Akzo Nobel Polymer Chemicals

Groundwater Monitoring Report
2016 Annual Report

443 Electronics Parkway, Liverpool, New York 13088

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2016 Annual Report

Akzo Nobel Polymer Chemicals

Lockport-Olcott Road
Burt, New York

NYSDEC Region #9

Prepared for:

Akzo Nobel Polymer Chemicals
2153 Lockport Olcott Road
Burt, New York 14028

Prepared by:

Barton & Loguidice, D.P.C.
443 Electronics Parkway
Liverpool, New York 13088

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Sample Collection Information

Sampled By: Barton & Loguidice, D.P.C.

Sampling Dates:
Second Quarter: June 7 and 8, 2016
Fourth Quarter: November 22 and 23, 2016

Sampling Locations:

Overburden	Bedrock
MW-1	MW-1B(1)
MW-2	
MW-3	MW-3B(1)
MW-4	MW-4B
MW-5	
MW-9	MW-9B
MW-10	MW-10B(1)
MW-11	MW-11B

Notes: (1) Sampled in Second Quarter only

Field Determinations: (See Field Data Sheets in Appendix A)
pH
Temperature
Turbidity
Specific Conductance
Eh (Oxidation Reduction Potential)
Dissolved Oxygen
Ferrous Iron
Static Water Levels

Sample Testing

Laboratory:
ALS Environmental
1565 Jefferson Road, Bldg 300, Suite 360
Rochester, NY 14623
NYSDOH I.D. No.10145

Parameters Tested: All monitoring locations were analyzed for Volatile Organic Compounds (EPA Method 8260), dissolved iron (EPA Method 2007), dissolved manganese (EPA Method 354.1), sulfate and nitrate as nitrogen (EPA Method 300.0), and methane (Method RSK 175).

Test Report:
Second Quarter ALS Report No.: R1605971
Fourth Quarter ALS Report No.: R1612457

Site Information

Introduction

This report presents the results of environmental groundwater monitoring conducted during 2015 monitoring events at Akzo Nobel Polymer Chemicals (Akzo Nobel), Burt, New York. The facility is required to complete groundwater monitoring as defined in 6 New York Code of Rules and Regulations (NYCRR) Part 373 Permit No. 9-2928-00001/00003. The purpose of the monitoring is to evaluate Monitored Natural Attenuation (MNA) of groundwater impacts at the site. The sampling was performed according to the Facility's Groundwater Monitoring Plan dated December 2015, prepared by Barton & Loguidice, D.P.C. (B&L), and the Work Plan approved by the New York State Department of Environmental Conservation (NYSDEC) on March 31, 2006.

The Site's 6 NYCRR Part 373 Permit states that Akzo Nobel must petition NYSDEC for approval to cease the groundwater monitoring program. Petitioning to seek termination of the groundwater monitoring program will be permissible when the following "Termination Criteria" are met: (a) all Groundwater Protection Standards set forth in Table 1 of the permit have been achieved; or (b) the total concentration of all organic compounds found in Table 1 is no greater than 100 parts per billion (ppb), and no single organic compound concentration exceeds 50 ppb.

In 2009 the NYSDEC granted Akzo Nobel approval to remove monitoring wells MW-6, MW-7, and MW-8 from the monitoring program because historic sampling and laboratory data indicated that those wells exhibited little or no contamination. Additionally, wells MW-1B, MW-3B, and MW-10B are now only sampled one time per year, during the first semi-annual monitoring event due to seasonal dryness.

As detailed in the updated Groundwater Monitoring Plan approved by the NYSDEC on December 7, 2015, future groundwater sampling will take place on a semi-annual basis (two times annually), typically during the Second and Fourth Quarters of each year. Groundwater samples will be analyzed for target compound list (TCL) volatile organic compounds (VOCs), select general chemistry and specific field parameters. A Groundwater Monitoring Program Evaluation Report will be submitted annually to the NYSDEC detailing the findings for the year. This report includes presentation of both the Second and Fourth Quarter 2016 data, and the annual groundwater monitoring program evaluation report. The updated Groundwater Monitoring Plan also states that a reduction in the sampling frequency of a monitoring well may be considered if an annual review shows that any well or wells consistently has results of non-detected for all parameters for at least four consecutive sampling events.

Site History

Akzo Nobel is located at 2153 Lockport-Olcott Road in Burt, NY. The facility formerly produced chemical peroxides. Production was discontinued in April 2003; however, the Facility remains in operation as a warehouse and distribution center. The property is 350 acres in size, of which the former production portion of the Site comprises 30 acres. Figures 1 and 2 depict the site and property boundaries.

The Site is subject to the requirements of 6NYCRR Part 373 – Hazardous Waste Management Facilities. Akzo Nobel has a Part 373 Permit, which required them to conduct a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) and a RCRA Facility Investigation (RFI) to determine the nature and extent of contamination associated with the Facility. These studies were conducted from 1994 to 2002. Based on the findings of the RFI, groundwater impacts were identified at the Site. A corrective measure study (CMS) was conducted to evaluate remedial alternatives. MNA and institutional controls were selected as the final corrective measures for the Site. Akzo Nobel's Part 373 Permit Number 9-02928-00001/00003 was renewed in December 2005. The Permit authorizes Akzo Nobel to implement corrective action measures to address the groundwater contamination at the Site.

Assessment of Monitoring Results

B&L field personnel performed groundwater monitoring activities on June 6 and 7, 2016, and November 22 and 23, 2016. Per the requirements specified in the Groundwater Monitoring Plan, groundwater samples were collected from the designated site monitoring wells depicted on Figure 3. Field measurements included dissolved oxygen, temperature, pH, conductivity, turbidity, oxidation-reduction potential (Eh), ferrous iron concentration, and static groundwater levels. Groundwater samples were analyzed by ALS Environmental for Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method SW-846-8260, dissolved iron by USEPA Method SW-846-200.7, dissolved manganese by USEPA Method SW-846 354.1, sulfate and nitrate as nitrogen by USEPA SW-846 300.0, and methane by Method RSK 175.

Table 1 of this report provides a summary of groundwater monitoring analytical results for 2016 and a comparison to NYSDEC groundwater standards. Table 2 summarizes the exceedance of NYSDEC groundwater standards. Table 3 summarizes the physical measurements for each monitoring well, and provides water level and field parameter data for each of the 2016 sampling events. Table 4 provides a summary of MNA indicator parameters. Figures 1 through 7 provide site maps, well locations, and groundwater contours for the overburden and bedrock units. Copies of field sampling forms, calibration sheets, and chain of custody forms are provided in Appendix A. Laboratory analytical results provided by ALS Environmental are provided in Appendix B.

The Groundwater Monitoring Work Plan specifies that *"if the sample results from any of the downgradient boundary wells (MW-3, MW-3B, MW-4, MW-4B, MW-9, MW-9B, MW-10, and MW-10B) indicate contamination for any TCL VOCs above the New York State groundwater standards in NYCRR 703.5, the well(s) will be resampled within 2 weeks of obtaining the results. Also, Akzo Nobel will immediately notify the NYSDEC that there was an exceedance at the boundary well."* Boundary well cluster wells MW-11 and MW-11B were installed in February 2007 as a result of VOC detections at MW-9 in 2006. The MW-11 and MW-11B locations now serve as the designated boundary well cluster downgradient of MW-9 and MW-9B. Detections of TCL VOCs above groundwater standards at the MW-9 well cluster no longer require resampling and immediate notification to the NYSDEC. These actions are now required in the event of such exceedances if they occur at the MW-11 well cluster (as well as in any of the other designated boundary wells described in the paragraph above).

Monitoring well locations MW-2, MW-5, and MW-9 have historically exhibited concentrations of several groundwater monitoring constituents above the 6NYCRR Part 703.5 standards (Part 703). In the Second Quarter MW-2 exhibited 1,1-Dichloroethane (6.4 µg/L) in excess of the action limit of 0.6 µg/L, benzene (9.7 µg/L) in excess of the groundwater quality standard of 1 µg/L, chloroethane (50 µg/L) in excess of the groundwater quality standard (5 µg/L), toluene (55 µg/L) in excess of the groundwater quality standard (5 µg/L), and m,p-xylene (6.2 µg/L) in excess of the groundwater standard (5 µg/L). In the Fourth Quarter MW-2 again exhibited chloroethane (7.6 µg/L) in excess of the groundwater quality standard.

Historically, monitoring well MW-5 has exceeded the 50 µg/L groundwater quality standard for acetone. The concentration of acetone within MW-5 varies seasonally with the lowest concentration observed in the First and Second Quarters and the highest concentration observed in the Third and Fourth Quarters. Acetone was detected within MW-5 at concentrations below the groundwater standard in both the Second Quarter (34 µg/L) and Fourth Quarter (13 µg/L). The concentration of acetone will continue to be closely evaluated to assess any changes or trends within this monitoring location.

Monitoring well MW-9 exhibited 1,1,1-trichloroethane in excess of the Part 703 groundwater quality standard (5 µg/L) during the Second Quarter (6.4 µg/L), and below the groundwater standard during the Fourth Quarter (4.5 µg/L). This former boundary well has historically exhibited detections of several other VOCs including 1,1,2-trichloroethane, tetrachloroethene, and trichloroethene.

The VOC concentrations within MW-2 and MW-9 have continued to show improvement over time. No other exceedances of the 6NYCRR Part 703.5 standards were observed at these three monitoring well locations, and the results are consistent with historical data.

None of the boundary wells exhibited any NYCRR 703.5 New York State groundwater standard exceedances during the 2016 monitoring events, although some VOC detections were

observed. Acetone was detected at MW-4 during the Fourth Quarter, and at an estimated concentration at MW-10B in the Second Quarter. 1,1-Dichlorethane was detected within monitoring wells MW-10B and MW-11 in the Second Quarter, and again at MW-11 in the Fourth Quarter. Concentrations at downgradient boundary wells will continue to be tracked through scheduled monitoring programs.

Static water level measurements were used to calculate overburden and bedrock unit groundwater elevations. The direction of overburden groundwater flow varies seasonally, but was generally to the northwest across the former source area, with the gradient becoming steeper and shifting to the west at the western property boundary. Second and Fourth Quarter Overburden Unit contours are shown in Figure 4 and Figure 6 respectively. The Second Quarter Bedrock Unit groundwater flow was generally to the west as shown in Figure 5. Fourth Quarter Bedrock Unit contour maps were not produced due to the limited static water level measurements collected from Bedrock Unit monitoring wells during these events. The overburden and bedrock relative water level ranges are consistent with historical measurements. The static water levels in several overburden wells were lower (deeper) than recent data due to a regional drought in Summer 2016.

Monitored Natural Attenuation Evaluation

Redox Conditions

Modestly oxidizing (aerobic) conditions were present in all of the bedrock monitoring wells and in the majority of the overburden monitoring wells during the 2016 monitoring year (Table 4). Average ORP values ranged from -124 mV at MW-1B to 39 mV at MW-4, with an overall average of -25.1 mV. DO concentrations ranged from 1.01 mg/L at MW-1B to 8.13 mg/L at MW-4, with an average DO concentration of 3.66 mg/L. DO is relatively depleted in wells MW-1B, MW-2, MW-10B, and MW-11 (average = 1.59 mg/L).

Dissolved iron concentrations ranged from non-detect (multiple locations) to 4650 µg/L (MW-2 in June), with an average dissolved iron concentration of 1,087 µg/L in the three wells where dissolved iron was detected. There were no dissolved iron detections in the bedrock monitoring wells. Dissolved manganese ranged from non-detect (multiple locations) to 2,240 µg/L (MW-2 in November). These data demonstrate that reductive dechlorination conditions are favorable in the vicinity of well MW-2 and MW-11.

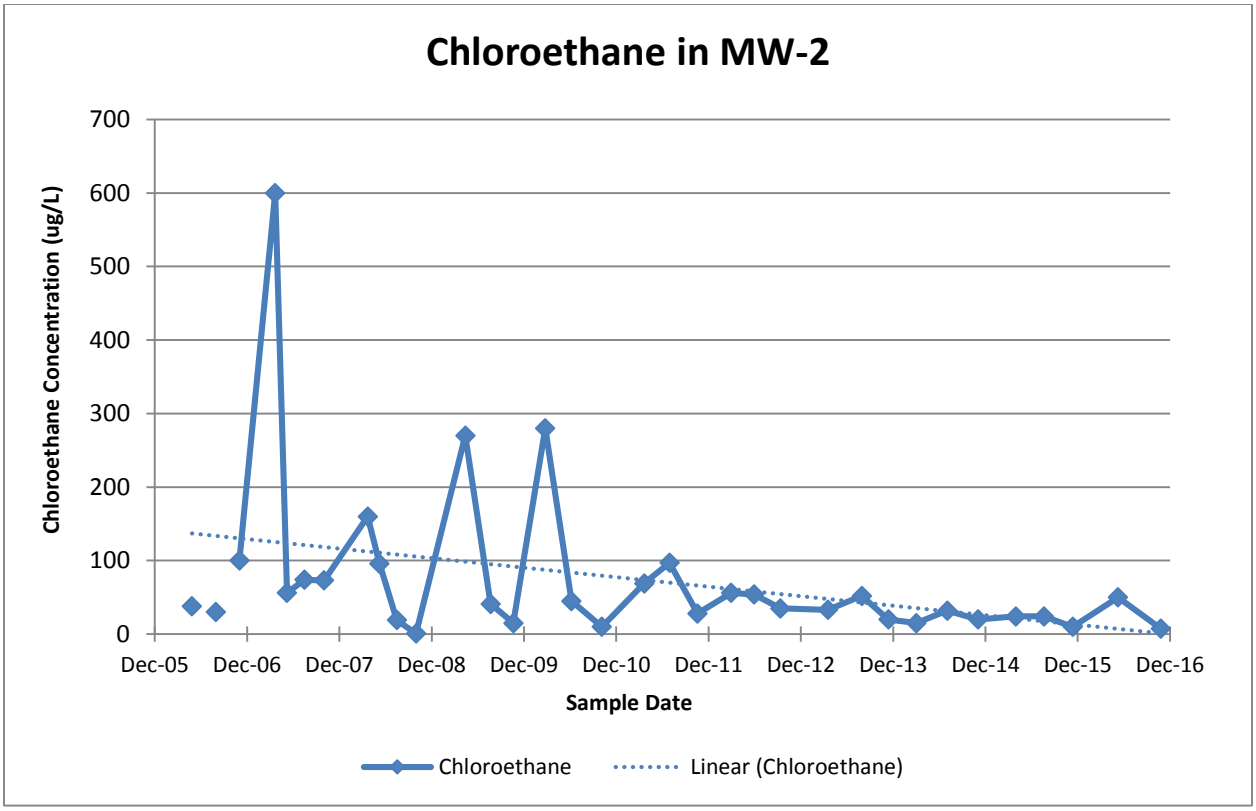
Nitrate was detected at four locations (MW-4B, MW-5, MW-9, and MW-10). In the wells with nitrate detections during 2016, the concentrations ranged from non-detect (multiple locations) to 3.1 mg/L (MW-9). These observations suggest that the denitrification process is incomplete at these locations.

Methane concentrations were greatest at monitoring well MW-2, averaging 4050 µg/L during the 2016 monitoring year. These methane concentrations confirm that strongly reducing conditions favoring reductive dechlorination are present in the vicinity of this well. Modestly elevated methane concentrations were also noted at monitoring wells MW-10B (June 2016) and MW-11, where methane concentrations averaged 57.5 µg/L during the 2015 monitoring year.

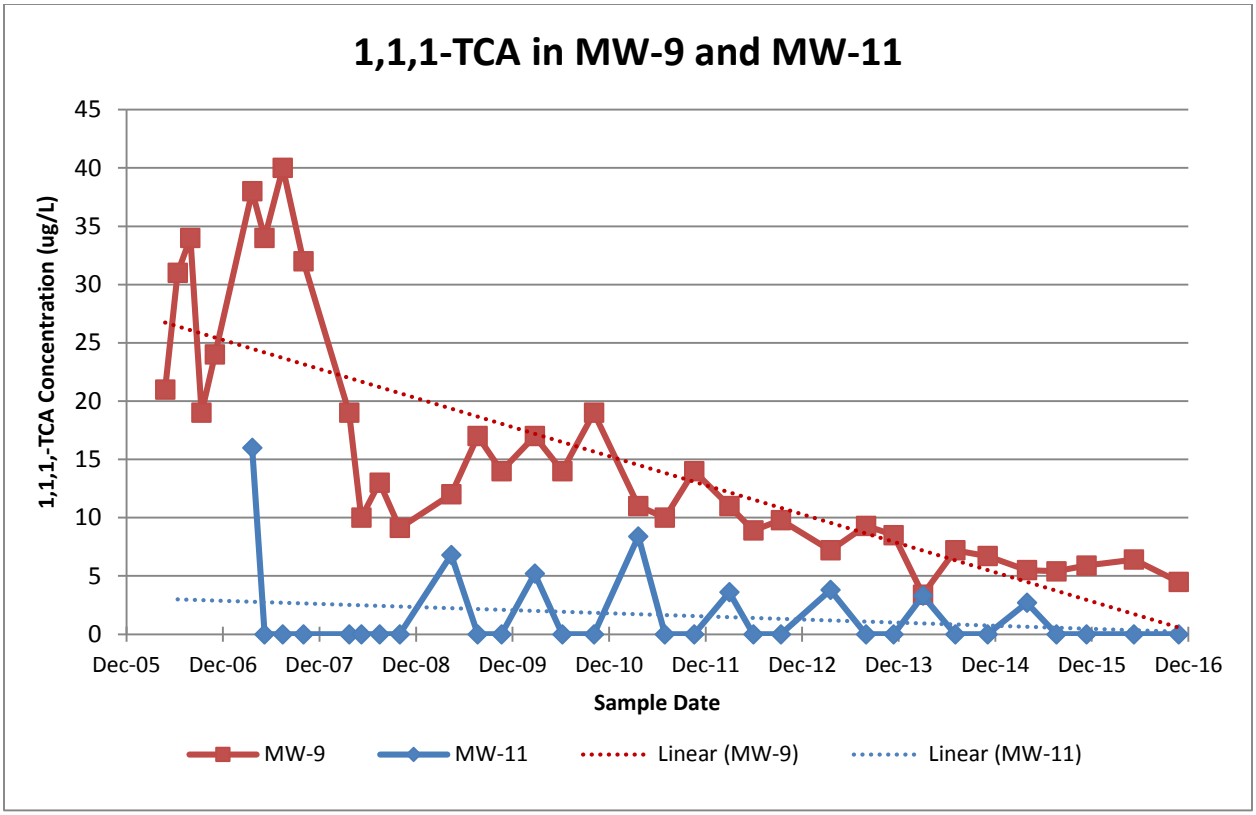
In general, the MNA indicator data are consistent with the results from prior monitoring years. Strongly reducing conditions favoring reductive dechlorination continue to be present in the vicinity of well MW-2. A zone where oxygen levels have been reduced, but conditions remain moderately aerobic (as evidenced by positive ORP values; significant nitrate detections; and infrequent methane, dissolved iron and dissolved manganese detections) encompasses wells MW-5, MW-9 & MW-10. A third zone encompassing monitoring wells MW-3 and MW-4 has near background DO (> 5 mg/L); positive ORP values; infrequent, low-concentration dissolved iron and manganese; and low or no detectable methane.

Degradation Products

The degradation of 111-TCA via reductive dechlorination yields two principal by-products: 11-DCA and CA. During the 2016 monitoring year, both CA and 11-DCA were again detected in MW-2. Low-level concentrations of 11-DCA were also detected at monitoring wells MW-9, MW-10B, and MW-11. The absence of 111-TCA (or its detection at very low concentrations) together with the presence of only low concentrations of 11-DCA suggest that the majority of the 111-TCA in the source area has been degraded to CA. In addition, CA has been declining in the source area in recent years, consistent with the principles of natural attenuation. In lieu of radial diagrams natural attenuation trends and effectiveness are represented in contaminant concentration vs. time graphs as shown for CA in the graph below:



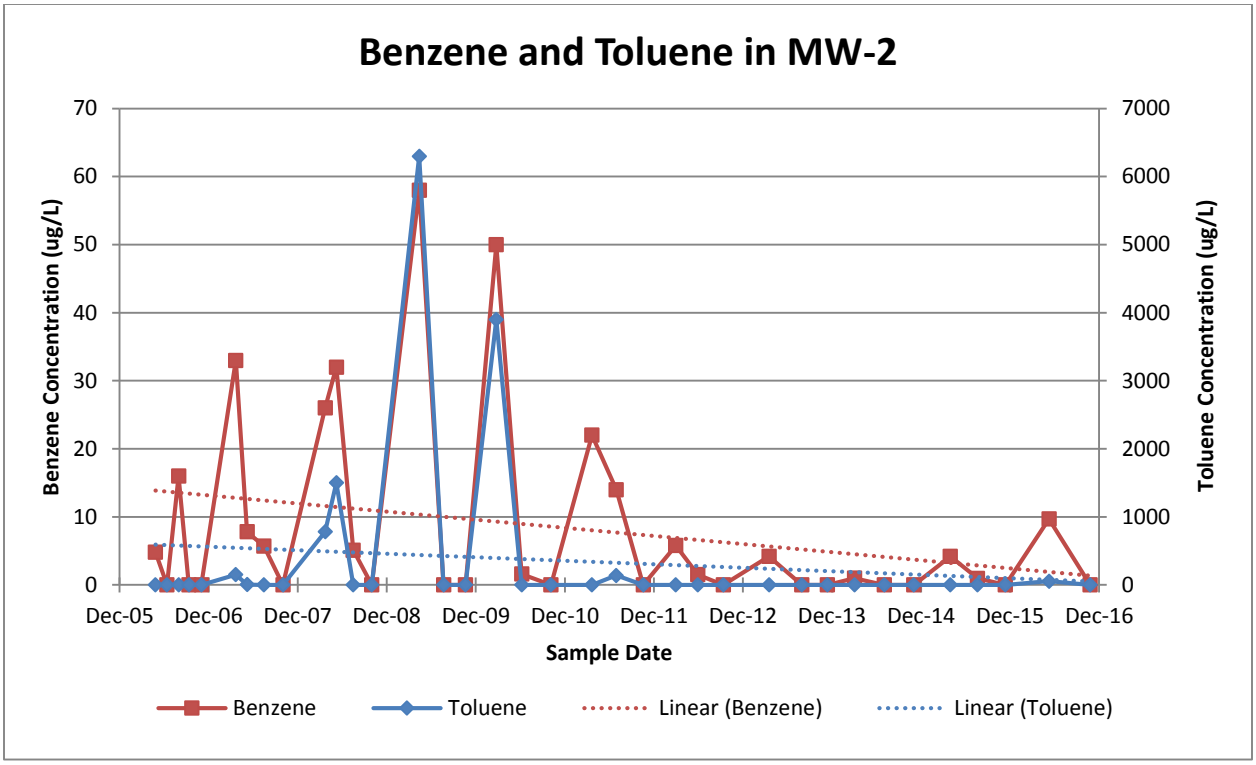
Similarly, low-level detections of 111-TCA in boundary wells MW-9 and MW-11 in recent years also demonstrate trends of declining concentrations (see graph below). Degradation is occurring at the boundary locations, particularly at MW-11, based on the observed redox conditions. However, the starting concentrations of the parent 111-TCA are sufficiently low to yield by-product concentrations that are very low and often below the method detection limits. MW-11 did not exhibit 111-TCA detections during either the June or November 2016 monitoring events.



As noted in previous reports prepared by Conestoga-Rovers & Associates (CRA), the anaerobic degradation of CA is a relatively slow process; accordingly, by-product CA would be expected to migrate from the source area with the groundwater flow, degrading anaerobically over time. As the flow of groundwater approaches the more aerobic areas to the west, however, it is likely that the CA will be degraded more rapidly via aerobic mechanisms. Since aerobic degradation of CA is a faster process, it is likely that CA will not reach the boundary wells, and the analytical data supports this conclusion.

BTEX Constituents

Benzene, toluene, ethylbenzene, and xylenes (BTEX) have historically been detected in the source area, including in well MW-2. Higher detections of benzene and toluene concentrations in MW-2 typically occur in the spring months (March, April, May, and June; see figure below) and decline through the remainder of the year. This suggests that the BTEX source may be associated with a water table smear zone that becomes seasonally saturated during periods of relatively higher groundwater levels.

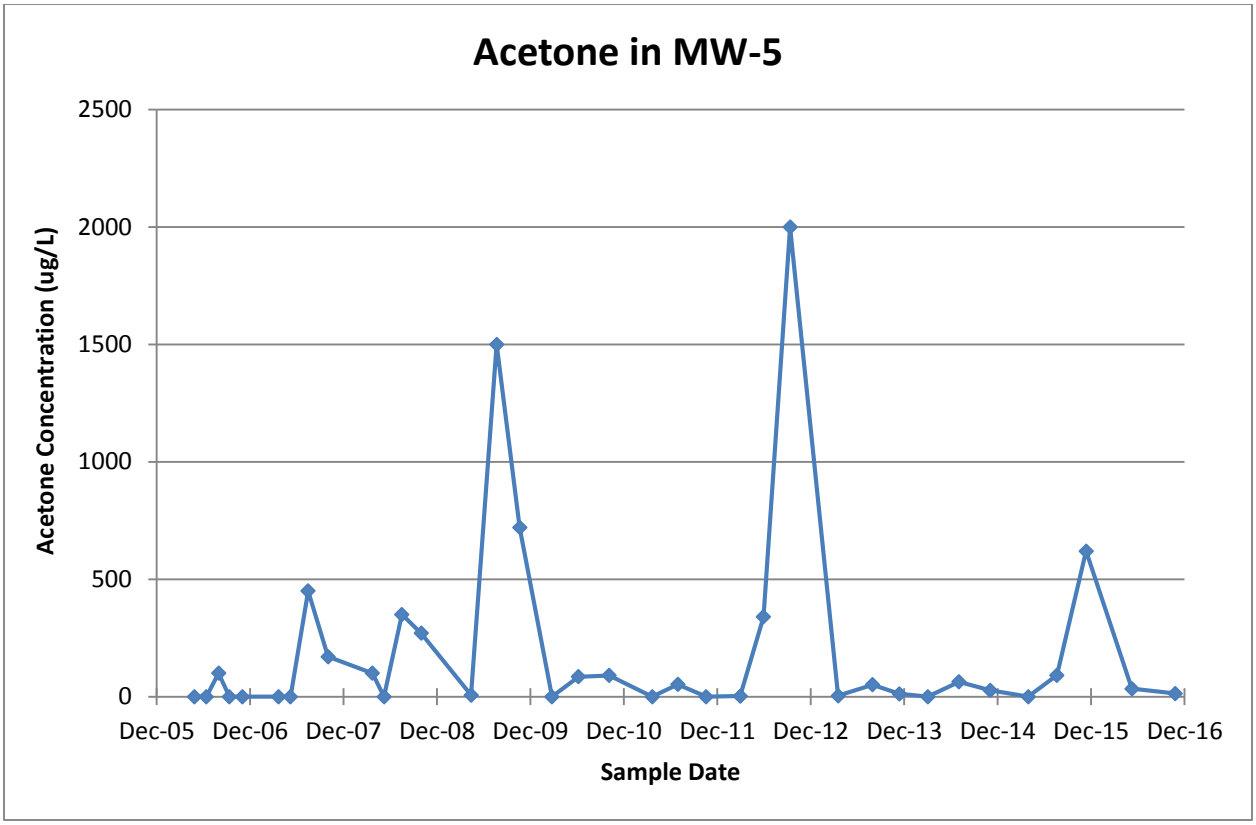


During 2016 none of the monitoring wells exhibited BTEX detections with the exception of MW-2 during the June monitoring event. Overall, the results for the 2011 to 2016 monitoring years demonstrate observed consistently low BTEX concentrations in the source area.

Anaerobic degradation of the BTEX constituents continues and BTEX in the source area are no longer at concentrations that can negatively impact downgradient wells. Accordingly, off-site migration of BTEX is not likely to occur.

