50 - 150
2-Butanone (MEK)	27.5	20.0	137	50 - 150
Carbon Disulfide	21.8	20.0	109	70 - 130
Carbon Tetrachloride	20.2	20.0	101	70 - 130
Chlorobenzene	19.8	20.0	99	70 - 130
Chloroethane	20.4	20.0	102	70 - 130
Chloroform	21.5	20.0	108	70 - 130
Chloromethane	20.9	20.0	105	70 - 130
Dibromochloromethane	23.3	20.0	117	70 - 130
1,1-Dichloroethane	20.8	20.0	104	70 - 130
1,2-Dichloroethane	23.3	20.0	116	70 - 130
1,1-Dichloroethene	20.5	20.0	102	70 - 130
cis-1,2-Dichloroethene	21.0	20.0	105	70 - 130
trans-1,2-Dichloroethene	20.7	20.0	104	70 - 130
1,2-Dichloropropane	22.1	20.0	111	70 - 130
cis-1,3-Dichloropropene	23.2	20.0	116	70 - 130
trans-1,3-Dichloropropene	22.4	20.0	112	70 - 130
Ethylbenzene	20.3	20.0	102	70 - 130
2-Hexanone	23.9	20.0	119	70 - 130
Methylene Chloride	21.0	20.0	105	70 - 130
4-Methyl-2-pentanone (MIBK)	24.7	20.0	123	70 - 130
Styrene	23.2	20.0	116	70 - 130
1,1,2,2-Tetrachloroethane	22.6	20.0	113	70 - 130
Tetrachloroethene	18.6	20.0	93	70 - 130
Toluene	19.8	20.0	99	70 - 130
1,1,1-Trichloroethane	19.9	20.0	100	70 - 130
1,1,2-Trichloroethane	21.7	20.0	108	70 - 130
Trichloroethene	20.5	20.0	102	70 - 130
Vinyl Chloride	20.7	20.0	104	70 - 130
o-Xylene	20.7	20.0	103	70 - 130
m,p-Xylenes	40.5	40.0	101	70 - 130

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 4/28/09

**Lab Control Sample Summary**  
**Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

**Units:** µg/L

**Basis:** NA

**Analysis Lot:** 151421

Analyte Name	Lab Control Sample RQ0902986-02			% Rec Limits
	Result	Expected	% Rec	
Ethane	170	144	118	50 - 150
Ethylene	106	134	79	50 - 150
Methane	94.1	76.4	123	50 - 150
Propane	259	211	123	50 - 150

Comments: \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 4/29/09

**Lab Control Sample Summary  
Dissolved Gases by GC/FID**

**Analytical Method:** RSK 175

**Units:** µg/L  
**Basis:** NA

**Analysis Lot:** 151694

Analyte Name	Lab Control Sample RQ0903045-02			Duplicate Lab Control Sample RQ0903045-03			% Rec Limits	RPD	RPD Limit
	Result	Expected	% Rec	Result	Expected	% Rec			
Ethane	199	144	138	186	144	128	50 - 150	7	30
Ethylene	180	134	134	169	134	126	50 - 150	6	30
Methane	102	76.4	134	95.2	76.4	125	50 - 150	7	30
Propane	278	211	132	257	211	122	50 - 150	8	30

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Haley & Aldrich, Incorporated  
Project: Coopervision/70665-013  
Sample Matrix: Water

Service Request: R0902294  
Date Analyzed: 4/30/09

Lab Control Sample Summary  
Low Level Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270C  
Prep Method: EPA 3510C

Units: µg/L  
Basis: NA

Extraction Lot: 86422

Analyte Name	Lab Control Sample RQ0903007-02			Duplicate Lab Control Sample RQ0903007-03			% Rec Limits	RPD	RPD Limit
	Result	Expected	% Rec	Result	Expected	% Rec			
1,4-Dioxane	2.28	5.00	46	2.40	5.00	48	31 - 80	5	30

Comments: \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

QA/QC Report

**Client:** Haley & Aldrich, Incorporated  
**Project:** Coopervision/70665-013  
**Sample Matrix:** Water

**Service Request:** R0902294  
**Date Analyzed:** 5/ 6/09

**Lab Control Sample Summary**  
**Organic Acids in Aqueous Matrices by High Performance Liquid Chromatography (HPLC)**

**Analytical Method:** Organic Acids

**Units:** mg/L

**Basis:** NA

**Analysis Lot:** 152527

Analyte Name	Lab Control Sample RQ0903324-02			Duplicate Lab Control Sample RQ0903324-03			% Rec Limits	RPD	RPD Limit
	Result	Expected	% Rec	Result	Expected	% Rec			
Pyruvic Acid	1.25	1.07	117	1.27	1.07	119	50 - 150	2	30
Acetic Acid	10.4	11.1	93	10.4	11.1	94	50 - 150	1	30
Butyric Acid	10.7	10.2	105	10.6	10.2	103	50 - 150	1	30
Lactic Acid	9.85	11.1	88	9.95	11.1	89	50 - 150	1	30
Propionic Acid	10.4	10.1	103	10.4	10.1	102	50 - 150	0	30

