

April 20, 2016

Mr. John R. Strang, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Region 4
1130 South Westcott Road
Schenectady, New York 12306-2014

Via Electronic Mail

Re: Chlorinated Solvent Plume- Monitoring Well Baseline Sampling
Parcel A Monitoring Well Network
ALCO – BCP Site C447042
Schenectady, NY

Dear Mr. Strang:

On behalf of Maxon ALCO Holdings, LLC, Barton & Loguidice, Inc. (B&L) has prepared the following report for the results of the Parcel A Monitoring Well Network (Network) baseline sampling for the Chlorinated Solvent Plume.

Summary of IRM Activities

The Parcel A Monitoring Well Network sampling activities were undertaken in accordance with the January 2016 approved Parcel A Remedial Design Report dated December 2015. The Network is composed of the following:

MW	PARCEL	DEPTH*
MW-65	A	69.65
MW-64S	A	38.55
MW-64D	A	70.15
MW-62	A	63.2

*measured from top of casing

Groundwater sampling of the Network was conducted on February 29, 2016.

Summary of Sample Results

A total of five (5) groundwater samples (including a duplicate) were collected from monitoring wells shown on the attached figure. Groundwater samples were analyzed for volatile organic compounds (VOCs), sodium, potassium, calcium, magnesium, sulfate, chloride, hardness, and nitrate. Detections are summarized on the attached table. The five (5) groundwater samples had one or more of the following at concentrations above their respective 6 NYCRR Part 703.5 Groundwater Quality Standards:

- 1,1-Dichloroethene,

The experience to **listen.**
The power to **solve.**





Mr. John R. Strang, P.E.
NYSDEC
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Page 2

- cis-1,2-Dichloroethene,
- Tetrachloroethene,
- trans-1,2-Dichloroethene,
- Trichloroethene,
- Vinyl chloride,
- Chloride, and
- Sodium.

As discussed in the Supplemental Remedial Investigation (SRI) Report (B&L, 2013), the plume moves across the site towards the Mohawk River, along the established hydraulic gradient, moving deeper with distance from the source. Some breakdown of the original source area contaminant is evident as the plume traverses the site. Within the source area on Parcel C, tetrachloroethene (PCE) is the primary contaminant, while its breakdown cis1,2-dichloroethene (12 -DCE) is the primary contaminant at the extremities of the plume on Parcel A. The sequential breakdown of chlorinated solvents such as PCE and trichloroethene (TCE) in the subsurface due to biological and chemical processes has been documented in numerous sites in New York and in research articles, and is discussed in detail in Weidemeier, et al, 1999. Such degradation is at work at this site.

Additional sampling of the Network will be conducted four (4) weeks post remedial injection work on Parcels B and C. Please feel free to contact the undersigned at (518) 218-1801 with any questions or need for additional information.

Very truly yours,

BARTON & LOGUIDICE, INC.

Andrew J. Barber
Sr. Environmental Consultant

AJB/akd

Enclosure

cc: Steve Porter, Esq. - Maxon ALCO Holdings LLC
Steve Luciano - Maxon ALCO Holdings LLC
Paul Fallati - Maxon ALCO Holdings LLC
Dean Sommer, Esq. - Young Sommer
Rich Ostrov - NYSDEC Region 4, OGC
Al DeMarco -NYSDOH