Acetone

Acetone is frequently detected within Site monitoring wells at low concentrations that may be associated with laboratory artifacts. More significant detections of acetone have been noted in monitoring well MW-5, with historical concentrations as high as 1,500 µg/L detected in August 2009. During the 2016 monitoring year detections of acetone occurred at the MW-5 location below relevant groundwater quality criteria (50 µg/L) in the June (34 µg/L) and November (13 µg/L) 2016 sampling events. Acetone is readily biodegradable under aerobic conditions and is likely to be fully degraded within a relatively short distance downgradient of monitoring well MW-5.



Conclusions

The groundwater data obtained 2016 for the Akzo Nobel facility is generally consistent with recent and historical water quality data. This data demonstrates the effectiveness of MNA in decreasing the concentrations of organic compounds within the groundwater at the facility. Specific conclusions on groundwater quality are noted below:

- The 111-TCA previously present in the source area appears to have been fully degraded to chloroethane, and the parent compound was not detected in the source area during the 2016 monitoring year. The by-product chloroethane continues to degrade under anaerobic conditions in the source area or degrades aerobically as it migrates towards the Site boundary. The absence of CA in the boundary wells confirms that the source concentrations are no longer high enough to negatively impact boundary wells water quality.

- 111-TCA has not been detected in boundary well MW-11 for the past 4 consecutive monitoring events. 111-TCA is present in MW-9, however demonstrate declining concentrations. Degradation is occurring at the boundary locations, particularly at MW-11, based on the observed redox conditions.

- Anaerobic degradation of the BTEX constituents present in the source area is also occurring. As the flow of groundwater approaches the more aerobic areas to the west, however, BTEX constituents not degraded in the source area appear to be fully degraded aerobically. As in prior years, there were no detections of BTEX constituents in the boundary wells during the 2016 monitoring year.

The groundwater quality will continue to be monitored during upcoming 2017 sampling events. An annual report will also be prepared at the end of 2017 to evaluate the data obtained for the calendar year and assess the continued effectiveness of monitored natural attenuation.

Tables

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

				Location ID:	MW-1	MW-1 DUPE	MW-1	MW-1 DUPE	MW-1B
				Sample Name:	R1605971-001	R1605971-002	R1612457-001, -012	R1612457-003	R1605971-003
				Sample Date:	06/07/16	06/07/16	11/23/16	11/23/16	06/07/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***						
CAS	***Volatile Organic Compounds***								
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1		1.0U	1.0U	1.0U	-	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6		1.0U	1.0U	1.0U	-	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5		2.0U	2.0U	2.0U	-	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1		1.0U	1.0U	1.0U	-	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50		5.0U	5.0U	5.0U	-	5.0U
591-78-6	2-Hexanone	µg/L	50		5.0U	5.0U	5.0U	-	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-		5.0U	5.0U	5.0U	-	0.77 J
67-64-1	Acetone	µg/L	50		5.0U	5.0U	5.0U	-	1.7 J
71-43-2	Benzene	µg/L	1		1.0U	1.0U	1.0U	-	1.0U
75-27-4	Bromodichloromethane	µg/L	50		1.0U	1.0U	1.0U	-	1.0U
75-25-2	Bromoform	µg/L	50		1.0U	1.0U	1.0U	-	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
75-15-0	Carbon disulfide	µg/L	-		1.0U	1.0U	1.0U	-	0.55 J
56-23-5	Carbon tetrachloride	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
108-90-7	Chlorobenzene	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
75-00-3	Chloroethane	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7		1.0U	1.0U	1.0U	-	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-		1.0U	1.0U	1.0U	-	1.0U
124-48-1	Dibromochloromethane	µg/L	50		1.0U	1.0U	1.0U	-	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
100-41-4	Ethylbenzene	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
100-42-5	Styrene	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
108-88-3	Toluene	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5		1.0U	1.0U	1.0U	-	1.0U
75-01-4	Vinyl chloride	µg/L	2		1.0U	1.0U	1.0U	-	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4		1.0U	1.0U	1.0U	-	1.0U
179061-23-1	Xylene - m,p	µg/L	5		2.0U	2.0U	2.0U	-	2.0U
95-47-6	Xylene - o	ug/L	5		1.0U	1.0U	1.0U	-	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4		1.0U	1.0U	1.0U	-	1.0U
	Dissolved Gas								
	Methane	µg/L	-		81	76	3.9	3.8	3.5
	Metals (Dissolved)								
	Iron (Dissolved)	µg/L	-		190	180	100U	100U	100U
	Manganese (Dissolved)	µg/L	-		234	224	130	131	48
	Wet Chemistry								
	Nitrate (as N)	mg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
	Nitrite (as N)	mg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
	Sulfate	mg/L	-		46.6	48.3	34.2	34.1	1030

Notes:		
	-	Not analyzed
	J	Estimated concentration
	U	Not present at or above the associated vaule
		Above 6 NYCRR Part 703.5 standards

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

				Location ID:	MW-2	MW-2	MW-3	MW-3	MW-3B
				Sample Name:	R1605971-015	R1612457-002, -013	R1605971-005	R1612457-004, -015	R1605971-006
				Sample Date:	06/07/16	11/23/16	06/07/16	11/23/16	06/07/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***						
CAS	***Volatile Organic Compounds***								
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1		1.0U	1.0U	1.0U	1.0U	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5		6.4	1.0U	1.0U	1.0U	1.0U
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6		0.58 J	1.0U	1.0U	1.0U	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5		0.67 J	2.0U	2.0U	2.0U	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1		1.0U	1.0U	1.0U	1.0U	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50		5.0U	5.0U	5.0U	5.0U	5.0U
591-78-6	2-Hexanone	µg/L	50		5.0U	5.0U	5.0U	5.0U	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-		5.0U	5.0U	5.0U	5.0U	5.0U
67-64-1	Acetone	µg/L	50		1.5 J	5.0U	5.0U	5.0U	5.0U
71-43-2	Benzene	µg/L	1		9.7	1.0U	1.0U	1.0U	1.0U
75-27-4	Bromodichloromethane	µg/L	50		1.0U	1.0U	1.0U	1.0U	1.0U
75-25-2	Bromoform	µg/L	50		1.0U	1.0U	1.0U	1.0U	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
75-15-0	Carbon disulfide	µg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
56-23-5	Carbon tetrachloride	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
108-90-7	Chlorobenzene	µg/L	5		3.7	1.9	1.0U	1.0U	1.0U
75-00-3	Chloroethane	µg/L	5		50	7.6	1.0U	1.0U	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7		1.0U	1.0U	1.0U	1.0U	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
124-48-1	Dibromochloromethane	µg/L	50		1.0U	1.0U	1.0U	1.0U	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	µg/L	5		3.3	1.0U	1.0U	1.0U	1.0U
100-42-5	Styrene	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5		1.0U	1.0U	1.0U	1.0U	1.0U
108-88-3	Toluene	µg/L	5		55	1.0U	1.0U	1.0U	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5		1.2	1.0U	1.0U	1.0U	1.0U
75-01-4	Vinyl chloride	µg/L	2		0.39 J	1.0U	1.0U	1.0U	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4		1.0U	1.0U	1.0U	1.0U	1.0U
179061-23-1	Xylene - m,p	µg/L	5		6.2	2.0U	2.0U	2.0U	2.0U
95-47-6	Xylene - o	ug/L	5		2.0	1.0U	1.0U	1.0U	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4		1.0U	1.0U	1.0U	1.0U	1.0U
	Dissolved Gas								
	Methane	µg/L	-		5300	2800	1.0U	1.3	38
	Metals (Dissolved)								
	Iron (Dissolved)	µg/L	-		4650	520	100U	100U	100U
	Manganese (Dissolved)	µg/L	-		2080	2240	11	10	58
	Wet Chemistry								
	Nitrate (as N)	mg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
	Nitrite (as N)	mg/L	-		1.0U	1.0U	1.0U	1.0U	1.0U
	Sulfate	mg/L	-		26.5	193	128	135	38.0

Notes:		
	-	Not analyzed
	J	Estimated concentration
	U	Not present at or above the associated vaule
		Above 6 NYCRR Part 703.5 standards

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

			Location ID:	MW-4	MW-4	MW-4B	MW-4B
			Sample Name:	R1605971-007	R1612457-016	R1605971-008	R1612457-005, -017
			Sample Date:	06/07/16	11/23/16	06/07/16	11/23/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***				
CAS	***Volatile Organic Compounds***						
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1	1.0U	1.0U	1.0U	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6	1.0U	1.0U	1.0U	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5	2.0U	2.0U	2.0U	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1	1.0U	1.0U	1.0U	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50	5.0U	5.0U	5.0U	5.0U
591-78-6	2-Hexanone	µg/L	50	5.0U	5.0U	5.0U	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-	5.0U	5.0U	5.0U	5.0U
67-64-1	Acetone	µg/L	50	5.0U	5.2	5.0U	5.0U
71-43-2	Benzene	µg/L	1	1.0U	1.0U	1.0U	1.0U
75-27-4	Bromodichloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U
75-25-2	Bromoform	µg/L	50	1.0U	1.0U	1.0U	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-15-0	Carbon disulfide	µg/L	-	1.0U	1.0U	1.0U	1.0U
56-23-5	Carbon tetrachloride	µg/L	5	1.0U	1.0U	1.0U	1.0U
108-90-7	Chlorobenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-00-3	Chloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7	1.0U	1.0U	1.0U	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-	1.0U	1.0U	1.0U	1.0U
124-48-1	Dibromochloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U
100-42-5	Styrene	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
108-88-3	Toluene	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-01-4	Vinyl chloride	µg/L	2	1.0U	1.0U	1.0U	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U
179061-23-1	Xylene - m,p	µg/L	5	2.0U	2.0U	2.0U	2.0U
95-47-6	Xylene - o	ug/L	5	1.0U	1.0U	1.0U	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U
	Dissolved Gas						
	Methane	µg/L	-	1.0U	-	6.1	4.3
	Metals (Dissolved)						
	Iron (Dissolved)	µg/L	-	100U	-	100U	100U
	Manganese (Dissolved)	µg/L	-	10U	10	157	47
	Wet Chemistry						
	Nitrate (as N)	mg/L	-	1.0U	-	1.3	1.0U
	Nitrite (as N)	mg/L	-	1.0U	-	1.0U	1.0U
	Sulfate	mg/L	-	17.8	-	1120	754

Notes:		
	-	Not analyzed
	J	Estimated concentration
	U	Not present at or above the associated vaule
		Above 6 NYCRR Part 703.5 standards

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

			Location ID:	MW-5	MW-5	MW-5 DUPE	MW-9	MW-9
			Sample Name:	R1605971-004	R1612457-006, -018	R1612457-014	R1605971-011	R1612457-007, -019
			Sample Date:	06/07/16	11/23/16	11/23/16	06/07/16	11/23/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***					
CAS	***Volatile Organic Compounds***							
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5	1.0U	1.0U	1.0U	6.4	4.5
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5	1.0U	1.0U	1.0U	0.45 J	1.0U
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6	1.0U	1.0U	1.0U	1.0U	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5	2.0U	2.0U	2.0U	2.0U	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50	5.0U	5.0U	5.0U	5.0U	5.0U
591-78-6	2-Hexanone	µg/L	50	5.0U	5.0U	5.0U	5.0U	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-	5.0U	5.0U	5.0U	5.0U	5.0U
67-64-1	Acetone	µg/L	50	34	13	13	5.0U	5.0U
71-43-2	Benzene	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
75-27-4	Bromodichloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
75-25-2	Bromoform	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
75-15-0	Carbon disulfide	µg/L	-	1.0U	1.0U	1.0U	1.0U	1.0U
56-23-5	Carbon tetrachloride	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
108-90-7	Chlorobenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
75-00-3	Chloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7	1.0U	1.0U	1.0U	1.0U	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-	1.0U	1.0U	1.0U	1.0U	1.0U
124-48-1	Dibromochloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
100-42-5	Styrene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5	1.0U	1.0U	1.0U	0.71 J	1.0U
108-88-3	Toluene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5	1.0U	1.0U	1.0U	0.36 J	1.0U
75-01-4	Vinyl chloride	µg/L	2	1.0U	1.0U	1.0U	1.0U	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U	1.0U
179061-23-1	Xylene - m,p	µg/L	5	2.0U	2.0U	2.0U	2.0U	2.0U
95-47-6	Xylene - o	ug/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U	1.0U
	Dissolved Gas							
	Methane	µg/L	-	1.0U	1.0U	-	1.0U	1.0U
	Metals (Dissolved)							
	Iron (Dissolved)	µg/L	-	100U	100U	-	100U	100U
	Manganese (Dissolved)	µg/L	-	12	26	-	11	10U
	Wet Chemistry							
	Nitrate (as N)	mg/L	-	2.7	1.4	-	3.1	2.5
	Nitrite (as N)	mg/L	-	1.0U	1.0U	-	1.0U	1.0U
	Sulfate	mg/L	-	58.2	59.7	-	50.5	50.8

Notes:

-	Not analyzed
J	Estimated concentration
U	Not present at or above the associated vaule
	Above 6 NYCRR Part 703.5 standards

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

			Location ID:	MW-9B	MW-9B	MW-10	MW-10	MW-10B
			Sample Name:	R1605971-012	R1612457-008, -020	R1605971-013	R1612457-009, -021	R1605971-014
			Sample Date:	06/07/16	11/23/16	06/07/16	11/23/16	06/07/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***					
CAS	***Volatile Organic Compounds***							
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5	1.0U	1.0U	1.0U	1.0U	2.2
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6	1.0U	1.0U	1.0U	1.0U	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5	2.0U	2.0U	2.0U	2.0U	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50	5.0U	5.0U	5.0U	5.0U	5.0U
591-78-6	2-Hexanone	µg/L	50	5.0U	5.0U	5.0U	5.0U	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-	5.0U	5.0U	5.0U	5.0U	5.0U
67-64-1	Acetone	µg/L	50	5.0U	5.0U	5.0U	5.0U	1.5 J
71-43-2	Benzene	µg/L	1	1.0U	1.0U	1.0U	1.0U	1.0U
75-27-4	Bromodichloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
75-25-2	Bromoform	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
75-15-0	Carbon disulfide	µg/L	-	1.0U	1.0U	1.0U	1.0U	1.0U
56-23-5	Carbon tetrachloride	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
108-90-7	Chlorobenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
75-00-3	Chloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7	1.0U	1.0U	1.0U	1.0U	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-	1.0U	1.0U	1.0U	1.0U	1.0U
124-48-1	Dibromochloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
100-42-5	Styrene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
108-88-3	Toluene	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
75-01-4	Vinyl chloride	µg/L	2	1.0U	1.0U	1.0U	1.0U	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U	1.0U
179061-23-1	Xylene - m,p	µg/L	5	2.0U	2.0U	2.0U	2.0U	2.0U
95-47-6	Xylene - o	ug/L	5	1.0U	1.0U	1.0U	1.0U	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U	1.0U
	Dissolved Gas							
	Methane	µg/L	-	11	3.7	1.0U	1.0U	57
	Metals (Dissolved)							
	Iron (Dissolved)	µg/L	-	100U	100U	100U	100U	100U
	Manganese (Dissolved)	µg/L	-	24	40	141	114	66
	Wet Chemistry							
	Nitrate (as N)	mg/L	-	1.0U	1.0U	1.9	1.0U	1.0U
	Nitrite (as N)	mg/L	-	1.0U	1.0U	1.0U	1.0U	1.0U
	Sulfate	mg/L	-	642	640	53.6	59.0	87.5

Notes:		
	-	Not analyzed
	J	Estimated concentration
	U	Not present at or above the associated vaule
		Above 6 NYCRR Part 703.5 standards

Table 1
2016 Analytical Summary
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

			Location ID:	MW-11	MW-11	MW-11B	MW-11B
			Sample Name:	R1605971-009	R1612457-010, -022	R1605971-010	R1612457-011, -023
			Sample Date:	06/07/16	11/23/16	06/07/16	11/23/16
	Parameters	***Units***	***6NYCRR Part 703.5 Action Limits***				
CAS	***Volatile Organic Compounds***						
71-55-6	1,1,1-Trichloroethane (TCA)	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-00-5	1,1,2-Trichloroethane	µg/L	1	1.0U	1.0U	1.0U	1.0U
75-34-3	1,1-Dichloroethane (1,1-DCA)	µg/L	5	1.8	1.6	1.0U	1.0U
75-35-4	1,1-Dichloroethene (1,1-DCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
107-06-2	1,2-Dichloroethane	µg/L	0.6	1.0U	1.0U	1.0U	1.0U
540-59-0	1,2-Dichloroethene (total)	µg/L	5	2.0U	2.0U	2.0U	2.0U
78-87-5	1,2-Dichloropropane	µg/L	1	1.0U	1.0U	1.0U	1.0U
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	50	5.0U	5.0U	5.0U	5.0U
591-78-6	2-Hexanone	µg/L	50	5.0U	5.0U	5.0U	5.0U
108-10-1	4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	-	5.0U	5.0U	5.0U	5.0U
67-64-1	Acetone	µg/L	50	5.0U	5.0U	5.0U	5.0U
71-43-2	Benzene	µg/L	1	1.0U	1.0U	1.0U	1.0U
75-27-4	Bromodichloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U
75-25-2	Bromoform	µg/L	50	1.0U	1.0U	1.0U	1.0U
74-83-9	Bromomethane (Methyl Bromide)	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-15-0	Carbon disulfide	µg/L	-	1.0U	1.0U	1.0U	1.0U
56-23-5	Carbon tetrachloride	µg/L	5	1.0U	1.0U	1.0U	1.0U
108-90-7	Chlorobenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-00-3	Chloroethane	µg/L	5	1.0U	1.0U	1.0U	1.0U
67-66-3	Chloroform (Trichloromethane)	µg/L	7	1.0U	1.0U	1.0U	1.0U
74-87-3	Chloromethane (Methyl Chloride)	µg/L	-	1.0U	1.0U	1.0U	1.0U
124-48-1	Dibromochloromethane	µg/L	50	1.0U	1.0U	1.0U	1.0U
75-09-2	Dichloromethane (Methylene Chloride)	µg/L	5	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	µg/L	5	1.0U	1.0U	1.0U	1.0U
100-42-5	Styrene	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-01-4	Tetrachloroethene (PCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
108-88-3	Toluene	µg/L	5	1.0U	1.0U	1.0U	1.0U
79-01-6	Trichloroethene (TCE)	µg/L	5	1.0U	1.0U	1.0U	1.0U
75-01-4	Vinyl chloride	µg/L	2	1.0U	1.0U	1.0U	1.0U
10061-01-5	cis-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U
179061-23-1	Xylene - m,p	µg/L	5	2.0U	2.0U	2.0U	2.0U
95-47-6	Xylene - o	ug/L	5	1.0U	1.0U	1.0U	1.0U
10061-02-6	trans-1,3-Dichloropropene	µg/L	0.4	1.0U	1.0U	1.0U	1.0U
	Dissolved Gas						
	Methane	µg/L	-	92	23	17	11
	Metals (Dissolved)						
	Iron (Dissolved)	µg/L	-	120	100U	100U	100U
	Manganese (Dissolved)	µg/L	-	121	168	16	29
	Wet Chemistry						
	Nitrate (as N)	mg/L	-	1.0U	1.0U	1.0U	1.0U
	Nitrite (as N)	mg/L	-	1.0U	1.0U	1.0U	1.0U
	Sulfate	mg/L	-	77.8	81.6	82.3	351

Notes:		
	-	Not analyzed
	J	Estimated concentration
	U	Not present at or above the associated vaule
		Above 6 NYCRR Part 703.5 standards

Table 2
2016 Groundwater Standard Exceedances
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

PARAMETER	6 NYCRR PART 703 STANDARD OR [GUIDANCE VALUE]	MONITORING WELL LOCATION			
		MW-2		MW-9	
		Second Quarter	Fourth Quarter	Second Quarter	Fourth Quarter
1,1,1-Trichloroethane (TCA)	5 ug/L	-	-	6.4	-
1,1-Dichloroethane (1,1-DCA)	0.6 ug/L	6.4	-	-	-
Acetone	50 ug/L	-	-	-	-
Benzene	1 ug/L	9.7	-	-	-
Chloroethane	5 ug/L	50	7.6	-	-
Toluene	5 ug/L	55	-	-	-
Xylene-m,p	5 ug/L	6.2	-	-	-

Table 3
Well Physical Measurements
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

November 2016

Well ID	Well Type	Top of Casing (feet)	Depth to Water (feet BTOC)	Water Elevation (feet)	pH (units)	Temp. (°F)	Conductivity (umhos/cm)	Eh-Redox Potential (Millivolts)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Ferrous Iron (mg/L)
MW-1	Background - Overburden	328.51	14.19	314.32	7.40	48.4	620	-10.0	1.97	3.17	0.00
MW-2	Source Area - Overburden	327.58	11.68	315.90	7.10	54.8	950	-37.0	23.40	2.04	0.49
MW-3	Downgradient Boundary - Overburden	322.58	10.80	311.78	7.40	50.7	1120	-74.0	3.58	7.88	0.04
MW-4	Downgradient Boundary - Overburden	323.12	15.28	307.84	-	-	-	-	-	-	-
MW-4B	Downgradient Boundary - Bedrock	323.66	17.51	306.15	7.90	50.6	3000	-39.0	7.75	3.75	0.16
MW-5	Source Area - Overburden	324.68	8.92	315.76	7.30	51.4	1100	-29.0	4.74	2.82	0.00
MW-9	Downgradient - Overburden	325.03	9.27	315.76	7.40	53.1	870	-46.0	9.26	5.90	0.02
MW-9B	Downgradient - Bedrock	325.21	19.87	305.34	8.10	52.0	1740	-87.0	5.78	3.77	0.02
MW-10	Downgradient Offset - Overburden	328.39	12.66	315.73	7.10	-	1160	-16.0	8.03	2.81	0.00
MW-11	Downgradient Boundary - Overburden	325.76	15.54	310.22	7.30	49.6	1350	-51.0	6.62	2.24	0.18
MW-11B	Downgradient Boundary - Bedrock	325.32	19.57	305.75	8.20	50.7	1310	-84.0	3.07	4.45	0.00

Notes:
BTOC: Below Top of Casing.
mg/L: Milligram/liter.
umohs/cm: Micro-ohms/centimeter.
NTU: Nephelometric Turbidity Unit.
Eh-Redox: Oxygen Release Potential
- : Not Sampled

Table 4
2016 Summary of MNA Indicator Parameter Data
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

Well ID	ORP Millivolts	ORP Millivolts	Average ORP Millivolts	DO mg/L	DO mg/L	Average DO mg/L
	06/07/16	*11/23/16*	*2016*	*06/07/16*	*11/23/16*	*2016*
MW-1	23.0	-10.0	6.5	2.22	3.17	2.70
MW-1B	-124.0	SNR	-124.0	1.01	SNR	1.01
MW-2	-105.0	-37.0	-71.0	1.37	2.04	1.71
MW-3	37.0	-74.0	-18.5	6.10	7.88	6.99
MW-3B	36.0	SNR	36.0	2.44	SNR	2.44
MW-4	39.0	DRY	39.0	8.13	DRY	8.13
MW-4B	-10.0	-39.0	-24.5	2.93	3.75	3.34
MW-5	6.0	-29.0	-11.5	2.74	2.82	2.78
MW-9	38.0	-46.0	-4.0	6.78	5.90	6.34
MW-9B	13.0	-87.0	-37.0	1.79	3.77	2.78
MW-10	10.0	-16.0	-3.0	3.48	2.81	3.15
MW-10B	-47.0	SNR	-47.0	1.82	SNR	1.82
MW-11	29.0	-51.0	-11.0	1.37	2.24	1.81
MW-11B	14.0	-84.0	-35.0	6.05	4.45	5.25
Average	-2.9	-47.3	-25.1	3.45	3.88	3.66
Min	-124.0	-87.0	-124.0	1.01	2.04	1.01
Max	39.0	-10.0	39.0	8.13	7.88	8.13

Note: Highlighted cells indicate results consistent with reducing conditions in groundwater
SNR = Sampling Not Required
ND = Analyte Not Detected

Table 4
2016 Summary of MNA Indicator Parameter Data
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

Well ID	Dissolved Iron ug/L	Dissolved Iron ug/L	Average ug/L	Dissolved Mn ug/L	Dissolved Mn ug/L	Average ug/L
	06/07/16	*11/23/16*	*2016*	*06/07/16*	*11/23/16*	*2016*
MW-1	190	ND	190	234	130	182
MW-1B	ND	SNR	NA	48	SNR	48
MW-2	4650	520	2585	2080	2240	2160
MW-3	ND	ND	NA	11	10	11
MW-3B	ND	SNR	NA	58	SNR	58
MW-4	ND	DRY	NA	ND	DRY	NA
MW-4B	ND	ND	NA	157	47	102
MW-5	ND	ND	NA	12	26	19
MW-9	ND	ND	NA	11	ND	11
MW-9B	ND	ND	NA	24	40	32
MW-10	ND	ND	NA	141	114	128
MW-10B	ND	SNR	NA	66	SNR	66
MW-11	120	ND	120	121	168	145
MW-11B	ND	ND	NA	16	29	23
Average	1653	520	1087	229	312	270
Min	120	520	120	11	10	10
Max	4650	520	4650	2080	2240	2240

Note: Highlighted cells indicate results consistent with reducing conditions in groundwater
SNR = Sampling Not Required
ND = Analyte Not Detected

Table 4
2016 Summary of MNA Indicator Parameter Data
Akzo Nobel Groundwater Monitoring
Akzo Nobel Functional Chemicals

Well ID	Sulfate mg/L	Sulfate mg/L	Average SO_4 mg/L	Nitrate mg/L	Nitrate mg/L	Average NO_3 mg/L	Methane ug/L	Methane ug/L	Average CH_4 ug/L
	06/07/16	*11/23/16*	*2016*	*06/07/16*	*11/23/16*	*2016*	*06/07/16*	*11/23/16*	*2016*
MW-1	46.6	34.2	40.4	ND	ND	NA	81.0	3.9	42.5
MW-1B	1030.0	SNR	1030.0	ND	SNR	NA	3.5	SNR	3.5
MW-2	26.5	193.0	109.8	ND	ND	NA	5300.0	2800.0	4050.0
MW-3	128.0	135.0	131.5	ND	ND	NA	ND	1.3	1.3
MW-3B	38.0	SNR	38.0	ND	SNR	NA	38.0	SNR	38.0
MW-4	17.8	DRY	17.8	ND	DRY	NA	ND	DRY	NA
MW-4B	1120.0	754.0	937.0	1.3	ND	1.3	6.1	4.3	5.2
MW-5	58.2	59.7	59.0	2.7	1.4	1.4	ND	ND	NA
MW-9	50.5	50.8	50.7	3.1	2.5	2.8	ND	ND	NA
MW-9B	642.0	640.0	641.0	ND	ND	NA	11.0	3.7	7.4
MW-10	53.6	59.0	56.3	1.9	ND	1.9	ND	ND	NA
MW-10B	87.5	SNR	87.5	ND	SNR	NA	57.0	SNR	57.0
MW-11	77.8	81.6	79.7	ND	ND	NA	92.0	23.0	57.5
MW-11B	82.3	351.0	216.7	ND	ND	NA	17.0	11.0	14.0
Average	247.1	235.8	241.4	2	2	2	622.8	406.7	514.8
Min	17.8	34.2	17.8	1.3	1.4	1.3	3.5	1.3	1.3
Max	1120.0	754.0	1120.0	3.1	2.5	3.1	5300.0	2800.0	5300.0

Note: Highlighted cells indicate results consistent with reducing conditions in groundwater
SNR = Sampling Not Required
ND = Analyte Not Detected

Figures

SOURCE REFERENCE:
NEW YORK STATE GIS CLEARINGHOUSE, 2008.

1000' 0 1000'
1"=1000'

Barton & Loguidice, D.P.C.