**Comments:** \_\_\_\_\_

# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE 1 OF 2

SR #

CAS Contact

Project Name <i>CooperVision</i>		Project Number <i>Dub65-013</i>		ANALYSIS REQUESTED (Include Method Number and Container Preservative)		PRESERVATIVE		REMARKS/ ALTERNATE DESCRIPTION	
Company/Address <i>S. Boyle Harley &amp; Aldrich of NY 200 Town Centre Dr Rochester, NY 14623</i>		Report CC		PRELIMINARY TESTS		METALS, TOTAL (List in comments below)		METALS, DISSOLVED (List in comments below)	
Phone # <i>585-359-9000</i>		FAX #		METALS, TOTAL GC/MS VOAS <input type="checkbox"/> CLP GC/MS SVOAS <input type="checkbox"/> CLP GC/MS VOAS <input type="checkbox"/> CLP		METALS, DISSOLVED GC/MS VOAS <input type="checkbox"/> CLP GC/MS SVOAS <input type="checkbox"/> CLP		METALS, DISSOLVED GC/MS VOAS <input type="checkbox"/> CLP GC/MS SVOAS <input type="checkbox"/> CLP	
Sampler's Signature <i>David M. Nasrbanji</i>		Sampler's Name <i>David M. Nasrbanji</i>		PESTICIDES 8021 <input type="checkbox"/> 607/602 8081 <input type="checkbox"/> 608 <input type="checkbox"/> CLP 8082 <input type="checkbox"/> 608 <input type="checkbox"/> CLP		PESTICIDES 8021 <input type="checkbox"/> 607/602 8081 <input type="checkbox"/> 608 <input type="checkbox"/> CLP 8082 <input type="checkbox"/> 608 <input type="checkbox"/> CLP		PESTICIDES 8021 <input type="checkbox"/> 607/602 8081 <input type="checkbox"/> 608 <input type="checkbox"/> CLP 8082 <input type="checkbox"/> 608 <input type="checkbox"/> CLP	
FOR OFFICE USE ONLY		DATE		SAMPLING TIME		MATRIX		NUMBER OF CONTAINERS	
CLIENT SAMPLE ID	LAB ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAS <input type="checkbox"/> CLP	GC/MS SVOAS <input type="checkbox"/> CLP	PESTICIDES 8021 <input type="checkbox"/> 607/602 8081 <input type="checkbox"/> 608 <input type="checkbox"/> CLP 8082 <input type="checkbox"/> 608 <input type="checkbox"/> CLP	PRELIMINARY TESTS METALS, TOTAL (List in comments below) METALS, DISSOLVED (List in comments below)
MW-202	-001	4/23/09	1505	GW	3	X			ASPCN SOC METABOLIC ACIDS
MW-203	-002	4/23/09	1604	GW	3	X			
MW-204	-003	4/23/09	1315	GW	5	X			
MW-205	-004	4/24/09	1315	GW	16	X			
MW-2	-005	4/24/09	1130	GW	3	X			
MW-304	-006	4/23/09	1558	GW	3	X			
MW-401	-007	4/22/09	1345	GW	3	X			
MW-402	-008	4/23/09	1410	GW	3	X			
MW-3	-009	4/24/09	818	GW	16	X			
MW-501	-010	4/24/09	846	GW	14	X			

SPECIAL INSTRUCTIONS/COMMENTS <b>Metals</b>	TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 5 day <input type="checkbox"/>	REPORT REQUIREMENTS I. Results Only II. Results + OC Summaries (LCS, DUP, MS/MSD as required) III. Results + OC and Calibration Summaries IV. Data Validation Report with Raw Data V. Specialized Forms / Custom Report	INVOICE INFORMATION PC# BILL TO:
	REQUESTED FAX DATE REQUESTED REPORT DATE	Signature Printed Name Firm Date/Time	Signature Printed Name Firm Date/Time

See QAPP <input type="checkbox"/>	SAMPLE RECEIPT: CONDITION/COOLER TEMP: <i>67°C</i>	CUSTODY SEALS <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
RELINQUISHED BY <i>David M. Nasrbanji</i>	RELINQUISHED BY <i>David M. Nasrbanji</i>	RELINQUISHED BY <i>David M. Nasrbanji</i>
Signature <i>David M. Nasrbanji</i>	Signature <i>David M. Nasrbanji</i>	Signature <i>David M. Nasrbanji</i>
Printed Name <i>David M. Nasrbanji</i>	Printed Name <i>David M. Nasrbanji</i>	Printed Name <i>David M. Nasrbanji</i>
Firm <i>Harley &amp; Aldrich</i>	Firm <i>Harley &amp; Aldrich</i>	Firm <i>Harley &amp; Aldrich</i>
Date/Time <i>4/24/09 16:40</i>	Date/Time <i>4/24/09 16:40</i>	Date/Time <i>4/24/09 16:40</i>