			Baseline Sampling 2/29/2016									
PARAMETER	PART 703 ⁽¹⁾	UNITS	MW-65		MW-64S		MW-64D		MW-62		FIELD DUP	
			Result	DF	Result	DF	Result	DF	Result	DF	Result	DF
1,1-Dichloroethene	5	UG/L	1.6	1	-	1	9.7	1	-	1	9.5	1
Acetone	[50]	UG/L	6.5 J	1	2.7 J	1	1.2 J	1	-	1	-	1
cis-1,2-Dichloroethene	5	UG/L	570 D	5	-	1	1100 D	10	420 D	3	990 D	10
Methyl tert-butyl ether	10	UG/L	1.7	1	-	1	-	1	-	1	-	1
Tetrachloroethene	5	UG/L	390 D	5	-	1	-	1	-	1	1	1
Toluene	5	UG/L	-	1	-	1	-	1	-	1	-	1
trans-1,2-Dichloroethene	5	UG/L	5.6	1	-	1	40	1	24	1	39	1
Trichloroethene	5	UG/L	260 D	5	-	1	900 D	10	1.5	1	890 D	10
Vinyl chloride	2	UG/L	590 D	5	-	1	820 D	10	120	1	660 D	10
Magnesium	[35]	MG/L	32.4	1	15.5	1	39.2	1	26.4	1	41.3	1
Sodium	20	MG/L	219	1	31.4	1	347	1	395	1	367	1
Chloride	250	MG/L	418 D	10	22.6	1	509 D	100	498 D	100	510 D	100
Hardness	-	MG/L	530 D	10	310 D	10	570 D	10	450 D	10	540 D	10

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

DF Dilution Factor

- Not Detected

[] Guidance Value

Field Dup collected from MW-64D

			PARCEL A																									
			MW-52			MW-25D			MW-63	MW-62			MW-64S	MW-64D	MW-65													
			4/23/2012	4/23/2012	6/17/2013	4/23/2012	4/23/2012	6/17/2013	6/17/2013	6/17/2013	9/11/2015	2/29/2016	2/29/2016	2/29/2016	2/29/2016													
Parameter	PART 703	Units	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF								
1,1-Dichloroethane	5	µg/l	-	1	-	20	1.52	1	-	1	-	4	-	1	3.41	1	-	1	-	1	-	1	-	1	-	1	-	1
1,1-Dichloroethene	5	µg/l	5.2 J	1	13 J	20	-	1	0.63 J	1	-	4	-	1	-	1	2.7	1	-	1	-	1	9.7	1	1.6	1	1.6	1
Acetone	50	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	-	1	2.7	1	1.2	1	6.5	1	6.5	1
Chloroform	7	µg/l	-	1	-	20	-	1	0.47 J	1	-	4	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
cis-1,2-Dichloroethene	5	µg/l	450 EJ	1	970	20	111	1	220 EJ	1	280	4	109	1	2720	1	2260	1	1000 D	10	420	3	-	1	1100	10	570	5
Methyl tert-butyl ether	10	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	NA	1	-	1	-	1	-	1	1.7	1
Tetrachloroethene	5	µg/l	25 J	1	43	20	-	1	28	1	34	4	17.3	1	82.7	1	-	1	NA	1	-	1	-	1	-	1	390	5
trans-1,2-Dichloroethene	5	µg/l	13 J	1	30	20	-	1	-	1	-	4	-	1	48.5	1	48.4	1	NA	1	24	1	-	1	40	1	5.6	1
Trichloroethene	5	µg/l	400 EJ	1	760	20	17.4	1	34	1	42	4	14.9	1	206	1	18.7	1	NA	1	1.5	1	-	1	900	10	260	5
Vinyl chloride	2	µg/l	25 J	1	47 J	20	5.94	1	6.1	1	7.8	4	-	1	21	1	-	1	NA	1	120	1	-	1	820	10	590	5
Calcium	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		152	1	108	1	172	1	171	1
Magnesium	[35]	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		26.4	1	15.5	1	39.2	1	32.4	1
Potassium	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		6.66	1	7.37	1	5.88	1	6.15	1
Sodium	20	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		395	1	31.4	1	347	1	219	1
Chloride	250	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		498 D	100	22.6	1	509 D	100	418 D	10
Sulfate	250	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		47.9 D		2.48 J	1	54 D	10	29.8	1
Hardness	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA		450 D	10	310 D	10	570 D	10	530 D	10