AKZO NOBEL POLYMER CHEMICALS LLC

SITE LOCATION MAP

TOWN OF BURT NIAGARA COUNTY, NEW YORK

Date	Scale
JANUARY 2015	AS SHOWN

Figure Number 1

Project Number 1398.001

Plotted: Jan 07, 2015 - 9:34AM SYR By: jgs2
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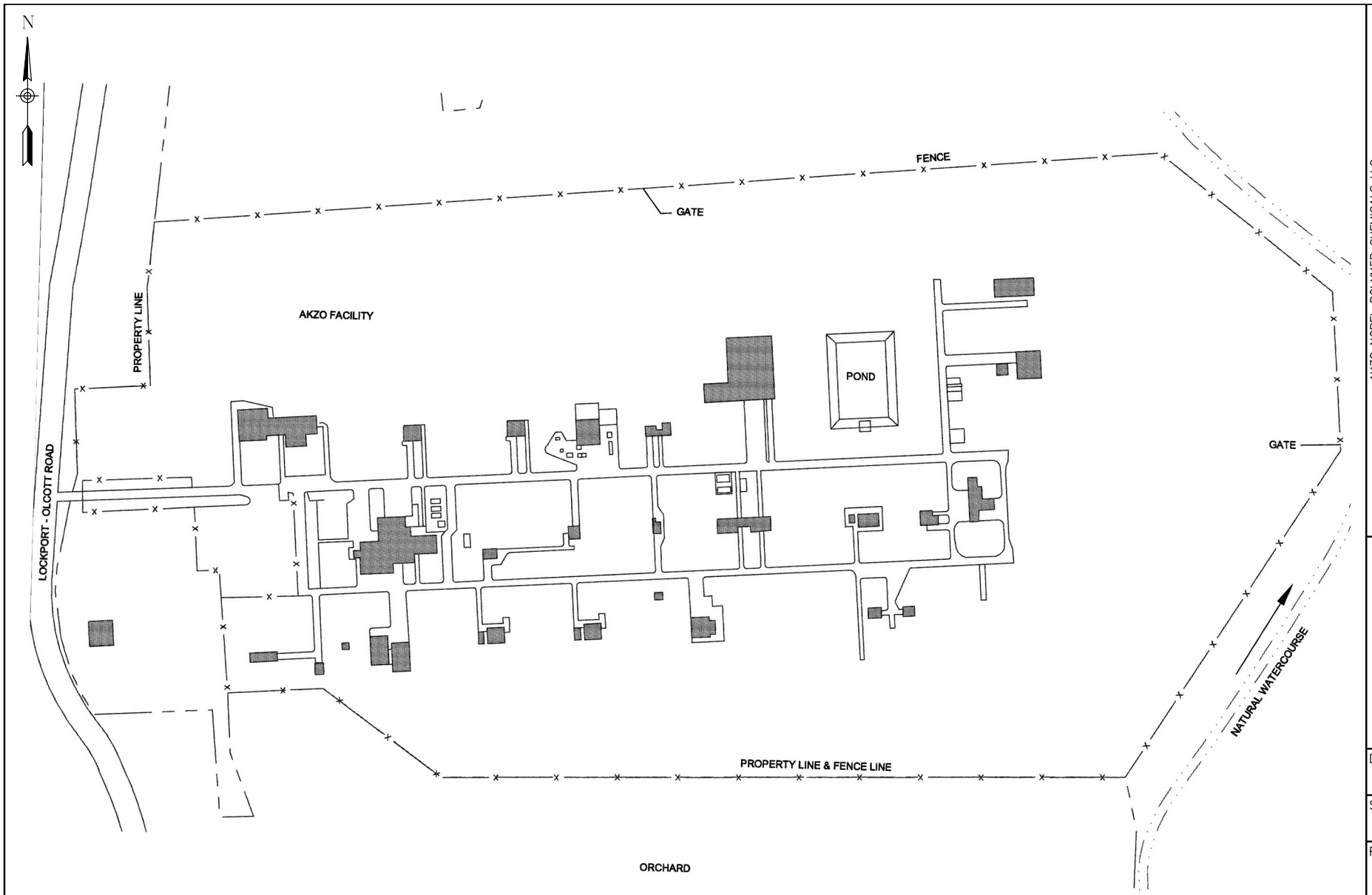

AKZO NOBEL POLYMER CHEMICALS LLC

SITE LAYOUT

NIAGARA COUNTY, NEW YORK

TOWN OF BURT

Barton & Loguidice, D.P.C.

Date	JANUARY 2015
Scale	1"=200'
Figure Number	2
Project Number	1398.001

Plotted: Jan 07, 2015 - 9:41AM SYR By: jgs2
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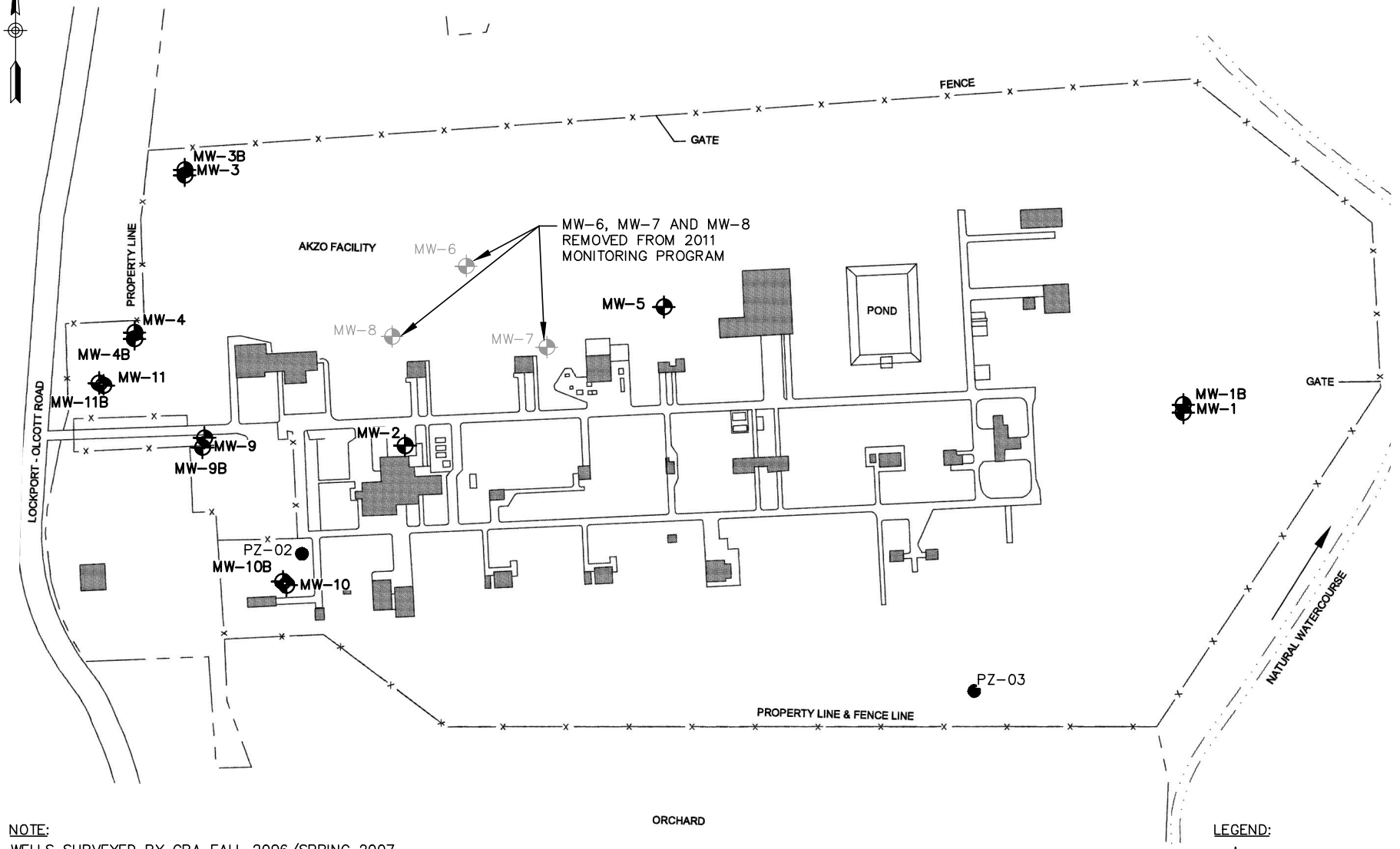

NOTE:
WELLS SURVEYED BY CRA FALL 2006/SPRING 2007 WITH REFERENCED ELEVATION OF 100.00'. WELLS RESURVEYED SPRING 2007 IN STATE PLANE NY WEST NAD83 VERTICAL DATUM NAVD88.

SOURCE:
TRC FIGURE FACILITY LOCATION MAP PJ.#19045

LEGEND:
- MONITORING WELL
- PIEZOMETER

AKZO NOBEL POLYMER CHEMICALS LLC

WELL LOCATIONS

NIAGARA COUNTY, NEW YORK

TOWN OF BURT

Barton & Loguidice, D.P.C.

Date	JANUARY 2015
Scale	1"=200'
Figure Number	3
Project Number	1398.001

Plotted: Jan 07, 2015 - 9:41AM SYR By: jgs2
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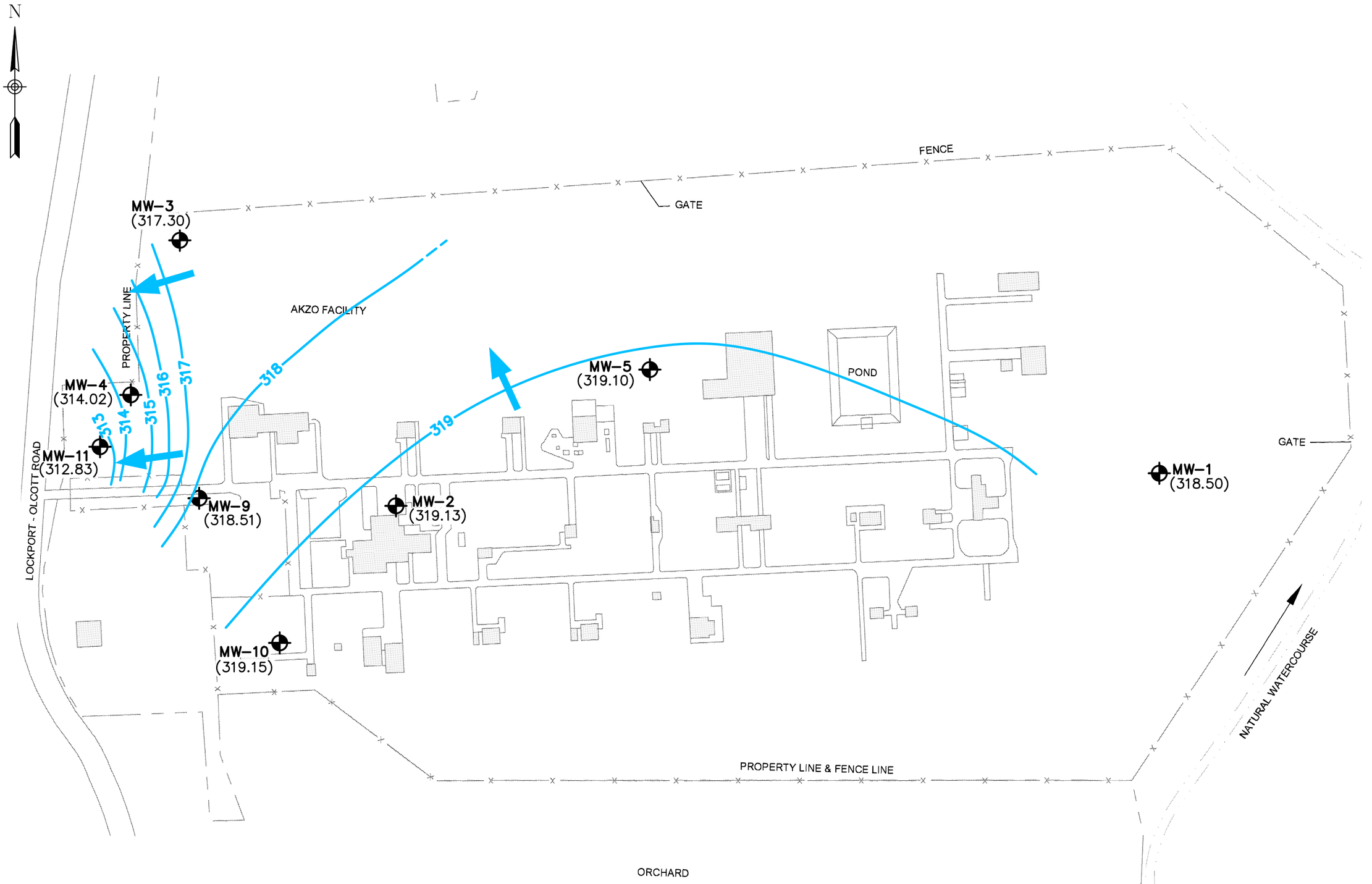


NOTE:
WELLS SURVEYED BY CRA FALL 2006/SPRING 2007 WITH REFERENCED ELEVATION OF 100.00'. WELLS RESURVEYED SPRING 2007 IN STATE PLANE NY WEST NAD83 VERTICAL DATUM NAVD88.

SOURCE:
TRC FIGURE FACILITY LOCATION MAP PJ.#19045

LEGEND:
MONITORING WELL
322.02 GROUNDWATER ELEVATION (FT. AMSL)

GENERALIZED POTENTIOMETRIC SURFACE OVERBURDEN JUNE 2016

AKZO NOBEL POLYMER CHEMICALS LLC

TOWN OF BURT

NIAGARA COUNTY, NEW YORK

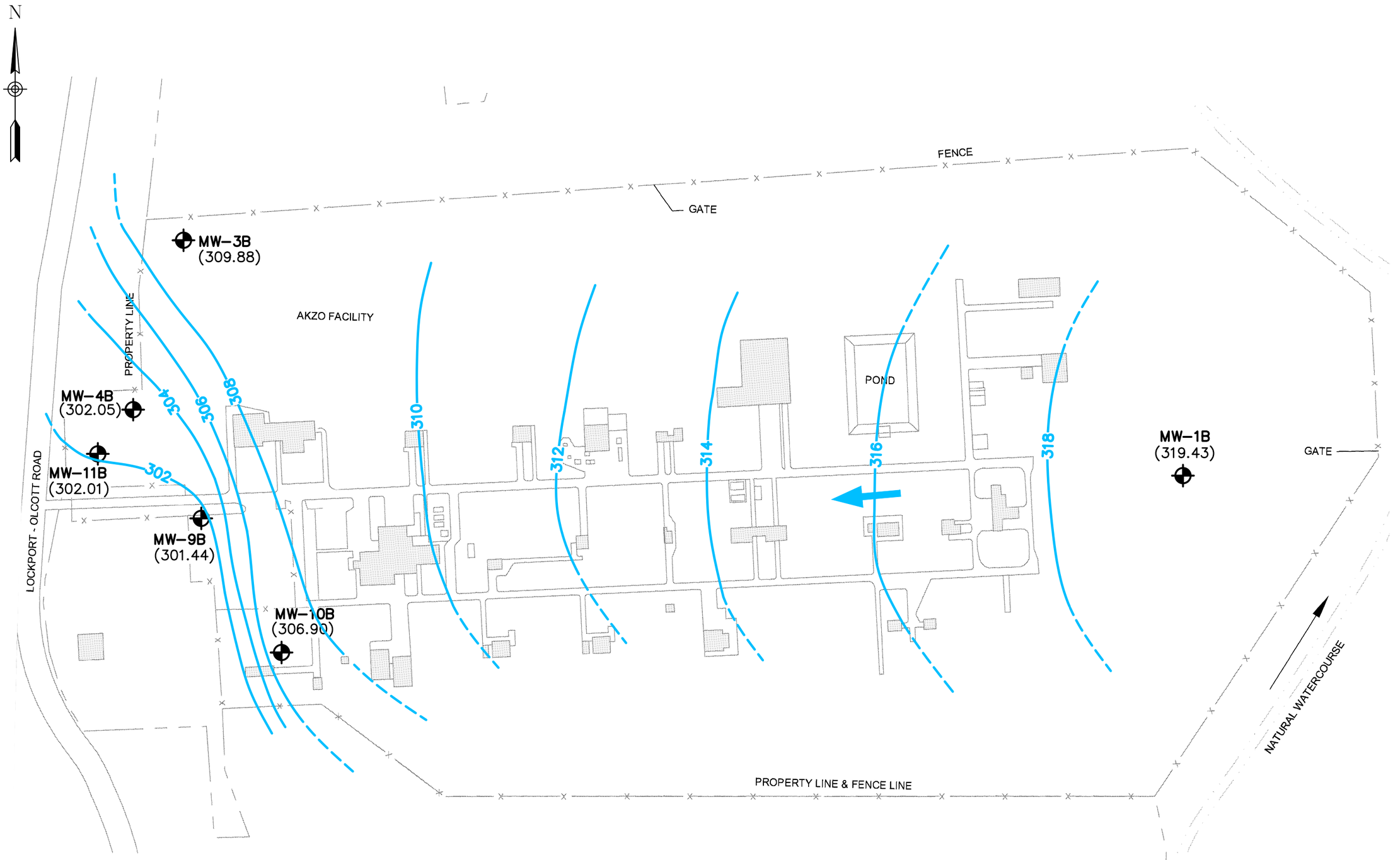
Barton & Loguidice, D.P.C.

Date
FEBRUARY 2017

Scale
1"=200'

Figure Number
4

Project Number
1398.001.016



NOTE:
WELLS SURVEYED BY CRA FALL 2006/SPRING 2007 WITH REFERENCED ELEVATION OF 100.00'. WELLS RESURVEYED SPRING 2007 IN STATE PLANE NY WEST NAD83 VERTICAL DATUM NAVD88.

SOURCE:
TRC FIGURE FACILITY LOCATION MAP PJ.#19045

LEGEND:
- MONITORING WELL
- 319.43 GROUNDWATER ELEVATION (FT. AMSL)

AKZO NOBEL POLYMER CHEMICALS LLC

GENERALIZED POTENTIOMETRIC SURFACE BEDROCK JUNE 2016

NIAGARA COUNTY, NEW YORK

TOWN OF BURT

Barton & Loguidice, D.P.C.

Date
FEBRUARY 2017

Scale
1"=200'

Figure Number
5

Project Number
1398.001.016

N

MW-3
(311.78)

MW-4
(307.84)

MW-11
(310.22)

MW-9
(315.73)

MW-2
(315.90)

MW-5
(315.76)

MW-10
(315.73)

MW-1
(314.32)

FENCE

GATE

GATE

PROPERTY LINE

AKZO FACILITY

308

310

312

314

POND

LOCKPORT - OLCOTT ROAD

NATURAL WATERCOURSE

PROPERTY LINE & FENCE LINE

ORCHARD

NOTE:
WELLS SURVEYED BY CRA FALL 2006/SPRING 2007 WITH REFERENCED ELEVATION OF 100.00'. WELLS RESURVEYED SPRING 2007 IN STATE PLANE NY WEST NAD83 VERTICAL DATUM NAVD88.

SOURCE:
TRC FIGURE FACILITY LOCATION MAP PJ.#19045

LEGEND:

MONITORING WELL

315.73 GROUNDWATER ELEVATION (FT. AMSL)

GENERALIZED POTENTIOMETRIC SURFACE OVERBURDEN NOVEMBER 2016

AKZO NOBEL POLYMER CHEMICALS LLC

TOWN OF BURT

NIAGARA COUNTY, NEW YORK

Barton & Loguidice, D.P.C.

Date
FEBRUARY 2017

Scale
1"=200'

Figure Number
6

Project Number
1398.001.016

Plotted: Feb 10, 2017 - 10:42AM SYR By: lmw
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N

FENCE

GATE

MW–3B
(NA)

PROPERTY LINE

AKZO FACILITY

POND

MW–4B
(306.15)

MW–11B
(305.75)

INSUFFICIENT DATA

LOCKPORT - OLCOTT ROAD

MW–9B
(305.34)

MW–10B
(NA)

MW–1B
(NA)

GATE

NATURAL WATERCOURSE

PROPERTY LINE & FENCE LINE

ORCHARD

NOTE:
WELLS SURVEYED BY CRA FALL 2006/SPRING 2007 WITH REFERENCED ELEVATION OF 100.00'. WELLS RESURVEYED SPRING 2007 IN STATE PLANE NY WEST NAD83 VERTICAL DATUM NAVD88.

SOURCE:
TRC FIGURE FACILITY LOCATION MAP PJ.#19045

LEGEND:

MONITORING WELL

302.06 GROUNDWATER ELEVATION (FT. AMSL)

AKZO NOBEL POLYMER CHEMICALS LLC

GENERALIZED POTENTIOMETRIC SURFACE BEDROCK NOVEMBER 2016

NIAGARA COUNTY, NEW YORK
TOWN OF BURT

Barton & Loguidice, D.P.C.

Date
JANUARY 2017

Scale
1"=200'

Figure Number
7

Project Number
1398.001.016

Plotted: Feb 01, 2017 – 3:21PM SYR By: lmw
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Appendix A

Field Sampling Data Sheets/ Well Stabilization Sheets/ Instrument Calibration Records

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-1 (Dupe-X)
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.001.016
Weather Conditions:	P.C.	Temp:	75°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	10.01
Measured Well Depth (feet)*:	18
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.28

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 11:30 Date: 6/6/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 3.93
Volume of Water Purged (gallons): 4.00

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: Minutes

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 10:45 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	620.0
Temperature (F)	52.7	Eh-Redox Potential (mV)	23.0
Turbidity (NTUs)	12.58	Dissolved Oxygen (mg/L)	2.22
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) 4 Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/7/2016

COMMENTS:
Dupe - X

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-1B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	P.C.	Temp:	75°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	9.96
Measured Well Depth (feet)*:	47
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	6.10

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 11:27 Date: 6/6/16
11:44

PURGING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 18.30
Volume of Water Purged (gallons): 13.00

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [ ] Recovery Time: overnight

SAMPLING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 10:59 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Slight Haze Sediment: Trace Fine
Odor: None

Field Measured Parameters

pH (Standard Units)	9.1	Sp. Conductivity (umhos/cm)	3000.0
Temperature (F)	52.3	Eh-Redox Potential (mV)	-124
Turbidity (NTUs)	12.35	Dissolved Oxygen (mg/L)	1.01
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 6 Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	SAMPLE LOCATION:	MW-2 (MS/MSD)
CLIENT:	Akzo Nobel Polymer Chemicals LLC	JOB #:	1398.004.015
Weather Conditions:	Sunny	Temp:	70°F

SAMPLE TYPE: Groundwater [X] Sediment [ ] Surface Water [ ] Leachate [ ] Other (specify): ____

WATER LEVEL DATA

Static Water Level (feet)*:	8.45
Measured Well Depth (feet)*:	16.4
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.27

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Date: 6/6/16
Time: 15:12
15:20

PURGING METHOD

Equipment:

Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 3.81
Volume of Water Purged (gallons): 4.00

Did well purge dry? No [✓] Yes [ ]
Did well recover? No [ ] Yes [✓] Recovery Time: Overnight

SAMPLING METHOD

Equipment:

Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 14:31 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Reddish Sediment: Fines Present
Odor: Petroleum

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	760.0
Temperature (F)	57.4	Eh-Redox Potential (mV)	-105
Turbidity (NTUs)	57.2	Dissolved Oxygen (mg/L)	1.37
		Ferrous Iron or Fe II (mg/L)	~~3.3~~ >3.30 Limit

Samples Collected (Number/Type) 22 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS: MS/MSD

B&L Form No. 127 Rev. 4/14 (BJM)

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-3
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	65°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	5.28
Measured Well Depth (feet)*:	16.8
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.84

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 12:46 Date: 6/6/16
12:52

PURGING METHOD

Equipment:
Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 5.53
Volume of Water Purged (gallons): 4.75

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment:
Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 11:51 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	1000.0
Temperature (F)	56.2	Eh-Redox Potential (mV)	37.0
Turbidity (NTUs)	5.41	Dissolved Oxygen (mg/L)	6.10
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) 8 Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-3B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	P.C.	Temp:	70°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	11.97
Measured Well Depth (feet)*:	37.2
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	4.09

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 12:30 Date: 6/6 /16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 12.11
Volume of Water Purged (gallons): 12.25

Did well purge dry?	No	[X]	Yes	[ ]	
Did well recover?	No	[ ]	Yes	[X]	Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 12:00 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear to Slight Haze Sediment: Trace Fine
Odor: None

Field Measured Parameters

pH (Standard Units)	9.0	Sp. Conductivity (umhos/cm)	560.0
Temperature (F)	52.5	Eh-Redox Potential (mV)	36.0
Turbidity (NTUs)	15.2	Dissolved Oxygen (mg/L)	2.44
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 9 Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	SAMPLE LOCATION:	MW-4
CLIENT:	Akzo Nobel Polymer Chemicals LLC	JOB #:	1398.004.015
Weather Conditions:	Cloudy	Temp:	65°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ______
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	9.10
Measured Well Depth (feet)*:	16
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.10

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 13:14 13:24 Date 6/6/16

PURGING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 3.31 1/3 bailer
Volume of Water Purged (gallons): 3.00

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD
Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 12:30 Date: 6/7/2016

SAMPLING DATA
Sample Appearance
Color: Clear Sediment: Clean/None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	700.0
Temperature (F)	53.5	Eh-Redox Potential (mV)	34.0
Turbidity (NTUs)	3.00	Dissolved Oxygen (mg/L)	9.13
		Ferrous Iron or Fe II (mg/L)	0.17

Samples Collected (Number/Type) 8 btls Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-4B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	65°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	21.61
Measured Well Depth (feet)*:	40.9
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	3.09

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 13:13 Date: 6/6 /16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 9.26
Volume of Water Purged (gallons): 3.5

Did well purge dry?	No [ ]	Yes	[X]	
Did well recover?	No [ ]	Yes	[X]	Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 12:38 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.9	Sp. Conductivity (umhos/cm)	4,106 J
Temperature (F)	51	Eh-Redox Potential (mV)	-10.0
Turbidity (NTUs)	2.34	Dissolved Oxygen (mg/L)	2.93
		Ferrous Iron or Fe II (mg/L)	0.03

Samples Collected (Number/Type) 4 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-5
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	P.C.	Temp:	75°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	5.58
Measured Well Depth (feet)*:	15
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.51

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or DMJ
Time: 12:04 Date: 6/6/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 4.52
Volume of Water Purged (gallons): 4.75

Did well purge dry?	No	[X]	Yes	[ ]	
Did well recover?	No	[ ]	Yes	[X]	Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 11:21 Date: 6/17/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: Trace
Odor: Mild

Field Measured Parameters

pH (Standard Units)	7.3	Sp. Conductivity (umhos/cm)	470.0
Temperature (F)	56.6	Eh-Redox Potential (mV)	6.0
Turbidity (NTUs)	11.11	Dissolved Oxygen (mg/L)	2.74
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) 8 Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/17/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-9
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:		Temp:	

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	6.52
Measured Well Depth (feet)*:	17.4
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.74

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM/DMJ
Time: 14:58 Date: 6/6 /16
15:04

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 5.22
Volume of Water Purged (gallons): 5.25

Did well purge dry?	No [X]	Yes [ ]		
Did well recover?	No [ ]	Yes [X]	Recovery Time:	Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:38 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.3	Sp. Conductivity (umhos/cm)	820.0
Temperature (F)	59.3	Eh-Redox Potential (mV)	59.0
Turbidity (NTUs)	1.69	Dissolved Oxygen (mg/L)	6.78
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) 9 Bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-9B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	P.C.	Temp:	70°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	23.73
Measured Well Depth (feet)*:	42.2
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	2.96

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 14.44 Date 6/6/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 8.87
Volume of Water Purged (gallons): 5.00

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:46 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: clear Sediment: Trace Fine
Odor: None

Field Measured Parameters

pH (Standard Units)	8.1	Sp. Conductivity (umhos/cm)	1830.0
Temperature (F)	54.8	Eh-Redox Potential (mV)	130
Turbidity (NTUs)	4.97	Dissolved Oxygen (mg/L)	1.74
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:16 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	SAMPLE LOCATION:	MW-10
CLIENT:	Akzo Nobel Polymer Chemicals LLC	JOB #:	1398.004.015
Weather Conditions:	Sunny	Temp:	72°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	9.24
Measured Well Depth (feet)*:	17.6
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.34

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 14:18 Date: 6/6 /16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 4.01
Volume of Water Purged (gallons): 4.25

Did well purge dry?	No [X]	Yes [ ]		
Did well recover?	No [ ]	Yes [X]	Recovery Time:	Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:59 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: clear Sediment: Trace Fines
Odor: None

Field Measured Parameters

pH (Standard Units)	7.1	Sp. Conductivity (umhos/cm)	1000.0
Temperature (F)	52.7	Eh-Redox Potential (mV)	10.0
Turbidity (NTUs)	6.03	Dissolved Oxygen (mg/L)	3.48
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-10B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Sunny	Temp:	75°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	21.22
Measured Well Depth (feet)*:	46.6
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	4.06

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 14:07 Date: 6/6/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 12.18
Volume of Water Purged (gallons): 60.5

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [ ] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 14:04 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: Fines Present
Odor: None

Field Measured Parameters

pH (Standard Units)	7.6	Sp. Conductivity (umhos/cm)	1490.0
Temperature (F)	55.1	Eh-Redox Potential (mV)	-47.0
Turbidity (NTUs)	15.6	Dissolved Oxygen (mg/L)	1.82
		Ferrous Iron or Fe II (mg/L)	0.06

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-11
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	65°N

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	12.43
Measured Well Depth (feet)*:	21.1
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.54

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 13:44 Date: 6/6/16
13:51

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 4.16
Volume of Water Purged (gallons): 4.50

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 12:58 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Slight red Haze Sediment: Fines Present
Odor: Sulfur

Field Measured Parameters

pH (Standard Units)	7.3	Sp. Conductivity (umhos/cm)	1440 1440
Temperature (F)	51.9	Eh-Redox Potential (mV)	24.0
Turbidity (NTUs)	22.9	Dissolved Oxygen (mg/L)	1.37
		Ferrous Iron or Fe II (mg/L)	0.18

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:10 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-11B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Rain	Temp:	60°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	23.31
Measured Well Depth (feet)*:	52.38
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	4.65

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 13:33 Date: 6/6 /16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 13.95
Volume of Water Purged (gallons): 14.00

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:07 Date: 6/7/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	8.1	Sp. Conductivity (umhos/cm)	788
Temperature (F)	51.4	Eh-Redox Potential (mV)	140
Turbidity (NTUs)	1.92	Dissolved Oxygen (mg/L)	6.05
		Ferrous Iron or Fe II (mg/L)	0.23

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 17:20 Date: 6/7/2016

COMMENTS:

Barton & Loguidice, P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

Record of Calibration

Project No: 1398. NKzo Date: 6/7/16

Calibrated By: BJM Time: 0825 - 0830

pH Instrument Model: pH Testr 10

Standard Solution	Calibration Reading	Acceptable Range	
pH 4:	4	(+/- 1.0 pH, pH 3.0 - 5.0)	Pass / Fail
pH 7:	7	(+/- 1.5 pH, pH 5.5 - 8.5)	
pH 10:	10	(+/- 1.0 pH, ph 9.0 - 11.0)	

Sp.Conductivity

Instrument Model: EC Testr 11

Standard Solution	Calibration Reading	Acceptable Range	
1413 uS	1410.0	(+/- 1.0 % Error = 1399-1427)	Pass / Fail

ORP Instrument Model: ORP Testr 10

Standard Solution	Calibration Reading	Acceptable Range	
240 mV	253.0	(+/- 20% at 25°C, 220 - 260 mV)	Pass / Fail
or			
YSI Zobell Soln		10-15°C = 250.5-244 Mv	

Turbidimeter Model: LaMotte 2020we/wi

Standard Solution	Calibration Reading	Acceptable Range	
0 NTU		Blank with 0.0 NTU	Pass / Fail
1.0 NTU	0.74	(+/- 0.05 % Error, 0.5-1.5 NTU)	
10 NTU	9.72	(+/- 2.0 % Error, 8-12 NTU)	

Comments:

Updated: 010410 MPS

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

1057 East Henrietta Rd.
Rochester NY 14623
Phone: 585-424-2140

Pine Environmental Services, Inc.