RECEIVED BY <i>David M. Nasrbanji</i>	RECEIVED BY <i>David M. Nasrbanji</i>	RECEIVED BY <i>David M. Nasrbanji</i>
Signature <i>David M. Nasrbanji</i>	Signature <i>David M. Nasrbanji</i>	Signature <i>David M. Nasrbanji</i>
Printed Name <i>David M. Nasrbanji</i>	Printed Name <i>David M. Nasrbanji</i>	Printed Name <i>David M. Nasrbanji</i>
Firm <i>Harley &amp; Aldrich</i>	Firm <i>Harley &amp; Aldrich</i>	Firm <i>Harley &amp; Aldrich</i>
Date/Time <i>4/24/09 16:40</i>	Date/Time <i>4/24/09 16:40</i>	Date/Time <i>4/24/09 16:40</i>

Submission # <i>10400094</i>	RECEIVED BY <i>David M. Nasrbanji</i>
Signature <i>David M. Nasrbanji</i>	Signature <i>David M. Nasrbanji</i>
Printed Name <i>David M. Nasrbanji</i>	Printed Name <i>David M. Nasrbanji</i>
Firm <i>Harley &amp; Aldrich</i>	Firm <i>Harley &amp; Aldrich</i>
Date/Time <i>4/24/09 16:40</i>	Date/Time <i>4/24/09 16:40</i>

#6046

SCOC-1102-08

# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR # \_\_\_\_\_  
CAS Contact \_\_\_\_\_

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE 2 OF 2



Project Name		Project Number		Report CC		ANALYSIS REQUESTED (Include Method Number and Container Preservative)		PRESERVATIVE		NUMBER OF CONTAINERS		SAMPLING DATE		TIME		MATRIX	
CooperVision		70665-013				METALS, TOTAL (List in comments below)		GCMS VOAS □ CLP		14		4/24/10		1015		GW	
S. Boyle						METALS, DISSOLVED (List in comments below)		GCMS SVOAS □ CLP		14		4/23/10		0954		GW	
HALLEY ALDRICH OF NY						METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP		7		4/23/10		1010		GW	
200 TOWN CENTRE DR.						METALS, DISSOLVED (List in comments below)		GCMS SVOAS □ CLP		3							
ROCHESTER NY 14623						METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
Phone # 585-359-9000						METALS, DISSOLVED (List in comments below)		GCMS SVOAS □ CLP									
SAMPLER'S SIGNATURE		SAMPLER'S NAME		SAMPLER'S TITLE		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
DAVID M. VASUNDY		DAVID M. VASUNDY		ANALYST		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
CLIENT SAMPLE ID		FOR OFFICE USE ONLY		LAB ID		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
MW-50Z		-011		-011		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
44A-OND-302D		-012		-012		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
OWS-302 S		-013		-013		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
TRIP BLANK		-014		-014		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
SPECIAL INSTRUCTIONS/COMMENTS		Metals		R0902294		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
Turnaround Requirements		RUSH (SURCHARGES APPLY)		STANDARD		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
Report Requirements		I. Results Only		II. Results + QC Summaries (LCS, DUP, MS/MSD as required)		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
Invoice Information		PO#		BILL TO:		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									
Submission #		R0902294		RECEIVED BY		METALS, DISSOLVED (List in comments below)		GCMS VOAS □ CLP									

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

**Cooler Receipt And Preservation Check Form**

Project/Client Haley + Aldrich Submission Number R0902294

Cooler received on 4-24-09 by: \_\_\_\_\_ COURIER: CAS 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 any VOA vials have significant\* air bubbles? See below YES NO N/A
5. Were **Ice** or **Ice packs** present? YES NO
6. Where did the bottles originate? CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 6° 7° 6° \_\_\_\_\_

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: 4-24-09 @ 17:05

Thermometer ID: 161 / IR GUN#2 IR GUN#3 Reading From: Temp Blank / Sample Bottle

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

PC Secondary Review: KB 4/27/09

Cooler Breakdown: Date: 4/27/09 by: AHT

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			Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
		YES	NO						
≥12	NaOH			WC85220C	10/13				
≤2	HNO <sub>3</sub>		X	BDB2692B	4/10	MW-205/MW502	1ml	BDB2692B	42 for 25 22 for 52
≤2	H <sub>2</sub> SO <sub>4</sub>								
Residual Chlorine (-)	For TCN and Phenol			If present, contact PM to add ascorbic acid					
	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	-	-			*Not to be tested before analysis - pH tested and recorded by VOAs or GenChem on a separate worksheet			
	Zn Aceta	-	-	WC85211B	9/09				
	HCl	*	*	G45A01	3/10	Phosp. Acid	WC85242B	12/10	

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: ✓

Bottle lot numbers: 9-014-002, 111708-1M, 033009-2M, 036133, 030909-1J  
Other Comments:

ONS-302-5- One of 3 RSK Vials have sig. Headspace.  
KE

PC Secondary Review: KB 5/13/09

\*significant air bubbles are greater than 5-6 mm  
00078