Instrument ID 15660
Description HACH DR890 Colorimeter
Calibrated 6/2/2016 11:49:51AM

Manufacturer HACH
Model Number DR/890
Serial Number/ Lot Number 100690C78423
Location Rochester, NY
Department

State Certified
Status Pass
Temp °C 52.8
Humidity % 23.00

Calibration Specifications

Group # 1
Group Name DR/Check ABS Standards
Test Performed: Yes **As Found Result: Pass** **As Left Result: Pass**

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Chris Dekdebrun

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
1057 East Henrietta Rd.
Rochester NY 14623
Phone: 585-424-2140

Pine Environmental Services, Inc.

Instrument ID 7275
Description YSI 550A
Calibrated 6/2/2016 9:25:23AM

Manufacturer YSI
Model Number 550A
Serial Number/ Lot Number 05H212AA
Location Rochester, NY
Department

State Certified
Status Pass
Temp °C 23.7
Humidity % 56

Calibration Specifications

Group # 1
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

Test Instruments Used During the Calibration (As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated KEVIN BARR

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

Partial Purge-X

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-1
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.001.016
Weather Conditions:	Cloudy	Temp:	42°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	17.14
Measured Well Depth (feet)*:	18
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.61

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 10:52 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 1.83
Volume of Water Purged (gallons): 2.00

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 10:34 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	620.0
Temperature (F)	48.4	Eh-Redox Potential (mV)	-10.0
Turbidity (NTUs)	1.97	Dissolved Oxygen (mg/L)	3.17
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS: VOA 3 Voc's @ 10:57 on 11/22/16

Purge-X for RSK methane
Dissolved metals
300.0 - NO_2, NO_3, SO_4

B&L Form No. 127 Rev. 4/14 (BJM)

Partial Purge-X only

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-2
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	11.68
Measured Well Depth (feet)*:	16.4
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.76

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 14:40 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 2.27
Volume of Water Purged (gallons): 2.50

Did well purge dry? No [X] Yes [ ] 1/2 Gallon Recharge to 2.5 gal
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 14:00 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Strong Petroleum
Odor: Reddish Haze
Sediment: Fines Present

Field Measured Parameters

pH (Standard Units)	7.1	Sp. Conductivity (umhos/cm)	958.0
Temperature (F)	54.9	Eh-Redox Potential (mV)	-37.0
Turbidity (NTUs)	23.4	Dissolved Oxygen (mg/L)	2.04
		Ferrous Iron or Fe II (mg/L)	0.49

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
3 VOA for Voc's @ 14:50 on 11/22/16

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-3 MW/4/20
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	P.C.	Temp:	45oF

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	10.80
Measured Well Depth (feet)*:	16.8
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.96

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM/DMJ
Time: 11:38 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 2.88 1/3 brute
Volume of Water Purged (gallons): 2.5

Did well purge dry?	No [ ]	Yes	[X]	
Did well recover?	No [ ]	Yes	[X]	Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 11:09 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	1120.0
Temperature (F)	50.7	Eh-Redox Potential (mV)	-74.0
Turbidity (NTUs)	3.38	Dissolved Oxygen (mg/L)	7.38
		Ferrous Iron or Fe II (mg/L)	0.04

Samples Collected (Number/Type) 8&8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
MW/4/20 3 VOA for VOC's @ 11:44

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-4
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): _____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	15.28
Measured Well Depth (feet)*:	16
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.11

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 12:16 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 0.35
Volume of Water Purged (gallons): 1/2 gallon 1/4 gallon

Did well purge dry?	No [ ]	Yes	[X]	
Did well recover?	No [X]	Yes	[ ]	Recovery Time: _____

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 11:42 Date: 11/2016

SAMPLING DATA

Sample Appearance
Color: _____ Sediment: _____
Odor: _____

Field Measured Parameters

pH (Standard Units)		Sp. Conductivity (umhos/cm)	
Temperature (F)		Eh-Redox Potential (mV)	
Turbidity (NTUs)		Dissolved Oxygen (mg/L)	
		Ferrous Iron or Fe II (mg/L)	

Samples Collected (Number/Type) Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS: 2 VOA for VOC's @ 12:24 on 11/22/16 - Replaced Bailer

B&L Form No. 127 Rev. 4/14 (BJM)

2 - VOC's Only well never recovered after a 24 recharge period

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-4B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	17.51
Measured Well Depth (feet)*:	40.9
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	3.74

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 12:03 Date: 11/22/16

PURGING METHOD

Equipment:
Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 11.22
Volume of Water Purged (gallons): 5.0

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:
Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 11:46 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.9	Sp. Conductivity (umhos/cm)	3010.0
Temperature (F)	50.6	Eh-Redox Potential (mV)	-39.0
Turbidity (NTUs)	7.75	Dissolved Oxygen (mg/L)	3.75
		Ferrous Iron or Fe II (mg/L)	0.16

Samples Collected (Number/Type) 8 Bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
3 VOA for VOC's @ 12:15

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE: Akzo Nobel Polymer Chemicals LLC
CLIENT: Akzo Nobel Polymer Chemicals LLC
Weather Conditions: P.C.

SAMPLE LOCATION: MW-5 (Dupe-X) VOC's only
JOB #: 1398.004.015
Temp: 49°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	8.92
Measured Well Depth (feet)*:	15
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.97

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 11:15 Date: 11/22/16

PURGING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 2.92
Volume of Water Purged (gallons): 3.00

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 10:54 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.3	Sp. Conductivity (umhos/cm)	1100.0
Temperature (F)	51.4	Eh-Redox Potential (mV)	-29.0
Turbidity (NTUs)	4.74	Dissolved Oxygen (mg/L)	~~[illegible]~~ 2.82
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 8 - Reg. 3 - Dupe-X Voc's Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS: Dupe-X location 6 VOA for VOC's @ 11:23 on 11/22/16
Voc's only

B&L Form No. 127 Rev. 4/14 (BJM)

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-9
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	9.27
Measured Well Depth (feet)*:	17.4
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	1.30

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM (BJM or)
Time: 13:54 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 3.90
Volume of Water Purged (gallons): 3.00

Did well purge dry? No [ ] Yes [X] 1/L Gal/Per
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 12:55 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.4	Sp. Conductivity (umhos/cm)	970.0
Temperature (F)	53.1	Eh-Redox Potential (mV)	-46
Turbidity (NTUs)	4.26	Dissolved Oxygen (mg/L)	5.90
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) 9 Bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 1600 Date: 11/23/2016

COMMENTS:
Ferrous 3 VOA @ 14:05 on 11/22/16

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-9B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	19.87
Measured Well Depth (feet)*:	42.2
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	3.67

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 13:45 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 10.71
Volume of Water Purged (gallons): 8.00

Did well purge dry? No [ ] Yes [X] 1/2 Gallon
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:03 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	8.1	Sp. Conductivity (umhos/cm)	17400
Temperature (F)	52.0	Eh-Redox Potential (mV)	-87.0
Turbidity (NTUs)	5.78	Dissolved Oxygen (mg/L)	3.77
		Ferrous Iron or Fe II (mg/L)	0.02

Samples Collected (Number/Type) Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
3 VOA for VOC's @ 13:58 on 11/22/16

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-10
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	50°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	12.66
Measured Well Depth (feet)*:	17.6
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.79

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 14:16 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 2.37
Volume of Water Purged (gallons): 2.00

Did well purge dry? No [ ] Yes [X]
Did well recover? No [ ] Yes [X] Recovery Time: Overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 13:49 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.1	Sp. Conductivity (umhos/cm)	1160.0
Temperature (F)		Eh-Redox Potential (mV)	-16.0
Turbidity (NTUs)	8.03	Dissolved Oxygen (mg/L)	2.81
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
3 VOA for VOC's @ 14:26 on 11/22/16

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	SAMPLE LOCATION:	MW-11
CLIENT:	Akzo Nobel Polymer Chemicals LLC	JOB #:	1398.004.015
Weather Conditions:	Cloudy	Temp:	45 °F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ______
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	15.54
Measured Well Depth (feet)*:	21.1
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	0.94

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: (BJM) or
Time: 13:04 Date: 11/22/16

PURGING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Calculate Volume of Water to Be Purged (gallons): 2.27
Volume of Water Purged (gallons): 2.50

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment: Bailer [X] Submersible Pump [ ] Air Lift System [ ]
Bladder Pump [ ] Foot Valve [ ] Peristaltic Pump [ ]
Dedicated [X] *Non-dedicated* [ ]

Sampled by: BJM/DMJ Time: 12:19 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	7.3	Sp. Conductivity (umhos/cm)	1350.0
Temperature (F)	49.6	Eh-Redox Potential (mV)	-51.0
Turbidity (NTUs)	6.62	Dissolved Oxygen (mg/L)	2.24
		Ferrous Iron or Fe II (mg/L)	~~0.58~~ 0.18

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/23/2016

COMMENTS:
3 vial for VOCs @ 13:04 Put in new 2" Locking Well Plug

B&L Form No. 127 Rev. 4/14 (BJM)

Barton & Loguidice, P.C.
Consulting Engineers

FIELD SAMPLING DATA SHEET

SITE:	Akzo Nobel Polymer Chemicals LLC	**SAMPLE LOCATION:**	MW-11B
CLIENT:	Akzo Nobel Polymer Chemicals LLC	**JOB #:**	1398.004.015
Weather Conditions:	Cloudy	Temp:	45°F

SAMPLE TYPE: Groundwater [X] Surface Water [ ] Other (specify): ____
Sediment [ ] Leachate [ ]

WATER LEVEL DATA

Static Water Level (feet)*:	19.57
Measured Well Depth (feet)*:	52.38
Well Casing Diameter (inches):	2"
Volume in Well Casing (gallons):	5.24

*depth from measuring point

Measuring Point: Top of Riser [X]
Other (specify):
Measured by: BJM or
Time: 12:46 Date: 11/22/16

PURGING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Calculate Volume of Water to Be Purged (gallons): 15.75
Volume of Water Purged (gallons): 15.75

Did well purge dry? No [X] Yes [ ]
Did well recover? No [ ] Yes [X] Recovery Time: overnight

SAMPLING METHOD

Equipment:

Bailer	[X]	Submersible Pump	[ ]	Air Lift System	[ ]
Bladder Pump	[ ]	Foot Valve	[ ]	Peristaltic Pump	[ ]
Dedicated	[X]	*Non-dedicated*	[ ]		

Sampled by: BJM/DMJ Time: 12:28 Date: 11/23/2016

SAMPLING DATA

Sample Appearance
Color: Clear Sediment: None
Odor: None

Field Measured Parameters

pH (Standard Units)	8.2	Sp. Conductivity (umhos/cm)	1310.0
Temperature (F)	50.7	Eh-Redox Potential (mV)	-84.0
Turbidity (NTUs)	3.07	Dissolved Oxygen (mg/L)	4.45
		Ferrous Iron or Fe II (mg/L)	0.00

Samples Collected (Number/Type) 8 bottles Voc's, Nitrate, Nitrite, Sulfate, Methane, and Dissolved Iron and Magnesium

Samples Delivered to: ALS Labs Time: 16:00 Date: 11/24/2016

COMMENTS:
Rinse for QC @ 15:03 Put in New 2" locking well plug

Barton & Loguidice, D.P.C.

Engineers • Environmental Scientists • Planners • Landscape Architects

Record of Calibration

Project No: ~~345.003.001~~ 1398.001.016 Date: 11/23/16

Calibrated By: DJM Time: 10:07 - 10:12

pH Instrument Model: pH Testr 10

Standard Solution	Calibration Reading	Acceptable Range	
pH 4:	4.2	(+/- 1.0 pH, pH 3.0 - 5.0)	Pass / Fail
pH 7:	7.0	(+/- 1.5 pH, pH 5.5 - 8.5)	
pH 10:	9.6	(+/- 1.0 pH, ph 9.0 - 11.0)	

Sp.Conductivity
Instrument Model: EC Testr 11

Standard Solution	Calibration Reading	Acceptable Range	
1413 uS	1410.0	(+/- 1.0 % Error = 1399-1427)	Pass / Fail

ORP Instrument Model: ORP Testr 10

Standard Solution	Calibration Reading	Acceptable Range	
240 mV	243.0 @ 61 F	(+/- 5% at 25oC, 228 - 252 mV)	Pass / Fail
or			
YSI Zobell Soln	-	(Refer to YSI calibration table)	

Turbidimeter Model: Micro TPI

Standard Solution	Calibration Reading	Acceptable Range	
0 NTU		Blank with 0.0 NTU	Pass / Fail
1.0 NTU		(0.5-1.5 NTU)	
10 NTU		(8-12 NTU)	

Methane Meter Model: NA

Standard Gas	Calibration Reading	Acceptable Range	
2.50% Methane	-	(+/- 5.0% Error, 2.63-2.38% methane)	Pass / Fail

Comments:

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
1057 East Henrietta Rd.
Rochester NY 14623
Phone: 585-424-2140

Pine Environmental Services, Inc.

Instrument ID 34701
Description DR900
Calibrated 11/21/2016 5:49:07PM

Manufacturer	HACH	**State Certified**	
Model Number	DR900	**Status**	Pass
Serial Number/ Lot Number	34701	**Temp °C**	23.4
Location	Rochester, NY	**Humidity %**	20
Department			

Calibration Specifications

Group # 1
Group Name FUNCTION TEST
Test Performed: N/A **As Found Result:** **As Left Result:**

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Kevin Barr

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

1057 East Henrietta Rd.
Rochester NY 14623
Phone: 585-424-2140

Pine Environmental Services, Inc.

Instrument ID 2670
Description YSI 55
Calibrated 11/21/2016 5:02:21PM

Manufacturer YSI
Model Number 55
Serial Number/ Lot Number 02A0181AQ
Location Rochester, NY
Department

State Certified
Status Pass
Temp °C 23.4
Humidity % 21

Calibration Specifications

Group # 1
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	98.80	100.00	0.00%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Kevin Barr

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

Appendix B

Analytical Laboratory Summary Report (ALS Environmental)

July 29, 2016 Service Request No:R1605971

Mr. Brian McGrath
Barton & Loguidice, PC
11 Centre Park
Suite 203
Rochester, NY 14614

Laboratory Results for: Akzo

Dear Mr.McGrath,

Enclosed are the results of the sample(s) submitted to our laboratory June 07, 2016
For your reference, these analyses have been assigned our service request number **R1605971.**

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

Please contact me if you have any questions. My extension is 7478. You may also contact me via email at Vanessa.Badman@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Vanessa Badman
Customer Service
Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

CASE NARRATIVE

This report contains analytical results for the following samples:

Service Request Number: R1605971

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1605971-001	MW-1	6/7/2016	1045
R1605971-002	Dupe-X	6/7/2016	
R1605971-003	MW-1B	6/7/2016	1059
R1605971-004	MW-5	6/7/2016	1121
R1605971-005	MW-3	6/7/2016	1151
R1605971-006	MW-3B	6/7/2016	1200
R1605971-007	MW-4	6/7/2016	1230
R1605971-008	MW-4B	6/7/2016	1238
R1605971-009	MW-11	6/7/2016	1258
R1605971-010	MW-11B	6/7/2016	1307
R1605971-011	MW-9	6/7/2016	1338
R1605971-012	MW-9B	6/7/2016	1346
R1605971-013	MW-10	6/7/2016	1359
R1605971-014	MW-10B	6/7/2016	1404
R1605971-015	MW-2	6/7/2016	1431

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

8260C: The CCV was out of range for the following compounds: Chloroethane, Acetone, 1,1-Dichloroethane, 1,1,1-Trichloroethane, and Carbon Tetrachloride.

Any other QC issues are flagged/commented in the report.

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-1	Lab ID: R1605971-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	46.6		0.2	2.0	mg/L	300.0
Iron, Dissolved	190		20	100	ug/L	200.7
Manganese, Dissolved	234		0.5	10	ug/L	200.7
Methane	81		0.21	1.0	ug/L	RSK 175

CLIENT ID: Dupe-X	Lab ID: R1605971-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	48.3		0.2	2.0	mg/L	300.0
Iron, Dissolved	180		20	100	ug/L	200.7
Manganese, Dissolved	224		0.5	10	ug/L	200.7
Methane	76		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-1B	Lab ID: R1605971-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	1030		4	40	mg/L	300.0
Manganese, Dissolved	48		0.5	10	ug/L	200.7
4-Methyl-2-pentanone	0.77	J	0.67	5.0	ug/L	8260C
Acetone	1.7	J	1.3	5.0	ug/L	8260C
Carbon Disulfide	0.55	J	0.22	1.0	ug/L	8260C
Methane	3.5		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-5	Lab ID: R1605971-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	2.7		0.5	1.0	mg/L	300.0
Sulfate	58.2		0.2	2.0	mg/L	300.0
Manganese, Dissolved	12		0.5	10	ug/L	200.7
Acetone	34		1.3	5.0	ug/L	8260C

CLIENT ID: MW-3	Lab ID: R1605971-005					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	128		0.4	4.0	mg/L	300.0
Manganese, Dissolved	11		0.5	10	ug/L	200.7

CLIENT ID: MW-3B	Lab ID: R1605971-006					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	38.0		0.2	2.0	mg/L	300.0
Manganese, Dissolved	58		0.5	10	ug/L	200.7
Methane	38		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-4	Lab ID: R1605971-007					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	17.8		0.2	2.0	mg/L	300.0

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-4B	Lab ID: R1605971-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	1.3		0.5	1.0	mg/L	300.0
Sulfate	1120		4	40	mg/L	300.0
Manganese, Dissolved	157		0.5	10	ug/L	200.7
Methane	6.1		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-11	Lab ID: R1605971-009					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	77.8		0.2	2.0	mg/L	300.0
Iron, Dissolved	120		20	100	ug/L	200.7
Manganese, Dissolved	121		0.5	10	ug/L	200.7
1,1-Dichloroethane (1,1-DCA)	1.8		0.20	1.0	ug/L	8260C
Methane	92		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-11B	Lab ID: R1605971-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	82.3		0.2	2.0	mg/L	300.0
Manganese, Dissolved	16		0.5	10	ug/L	200.7
Methane	17		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-9	Lab ID: R1605971-011					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	3.1		0.5	1.0	mg/L	300.0
Sulfate	50.5		0.2	2.0	mg/L	300.0
Manganese, Dissolved	11		0.5	10	ug/L	200.7
1,1,1-Trichloroethane (TCA)	6.4		0.36	1.0	ug/L	8260C
1,1-Dichloroethane (1,1-DCA)	0.45	J	0.20	1.0	ug/L	8260C
Tetrachloroethene (PCE)	0.71	J	0.30	1.0	ug/L	8260C
Trichloroethene (TCE)	0.36	J	0.22	1.0	ug/L	8260C

CLIENT ID: MW-9B	Lab ID: R1605971-012					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	642		2	20	mg/L	300.0
Manganese, Dissolved	24		0.5	10	ug/L	200.7
Methane	11		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-10	Lab ID: R1605971-013					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	1.9		0.5	1.0	mg/L	300.0
Sulfate	53.6		0.2	2.0	mg/L	300.0
Manganese, Dissolved	141		0.5	10	ug/L	200.7

CLIENT ID: MW-10B	Lab ID: R1605971-014					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	87.5		0.2	2.0	mg/L	300.0

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-10B	Lab ID: R1605971-014					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Manganese, Dissolved	66		0.5	10	ug/L	200.7
1,1-Dichloroethane (1,1-DCA)	2.2		0.20	1.0	ug/L	8260C
Acetone	1.5	J	1.3	5.0	ug/L	8260C
Methane	57		0.21	1.0	ug/L	RSK 175

CLIENT ID: MW-2	Lab ID: R1605971-015					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	26.5		0.2	2.0	mg/L	300.0
Iron, Dissolved	4650		20	100	ug/L	200.7
Manganese, Dissolved	2080		0.5	10	ug/L	200.7
1,1-Dichloroethane (1,1-DCA)	6.4		0.20	1.0	ug/L	8260C
1,2-Dichloroethane	0.58	J	0.36	1.0	ug/L	8260C
1,2-Dichloroethene, Total	0.67	J	0.63	2.0	ug/L	8260C
Acetone	1.5	J	1.3	5.0	ug/L	8260C
Benzene	9.7		0.20	1.0	ug/L	8260C
Chlorobenzene	3.7		0.29	1.0	ug/L	8260C
Chloroethane	50		0.24	1.0	ug/L	8260C
Ethylbenzene	3.3		0.20	1.0	ug/L	8260C
Toluene	55		0.20	1.0	ug/L	8260C
Trichloroethene (TCE)	1.2		0.22	1.0	ug/L	8260C
Vinyl Chloride	0.39	J	0.32	1.0	ug/L	8260C
m,p-Xylenes	6.2		0.33	2.0	ug/L	8260C
o-Xylene	2.0		0.20	1.0	ug/L	8260C
Methane	5300		21	100	ug/L	RSK 175

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Barton & Loguidice, PC **Service Request:**R1605971
Project: Akzo/1398.001.016

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1605971-001	MW-1	6/7/2016	1045
R1605971-002	Dupe-X	6/7/2016	
R1605971-003	MW-1B	6/7/2016	1059
R1605971-004	MW-5	6/7/2016	1121
R1605971-005	MW-3	6/7/2016	1151
R1605971-006	MW-3B	6/7/2016	1200
R1605971-007	MW-4	6/7/2016	1230
R1605971-008	MW-4B	6/7/2016	1238
R1605971-009	MW-11	6/7/2016	1258
R1605971-010	MW-11B	6/7/2016	1307
R1605971-011	MW-9	6/7/2016	1338
R1605971-012	MW-9B	6/7/2016	1346
R1605971-013	MW-10	6/7/2016	1359
R1605971-014	MW-10B	6/7/2016	1404
R1605971-015	MW-2	6/7/2016	1431

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

38648

ALS Environmental

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 2

Project Name: Akzo Nobel	Project Number: 1398.001.016
Project Manager: Bill Doebler	Report CC:
Company/Address: B+L	
Phone #	Email
Sampler's Signature:	Sampler's Printed Name: Daniel M. Jordan

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Nitrate/Nitrite/Sulfate	Methane	Dissolved Iron + Manganese					
MW-1		6/7/2016	10:45	H2O	8	X							X	X	X					
Dupe-X		6/7/2016	—	H2O	8															
MW-1B		6/7/2016	10:59	H2O	8															
MW-5		6/7/2016	11:21	H2O	8															
MW-3		6/7/2016	11:51	H2O	8															
MW-3B		6/7/2016	12:00	H2O	8															
MW-4		6/7/2016	12:30	H2O	8															
MW-4B		6/7/2016	12:38	H2O	8															
MW-11		6/7/2016	12:58	H2O	8															
MW-11B		6/7/2016	13:07	H2O	8															
MW-9		6/7/2016	13:38	H2O	8	V							V	V	V					

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

Metals

Same Parameter list as historically completed

Please reference correct job number on report

1398.001.016

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS

____ RUSH (SURCHARGES APPLY)

STANDARD (1 day, 2 day, 3 day)

REQUESTED REPORT DATE

REPORT REQUIREMENTS

____ I. Results Only

____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)

X III. Results + QC and Calibration Summaries

____ IV. Data Validation Report with Raw Data

Edata ____Yes ____No

INVOICE INFORMATION

PO #

BILL TO: B+L

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Daniel M. Jordan	Signature: Daniel Mark	Signature	Signature	Signature	
Printed Name: B+L	Printed Name: ALS	Printed Name	Printed Name	Printed Name	
Firm: 6/7/2016 1720	Firm: 6/7/16/ 1720	Firm	Firm	Firm	
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

R1605971
Barton & Loguidice, PC
Akzo

5

Distribution: White - Lab Copy; Yellow - Return to Originator

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

38649

ALS Environmental
1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax)

Project Name: AK20 Nobel	Project Number: 1358.001.016
Project Manager: Bill Doebler	Report CC:
Company/Address: B+L	
Phone #	Email
Sampler's Signature	Sampler's Printed Name: Derek M. Sorce

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Nitrate/Nitrite/Sulfate	Methane	Dissolved Iron + Manganese					
MW-9B		6/7/2016	13:46	H_2O	8	X							X	X	X					
MW-10		6/7/2016	13:55	H_2O	8															
MW-10B		6/7/2016	14:04	H_2O	8															
MW-2 (MS/MSD)		6/7/2016	14:31	H_2O	22															
Trip Blank		—	—	H_2O	3	X														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Derek M. Sorce	Printed Name: ALS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: B+L	Firm	Firm	Firm	Firm	Firm
Date/Time: 6/7/2016/1720	Date/Time: 6/7/16/1720	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

R1605971 5
Barton & Loguidice, PC
Akzo

Cooler Receipt and Preservation Check For

R1605971 5
Barton & Loguidice, PC
Akzo

Project/Client BTL Folder Number R16-5971 6/7/16

Cooler received on 6/7/16 by: DM COURIER: ~~ALS~~ UPS FEDEX VELOCITY ~~CLIENT~~

1	Were **Custody seals** on outside of cooler?	Y ~~N~~	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 6/7/16 Time: 1757 ID: ~~IR#3~~ IR#5 From: Temp Blank Sample Bottle

Observed Temp (°C)	3.8°	2.1°					
Correction Factor (°C)	-0.1°	-0.1°					
Corrected Temp (°C)	3.7°	2.0°					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-007 by DM on 6/7/16 at 1757
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 6/7/16 Time: 2215 by: DM

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

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BDB26153E	5/17				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4115022	5/17				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 6-0600-004, 11205-2AAW, 041116-2AAC
Other Comments:

PC Secondary Review: _____

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

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

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

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Service Request: R1605971

Sample Name: MW-1
Lab Code: R1605971-001
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: Dupe-X
Lab Code: R1605971-002
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-1B
Lab Code: R1605971-003
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-5
Lab Code: R1605971-004
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Service Request: R1605971

Sample Name: MW-5
Lab Code: R1605971-004
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-3
Lab Code: R1605971-005
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-3B
Lab Code: R1605971-006
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-4
Lab Code: R1605971-007
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Service Request: R1605971

Sample Name: MW-4
Lab Code: R1605971-007
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-4B
Lab Code: R1605971-008
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-11
Lab Code: R1605971-009
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-11B
Lab Code: R1605971-010
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Service Request: R1605971

Sample Name: MW-11B
Lab Code: R1605971-010
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
RSK 175		AMOSES

Sample Name: MW-9
Lab Code: R1605971-011
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-9B
Lab Code: R1605971-012
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name: MW-10
Lab Code: R1605971-013
Sample Matrix: Water
Date Collected: 06/7/16
Date Received: 06/7/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016		

Sample Name:	MW-10B	**Date Collected:**	06/7/16
Lab Code:	R1605971-014	**Date Received:**	06/7/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

Sample Name:	MW-2	**Date Collected:**	06/7/16
Lab Code:	R1605971-015	**Date Received:**	06/7/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CGILDAY	DBOND
300.0		CWOODS
8260C		FNAEGLER
RSK 175		AMOSES

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:45
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1	**Units:**	ug/L
Lab Code:	R1605971-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 00:01	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 00:01	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 00:01	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 00:01	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 00:01	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 00:01	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 00:01	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 00:01	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 00:01	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 00:01	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 00:01	
Acetone	5.0 U	5.0	1.3	1	06/10/16 00:01	
Benzene	1.0 U	1.0	0.20	1	06/10/16 00:01	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 00:01	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 00:01	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 00:01	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 00:01	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 00:01	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 00:01	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 00:01	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 00:01	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 00:01	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 00:01	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 00:01	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 00:01	
Styrene	1.0 U	1.0	0.20	1	06/10/16 00:01	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 00:01	
Toluene	1.0 U	1.0	0.20	1	06/10/16 00:01	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 00:01	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 00:01	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 00:01	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 00:01	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 00:01	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 00:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 00:01	
Dibromofluoromethane	100	89 - 119	06/10/16 00:01	
Toluene-d8	102	87 - 121	06/10/16 00:01	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	Dupe-X	**Units:**	ug/L
Lab Code:	R1605971-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 00:26	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 00:26	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 00:26	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 00:26	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 00:26	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 00:26	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 00:26	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 00:26	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 00:26	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 00:26	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 00:26	
Acetone	5.0 U	5.0	1.3	1	06/10/16 00:26	
Benzene	1.0 U	1.0	0.20	1	06/10/16 00:26	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 00:26	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 00:26	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 00:26	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 00:26	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 00:26	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 00:26	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 00:26	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 00:26	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 00:26	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 00:26	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 00:26	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 00:26	
Styrene	1.0 U	1.0	0.20	1	06/10/16 00:26	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 00:26	
Toluene	1.0 U	1.0	0.20	1	06/10/16 00:26	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 00:26	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 00:26	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 00:26	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 00:26	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 00:26	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 00:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 00:26	
Dibromofluoromethane	103	89 - 119	06/10/16 00:26	
Toluene-d8	103	87 - 121	06/10/16 00:26	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1B	**Units:**	ug/L
Lab Code:	R1605971-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 00:50	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 00:50	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 00:50	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 00:50	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 00:50	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 00:50	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 00:50	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 00:50	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 00:50	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 00:50	
4-Methyl-2-pentanone	**0.77 J**	5.0	0.67	1	06/10/16 00:50	
Acetone	**1.7 J**	5.0	1.3	1	06/10/16 00:50	
Benzene	1.0 U	1.0	0.20	1	06/10/16 00:50	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 00:50	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 00:50	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 00:50	
Carbon Disulfide	**0.55 J**	1.0	0.22	1	06/10/16 00:50	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 00:50	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 00:50	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 00:50	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 00:50	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 00:50	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 00:50	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 00:50	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 00:50	
Styrene	1.0 U	1.0	0.20	1	06/10/16 00:50	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 00:50	
Toluene	1.0 U	1.0	0.20	1	06/10/16 00:50	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 00:50	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 00:50	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 00:50	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 00:50	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 00:50	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 00:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	06/10/16 00:50	
Dibromofluoromethane	102	89 - 119	06/10/16 00:50	
Toluene-d8	101	87 - 121	06/10/16 00:50	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:21
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-5	**Units:**	ug/L
Lab Code:	R1605971-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 18:40	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 18:40	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 18:40	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 18:40	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 18:40	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 18:40	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 18:40	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 18:40	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 18:40	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 18:40	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 18:40	
Acetone	**34**	5.0	1.3	1	06/10/16 18:40	
Benzene	1.0 U	1.0	0.20	1	06/10/16 18:40	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 18:40	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 18:40	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 18:40	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 18:40	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 18:40	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 18:40	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 18:40	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 18:40	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 18:40	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 18:40	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 18:40	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 18:40	
Styrene	1.0 U	1.0	0.20	1	06/10/16 18:40	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 18:40	
Toluene	1.0 U	1.0	0.20	1	06/10/16 18:40	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 18:40	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 18:40	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 18:40	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 18:40	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 18:40	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 18:40	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 18:40	
Dibromofluoromethane	102	89 - 119	06/10/16 18:40	
Toluene-d8	103	87 - 121	06/10/16 18:40	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:51
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	R1605971-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 01:39	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 01:39	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 01:39	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 01:39	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 01:39	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 01:39	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 01:39	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 01:39	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 01:39	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 01:39	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 01:39	
Acetone	5.0 U	5.0	1.3	1	06/10/16 01:39	
Benzene	1.0 U	1.0	0.20	1	06/10/16 01:39	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 01:39	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 01:39	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 01:39	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 01:39	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 01:39	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 01:39	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 01:39	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 01:39	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 01:39	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 01:39	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 01:39	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 01:39	
Styrene	1.0 U	1.0	0.20	1	06/10/16 01:39	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 01:39	
Toluene	1.0 U	1.0	0.20	1	06/10/16 01:39	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 01:39	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 01:39	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 01:39	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 01:39	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 01:39	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 01:39	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	06/10/16 01:39	
Dibromofluoromethane	102	89 - 119	06/10/16 01:39	
Toluene-d8	102	87 - 121	06/10/16 01:39	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:00
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3B	**Units:**	ug/L
Lab Code:	R1605971-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 02:03	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 02:03	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 02:03	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 02:03	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 02:03	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 02:03	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 02:03	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 02:03	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 02:03	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 02:03	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 02:03	
Acetone	5.0 U	5.0	1.3	1	06/10/16 02:03	
Benzene	1.0 U	1.0	0.20	1	06/10/16 02:03	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 02:03	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 02:03	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 02:03	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 02:03	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 02:03	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 02:03	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 02:03	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 02:03	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 02:03	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 02:03	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 02:03	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 02:03	
Styrene	1.0 U	1.0	0.20	1	06/10/16 02:03	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 02:03	
Toluene	1.0 U	1.0	0.20	1	06/10/16 02:03	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 02:03	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 02:03	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 02:03	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 02:03	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 02:03	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 02:03	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 02:03	
Dibromofluoromethane	103	89 - 119	06/10/16 02:03	
Toluene-d8	105	87 - 121	06/10/16 02:03	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:30
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4	**Units:**	ug/L
Lab Code:	R1605971-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 02:28	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 02:28	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 02:28	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 02:28	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 02:28	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 02:28	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 02:28	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 02:28	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 02:28	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 02:28	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 02:28	
Acetone	5.0 U	5.0	1.3	1	06/10/16 02:28	
Benzene	1.0 U	1.0	0.20	1	06/10/16 02:28	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 02:28	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 02:28	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 02:28	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 02:28	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 02:28	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 02:28	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 02:28	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 02:28	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 02:28	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 02:28	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 02:28	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 02:28	
Styrene	1.0 U	1.0	0.20	1	06/10/16 02:28	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 02:28	
Toluene	1.0 U	1.0	0.20	1	06/10/16 02:28	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 02:28	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 02:28	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 02:28	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 02:28	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 02:28	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 02:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	06/10/16 02:28	
Dibromofluoromethane	99	89 - 119	06/10/16 02:28	
Toluene-d8	101	87 - 121	06/10/16 02:28	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4B	**Units:**	ug/L
Lab Code:	R1605971-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 02:52	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 02:52	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 02:52	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 02:52	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 02:52	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 02:52	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 02:52	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 02:52	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 02:52	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 02:52	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 02:52	
Acetone	5.0 U	5.0	1.3	1	06/10/16 02:52	
Benzene	1.0 U	1.0	0.20	1	06/10/16 02:52	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 02:52	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 02:52	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 02:52	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 02:52	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 02:52	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 02:52	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 02:52	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 02:52	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 02:52	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 02:52	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 02:52	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 02:52	
Styrene	1.0 U	1.0	0.20	1	06/10/16 02:52	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 02:52	
Toluene	1.0 U	1.0	0.20	1	06/10/16 02:52	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 02:52	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 02:52	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 02:52	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 02:52	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 02:52	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 02:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/10/16 02:52	
Dibromofluoromethane	100	89 - 119	06/10/16 02:52	
Toluene-d8	102	87 - 121	06/10/16 02:52	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:58
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1605971-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 19:04	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 19:04	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 19:04	
1,1-Dichloroethane (1,1-DCA)	**1.8**	1.0	0.20	1	06/10/16 19:04	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 19:04	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 19:04	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 19:04	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 19:04	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 19:04	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 19:04	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 19:04	
Acetone	5.0 U	5.0	1.3	1	06/10/16 19:04	
Benzene	1.0 U	1.0	0.20	1	06/10/16 19:04	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 19:04	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 19:04	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 19:04	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 19:04	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 19:04	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 19:04	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 19:04	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 19:04	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 19:04	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 19:04	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 19:04	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 19:04	
Styrene	1.0 U	1.0	0.20	1	06/10/16 19:04	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 19:04	
Toluene	1.0 U	1.0	0.20	1	06/10/16 19:04	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 19:04	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 19:04	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 19:04	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 19:04	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 19:04	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 19:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	06/10/16 19:04	
Dibromofluoromethane	105	89 - 119	06/10/16 19:04	
Toluene-d8	105	87 - 121	06/10/16 19:04	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:07
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11B	**Units:**	ug/L
Lab Code:	R1605971-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 03:41	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 03:41	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 03:41	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 03:41	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 03:41	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 03:41	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 03:41	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 03:41	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 03:41	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 03:41	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 03:41	
Acetone	5.0 U	5.0	1.3	1	06/10/16 03:41	
Benzene	1.0 U	1.0	0.20	1	06/10/16 03:41	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 03:41	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 03:41	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 03:41	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 03:41	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 03:41	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 03:41	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 03:41	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 03:41	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 03:41	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 03:41	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 03:41	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 03:41	
Styrene	1.0 U	1.0	0.20	1	06/10/16 03:41	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 03:41	
Toluene	1.0 U	1.0	0.20	1	06/10/16 03:41	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 03:41	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 03:41	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 03:41	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 03:41	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 03:41	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 03:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/10/16 03:41	
Dibromofluoromethane	100	89 - 119	06/10/16 03:41	
Toluene-d8	102	87 - 121	06/10/16 03:41	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1605971-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**6.4**	1.0	0.36	1	06/10/16 19:28	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 19:28	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 19:28	
1,1-Dichloroethane (1,1-DCA)	**0.45 J**	1.0	0.20	1	06/10/16 19:28	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 19:28	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 19:28	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 19:28	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 19:28	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 19:28	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 19:28	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 19:28	
Acetone	5.0 U	5.0	1.3	1	06/10/16 19:28	
Benzene	1.0 U	1.0	0.20	1	06/10/16 19:28	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 19:28	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 19:28	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 19:28	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 19:28	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 19:28	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 19:28	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 19:28	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 19:28	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 19:28	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 19:28	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 19:28	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 19:28	
Styrene	1.0 U	1.0	0.20	1	06/10/16 19:28	
Tetrachloroethene (PCE)	**0.71 J**	1.0	0.30	1	06/10/16 19:28	
Toluene	1.0 U	1.0	0.20	1	06/10/16 19:28	
Trichloroethene (TCE)	**0.36 J**	1.0	0.22	1	06/10/16 19:28	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 19:28	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 19:28	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 19:28	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 19:28	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 19:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 19:28	
Dibromofluoromethane	104	89 - 119	06/10/16 19:28	
Toluene-d8	105	87 - 121	06/10/16 19:28	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:46
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9B	**Units:**	ug/L
Lab Code:	R1605971-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 04:29	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 04:29	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 04:29	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 04:29	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 04:29	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 04:29	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 04:29	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 04:29	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 04:29	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 04:29	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 04:29	
Acetone	5.0 U	5.0	1.3	1	06/10/16 04:29	
Benzene	1.0 U	1.0	0.20	1	06/10/16 04:29	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 04:29	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 04:29	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 04:29	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 04:29	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 04:29	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 04:29	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 04:29	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 04:29	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 04:29	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 04:29	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 04:29	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 04:29	
Styrene	1.0 U	1.0	0.20	1	06/10/16 04:29	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 04:29	
Toluene	1.0 U	1.0	0.20	1	06/10/16 04:29	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 04:29	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 04:29	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 04:29	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 04:29	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 04:29	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 04:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	06/10/16 04:29	
Dibromofluoromethane	103	89 - 119	06/10/16 04:29	
Toluene-d8	102	87 - 121	06/10/16 04:29	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1605971-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 04:53	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 04:53	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 04:53	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 04:53	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 04:53	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 04:53	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 04:53	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 04:53	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 04:53	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 04:53	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 04:53	
Acetone	5.0 U	5.0	1.3	1	06/10/16 04:53	
Benzene	1.0 U	1.0	0.20	1	06/10/16 04:53	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 04:53	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 04:53	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 04:53	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 04:53	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 04:53	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 04:53	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 04:53	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 04:53	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 04:53	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 04:53	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 04:53	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 04:53	
Styrene	1.0 U	1.0	0.20	1	06/10/16 04:53	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 04:53	
Toluene	1.0 U	1.0	0.20	1	06/10/16 04:53	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 04:53	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 04:53	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 04:53	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 04:53	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 04:53	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 04:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	06/10/16 04:53	
Dibromofluoromethane	99	89 - 119	06/10/16 04:53	
Toluene-d8	102	87 - 121	06/10/16 04:53	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:04
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10B	**Units:**	ug/L
Lab Code:	R1605971-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 19:53	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 19:53	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 19:53	
1,1-Dichloroethane (1,1-DCA)	**2.2**	1.0	0.20	1	06/10/16 19:53	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 19:53	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 19:53	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 19:53	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 19:53	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 19:53	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 19:53	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 19:53	
Acetone	**1.5 J**	5.0	1.3	1	06/10/16 19:53	
Benzene	1.0 U	1.0	0.20	1	06/10/16 19:53	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 19:53	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 19:53	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 19:53	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 19:53	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 19:53	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 19:53	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 19:53	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 19:53	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 19:53	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 19:53	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 19:53	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 19:53	
Styrene	1.0 U	1.0	0.20	1	06/10/16 19:53	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 19:53	
Toluene	1.0 U	1.0	0.20	1	06/10/16 19:53	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 19:53	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 19:53	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 19:53	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 19:53	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 19:53	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 19:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	06/10/16 19:53	
Dibromofluoromethane	102	89 - 119	06/10/16 19:53	
Toluene-d8	104	87 - 121	06/10/16 19:53	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:31
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1605971-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0	U	1.0	0.36	1	06/10/16 20:17	
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.25	1	06/10/16 20:17	
1,1,2-Trichloroethane	1.0	U	1.0	0.34	1	06/10/16 20:17	
1,1-Dichloroethane (1,1-DCA)	**6.4**		1.0	0.20	1	06/10/16 20:17	
1,1-Dichloroethene (1,1-DCE)	1.0	U	1.0	0.57	1	06/10/16 20:17	
1,2-Dichloroethane	**0.58**	**J**	1.0	0.36	1	06/10/16 20:17	
1,2-Dichloroethene, Total	**0.67**	**J**	2.0	0.63	1	06/10/16 20:17	
1,2-Dichloropropane	1.0	U	1.0	0.20	1	06/10/16 20:17	
2-Butanone (MEK)	5.0	U	5.0	0.81	1	06/10/16 20:17	
2-Hexanone	5.0	U	5.0	1.7	1	06/10/16 20:17	
4-Methyl-2-pentanone	5.0	U	5.0	0.67	1	06/10/16 20:17	
Acetone	**1.5**	**J**	5.0	1.3	1	06/10/16 20:17	
Benzene	**9.7**		1.0	0.20	1	06/10/16 20:17	
Bromodichloromethane	1.0	U	1.0	0.32	1	06/10/16 20:17	
Bromoform	1.0	U	1.0	0.42	1	06/10/16 20:17	
Bromomethane	1.0	U	1.0	0.29	1	06/10/16 20:17	
Carbon Disulfide	1.0	U	1.0	0.22	1	06/10/16 20:17	
Carbon Tetrachloride	1.0	U	1.0	0.45	1	06/10/16 20:17	
Chlorobenzene	**3.7**		1.0	0.29	1	06/10/16 20:17	
Chloroethane	**50**		1.0	0.24	1	06/10/16 20:17	
Chloroform	1.0	U	1.0	0.25	1	06/10/16 20:17	
Chloromethane (Methyl Chloride)	1.0	U	1.0	0.21	1	06/10/16 20:17	
Dibromochloromethane	1.0	U	1.0	0.31	1	06/10/16 20:17	
Dichloromethane (Methylene Chloride)	1.0	U	1.0	0.60	1	06/10/16 20:17	
Ethylbenzene	**3.3**		1.0	0.20	1	06/10/16 20:17	
Styrene	1.0	U	1.0	0.20	1	06/10/16 20:17	
Tetrachloroethene (PCE)	1.0	U	1.0	0.30	1	06/10/16 20:17	
Toluene	**55**		1.0	0.20	1	06/10/16 20:17	
Trichloroethene (TCE)	**1.2**		1.0	0.22	1	06/10/16 20:17	
Vinyl Chloride	**0.39**	**J**	1.0	0.32	1	06/10/16 20:17	
cis-1,3-Dichloropropene	1.0	U	1.0	0.24	1	06/10/16 20:17	
m,p-Xylenes	**6.2**		2.0	0.33	1	06/10/16 20:17	
o-Xylene	**2.0**		1.0	0.20	1	06/10/16 20:17	
trans-1,3-Dichloropropene	1.0	U	1.0	0.20	1	06/10/16 20:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	06/10/16 20:17	
Dibromofluoromethane	103	89 - 119	06/10/16 20:17	
Toluene-d8	102	87 - 121	06/10/16 20:17	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:45
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1	**Units:**	ug/L
Lab Code:	R1605971-001	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**81**	1.0	1	06/13/16 13:33	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	Dupe-X	**Units:**	ug/L
Lab Code:	R1605971-002	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**76**	1.0	1	06/13/16 13:44	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1B	**Units:**	ug/L
Lab Code:	R1605971-003	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**3.5**	1.0	1	06/13/16 13:53	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:21
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-5	**Units:**	ug/L
Lab Code:	R1605971-004	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 14:03	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:51
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	R1605971-005	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 14:12	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:00
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3B	**Units:**	ug/L
Lab Code:	R1605971-006	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**38**	1.0	1	06/13/16 14:22	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:30
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4	**Units:**	ug/L
Lab Code:	R1605971-007	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 14:33	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4B	**Units:**	ug/L
Lab Code:	R1605971-008	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**6.1**	1.0	1	06/13/16 14:55	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:58
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1605971-009	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**92**	1.0	1	06/13/16 15:03	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:07
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11B	**Units:**	ug/L
Lab Code:	R1605971-010	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**17**	1.0	1	06/13/16 15:12	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1605971-011	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 15:21	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:46
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9B	**Units:**	ug/L
Lab Code:	R1605971-012	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**11**	1.0	1	06/13/16 15:29	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1605971-013	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 15:37	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:04
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10B	**Units:**	ug/L
Lab Code:	R1605971-014	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**57**	1.0	1	06/13/16 15:46	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:31
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1605971-015	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**5300**	100	100	06/14/16 15:02	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:45
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1	**Basis:**	NA
Lab Code:	R1605971-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	**190**	ug/L	100	1	06/17/16 08:59	06/16/16	
Manganese, Dissolved	200.7	**234**	ug/L	10	1	06/17/16 08:59	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	Dupe-X	**Basis:**	NA
Lab Code:	R1605971-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	**180**	ug/L	100	1	06/17/16 09:03	06/16/16	
Manganese, Dissolved	200.7	**224**	ug/L	10	1	06/17/16 09:03	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1B	**Basis:**	NA
Lab Code:	R1605971-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:07	06/16/16	
Manganese, Dissolved	200.7	**48**	ug/L	10	1	06/17/16 09:07	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:21
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-5	**Basis:**	NA
Lab Code:	R1605971-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100	U	ug/L	100	1	06/17/16 09:11	06/16/16	
Manganese, Dissolved	200.7	**12**		ug/L	10	1	06/17/16 09:11	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:51
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3	**Basis:**	NA
Lab Code:	R1605971-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:15	06/16/16	
Manganese, Dissolved	200.7	**11**	ug/L	10	1	06/17/16 09:15	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:00
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3B	**Basis:**	NA
Lab Code:	R1605971-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:18	06/16/16	
Manganese, Dissolved	200.7	**58**	ug/L	10	1	06/17/16 09:18	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:30
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4	**Basis:**	NA
Lab Code:	R1605971-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100	U	ug/L	100	1	06/17/16 09:30	06/16/16	
Manganese, Dissolved	200.7	10	U	ug/L	10	1	06/17/16 09:30	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4B	**Basis:**	NA
Lab Code:	R1605971-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:34	06/16/16	
Manganese, Dissolved	200.7	**157**	ug/L	10	1	06/17/16 09:34	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:58
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11	**Basis:**	NA
Lab Code:	R1605971-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	**120**	ug/L	100	1	06/17/16 09:38	06/16/16	
Manganese, Dissolved	200.7	**121**	ug/L	10	1	06/17/16 09:38	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:07
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11B	**Basis:**	NA
Lab Code:	R1605971-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:42	06/16/16	
Manganese, Dissolved	200.7	**16**	ug/L	10	1	06/17/16 09:42	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9	**Basis:**	NA
Lab Code:	R1605971-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:45	06/16/16	
Manganese, Dissolved	200.7	**11**	ug/L	10	1	06/17/16 09:45	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:46
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9B	**Basis:**	NA
Lab Code:	R1605971-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:49	06/16/16	
Manganese, Dissolved	200.7	**24**	ug/L	10	1	06/17/16 09:49	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10	**Basis:**	NA
Lab Code:	R1605971-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100 U	ug/L	100	1	06/17/16 09:53	06/16/16	
Manganese, Dissolved	200.7	**141**	ug/L	10	1	06/17/16 09:53	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:04
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10B	**Basis:**	NA
Lab Code:	R1605971-014		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100	U	ug/L	100	1	06/17/16 09:57	06/16/16	
Manganese, Dissolved	200.7	**66**		ug/L	10	1	06/17/16 09:57	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:31
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-2	**Basis:**	NA
Lab Code:	R1605971-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	**4650**	ug/L	100	1	06/17/16 10:01	06/16/16	
Manganese, Dissolved	200.7	**2080**	ug/L	10	1	06/17/16 10:01	06/16/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:45
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1	**Basis:**	NA
Lab Code:	R1605971-001		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 20:17	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 20:17	
Sulfate	300.0	**46.6**	mg/L	2.0	10	06/08/16 20:17	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	Dupe-X	**Basis:**	NA
Lab Code:	R1605971-002		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 19:40	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 19:40	
Sulfate	300.0	**48.3**	mg/L	2.0	10	06/08/16 19:40	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 10:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-1B	**Basis:**	NA
Lab Code:	R1605971-003		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 19:52	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 19:52	
Sulfate	300.0	**1030**	mg/L	40	200	06/09/16 15:32	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:21
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-5	**Basis:**	NA
Lab Code:	R1605971-004		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**2.7**	mg/L	1.0	10	06/08/16 21:14	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:14	
Sulfate	300.0	**58.2**	mg/L	2.0	10	06/08/16 21:14	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 11:51
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3	**Basis:**	NA
Lab Code:	R1605971-005		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:26	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:26	
Sulfate	300.0	**128**	mg/L	4.0	20	06/09/16 15:44	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:00
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-3B	**Basis:**	NA
Lab Code:	R1605971-006		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:38	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:38	
Sulfate	300.0	**38.0**	mg/L	2.0	10	06/08/16 21:38	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:30
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4	**Basis:**	NA
Lab Code:	R1605971-007		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:49	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 21:49	
Sulfate	300.0	**17.8**	mg/L	2.0	10	06/08/16 21:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-4B	**Basis:**	NA
Lab Code:	R1605971-008		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**1.3**	mg/L	1.0	10	06/08/16 22:01	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:01	
Sulfate	300.0	**1120**	mg/L	40	200	06/09/16 15:56	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 12:58
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11	**Basis:**	NA
Lab Code:	R1605971-009		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:14	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:14	
Sulfate	300.0	**77.8**	mg/L	2.0	10	06/08/16 22:14	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:07
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-11B	**Basis:**	NA
Lab Code:	R1605971-010		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:26	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:26	
Sulfate	300.0	**82.3**	mg/L	2.0	10	06/08/16 22:26	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:38
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9	**Basis:**	NA
Lab Code:	R1605971-011		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**3.1**	mg/L	1.0	10	06/08/16 22:38	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 22:38	
Sulfate	300.0	**50.5**	mg/L	2.0	10	06/08/16 22:38	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:46
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-9B	**Basis:**	NA
Lab Code:	R1605971-012		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:12	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:12	
Sulfate	300.0	**642**	mg/L	20	100	06/09/16 16:08	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 13:59
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10	**Basis:**	NA
Lab Code:	R1605971-013		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**1.9**	mg/L	1.0	10	06/08/16 23:24	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:24	
Sulfate	300.0	**53.6**	mg/L	2.0	10	06/08/16 23:24	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:04
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-10B	**Basis:**	NA
Lab Code:	R1605971-014		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:35	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:35	
Sulfate	300.0	**87.5**	mg/L	2.0	10	06/08/16 23:35	

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16 14:31
Sample Matrix:	Water	**Date Received:**	06/07/16 17:20
Sample Name:	MW-2	**Basis:**	NA
Lab Code:	R1605971-015		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:47	
Nitrite as Nitrogen	300.0	1.0 U	mg/L	1.0	10	06/08/16 23:47	
Sulfate	300.0	**26.5**	mg/L	2.0	10	06/08/16 23:47	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Barton & Loguidice, PC **Service Request:** R1605971
Project: Akzo/1398.001.016
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 89 - 119	Toluene-d8 87 - 121
MW-1	R1605971-001	101	100	102
Dupe-X	R1605971-002	101	103	103
MW-1B	R1605971-003	99	102	101
MW-5	R1605971-004	101	102	103
MW-3	R1605971-005	97	102	102
MW-3B	R1605971-006	101	103	105
MW-4	R1605971-007	97	99	101
MW-4B	R1605971-008	98	100	102
MW-11	R1605971-009	102	105	105
MW-11B	R1605971-010	98	100	102
MW-9	R1605971-011	101	104	105
MW-9B	R1605971-012	100	103	102
MW-10	R1605971-013	97	99	102
MW-10B	R1605971-014	100	102	104
MW-2	R1605971-015	101	103	102
Method Blank	RQ1606851-01	100	104	103
Lab Control Sample	RQ1606851-02	105	102	103
Method Blank	RQ1606895-01	98	101	101
Lab Control Sample	RQ1606895-02	102	106	103
MW-2 MS	RQ1606895-05	101	105	103
MW-2 DMS	RQ1606895-06	102	105	104

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16
		Date Analyzed:	06/10/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1605971-015	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike			Duplicate Matrix Spike					
		RQ1606895-05			RQ1606895-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1-Trichloroethane (TCA)	1.0 U	57.8	50.0	116	63.3	50.0	127	74-127	9	30
1,1,2,2-Tetrachloroethane	1.0 U	53.7	50.0	107	59.3	50.0	119	72-122	10	30
1,1,2-Trichloroethane	1.0 U	51.5	50.0	103	54.8	50.0	110	79-119	6	30
1,1-Dichloroethane (1,1-DCA)	6.4	66.3	50.0	120	69.4	50.0	126	74-132	5	30
1,1-Dichloroethene (1,1-DCE)	1.0 U	55.1	50.0	110	58.7	50.0	117	74-139	6	30
1,2-Dichloroethane	0.58 J	55.0	50.0	109	59.8	50.0	118	68-130	8	30
1,2-Dichloropropane	1.0 U	55.7	50.0	111	58.1	50.0	116	79-124	4	30
2-Butanone (MEK)	5.0 U	49.6	50.0	99	51.8	50.0	104	46-141	4	30
2-Hexanone	5.0 U	53.1	50.0	106	56.7	50.0	113	56-132	7	30
4-Methyl-2-pentanone	5.0 U	55.3	50.0	111	58.6	50.0	117	60-141	6	30
Acetone	1.5 J	50.1	50.0	97	53.1	50.0	103	29-151	6	30
Benzene	9.7	62.4	50.0	105	65.9	50.0	112	76-129	5	30
Bromodichloromethane	1.0 U	53.1	50.0	106	56.9	50.0	114	76-127	7	30
Bromoform	1.0 U	58.6	50.0	117	61.6	50.0	123	58-133	5	30
Bromomethane	1.0 U	31.6	50.0	63	37.2	50.0	74	10-162	16	30
Carbon Disulfide	1.0 U	46.9	50.0	94	51.0	50.0	102	34-162	8	30
Carbon Tetrachloride	1.0 U	62.1	50.0	124	66.5	50.0	133	65-135	7	30
Chlorobenzene	3.7	54.4	50.0	101	57.6	50.0	108	76-125	6	30
Chloroethane	50	105	50.0	110	108	50.0	117	70-140	4	30
Chloroform	1.0 U	52.4	50.0	105	55.8	50.0	112	75-130	6	30
Chloromethane (Methyl Chloride)	1.0 U	53.2	50.0	106	57.2	50.0	114	55-160	7	30
cis-1,3-Dichloropropene	1.0 U	49.5	50.0	99	53.5	50.0	107	52-134	8	30
Dibromochloromethane	1.0 U	52.5	50.0	105	56.4	50.0	113	72-128	7	30
Dichloromethane (Methylene Chloride)	1.0 U	50.1	50.0	100	52.1	50.0	104	75-121	4	30
Ethylbenzene	3.3	57.4	50.0	108	60.9	50.0	115	72-134	6	30
m,p-Xylenes	6.2	115	100	108	121	100	115	68-138	5	30
o-Xylene	2.0	56.3	50.0	109	58.7	50.0	113	68-134	4	30
Styrene	1.0 U	51.5	50.0	103	54.8	50.0	110	34-156	6	30
Tetrachloroethene (PCE)	1.0 U	49.2	50.0	98	53.2	50.0	106	67-137	8	30
Toluene	55	107	50.0	102	109	50.0	107	79-125	2	30
trans-1,3-Dichloropropene	1.0 U	53.1	50.0	106	56.8	50.0	114	50-142	7	30
Trichloroethene (TCE)	1.2	53.7	50.0	105	56.6	50.0	111	62-142	5	30
Vinyl Chloride	0.39 J	53.9	50.0	107	58.2	50.0	116	60-157	8	30

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1606851-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/09/16 23:37	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/09/16 23:37	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/09/16 23:37	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/09/16 23:37	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/09/16 23:37	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/09/16 23:37	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/09/16 23:37	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/09/16 23:37	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/09/16 23:37	
2-Hexanone	5.0 U	5.0	1.7	1	06/09/16 23:37	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/09/16 23:37	
Acetone	5.0 U	5.0	1.3	1	06/09/16 23:37	
Benzene	1.0 U	1.0	0.20	1	06/09/16 23:37	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/09/16 23:37	
Bromoform	1.0 U	1.0	0.42	1	06/09/16 23:37	
Bromomethane	1.0 U	1.0	0.29	1	06/09/16 23:37	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/09/16 23:37	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/09/16 23:37	
Chlorobenzene	1.0 U	1.0	0.29	1	06/09/16 23:37	
Chloroethane	1.0 U	1.0	0.24	1	06/09/16 23:37	
Chloroform	1.0 U	1.0	0.25	1	06/09/16 23:37	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/09/16 23:37	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/09/16 23:37	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/09/16 23:37	
Ethylbenzene	1.0 U	1.0	0.20	1	06/09/16 23:37	
Styrene	1.0 U	1.0	0.20	1	06/09/16 23:37	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/09/16 23:37	
Toluene	1.0 U	1.0	0.20	1	06/09/16 23:37	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/09/16 23:37	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/09/16 23:37	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/09/16 23:37	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/09/16 23:37	
o-Xylene	1.0 U	1.0	0.20	1	06/09/16 23:37	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/09/16 23:37	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	06/09/16 23:37	
Dibromofluoromethane	104	89 - 119	06/09/16 23:37	
Toluene-d8	103	87 - 121	06/09/16 23:37	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1606895-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.0 U	1.0	0.36	1	06/10/16 12:28	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.25	1	06/10/16 12:28	
1,1,2-Trichloroethane	1.0 U	1.0	0.34	1	06/10/16 12:28	
1,1-Dichloroethane (1,1-DCA)	1.0 U	1.0	0.20	1	06/10/16 12:28	
1,1-Dichloroethene (1,1-DCE)	1.0 U	1.0	0.57	1	06/10/16 12:28	
1,2-Dichloroethane	1.0 U	1.0	0.36	1	06/10/16 12:28	
1,2-Dichloroethene, Total	2.0 U	2.0	0.63	1	06/10/16 12:28	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	06/10/16 12:28	
2-Butanone (MEK)	5.0 U	5.0	0.81	1	06/10/16 12:28	
2-Hexanone	5.0 U	5.0	1.7	1	06/10/16 12:28	
4-Methyl-2-pentanone	5.0 U	5.0	0.67	1	06/10/16 12:28	
Acetone	5.0 U	5.0	1.3	1	06/10/16 12:28	
Benzene	1.0 U	1.0	0.20	1	06/10/16 12:28	
Bromodichloromethane	1.0 U	1.0	0.32	1	06/10/16 12:28	
Bromoform	1.0 U	1.0	0.42	1	06/10/16 12:28	
Bromomethane	1.0 U	1.0	0.29	1	06/10/16 12:28	
Carbon Disulfide	1.0 U	1.0	0.22	1	06/10/16 12:28	
Carbon Tetrachloride	1.0 U	1.0	0.45	1	06/10/16 12:28	
Chlorobenzene	1.0 U	1.0	0.29	1	06/10/16 12:28	
Chloroethane	1.0 U	1.0	0.24	1	06/10/16 12:28	
Chloroform	1.0 U	1.0	0.25	1	06/10/16 12:28	
Chloromethane (Methyl Chloride)	1.0 U	1.0	0.21	1	06/10/16 12:28	
Dibromochloromethane	1.0 U	1.0	0.31	1	06/10/16 12:28	
Dichloromethane (Methylene Chloride)	1.0 U	1.0	0.60	1	06/10/16 12:28	
Ethylbenzene	1.0 U	1.0	0.20	1	06/10/16 12:28	
Styrene	1.0 U	1.0	0.20	1	06/10/16 12:28	
Tetrachloroethene (PCE)	1.0 U	1.0	0.30	1	06/10/16 12:28	
Toluene	1.0 U	1.0	0.20	1	06/10/16 12:28	
Trichloroethene (TCE)	1.0 U	1.0	0.22	1	06/10/16 12:28	
Vinyl Chloride	1.0 U	1.0	0.32	1	06/10/16 12:28	
cis-1,3-Dichloropropene	1.0 U	1.0	0.24	1	06/10/16 12:28	
m,p-Xylenes	2.0 U	2.0	0.33	1	06/10/16 12:28	
o-Xylene	1.0 U	1.0	0.20	1	06/10/16 12:28	
trans-1,3-Dichloropropene	1.0 U	1.0	0.20	1	06/10/16 12:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	06/10/16 12:28	
Dibromofluoromethane	101	89 - 119	06/10/16 12:28	
Toluene-d8	101	87 - 121	06/10/16 12:28	

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/09/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1606851-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	20.1	20.0	101	74-120
1,1,2,2-Tetrachloroethane	8260C	20.7	20.0	103	78-122
1,1,2-Trichloroethane	8260C	21.5	20.0	108	82-118
1,1-Dichloroethane (1,1-DCA)	8260C	21.6	20.0	108	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	19.5	20.0	98	74-135
1,2-Dichloroethane	8260C	22.6	20.0	113	71-127
1,2-Dichloropropane	8260C	21.6	20.0	108	80-119
2-Butanone (MEK)	8260C	20.5	20.0	102	61-137
2-Hexanone	8260C	20.5	20.0	102	63-124
4-Methyl-2-pentanone	8260C	21.3	20.0	107	66-124
Acetone	8260C	21.9	20.0	109	40-161
Benzene	8260C	19.4	20.0	97	76-118
Bromodichloromethane	8260C	20.9	20.0	105	78-126
Bromoform	8260C	24.9	20.0	124	71-136
Bromomethane	8260C	23.8	20.0	119	42-166
Carbon Disulfide	8260C	14.8	20.0	74	65-127
Carbon Tetrachloride	8260C	24.6	20.0	123	68-125
Chlorobenzene	8260C	19.3	20.0	97	80-121
Chloroethane	8260C	21.2	20.0	106	70-127
Chloroform	8260C	19.8	20.0	99	76-120
Chloromethane (Methyl Chloride)	8260C	21.0	20.0	105	69-145
Dibromochloromethane	8260C	20.9	20.0	105	77-128
Dichloromethane (Methylene Chloride)	8260C	20.3	20.0	101	73-122
Ethylbenzene	8260C	20.0	20.0	100	76-120
Styrene	8260C	20.0	20.0	100	80-124
Tetrachloroethene (PCE)	8260C	17.9	20.0	89	78-124
Toluene	8260C	18.9	20.0	94	77-120
Trichloroethene (TCE)	8260C	21.5	20.0	108	78-123
Vinyl Chloride	8260C	19.1	20.0	95	69-133
cis-1,3-Dichloropropene	8260C	19.7	20.0	98	74-126
m,p-Xylenes	8260C	39.3	40.0	98	78-123
o-Xylene	8260C	20.1	20.0	100	80-120
trans-1,3-Dichloropropene	8260C	23.2	20.0	116	67-135

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/10/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1606895-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	21.6	20.0	108	74-120
1,1,2,2-Tetrachloroethane	8260C	19.4	20.0	97	78-122
1,1,2-Trichloroethane	8260C	20.5	20.0	102	82-118
1,1-Dichloroethane (1,1-DCA)	8260C	22.2	20.0	111	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	20.8	20.0	104	74-135
1,2-Dichloroethane	8260C	22.2	20.0	111	71-127
1,2-Dichloropropane	8260C	21.4	20.0	107	80-119
2-Butanone (MEK)	8260C	18.5	20.0	92	61-137
2-Hexanone	8260C	19.3	20.0	96	63-124
4-Methyl-2-pentanone	8260C	19.6	20.0	98	66-124
Acetone	8260C	18.6	20.0	93	40-161
Benzene	8260C	20.2	20.0	101	76-118
Bromodichloromethane	8260C	20.0	20.0	100	78-126
Bromoform	8260C	23.7	20.0	118	71-136
Bromomethane	8260C	26.1	20.0	130	42-166
Carbon Disulfide	8260C	19.2	20.0	96	65-127
Carbon Tetrachloride	8260C	25.5	20.0	128 *	68-125
Chlorobenzene	8260C	19.5	20.0	98	80-121
Chloroethane	8260C	21.9	20.0	109	70-127
Chloroform	8260C	19.8	20.0	99	76-120
Chloromethane (Methyl Chloride)	8260C	21.8	20.0	109	69-145
Dibromochloromethane	8260C	19.3	20.0	97	77-128
Dichloromethane (Methylene Chloride)	8260C	19.4	20.0	97	73-122
Ethylbenzene	8260C	20.6	20.0	103	76-120
Styrene	8260C	19.9	20.0	100	80-124
Tetrachloroethene (PCE)	8260C	19.7	20.0	99	78-124
Toluene	8260C	19.2	20.0	96	77-120
Trichloroethene (TCE)	8260C	21.3	20.0	106	78-123
Vinyl Chloride	8260C	19.6	20.0	98	69-133
cis-1,3-Dichloropropene	8260C	19.5	20.0	97	74-126
m,p-Xylenes	8260C	41.0	40.0	103	78-123
o-Xylene	8260C	20.0	20.0	100	80-120
trans-1,3-Dichloropropene	8260C	23.4	20.0	117	67-135

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QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16
		Date Analyzed:	06/14/16

Duplicate Matrix Spike Summary
Dissolved Gases by GC/FID

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1605971-015	**Basis:**	NA
Analysis Method:	RSK 175		

		Matrix Spike RQ1607045-07			Duplicate Matrix Spike RQ1607045-08					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methane	5300	5480	262	75 #	5450	262	63 #	54-120	<1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1607045-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/13/16 13:07	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1607045-04	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	1.0 U	1.0	1	06/14/16 13:12	

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/13/16

Duplicate Lab Control Sample Summary
Dissolved Gases by GC/FID

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1607045-02			RQ1607045-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methane	RSK 175	23.3	26.2	89	23.3	26.2	89	65-126	<1	20

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/14/16

Duplicate Lab Control Sample Summary
Dissolved Gases by GC/FID

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1607045-05			RQ1607045-06					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methane	RSK 175	24.3	26.2	93	24.0	26.2	92	65-126	1	20

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1605971-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	100	U	ug/L	100	1	06/17/16 08:44	06/16/16	
Manganese, Dissolved	200.7	10	U	ug/L	10	1	06/17/16 08:44	06/16/16	

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dba ALS Environmental

QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request:R1605971
Date Collected:06/07/16
Date Received:06/07/16
Date Analyzed:6/17/16

Matrix Spike Summary
Inorganic Parameters

Sample Name: MW-2
Lab Code: R1605971-015

Units:ug/L
Basis:NA

Matrix Spike
R1605971-015MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	200.7	4650	4840	1000	19 #	70-130
Manganese, Dissolved	200.7	2080	2190	500	20 #	70-130

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

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QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16
		Date Analyzed:	06/17/16

Replicate Sample Summary
Inorganic Parameters

Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1605971-015	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1605971-015DUP Result	Average	RPD	RPD Limit
Iron, Dissolved	200.7	100	4650	4530	4590	3	20
Manganese, Dissolved	200.7	10	2080	2030	2060	3	20

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

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Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/17/16

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R1605971-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	200.7	1060	1000	106	85-115
Manganese, Dissolved	200.7	528	500	106	85-115

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1605971-MB1		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	06/08/16 13:29	
Nitrite as Nitrogen	300.0	0.10 U	mg/L	0.10	1	06/08/16 13:29	
Sulfate	300.0	0.20 U	mg/L	0.20	1	06/08/16 13:29	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1605971-MB2		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	06/08/16 18:17	
Nitrite as Nitrogen	300.0	0.10 U	mg/L	0.10	1	06/08/16 18:17	
Sulfate	300.0	0.20 U	mg/L	0.20	1	06/08/16 18:17	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1605971-MB3		

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Sulfate	300.0	0.20 U	mg/L	0.20	1	06/09/16 12:41	

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request:R1605971
Date Collected:06/07/16
Date Received:06/07/16
Date Analyzed:6/8/16

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: MW-1
Lab Code: R1605971-001

Units:mg/L
Basis:NA

			Matrix Spike R1605971-001MS			Duplicate Matrix Spike R1605971-001DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	300.0	1.0	9.3	10.0	93	9.3	10.0	93	90-110	<1	20
Nitrite as Nitrogen	300.0	1.0	9.1	10.0	91	9.3	10.0	93	90-110	3	20
Sulfate	300.0	46.6	64.9	20.0	91	64.2	20.0	88 *	90-110	1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

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QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1605971
Project:	Akzo/1398.001.016	**Date Collected:**	06/07/16
Sample Matrix:	Water	**Date Received:**	06/07/16
		Date Analyzed:	06/9/16

Duplicate Matrix Spike Summary
Sulfate

Sample Name:	MW-9B	**Units:**	mg/L
Lab Code:	R1605971-012	**Basis:**	NA
Analysis Method:	300.0		

		Matrix Spike			Duplicate Matrix Spike					
		R1605971-012MS			R1605971-012DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	642	827	200	92	824	200	91	90-110	<1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request:R1605971
Date Collected:06/07/16
Date Received:06/07/16
Date Analyzed:6/8/16

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: MW-2
Lab Code: R1605971-015

Units:mg/L
Basis:NA

			Matrix Spike R1605971-015MS			Duplicate Matrix Spike R1605971-015DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	300.0	1.0	9.2	10.0	92	9.3	10.0	93	90-110	<1	20
Nitrite as Nitrogen	300.0	1.0	9.3	10.0	93	9.0	10.0	90	90-110	4	20
Sulfate	300.0	26.5	47.0	20.0	103	45.9	20.0	97	90-110	2	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/08/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1605971-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	300.0	0.985	1.00	98	90-110
Nitrite as Nitrogen	300.0	0.986	1.00	99	90-110
Sulfate	300.0	1.97	2.00	98	90-110

ALS Group USA, Corp.
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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/08/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1605971-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	300.0	0.984	1.00	98	90-110
Nitrite as Nitrogen	300.0	0.957	1.00	96	90-110
Sulfate	300.0	1.99	2.00	99	90-110

Client: Barton & Loguidice, PC
Project: Akzo/1398.001.016
Sample Matrix: Water

Service Request: R1605971
Date Analyzed: 06/09/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1605971-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Sulfate	300.0	1.91	2.00	95	90-110

December 07, 2016 Service Request No:R1612457

Mr. Brian McGrath
Barton & Loguidice, PC
11 Centre Park
Suite 203
Rochester, NY 14614

Laboratory Results for: Akzo Nobel

Dear Mr.McGrath,

Enclosed are the results of the sample(s) submitted to our laboratory November 23, 2016
For your reference, these analyses have been assigned our service request number **R1612457.**

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Brady Kalkman
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request:R1612457
Date Received:11/23/16

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

Twenty four water samples were received for analysis at ALS Environmental on 11/23/2016. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

Method 8260, 11/29/16, 12/1/16: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260, 12/1/16: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

R1612457-016 pH > 2; ran 9 days after sampling.

Metals Analyses:

No significant anomalies were noted with this analysis.

General Chemistry Analyses:

No significant anomalies were noted with this analysis.

Approved by _____ Date 12/7/2016

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-1	Lab ID: R1612457-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	34.2		0.2	2.0	mg/L	300.0
Manganese, Dissolved	130		0.5	10	ug/L	200.7
Methane	3.9		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-2	Lab ID: R1612457-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	193		0.8	8.0	mg/L	300.0
Iron, Dissolved	520		20	100	ug/L	200.7
Manganese, Dissolved	2240		0.5	10	ug/L	200.7
Methane	2800		12	100	ug/L	RSK 175

CLIENT ID: DUPE-X	Lab ID: R1612457-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	34.1		0.2	2.0	mg/L	300.0
Manganese, Dissolved	131		0.5	10	ug/L	200.7
Methane	3.8		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-3	Lab ID: R1612457-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	135		0.8	8.0	mg/L	300.0
Manganese, Dissolved	10		0.5	10	ug/L	200.7
Methane	1.3		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-4B	Lab ID: R1612457-005					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	754		2	20	mg/L	300.0
Manganese, Dissolved	47		0.5	10	ug/L	200.7
Methane	4.3		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-5	Lab ID: R1612457-006					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	1.4		0.5	1.0	mg/L	300.0
Sulfate	59.7		0.2	2.0	mg/L	300.0
Manganese, Dissolved	26		0.5	10	ug/L	200.7

CLIENT ID: MW-9	Lab ID: R1612457-007					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Nitrate as Nitrogen	2.5		0.5	1.0	mg/L	300.0
Sulfate	50.8		0.2	2.0	mg/L	300.0

CLIENT ID: MW-9B	Lab ID: R1612457-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	640		2	20	mg/L	300.0
Manganese, Dissolved	40		0.5	10	ug/L	200.7
Methane	3.7		0.12	1.0	ug/L	RSK 175

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-9B	Lab ID: R1612457-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**

CLIENT ID: MW-10	Lab ID: R1612457-009					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	59.0		0.2	2.0	mg/L	300.0
Manganese, Dissolved	114		0.5	10	ug/L	200.7

CLIENT ID: MW-11	Lab ID: R1612457-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	81.6		0.2	2.0	mg/L	300.0
Manganese, Dissolved	168		0.5	10	ug/L	200.7
Methane	23		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-11B	Lab ID: R1612457-011					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Sulfate	351		2	20	mg/L	300.0
Manganese, Dissolved	29		0.5	10	ug/L	200.7
Methane	11		0.12	1.0	ug/L	RSK 175

CLIENT ID: MW-2 VOA	Lab ID: R1612457-013					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Chlorobenzene	1.9		0.29	1.0	ug/L	8260C
Chloroethane	7.6		0.24	1.0	ug/L	8260C

CLIENT ID: DUPE-X VOA	Lab ID: R1612457-014					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Acetone	13		1.3	5.0	ug/L	8260C

CLIENT ID: MW-4 VOA	Lab ID: R1612457-016					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Acetone	5.2		1.3	5.0	ug/L	8260C

CLIENT ID: MW-5 VOA	Lab ID: R1612457-018					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Acetone	13		1.3	5.0	ug/L	8260C

CLIENT ID: MW-9 VOA	Lab ID: R1612457-019					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1,1-Trichloroethane (TCA)	4.5		0.36	1.0	ug/L	8260C

CLIENT ID: MW-11 VOA	Lab ID: R1612457-022					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
1,1-Dichloroethane (1,1-DCA)	1.6		0.20	1.0	ug/L	8260C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Barton & Loguidice, PC **Service Request:**R1612457
Project: Akzo Nobel/1398.003.001

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1612457-001	MW-1	11/23/2016	1034
R1612457-002	MW-2	11/23/2016	1400
R1612457-003	DUPE-X	11/23/2016	
R1612457-004	MW-3	11/23/2016	1109
R1612457-005	MW-4B	11/23/2016	1146
R1612457-006	MW-5	11/23/2016	1054
R1612457-007	MW-9	11/23/2016	1255
R1612457-008	MW-9B	11/23/2016	1303
R1612457-009	MW-10	11/23/2016	1348
R1612457-010	MW-11	11/23/2016	1219
R1612457-011	MW-11B	11/23/2016	1228
R1612457-012	MW-1 VOA	11/22/2016	1057
R1612457-013	MW-2 VOA	11/22/2016	1450
R1612457-014	DUPE-X VOA	11/22/2016	
R1612457-015	MW-3 VOA	11/22/2016	1144
R1612457-016	MW-4 VOA	11/22/2016	1224
R1612457-017	MW-4B VOA	11/22/2016	1215
R1612457-018	MW-5 VOA	11/22/2016	1123
R1612457-019	MW-9 VOA	11/22/2016	1405
R1612457-020	MW-9B VOA	11/22/2016	1358
R1612457-021	MW-10 VOA	11/22/2016	1426
R1612457-022	MW-11 VOA	11/22/2016	1309
R1612457-023	MW-11B VOA	11/22/2016	1303
R1612457-024	TRIP BLANK	11/22/2016	

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SR# _____

PAGE _1_____ OF __2____

Project Name: Akzo Nobel Project Number: 1398.003.001

Project Manager: William Doebler Company: _Barton & Loguidice_____

Company/Address: 11 Centre Park Suite 2 Phone: (585) 315-7190

City, State, Zip: Rochester, NY 14614 FAX: _____

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: Dissolved Fe, Mn	NO2, NO3, SO4 (300.0)	8260C	RSK 175		REMARKS
MW-1	11/23/16	10:34		W	8	X	X	X	X		VOA's 10:57 - 11/22/16
MW-2	11/23/16	14:00		W	8	X	X	X	X		VOA's 14:50 - 11/22/16 MS/MSD
MW-2 Dupe - X	11/23/16	—		W	8	X	X	X	X		VOA's - 11/22/16
MW-3 (MS/MSD)	11/23/16	11:09		W	16	X	X	X	X		VOA's - 11:44 - 11/22/16
MW-4	11/22/16	12:24		W	3			X			
MW-4B	11/23/16	11:46		W	8	X	X	X	X		VOA's - 12:15 - 11/22/16
MW-5	11/23/16	10:54		W	8	X	X	X	X		VOA's 11:23 - 11/22/16
MW-9	11/23/16	12:55		W	8	X	X	X	X		VOA's 14:05 - 11/22/16
MW-9B	11/23/16	13:03		W	8	X	X	X	X		VOA's 13:58 - 11/22/16
MW-10	11/23/16	13:48		W	8	X	X	X	X		VOA's 14:26 - 11/22/16

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 BD

_X___ Standard (15 BD)

____ Provide FAX Preliminary Results

Requested Report Date:_____

Invoice Information

P.O. # _____

Bill to: B+L

REPORT REQUIREMENTS

_____ I. Routine Report: Results and Method Blank (Surrogate, as required)

x II. Results w/ QC (Dup., MS, MSD as req)

_____ III. Results (with QC and Calibration Summaries)

_____ IV. ASP-B

_____ V. CLP

_____ EDD?:

Comments/Special Instructions:

RSK Methane Only

Dissolved metals are field filtered

VOA's - 8260 - Samples on 11/22/16. All other samples collected 11/23/16.

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: Brian Tyler	Printed Name: Daniel Ward	Printed Name:	Printed Name:
Firm: B+L	Firm: ALS	Firm:	Firm:
Date/Time: 11/23/16 16:00	Date/Time: 11/23/16 1600	Date/Time:	Date/Time:

ALS

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SR# _____

PAGE 2 OF 2

Project Name: Akzo Nobel **Project Number:** 1398.003.001

Project Manager: William Doebler **Company:** Barton & Loguidice

Company/Address: _____ **Phone:** _____

City, State, Zip: _____ **FAX:** _____

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: Dissolved Fe, Mn	NO2, NO3, SO4 (300.0)	8260C	RSK 175		REMARKS
MW-11	11/23/16	12:14		W	8	X	X	X	X		VOA's -13:09 11/22/16
MW-11B	11/23/16	12:28		W	8	X	X	X	X		VOA's -13:03 11/22/16
Field Blank				W							
Trip Blank				W				X			
				W							
				W							
				W							

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr ____ 5 BD

__X__ Standard (15 BD)

____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results and Method Blank (Surrogate, as required)

X II. Results w/ QC (Dup., MS, MSD as req)

_____ III. Results (with QC and Calibration Summaries)

_____ IV. ASP-B

_____ V. CLP

_____ EDD?: _____

Comments/Special Instructions:

RSK Methane Only

Dissolved metals are field filtered

Invoice Information

P.O. # _____

Bill to: B+L

RELINQUISHED BY:

Signature: _____

Printed Name: _____

Firm: B+L

Date/Time: 11/23/16 16:4

RECEIVED BY:

Signature: _____

Printed Name: Daniel Ward

Firm: ALS

Date/Time: 11/23/16/1600

RELINQUISHED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

RECEIVED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

Cooler Receipt and Preservation Check Form

Project/Client BHL Akzo Folder Number .

Cooler received on 11/23/16 by: @

COURIER: ALS UPS FEDEX VELOCITY (CLIENT)

1	Were **Custody seals** on outside of cooler?	Y (N)
2	**Custody papers** properly completed (ink, signed)?	(Y) N
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N
4	Circle: (**Wet Ice**) **Dry Ice** **Gel packs** present?	(Y) N

5a	**Perchlorate** samples have required headspace?	Y N (NA)
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
6	Where did the bottles originate?	(ALS/ROC) CLIENT
7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 11/23/16 Time: 1605 ID: (IR#7) IR#8 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	6.0	3.5					
Correction Factor (°C)	+0.9	+0.9					
Corrected Temp (°C)	6.9°	4.4°					
Within 0-6°C?	Y (N)	(Y) N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (Same Day Rule)

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by @ on 11/23/16 at 1606

5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 11-23-16 Time: 1415 by: TS

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.	Were 5035 vials acceptable (no extra labels, not leaking)?	YES	NO
5.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated

(N/A) (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	X		BD1326156H	10/17				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 101716-2440

Other Comments:

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

PC Secondary Review: _____

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

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

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

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Service Request: R1612457

Sample Name: MW-1
Lab Code: R1612457-001
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: MW-2
Lab Code: R1612457-002
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: DUPE-X
Lab Code: R1612457-003
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: MW-3
Lab Code: R1612457-004
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Service Request: R1612457

Sample Name: MW-4B
Lab Code: R1612457-005
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: MW-5
Lab Code: R1612457-006
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: MW-9
Lab Code: R1612457-007
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name: MW-9B
Lab Code: R1612457-008
Sample Matrix: Water
Date Collected: 11/23/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001		

Sample Name:	MW-10	**Date Collected:**	11/23/16
Lab Code:	R1612457-009	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name:	MW-11	**Date Collected:**	11/23/16
Lab Code:	R1612457-010	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name:	MW-11B	**Date Collected:**	11/23/16
Lab Code:	R1612457-011	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CBURLESON	NMANSEN
300.0		CWOODS
RSK 175		AMOSES

Sample Name:	MW-1 VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-012	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001		

Sample Name:	MW-2 VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-013	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	DUPE-X VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-014	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-3 VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-015	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-4 VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-016	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	MW-4B VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-017	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Service Request: R1612457

Sample Name: MW-5 VOA
Lab Code: R1612457-018
Sample Matrix: Water
Date Collected: 11/22/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9 VOA
Lab Code: R1612457-019
Sample Matrix: Water
Date Collected: 11/22/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-9B VOA
Lab Code: R1612457-020
Sample Matrix: Water
Date Collected: 11/22/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-10 VOA
Lab Code: R1612457-021
Sample Matrix: Water
Date Collected: 11/22/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name: MW-11 VOA
Lab Code: R1612457-022
Sample Matrix: Water
Date Collected: 11/22/16
Date Received: 11/23/16

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001		

Sample Name:	MW-11B VOA	**Date Collected:**	11/22/16
Lab Code:	R1612457-023	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

Sample Name:	TRIP BLANK	**Date Collected:**	11/22/16
Lab Code:	R1612457-024	**Date Received:**	11/23/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		KRUEST

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

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www.alsglobal.com

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 10:57
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-1 VOA	**Units:**	ug/L
Lab Code:	R1612457-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 00:43	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 00:43	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 00:43	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 00:43	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 00:43	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 00:43	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 00:43	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 00:43	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 00:43	
2-Hexanone	ND U	5.0	1	11/30/16 00:43	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 00:43	
Acetone	ND U	5.0	1	11/30/16 00:43	
Benzene	ND U	1.0	1	11/30/16 00:43	
Bromodichloromethane	ND U	1.0	1	11/30/16 00:43	
Bromoform	ND U	1.0	1	11/30/16 00:43	
Bromomethane	ND U	1.0	1	11/30/16 00:43	
Carbon Disulfide	ND U	1.0	1	11/30/16 00:43	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 00:43	
Chlorobenzene	ND U	1.0	1	11/30/16 00:43	
Chloroethane	ND U	1.0	1	11/30/16 00:43	
Chloroform	ND U	1.0	1	11/30/16 00:43	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 00:43	
Dibromochloromethane	ND U	1.0	1	11/30/16 00:43	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 00:43	
Ethylbenzene	ND U	1.0	1	11/30/16 00:43	
Styrene	ND U	1.0	1	11/30/16 00:43	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 00:43	
Toluene	ND U	1.0	1	11/30/16 00:43	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 00:43	
Vinyl Chloride	ND U	1.0	1	11/30/16 00:43	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 00:43	
m,p-Xylenes	ND U	2.0	1	11/30/16 00:43	
o-Xylene	ND U	1.0	1	11/30/16 00:43	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 00:43	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 10:57
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-1 VOA	**Units:**	ug/L
Lab Code:	R1612457-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	11/30/16 00:43	
Dibromofluoromethane	106	89 - 119	11/30/16 00:43	
Toluene-d8	108	87 - 121	11/30/16 00:43	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:50
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-2 VOA	**Units:**	ug/L
Lab Code:	R1612457-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 07:49	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 07:49	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 07:49	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 07:49	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 07:49	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 07:49	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 07:49	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 07:49	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 07:49	
2-Hexanone	ND U	5.0	1	11/30/16 07:49	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 07:49	
Acetone	ND U	5.0	1	11/30/16 07:49	
Benzene	ND U	1.0	1	11/30/16 07:49	
Bromodichloromethane	ND U	1.0	1	11/30/16 07:49	
Bromoform	ND U	1.0	1	11/30/16 07:49	
Bromomethane	ND U	1.0	1	11/30/16 07:49	
Carbon Disulfide	ND U	1.0	1	11/30/16 07:49	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 07:49	
Chlorobenzene	**1.9**	1.0	1	11/30/16 07:49	
Chloroethane	**7.6**	1.0	1	11/30/16 07:49	
Chloroform	ND U	1.0	1	11/30/16 07:49	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 07:49	
Dibromochloromethane	ND U	1.0	1	11/30/16 07:49	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 07:49	
Ethylbenzene	ND U	1.0	1	11/30/16 07:49	
Styrene	ND U	1.0	1	11/30/16 07:49	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 07:49	
Toluene	ND U	1.0	1	11/30/16 07:49	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 07:49	
Vinyl Chloride	ND U	1.0	1	11/30/16 07:49	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 07:49	
m,p-Xylenes	ND U	2.0	1	11/30/16 07:49	
o-Xylene	ND U	1.0	1	11/30/16 07:49	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 07:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:50
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-2 VOA	**Units:**	ug/L
Lab Code:	R1612457-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	11/30/16 07:49	
Dibromofluoromethane	108	89 - 119	11/30/16 07:49	
Toluene-d8	105	87 - 121	11/30/16 07:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	DUPE-X VOA	**Units:**	ug/L
Lab Code:	R1612457-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 08:19	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 08:19	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 08:19	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 08:19	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 08:19	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 08:19	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 08:19	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 08:19	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 08:19	
2-Hexanone	ND U	5.0	1	11/30/16 08:19	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 08:19	
Acetone	**13**	5.0	1	11/30/16 08:19	
Benzene	ND U	1.0	1	11/30/16 08:19	
Bromodichloromethane	ND U	1.0	1	11/30/16 08:19	
Bromoform	ND U	1.0	1	11/30/16 08:19	
Bromomethane	ND U	1.0	1	11/30/16 08:19	
Carbon Disulfide	ND U	1.0	1	11/30/16 08:19	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 08:19	
Chlorobenzene	ND U	1.0	1	11/30/16 08:19	
Chloroethane	ND U	1.0	1	11/30/16 08:19	
Chloroform	ND U	1.0	1	11/30/16 08:19	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 08:19	
Dibromochloromethane	ND U	1.0	1	11/30/16 08:19	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 08:19	
Ethylbenzene	ND U	1.0	1	11/30/16 08:19	
Styrene	ND U	1.0	1	11/30/16 08:19	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 08:19	
Toluene	ND U	1.0	1	11/30/16 08:19	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 08:19	
Vinyl Chloride	ND U	1.0	1	11/30/16 08:19	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 08:19	
m,p-Xylenes	ND U	2.0	1	11/30/16 08:19	
o-Xylene	ND U	1.0	1	11/30/16 08:19	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 08:19	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	DUPE-X VOA	**Units:**	ug/L
Lab Code:	R1612457-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	11/30/16 08:19	
Dibromofluoromethane	106	89 - 119	11/30/16 08:19	
Toluene-d8	109	87 - 121	11/30/16 08:19	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 11:44
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-3 VOA	**Units:**	ug/L
Lab Code:	R1612457-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 12:47	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 12:47	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 12:47	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 12:47	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 12:47	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 12:47	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 12:47	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 12:47	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 12:47	
2-Hexanone	ND U	5.0	1	12/01/16 12:47	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 12:47	
Acetone	ND U	5.0	1	12/01/16 12:47	
Benzene	ND U	1.0	1	12/01/16 12:47	
Bromodichloromethane	ND U	1.0	1	12/01/16 12:47	
Bromoform	ND U	1.0	1	12/01/16 12:47	
Bromomethane	ND U	1.0	1	12/01/16 12:47	
Carbon Disulfide	ND U	1.0	1	12/01/16 12:47	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 12:47	
Chlorobenzene	ND U	1.0	1	12/01/16 12:47	
Chloroethane	ND U	1.0	1	12/01/16 12:47	
Chloroform	ND U	1.0	1	12/01/16 12:47	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 12:47	
Dibromochloromethane	ND U	1.0	1	12/01/16 12:47	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 12:47	
Ethylbenzene	ND U	1.0	1	12/01/16 12:47	
Styrene	ND U	1.0	1	12/01/16 12:47	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 12:47	
Toluene	ND U	1.0	1	12/01/16 12:47	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 12:47	
Vinyl Chloride	ND U	1.0	1	12/01/16 12:47	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 12:47	
m,p-Xylenes	ND U	2.0	1	12/01/16 12:47	
o-Xylene	ND U	1.0	1	12/01/16 12:47	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 12:47	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 11:44
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-3 VOA	**Units:**	ug/L
Lab Code:	R1612457-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	12/01/16 12:47	
Dibromofluoromethane	107	89 - 119	12/01/16 12:47	
Toluene-d8	102	87 - 121	12/01/16 12:47	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 12:24
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4 VOA	**Units:**	ug/L
Lab Code:	R1612457-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 13:17	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 13:17	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 13:17	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 13:17	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 13:17	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 13:17	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 13:17	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 13:17	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 13:17	
2-Hexanone	ND U	5.0	1	12/01/16 13:17	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 13:17	
Acetone	**5.2**	5.0	1	12/01/16 13:17	
Benzene	ND U	1.0	1	12/01/16 13:17	
Bromodichloromethane	ND U	1.0	1	12/01/16 13:17	
Bromoform	ND U	1.0	1	12/01/16 13:17	
Bromomethane	ND U	1.0	1	12/01/16 13:17	
Carbon Disulfide	ND U	1.0	1	12/01/16 13:17	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 13:17	
Chlorobenzene	ND U	1.0	1	12/01/16 13:17	
Chloroethane	ND U	1.0	1	12/01/16 13:17	
Chloroform	ND U	1.0	1	12/01/16 13:17	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 13:17	
Dibromochloromethane	ND U	1.0	1	12/01/16 13:17	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 13:17	
Ethylbenzene	ND U	1.0	1	12/01/16 13:17	
Styrene	ND U	1.0	1	12/01/16 13:17	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 13:17	
Toluene	ND U	1.0	1	12/01/16 13:17	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 13:17	
Vinyl Chloride	ND U	1.0	1	12/01/16 13:17	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 13:17	
m,p-Xylenes	ND U	2.0	1	12/01/16 13:17	
o-Xylene	ND U	1.0	1	12/01/16 13:17	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 13:17	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 12:24
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4 VOA	**Units:**	ug/L
Lab Code:	R1612457-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	12/01/16 13:17	
Dibromofluoromethane	107	89 - 119	12/01/16 13:17	
Toluene-d8	110	87 - 121	12/01/16 13:17	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 12:15
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4B VOA	**Units:**	ug/L
Lab Code:	R1612457-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 08:49	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 08:49	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 08:49	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 08:49	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 08:49	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 08:49	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 08:49	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 08:49	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 08:49	
2-Hexanone	ND U	5.0	1	11/30/16 08:49	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 08:49	
Acetone	ND U	5.0	1	11/30/16 08:49	
Benzene	ND U	1.0	1	11/30/16 08:49	
Bromodichloromethane	ND U	1.0	1	11/30/16 08:49	
Bromoform	ND U	1.0	1	11/30/16 08:49	
Bromomethane	ND U	1.0	1	11/30/16 08:49	
Carbon Disulfide	ND U	1.0	1	11/30/16 08:49	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 08:49	
Chlorobenzene	ND U	1.0	1	11/30/16 08:49	
Chloroethane	ND U	1.0	1	11/30/16 08:49	
Chloroform	ND U	1.0	1	11/30/16 08:49	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 08:49	
Dibromochloromethane	ND U	1.0	1	11/30/16 08:49	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 08:49	
Ethylbenzene	ND U	1.0	1	11/30/16 08:49	
Styrene	ND U	1.0	1	11/30/16 08:49	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 08:49	
Toluene	ND U	1.0	1	11/30/16 08:49	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 08:49	
Vinyl Chloride	ND U	1.0	1	11/30/16 08:49	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 08:49	
m,p-Xylenes	ND U	2.0	1	11/30/16 08:49	
o-Xylene	ND U	1.0	1	11/30/16 08:49	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 08:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 12:15
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4B VOA	**Units:**	ug/L
Lab Code:	R1612457-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	11/30/16 08:49	
Dibromofluoromethane	109	89 - 119	11/30/16 08:49	
Toluene-d8	111	87 - 121	11/30/16 08:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 11:23
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-5 VOA	**Units:**	ug/L
Lab Code:	R1612457-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 09:19	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 09:19	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 09:19	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 09:19	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 09:19	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 09:19	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 09:19	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 09:19	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 09:19	
2-Hexanone	ND U	5.0	1	11/30/16 09:19	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 09:19	
Acetone	**13**	5.0	1	11/30/16 09:19	
Benzene	ND U	1.0	1	11/30/16 09:19	
Bromodichloromethane	ND U	1.0	1	11/30/16 09:19	
Bromoform	ND U	1.0	1	11/30/16 09:19	
Bromomethane	ND U	1.0	1	11/30/16 09:19	
Carbon Disulfide	ND U	1.0	1	11/30/16 09:19	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 09:19	
Chlorobenzene	ND U	1.0	1	11/30/16 09:19	
Chloroethane	ND U	1.0	1	11/30/16 09:19	
Chloroform	ND U	1.0	1	11/30/16 09:19	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 09:19	
Dibromochloromethane	ND U	1.0	1	11/30/16 09:19	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 09:19	
Ethylbenzene	ND U	1.0	1	11/30/16 09:19	
Styrene	ND U	1.0	1	11/30/16 09:19	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 09:19	
Toluene	ND U	1.0	1	11/30/16 09:19	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 09:19	
Vinyl Chloride	ND U	1.0	1	11/30/16 09:19	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 09:19	
m,p-Xylenes	ND U	2.0	1	11/30/16 09:19	
o-Xylene	ND U	1.0	1	11/30/16 09:19	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 09:19	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 11:23
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-5 VOA	**Units:**	ug/L
Lab Code:	R1612457-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	11/30/16 09:19	
Dibromofluoromethane	107	89 - 119	11/30/16 09:19	
Toluene-d8	110	87 - 121	11/30/16 09:19	

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:05
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9 VOA	**Units:**	ug/L
Lab Code:	R1612457-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**4.5**	1.0	1	11/30/16 09:49	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 09:49	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 09:49	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 09:49	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 09:49	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 09:49	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 09:49	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 09:49	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 09:49	
2-Hexanone	ND U	5.0	1	11/30/16 09:49	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 09:49	
Acetone	ND U	5.0	1	11/30/16 09:49	
Benzene	ND U	1.0	1	11/30/16 09:49	
Bromodichloromethane	ND U	1.0	1	11/30/16 09:49	
Bromoform	ND U	1.0	1	11/30/16 09:49	
Bromomethane	ND U	1.0	1	11/30/16 09:49	
Carbon Disulfide	ND U	1.0	1	11/30/16 09:49	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 09:49	
Chlorobenzene	ND U	1.0	1	11/30/16 09:49	
Chloroethane	ND U	1.0	1	11/30/16 09:49	
Chloroform	ND U	1.0	1	11/30/16 09:49	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 09:49	
Dibromochloromethane	ND U	1.0	1	11/30/16 09:49	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 09:49	
Ethylbenzene	ND U	1.0	1	11/30/16 09:49	
Styrene	ND U	1.0	1	11/30/16 09:49	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 09:49	
Toluene	ND U	1.0	1	11/30/16 09:49	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 09:49	
Vinyl Chloride	ND U	1.0	1	11/30/16 09:49	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 09:49	
m,p-Xylenes	ND U	2.0	1	11/30/16 09:49	
o-Xylene	ND U	1.0	1	11/30/16 09:49	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 09:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:05
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9 VOA	**Units:**	ug/L
Lab Code:	R1612457-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	11/30/16 09:49	
Dibromofluoromethane	109	89 - 119	11/30/16 09:49	
Toluene-d8	104	87 - 121	11/30/16 09:49	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:58
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9B VOA	**Units:**	ug/L
Lab Code:	R1612457-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 13:48	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 13:48	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 13:48	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 13:48	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 13:48	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 13:48	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 13:48	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 13:48	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 13:48	
2-Hexanone	ND U	5.0	1	12/01/16 13:48	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 13:48	
Acetone	ND U	5.0	1	12/01/16 13:48	
Benzene	ND U	1.0	1	12/01/16 13:48	
Bromodichloromethane	ND U	1.0	1	12/01/16 13:48	
Bromoform	ND U	1.0	1	12/01/16 13:48	
Bromomethane	ND U	1.0	1	12/01/16 13:48	
Carbon Disulfide	ND U	1.0	1	12/01/16 13:48	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 13:48	
Chlorobenzene	ND U	1.0	1	12/01/16 13:48	
Chloroethane	ND U	1.0	1	12/01/16 13:48	
Chloroform	ND U	1.0	1	12/01/16 13:48	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 13:48	
Dibromochloromethane	ND U	1.0	1	12/01/16 13:48	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 13:48	
Ethylbenzene	ND U	1.0	1	12/01/16 13:48	
Styrene	ND U	1.0	1	12/01/16 13:48	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 13:48	
Toluene	ND U	1.0	1	12/01/16 13:48	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 13:48	
Vinyl Chloride	ND U	1.0	1	12/01/16 13:48	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 13:48	
m,p-Xylenes	ND U	2.0	1	12/01/16 13:48	
o-Xylene	ND U	1.0	1	12/01/16 13:48	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 13:48	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:58
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9B VOA	**Units:**	ug/L
Lab Code:	R1612457-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	12/01/16 13:48	
Dibromofluoromethane	105	89 - 119	12/01/16 13:48	
Toluene-d8	109	87 - 121	12/01/16 13:48	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:26
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-10 VOA	**Units:**	ug/L
Lab Code:	R1612457-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 14:18	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 14:18	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 14:18	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 14:18	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 14:18	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 14:18	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 14:18	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 14:18	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 14:18	
2-Hexanone	ND U	5.0	1	12/01/16 14:18	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 14:18	
Acetone	ND U	5.0	1	12/01/16 14:18	
Benzene	ND U	1.0	1	12/01/16 14:18	
Bromodichloromethane	ND U	1.0	1	12/01/16 14:18	
Bromoform	ND U	1.0	1	12/01/16 14:18	
Bromomethane	ND U	1.0	1	12/01/16 14:18	
Carbon Disulfide	ND U	1.0	1	12/01/16 14:18	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 14:18	
Chlorobenzene	ND U	1.0	1	12/01/16 14:18	
Chloroethane	ND U	1.0	1	12/01/16 14:18	
Chloroform	ND U	1.0	1	12/01/16 14:18	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 14:18	
Dibromochloromethane	ND U	1.0	1	12/01/16 14:18	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 14:18	
Ethylbenzene	ND U	1.0	1	12/01/16 14:18	
Styrene	ND U	1.0	1	12/01/16 14:18	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 14:18	
Toluene	ND U	1.0	1	12/01/16 14:18	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 14:18	
Vinyl Chloride	ND U	1.0	1	12/01/16 14:18	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 14:18	
m,p-Xylenes	ND U	2.0	1	12/01/16 14:18	
o-Xylene	ND U	1.0	1	12/01/16 14:18	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 14:18	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 14:26
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-10 VOA	**Units:**	ug/L
Lab Code:	R1612457-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	12/01/16 14:18	
Dibromofluoromethane	108	89 - 119	12/01/16 14:18	
Toluene-d8	102	87 - 121	12/01/16 14:18	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:09
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11 VOA	**Units:**	ug/L
Lab Code:	R1612457-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 14:48	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 14:48	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 14:48	
1,1-Dichloroethane (1,1-DCA)	**1.6**	1.0	1	12/01/16 14:48	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 14:48	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 14:48	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 14:48	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 14:48	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 14:48	
2-Hexanone	ND U	5.0	1	12/01/16 14:48	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 14:48	
Acetone	ND U	5.0	1	12/01/16 14:48	
Benzene	ND U	1.0	1	12/01/16 14:48	
Bromodichloromethane	ND U	1.0	1	12/01/16 14:48	
Bromoform	ND U	1.0	1	12/01/16 14:48	
Bromomethane	ND U	1.0	1	12/01/16 14:48	
Carbon Disulfide	ND U	1.0	1	12/01/16 14:48	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 14:48	
Chlorobenzene	ND U	1.0	1	12/01/16 14:48	
Chloroethane	ND U	1.0	1	12/01/16 14:48	
Chloroform	ND U	1.0	1	12/01/16 14:48	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 14:48	
Dibromochloromethane	ND U	1.0	1	12/01/16 14:48	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 14:48	
Ethylbenzene	ND U	1.0	1	12/01/16 14:48	
Styrene	ND U	1.0	1	12/01/16 14:48	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 14:48	
Toluene	ND U	1.0	1	12/01/16 14:48	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 14:48	
Vinyl Chloride	ND U	1.0	1	12/01/16 14:48	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 14:48	
m,p-Xylenes	ND U	2.0	1	12/01/16 14:48	
o-Xylene	ND U	1.0	1	12/01/16 14:48	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 14:48	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:09
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11 VOA	**Units:**	ug/L
Lab Code:	R1612457-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	12/01/16 14:48	
Dibromofluoromethane	110	89 - 119	12/01/16 14:48	
Toluene-d8	104	87 - 121	12/01/16 14:48	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:03
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11B VOA	**Units:**	ug/L
Lab Code:	R1612457-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 15:18	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 15:18	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 15:18	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 15:18	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 15:18	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 15:18	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 15:18	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 15:18	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 15:18	
2-Hexanone	ND U	5.0	1	12/01/16 15:18	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 15:18	
Acetone	ND U	5.0	1	12/01/16 15:18	
Benzene	ND U	1.0	1	12/01/16 15:18	
Bromodichloromethane	ND U	1.0	1	12/01/16 15:18	
Bromoform	ND U	1.0	1	12/01/16 15:18	
Bromomethane	ND U	1.0	1	12/01/16 15:18	
Carbon Disulfide	ND U	1.0	1	12/01/16 15:18	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 15:18	
Chlorobenzene	ND U	1.0	1	12/01/16 15:18	
Chloroethane	ND U	1.0	1	12/01/16 15:18	
Chloroform	ND U	1.0	1	12/01/16 15:18	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 15:18	
Dibromochloromethane	ND U	1.0	1	12/01/16 15:18	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 15:18	
Ethylbenzene	ND U	1.0	1	12/01/16 15:18	
Styrene	ND U	1.0	1	12/01/16 15:18	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 15:18	
Toluene	ND U	1.0	1	12/01/16 15:18	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 15:18	
Vinyl Chloride	ND U	1.0	1	12/01/16 15:18	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 15:18	
m,p-Xylenes	ND U	2.0	1	12/01/16 15:18	
o-Xylene	ND U	1.0	1	12/01/16 15:18	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 15:18	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16 13:03
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11B VOA	**Units:**	ug/L
Lab Code:	R1612457-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	12/01/16 15:18	
Dibromofluoromethane	108	89 - 119	12/01/16 15:18	
Toluene-d8	111	87 - 121	12/01/16 15:18	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1612457-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 12:17	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 12:17	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 12:17	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 12:17	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 12:17	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 12:17	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 12:17	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 12:17	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 12:17	
2-Hexanone	ND U	5.0	1	12/01/16 12:17	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 12:17	
Acetone	ND U	5.0	1	12/01/16 12:17	
Benzene	ND U	1.0	1	12/01/16 12:17	
Bromodichloromethane	ND U	1.0	1	12/01/16 12:17	
Bromoform	ND U	1.0	1	12/01/16 12:17	
Bromomethane	ND U	1.0	1	12/01/16 12:17	
Carbon Disulfide	ND U	1.0	1	12/01/16 12:17	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 12:17	
Chlorobenzene	ND U	1.0	1	12/01/16 12:17	
Chloroethane	ND U	1.0	1	12/01/16 12:17	
Chloroform	ND U	1.0	1	12/01/16 12:17	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 12:17	
Dibromochloromethane	ND U	1.0	1	12/01/16 12:17	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 12:17	
Ethylbenzene	ND U	1.0	1	12/01/16 12:17	
Styrene	ND U	1.0	1	12/01/16 12:17	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 12:17	
Toluene	ND U	1.0	1	12/01/16 12:17	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 12:17	
Vinyl Chloride	ND U	1.0	1	12/01/16 12:17	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 12:17	
m,p-Xylenes	ND U	2.0	1	12/01/16 12:17	
o-Xylene	ND U	1.0	1	12/01/16 12:17	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 12:17	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/22/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1612457-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	12/01/16 12:17	
Dibromofluoromethane	110	89 - 119	12/01/16 12:17	
Toluene-d8	105	87 - 121	12/01/16 12:17	

Volatile Organic Compounds by GC

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1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:34
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-1	**Units:**	ug/L
Lab Code:	R1612457-001	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**3.9**	1.0	1	12/06/16 11:37	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 14:00
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-2	**Units:**	ug/L
Lab Code:	R1612457-002	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**2800**	100	100	12/06/16 11:47	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	DUPE-X	**Units:**	ug/L
Lab Code:	R1612457-003	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**3.8**	1.0	1	12/06/16 11:58	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:09
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	R1612457-004	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**1.3**	1.0	1	12/06/16 12:22	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:46
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4B	**Units:**	ug/L
Lab Code:	R1612457-005	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**4.3**	1.0	1	12/06/16 12:51	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:54
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-5	**Units:**	ug/L
Lab Code:	R1612457-006	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	ND U	1.0	1	12/06/16 13:02	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:55
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9	**Units:**	ug/L
Lab Code:	R1612457-007	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	ND U	1.0	1	12/06/16 13:26	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:03
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9B	**Units:**	ug/L
Lab Code:	R1612457-008	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**3.7**	1.0	1	12/06/16 13:36	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:48
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	R1612457-009	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	ND U	1.0	1	12/06/16 13:46	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:19
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11	**Units:**	ug/L
Lab Code:	R1612457-010	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**23**	1.0	1	12/06/16 13:56	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:28
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11B	**Units:**	ug/L
Lab Code:	R1612457-011	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	**11**	1.0	1	12/06/16 14:06	

Metals

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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:34
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-1	**Basis:**	NA
Lab Code:	R1612457-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 12:59	11/28/16	
Manganese, Dissolved	200.7	**130**	ug/L	10	1	11/30/16 12:59	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 14:00
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-2	**Basis:**	NA
Lab Code:	R1612457-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	**520**	ug/L	100	1	11/30/16 13:29	11/28/16	
Manganese, Dissolved	200.7	**2240**	ug/L	10	1	11/30/16 13:29	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	DUPE-X	**Basis:**	NA
Lab Code:	R1612457-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 13:35	11/28/16	
Manganese, Dissolved	200.7	**131**	ug/L	10	1	11/30/16 13:35	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:09
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-3	**Basis:**	NA
Lab Code:	R1612457-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 13:41	11/28/16	
Manganese, Dissolved	200.7	**10**	ug/L	10	1	11/30/16 13:41	11/28/16	

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:46
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4B	**Basis:**	NA
Lab Code:	R1612457-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:23	11/28/16	
Manganese, Dissolved	200.7	**47**	ug/L	10	1	11/30/16 14:23	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:54
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-5	**Basis:**	NA
Lab Code:	R1612457-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:30	11/28/16	
Manganese, Dissolved	200.7	**26**	ug/L	10	1	11/30/16 14:30	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:55
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9	**Basis:**	NA
Lab Code:	R1612457-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:36	11/28/16	
Manganese, Dissolved	200.7	ND U	ug/L	10	1	11/30/16 14:36	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:03
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9B	**Basis:**	NA
Lab Code:	R1612457-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:42	11/28/16	
Manganese, Dissolved	200.7	**40**	ug/L	10	1	11/30/16 14:42	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:48
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-10	**Basis:**	NA
Lab Code:	R1612457-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:48	11/28/16	
Manganese, Dissolved	200.7	**114**	ug/L	10	1	11/30/16 14:48	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:19
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11	**Basis:**	NA
Lab Code:	R1612457-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 14:54	11/28/16	
Manganese, Dissolved	200.7	**168**	ug/L	10	1	11/30/16 14:54	11/28/16	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:28
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11B	**Basis:**	NA
Lab Code:	R1612457-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 15:12	11/28/16	
Manganese, Dissolved	200.7	**29**	ug/L	10	1	11/30/16 15:12	11/28/16	

General Chemistry

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Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:34
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-1	**Basis:**	NA
Lab Code:	R1612457-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:10	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:10	
Sulfate	300.0	**34.2**	mg/L	2.0	10	11/23/16 17:10	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 14:00
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-2	**Basis:**	NA
Lab Code:	R1612457-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:23	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:23	
Sulfate	300.0	**193**	mg/L	8.0	40	11/26/16 03:29	

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	DUPE-X	**Basis:**	NA
Lab Code:	R1612457-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:35	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:35	
Sulfate	300.0	**34.1**	mg/L	2.0	10	11/23/16 17:35	

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:09
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-3	**Basis:**	NA
Lab Code:	R1612457-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:48	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 17:48	
Sulfate	300.0	**135**	mg/L	8.0	40	11/26/16 04:08	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 11:46
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-4B	**Basis:**	NA
Lab Code:	R1612457-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 18:27	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 18:27	
Sulfate	300.0	**754**	mg/L	20	100	11/26/16 03:42	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 10:54
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-5	**Basis:**	NA
Lab Code:	R1612457-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**1.4**	mg/L	1.0	10	11/23/16 19:06	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:06	
Sulfate	300.0	**59.7**	mg/L	2.0	10	11/23/16 19:06	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:55
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9	**Basis:**	NA
Lab Code:	R1612457-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	**2.5**	mg/L	1.0	10	11/23/16 19:19	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:19	
Sulfate	300.0	**50.8**	mg/L	2.0	10	11/23/16 19:19	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:03
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-9B	**Basis:**	NA
Lab Code:	R1612457-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:32	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:32	
Sulfate	300.0	**640**	mg/L	20	100	11/26/16 04:47	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 13:48
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-10	**Basis:**	NA
Lab Code:	R1612457-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:45	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:45	
Sulfate	300.0	**59.0**	mg/L	2.0	10	11/23/16 19:45	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:19
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11	**Basis:**	NA
Lab Code:	R1612457-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:58	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 19:58	
Sulfate	300.0	**81.6**	mg/L	2.0	10	11/23/16 19:58	

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16 12:28
Sample Matrix:	Water	**Date Received:**	11/23/16 16:00
Sample Name:	MW-11B	**Basis:**	NA
Lab Code:	R1612457-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 20:11	
Nitrite as Nitrogen	300.0	ND U	mg/L	1.0	10	11/23/16 20:11	
Sulfate	300.0	**351**	mg/L	20	100	11/26/16 05:26	

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: Barton & Loguidice, PC **Service Request:** R1612457
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 89 - 119	Toluene-d8 87 - 121
MW-1 VOA	R1612457-012	101	106	108
MW-2 VOA	R1612457-013	102	108	105
DUPE-X VOA	R1612457-014	102	106	109
MW-3 VOA	R1612457-015	103	107	102
MW-4 VOA	R1612457-016	103	107	110
MW-4B VOA	R1612457-017	104	109	111
MW-5 VOA	R1612457-018	103	107	110
MW-9 VOA	R1612457-019	103	109	104
MW-9B VOA	R1612457-020	105	105	109
MW-10 VOA	R1612457-021	103	108	102
MW-11 VOA	R1612457-022	105	110	104
MW-11B VOA	R1612457-023	102	108	111
TRIP BLANK	R1612457-024	102	110	105
Lab Control Sample	RQ1614555-03	103	109	111
Method Blank	RQ1614555-04	102	108	111
Lab Control Sample	RQ1614685-03	106	109	112
Method Blank	RQ1614685-04	104	109	111

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1614555-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	11/30/16 00:13	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	11/30/16 00:13	
1,1,2-Trichloroethane	ND U	1.0	1	11/30/16 00:13	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	11/30/16 00:13	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	11/30/16 00:13	
1,2-Dichloroethane	ND U	1.0	1	11/30/16 00:13	
1,2-Dichloroethene, Total	ND U	2.0	1	11/30/16 00:13	
1,2-Dichloropropane	ND U	1.0	1	11/30/16 00:13	
2-Butanone (MEK)	ND U	5.0	1	11/30/16 00:13	
2-Hexanone	ND U	5.0	1	11/30/16 00:13	
4-Methyl-2-pentanone	ND U	5.0	1	11/30/16 00:13	
Acetone	ND U	5.0	1	11/30/16 00:13	
Benzene	ND U	1.0	1	11/30/16 00:13	
Bromodichloromethane	ND U	1.0	1	11/30/16 00:13	
Bromoform	ND U	1.0	1	11/30/16 00:13	
Bromomethane	ND U	1.0	1	11/30/16 00:13	
Carbon Disulfide	ND U	1.0	1	11/30/16 00:13	
Carbon Tetrachloride	ND U	1.0	1	11/30/16 00:13	
Chlorobenzene	ND U	1.0	1	11/30/16 00:13	
Chloroethane	ND U	1.0	1	11/30/16 00:13	
Chloroform	ND U	1.0	1	11/30/16 00:13	
Chloromethane (Methyl Chloride)	ND U	1.0	1	11/30/16 00:13	
Dibromochloromethane	ND U	1.0	1	11/30/16 00:13	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	11/30/16 00:13	
Ethylbenzene	ND U	1.0	1	11/30/16 00:13	
Styrene	ND U	1.0	1	11/30/16 00:13	
Tetrachloroethene (PCE)	ND U	1.0	1	11/30/16 00:13	
Toluene	ND U	1.0	1	11/30/16 00:13	
Trichloroethene (TCE)	ND U	1.0	1	11/30/16 00:13	
Vinyl Chloride	ND U	1.0	1	11/30/16 00:13	
cis-1,3-Dichloropropene	ND U	1.0	1	11/30/16 00:13	
m,p-Xylenes	ND U	2.0	1	11/30/16 00:13	
o-Xylene	ND U	1.0	1	11/30/16 00:13	
trans-1,3-Dichloropropene	ND U	1.0	1	11/30/16 00:13	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1614555-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	11/30/16 00:13	
Dibromofluoromethane	108	89 - 119	11/30/16 00:13	
Toluene-d8	111	87 - 121	11/30/16 00:13	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1614685-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	1.0	1	12/01/16 11:47	
1,1,2,2-Tetrachloroethane	ND U	1.0	1	12/01/16 11:47	
1,1,2-Trichloroethane	ND U	1.0	1	12/01/16 11:47	
1,1-Dichloroethane (1,1-DCA)	ND U	1.0	1	12/01/16 11:47	
1,1-Dichloroethene (1,1-DCE)	ND U	1.0	1	12/01/16 11:47	
1,2-Dichloroethane	ND U	1.0	1	12/01/16 11:47	
1,2-Dichloroethene, Total	ND U	2.0	1	12/01/16 11:47	
1,2-Dichloropropane	ND U	1.0	1	12/01/16 11:47	
2-Butanone (MEK)	ND U	5.0	1	12/01/16 11:47	
2-Hexanone	ND U	5.0	1	12/01/16 11:47	
4-Methyl-2-pentanone	ND U	5.0	1	12/01/16 11:47	
Acetone	ND U	5.0	1	12/01/16 11:47	
Benzene	ND U	1.0	1	12/01/16 11:47	
Bromodichloromethane	ND U	1.0	1	12/01/16 11:47	
Bromoform	ND U	1.0	1	12/01/16 11:47	
Bromomethane	ND U	1.0	1	12/01/16 11:47	
Carbon Disulfide	ND U	1.0	1	12/01/16 11:47	
Carbon Tetrachloride	ND U	1.0	1	12/01/16 11:47	
Chlorobenzene	ND U	1.0	1	12/01/16 11:47	
Chloroethane	ND U	1.0	1	12/01/16 11:47	
Chloroform	ND U	1.0	1	12/01/16 11:47	
Chloromethane (Methyl Chloride)	ND U	1.0	1	12/01/16 11:47	
Dibromochloromethane	ND U	1.0	1	12/01/16 11:47	
Dichloromethane (Methylene Chloride)	ND U	1.0	1	12/01/16 11:47	
Ethylbenzene	ND U	1.0	1	12/01/16 11:47	
Styrene	ND U	1.0	1	12/01/16 11:47	
Tetrachloroethene (PCE)	ND U	1.0	1	12/01/16 11:47	
Toluene	ND U	1.0	1	12/01/16 11:47	
Trichloroethene (TCE)	ND U	1.0	1	12/01/16 11:47	
Vinyl Chloride	ND U	1.0	1	12/01/16 11:47	
cis-1,3-Dichloropropene	ND U	1.0	1	12/01/16 11:47	
m,p-Xylenes	ND U	2.0	1	12/01/16 11:47	
o-Xylene	ND U	1.0	1	12/01/16 11:47	
trans-1,3-Dichloropropene	ND U	1.0	1	12/01/16 11:47	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1614685-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	85 - 122	12/01/16 11:47	
Dibromofluoromethane	109	89 - 119	12/01/16 11:47	
Toluene-d8	111	87 - 121	12/01/16 11:47	

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 11/29/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1614555-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.5	20.0	97	74-120
1,1,2,2-Tetrachloroethane	8260C	21.0	20.0	105	78-122
1,1,2-Trichloroethane	8260C	19.5	20.0	97	82-118
1,1-Dichloroethane (1,1-DCA)	8260C	21.1	20.0	105	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	21.2	20.0	106	74-135
1,2-Dichloroethane	8260C	20.1	20.0	101	71-127
1,2-Dichloropropane	8260C	20.4	20.0	102	80-119
2-Butanone (MEK)	8260C	20.6	20.0	103	61-137
2-Hexanone	8260C	20.0	20.0	100	63-124
4-Methyl-2-pentanone	8260C	19.2	20.0	96	66-124
Acetone	8260C	18.9	20.0	95	40-161
Benzene	8260C	21.0	20.0	105	76-118
Bromodichloromethane	8260C	18.9	20.0	95	78-126
Bromoform	8260C	17.5	20.0	87	71-136
Bromomethane	8260C	13.3	20.0	67	42-166
Carbon Disulfide	8260C	19.7	20.0	98	65-127
Carbon Tetrachloride	8260C	17.1	20.0	86	68-125
Chlorobenzene	8260C	21.1	20.0	105	80-121
Chloroethane	8260C	22.2	20.0	111	70-127
Chloroform	8260C	20.4	20.0	102	76-120
Chloromethane (Methyl Chloride)	8260C	19.0	20.0	95	69-145
Dibromochloromethane	8260C	17.7	20.0	88	77-128
Dichloromethane (Methylene Chloride)	8260C	20.1	20.0	101	73-122
Ethylbenzene	8260C	21.5	20.0	107	76-120
Styrene	8260C	20.7	20.0	104	80-124
Tetrachloroethene (PCE)	8260C	18.8	20.0	94	78-124
Toluene	8260C	21.6	20.0	108	77-120
Trichloroethene (TCE)	8260C	21.1	20.0	105	78-123
Vinyl Chloride	8260C	20.6	20.0	103	69-133
cis-1,3-Dichloropropene	8260C	19.1	20.0	96	74-126
m,p-Xylenes	8260C	43.2	40.0	108	78-123
o-Xylene	8260C	20.9	20.0	104	80-120
trans-1,3-Dichloropropene	8260C	17.2	20.0	86	67-135

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 12/01/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1614685-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	19.9	20.0	100	74-120
1,1,2,2-Tetrachloroethane	8260C	23.9	20.0	119	78-122
1,1,2-Trichloroethane	8260C	22.5	20.0	112	82-118
1,1-Dichloroethane (1,1-DCA)	8260C	21.7	20.0	108	78-117
1,1-Dichloroethene (1,1-DCE)	8260C	21.1	20.0	105	74-135
1,2-Dichloroethane	8260C	21.0	20.0	105	71-127
1,2-Dichloropropane	8260C	20.3	20.0	102	80-119
2-Butanone (MEK)	8260C	24.3	20.0	121	61-137
2-Hexanone	8260C	23.4	20.0	117	63-124
4-Methyl-2-pentanone	8260C	21.7	20.0	108	66-124
Acetone	8260C	24.4	20.0	122	40-161
Benzene	8260C	21.5	20.0	107	76-118
Bromodichloromethane	8260C	19.5	20.0	98	78-126
Bromoform	8260C	20.8	20.0	104	71-136
Bromomethane	8260C	14.6	20.0	73	42-166
Carbon Disulfide	8260C	21.1	20.0	106	65-127
Carbon Tetrachloride	8260C	17.4	20.0	87	68-125
Chlorobenzene	8260C	21.0	20.0	105	80-121
Chloroethane	8260C	24.0	20.0	120	70-127
Chloroform	8260C	21.4	20.0	107	76-120
Chloromethane (Methyl Chloride)	8260C	20.4	20.0	102	69-145
Dibromochloromethane	8260C	19.2	20.0	96	77-128
Dichloromethane (Methylene Chloride)	8260C	21.0	20.0	105	73-122
Ethylbenzene	8260C	20.7	20.0	103	76-120
Styrene	8260C	20.7	20.0	104	80-124
Tetrachloroethene (PCE)	8260C	20.3	20.0	101	78-124
Toluene	8260C	21.9	20.0	109	77-120
Trichloroethene (TCE)	8260C	20.8	20.0	104	78-123
Vinyl Chloride	8260C	22.5	20.0	112	69-133
cis-1,3-Dichloropropene	8260C	19.9	20.0	99	74-126
m,p-Xylenes	8260C	43.3	40.0	108	78-123
o-Xylene	8260C	20.5	20.0	103	80-120
trans-1,3-Dichloropropene	8260C	18.8	20.0	94	67-135

Volatile Organic Compounds by GC

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16
		Date Analyzed:	12/6/16

Duplicate Matrix Spike Summary
Dissolved Gases by GC/FID

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	R1612457-004	**Basis:**	NA
Analysis Method:	RSK 175		

		Matrix Spike RQ1614843-04			Duplicate Matrix Spike RQ1614843-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methane	1.3	25.4	26.2	92	27.4	26.2	100	54-120	8	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1614843-01	**Basis:**	NA

Dissolved Gases by GC/FID

Analysis Method: RSK 175

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Methane	ND U	1.0	1	12/06/16 10:53	

QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 12/06/16

Duplicate Lab Control Sample Summary
Dissolved Gases by GC/FID

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1614843-02			RQ1614843-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Methane	RSK 175	26.9	26.2	102	25.8	26.2	98	65-126	4	20

Metals

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Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1612457-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Iron, Dissolved	200.7	ND U	ug/L	100	1	11/30/16 12:47	11/28/16	
Manganese, Dissolved	200.7	ND U	ug/L	10	1	11/30/16 12:47	11/28/16	

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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request:R1612457
Date Collected:11/23/16
Date Received:11/23/16
Date Analyzed:11/30/16

Matrix Spike Summary
Inorganic Parameters

Sample Name: MW-1
Lab Code: R1612457-001

Units:ug/L
Basis:NA

Matrix Spike
R1612457-001MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	200.7	ND U	940	1000	94	70-130
Manganese, Dissolved	200.7	130	633	500	101	70-130

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request:R1612457
Date Collected:11/23/16
Date Received:11/23/16
Date Analyzed:11/30/16

Matrix Spike Summary
Inorganic Parameters

Sample Name: MW-3
Lab Code: R1612457-004

Units:ug/L
Basis:NA

Matrix Spike
R1612457-004MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	200.7	ND U	900	1000	90	70-130
Manganese, Dissolved	200.7	10	518	500	102	70-130

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16
		Date Analyzed:	11/30/16

Replicate Sample Summary
Inorganic Parameters

Sample Name:	MW-1	**Units:**	ug/L
Lab Code:	R1612457-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1612457-001DUP Result	Average	RPD	RPD Limit
Iron, Dissolved	200.7	100	ND U	ND U	NC	NC	20
Manganese, Dissolved	200.7	10	130	128	129	1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project	Akzo Nobel/1398.003.001	**Date Collected:**	11/23/16
Sample Matrix:	Water	**Date Received:**	11/23/16
		Date Analyzed:	11/30/16

Replicate Sample Summary
Inorganic Parameters

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	R1612457-004	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1612457-004DUP Result	Average	RPD	RPD Limit
Iron, Dissolved	200.7	100	ND U	ND U	NC	NC	20
Manganese, Dissolved	200.7	10	10	10	10.2	1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 11/30/16

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R1612457-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron, Dissolved	200.7	1010	1000	101	85-115
Manganese, Dissolved	200.7	518	500	104	85-115

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1612457-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	ND U	mg/L	0.10	1	11/23/16 13:41	
Nitrite as Nitrogen	300.0	ND U	mg/L	0.10	1	11/23/16 13:41	
Sulfate	300.0	ND U	mg/L	0.20	1	11/23/16 13:41	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1612457-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Sulfate	300.0	ND U	mg/L	0.20	1	11/25/16 21:27	

Analytical Report

Client:	Barton & Loguidice, PC	**Service Request:**	R1612457
Project:	Akzo Nobel/1398.003.001	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1612457-MB3		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Sulfate	300.0	ND U	mg/L	0.20	1	11/26/16 02:37	

ALS Group USA, Corp.
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QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request:R1612457
Date Collected:11/23/16
Date Received:11/23/16
Date Analyzed:11/23/16 - 11/26/16

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: MW-3
Lab Code: R1612457-004

Units:mg/L
Basis:NA

			Matrix Spike R1612457-004MS			Duplicate Matrix Spike R1612457-004DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	300.0	ND U	8.4	10.0	84 *	8.6	10.0	86 *	90-110	2	20
Sulfate	300.0	135	220	80.0	106	221	80.0	107	90-110	<1	20
Nitrite as Nitrogen	300.0	ND U	8.5	10.0	85 *	8.6	10.0	86 *	90-110	<1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request:R1612457
Date Collected:11/23/16
Date Received:11/23/16
Date Analyzed:11/23/16

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: MW-11B
Lab Code: R1612457-011

Units:mg/L
Basis:NA

			Matrix Spike R1612457-011MS			Duplicate Matrix Spike R1612457-011DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate as Nitrogen	300.0	ND U	9.7	10.0	97	9.8	10.0	98	90-110	<1	20
Nitrite as Nitrogen	300.0	ND U	9.8	10.0	98	9.9	10.0	99	90-110	1	20

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 11/23/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1612457-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	300.0	1.00	1.00	100	90-110
Nitrite as Nitrogen	300.0	0.99	1.00	99	90-110
Sulfate	300.0	1.94	2.00	97	90-110

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 11/25/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1612457-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Sulfate	300.0	1.97	2.00	99	90-110

Client: Barton & Loguidice, PC
Project: Akzo Nobel/1398.003.001
Sample Matrix: Water

Service Request: R1612457
Date Analyzed: 11/26/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1612457-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Sulfate	300.0	1.97	2.00	99	90-110

Appendix C

Water Level Elevation Data

Akzo Nobel Polymer Chemicals LLC
Water Level Elevation Data
2011-2016

	MW-1		MW-1B		MW-2		MW-3		MW-3B		MW-4	
TOP OF CASING ELEVATION		328.51		328.29		327.58		322.58		321.85		323.12
DATE	water level	elevation	water level	elevation	water level	elevation	water level	elevation	water level	elevation	water level	elevation
4/19/2011	6.41	322.10	7.21	321.08	5.73	321.85	3.14	319.44	10.81	315.42	6.79	316.33
7/28/2011	11.54	316.97	-	-	9.87	317.71	6.80	315.78	-	-	9.58	313.54
11/17/2011	13.09	315.42	7.21	321.08	10.59	316.99	7.13	315.45	10.81	311.04	9.65	313.47
3/28/2012	7.63	320.88	7.09	321.20	6.76	320.82	3.33	319.25	10.98	310.87	7.65	315.47
6/27/2012	10.94	317.57	-	-	9.13	318.45	6.31	316.27	-	-	9.48	313.64
10/9/2012	13.89	314.62	-	-	11.07	316.51	9.35	313.23	-	-	11.46	311.66
4/15/2013	6.02	322.49	6.76	321.53	5.68	321.90	2.66	319.92	10.65	311.20	6.45	316.67
8/27/2013	11.41	317.10	-	-	9.42	318.16	6.23	316.35	-	-	9.61	313.51
12/10/2013	9.78	318.73	-	-	8.29	319.29	3.78	318.80	-	-	7.90	315.22
4/28/2014	6.82	321.69	6.50	321.79	6.10	321.48	2.36	320.22	10.98	310.87	7.28	315.84
8/28/2014	10.73	317.78	-	-	9.01	318.57	5.39	317.19	-	-	9.09	314.03
10/30/2014	11.45	317.06	-	-	10.27	317.31	6.88	315.70	-	-	9.67	313.45
4/29/2015	7.65	320.86	6.83	321.46	6.64	320.94	3.52	319.06	11.20	310.65	7.51	315.61
8/18/2015	11.67	316.84	-	-	9.92	317.66	6.91	315.67	-	-	10.12	313.00
12/10/2015	11.52	316.99	-	-	10.31	317.27	5.92	316.66	-	-	9.73	313.39
6/6/2016	10.01	318.50	8.86	319.43	8.45	319.13	5.28	317.30	11.97	309.88	9.10	314.02
11/22/2016	14.14	314.37	-	-	11.68	315.90	10.80	311.78	-	-	15.28	307.84

Akzo Nobel Polymer Chemicals LLC
Water Level Elevation Data
2011-2016

	MW-4B		MW-5		MW-6		MW-7		MW-8		MW-9	
TOP OF PVC PIPE ELEVATION		323.66		324.68		325.31		324.10		326.23		325.03
DATE	water level	elevation	water level	elevation	water level	elevation	water level	elevation	water level	elevation	water level	elevation
4/19/2011	20.18	303.48	8.05	316.63	-	-	-	-	-	-	4.60	320.43
7/28/2011	21.73	301.93	6.71	317.97	-	-	-	-	-	-	7.84	317.19
11/17/2011	16.81	306.85	7.76	316.92	7.79	317.52	6.53	317.57	8.81	317.42	8.60	316.43
3/28/2012	18.52	305.14	3.88	320.80	-	-	-	-	-	-	5.07	319.96
6/27/2012	21.46	302.20	6.33	318.35	-	-	-	-	-	-	7.22	317.81
10/9/2012	18.54	305.12	8.28	316.40	-	-	-	-	-	-	8.88	316.15
4/15/2013	19.21	304.45	3.01	321.67	-	-	-	-	-	-	4.13	320.90
8/27/2013	20.34	303.32	6.58	318.10	-	-	-	-	-	-	7.66	317.37
12/10/2013	16.29	307.37	5.44	319.24	-	-	-	-	-	-	6.64	318.39
4/28/2014	21.00	302.66	3.50	321.18	-	-	-	-	-	-	3.32	321.71
8/28/2014	20.76	302.90	6.21	318.47	-	-	-	-	-	-	7.47	317.56
10/30/2014	18.02	305.64	7.44	317.24	-	-	-	-	-	-	8.43	316.60
4/29/2015	21.10	302.56	3.82	320.86	-	-	-	-	-	-	5.22	319.81
8/18/2015	21.60	302.06	7.20	317.48	-	-	-	-	-	-	8.16	316.87
12/10/2015	16.87	306.79	7.43	317.25	-	-	-	-	-	-	8.38	316.65
6/6/2016	21.61	302.05	5.58	319.10	-	-	-	-	-	-	6.52	318.51
11/22/2016	17.51	306.15	8.92	315.76	-	-	-	-	-	-	9.27	315.76

Akzo Nobel Polymer Chemicals LLC
Water Level Elevation Data
2011-2016

	MW-9B		MW-10		MW-10B		MW-11		MW-11B		-	
TOP OF PVC PIPE ELEVATION		325.21		328.39		328.12		325.76		325.32		
DATE	water level	elevation	water level	elevation	water level	elevation	water level	elevation	water level	elevation		
4/19/2011	23.16	302.05	6.37	322.02	23.51	304.61	10.62	315.14	22.22	303.10		
7/28/2011	24.47	300.74	6.24	322.15	-	-	13.85	311.91	23.66	301.66		
11/17/2011	19.66	305.55	11.38	317.01	23.51	304.61	14.31	311.45	19.12	306.20		
3/28/2012	21.12	304.09	7.47	320.92	21.70	306.42	11.38	314.38	20.45	304.87		
6/27/2012	24.00	301.21	9.77	318.62	-	-	13.35	312.41	23.43	301.89		
10/9/2012	21.26	303.95	11.88	316.51	-	-	15.12	310.64	20.53	304.79		
4/15/2013	22.36	302.85	6.30	322.09	22.40	305.72	10.11	315.65	21.75	303.57		
8/27/2013	22.93	302.28	10.21	318.18	-	-	13.62	312.14	22.29	303.03		
12/10/2013	18.52	306.69	9.02	319.37	-	-	12.64	313.12	18.40	306.92		
4/28/2014	22.82	302.39	7.41	320.98	23.73	304.39	10.96	314.80	22.82	302.50		
8/28/2014	23.20	302.01	9.81	318.58	-	-	13.24	312.52	22.58	302.74		
10/30/2014	20.22	304.99	11.07	317.32	-	-	14.31	311.45	18.96	306.36		
4/29/2015	23.60	301.61	7.32	321.07	22.99	305.13	11.29	314.47	22.85	302.47		
8/18/2015	23.85	301.36	10.70	317.69	-	-	14.18	311.58	23.49	301.83		
12/10/2015	19.15	306.06	11.10	317.29	-	-	13.91	311.85	19.02	306.30		
6/6/2016	23.77	301.44	9.24	319.15	21.22	306.90	12.93	312.83	23.31	302.01		
11/22/2016	19.87	305.34	12.66	315.73	-	-	15.54	310.22	19.57	305.75		