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

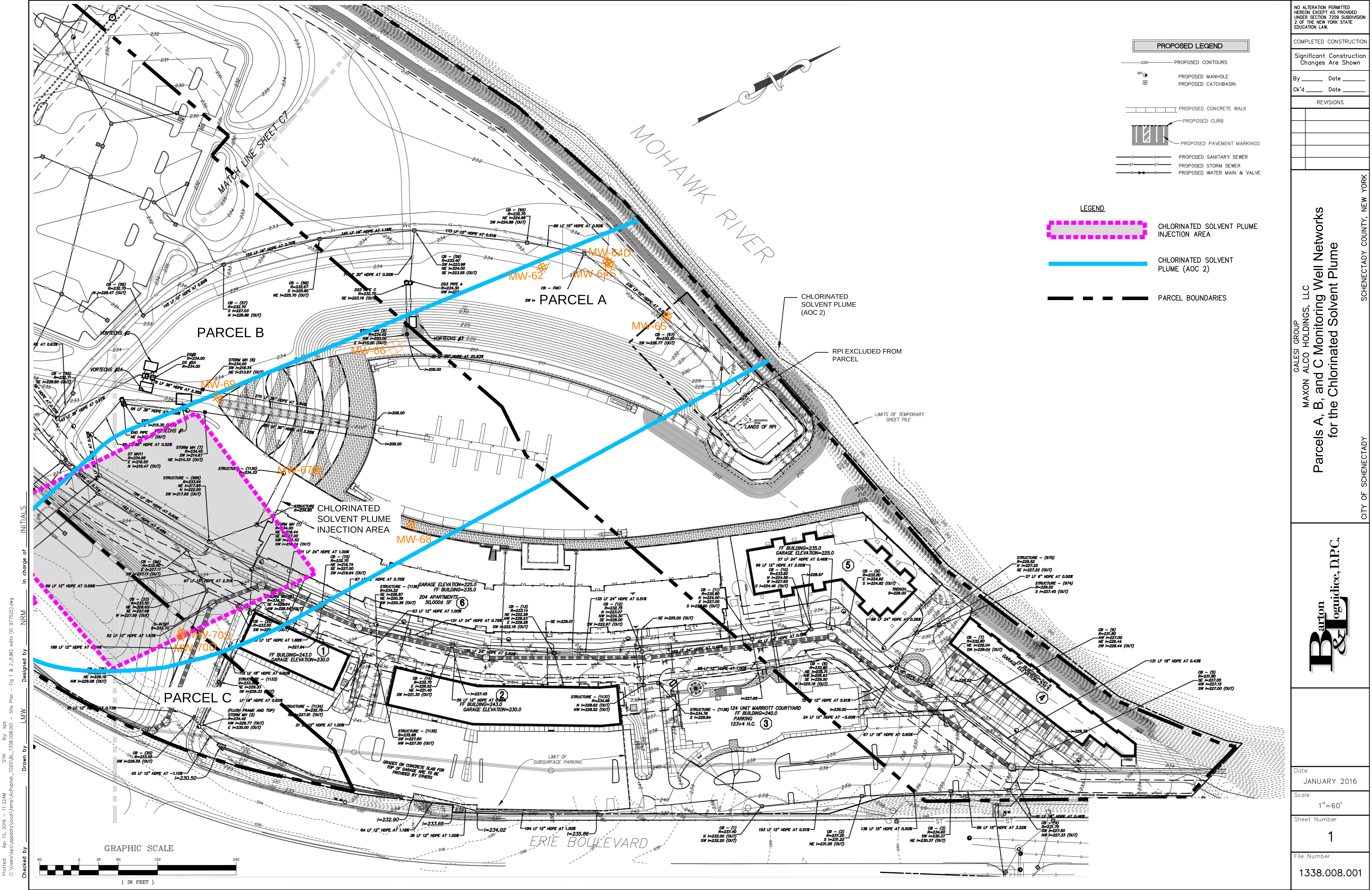
EJ - Result exceeded the calibration range. Analyte is present, but the reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

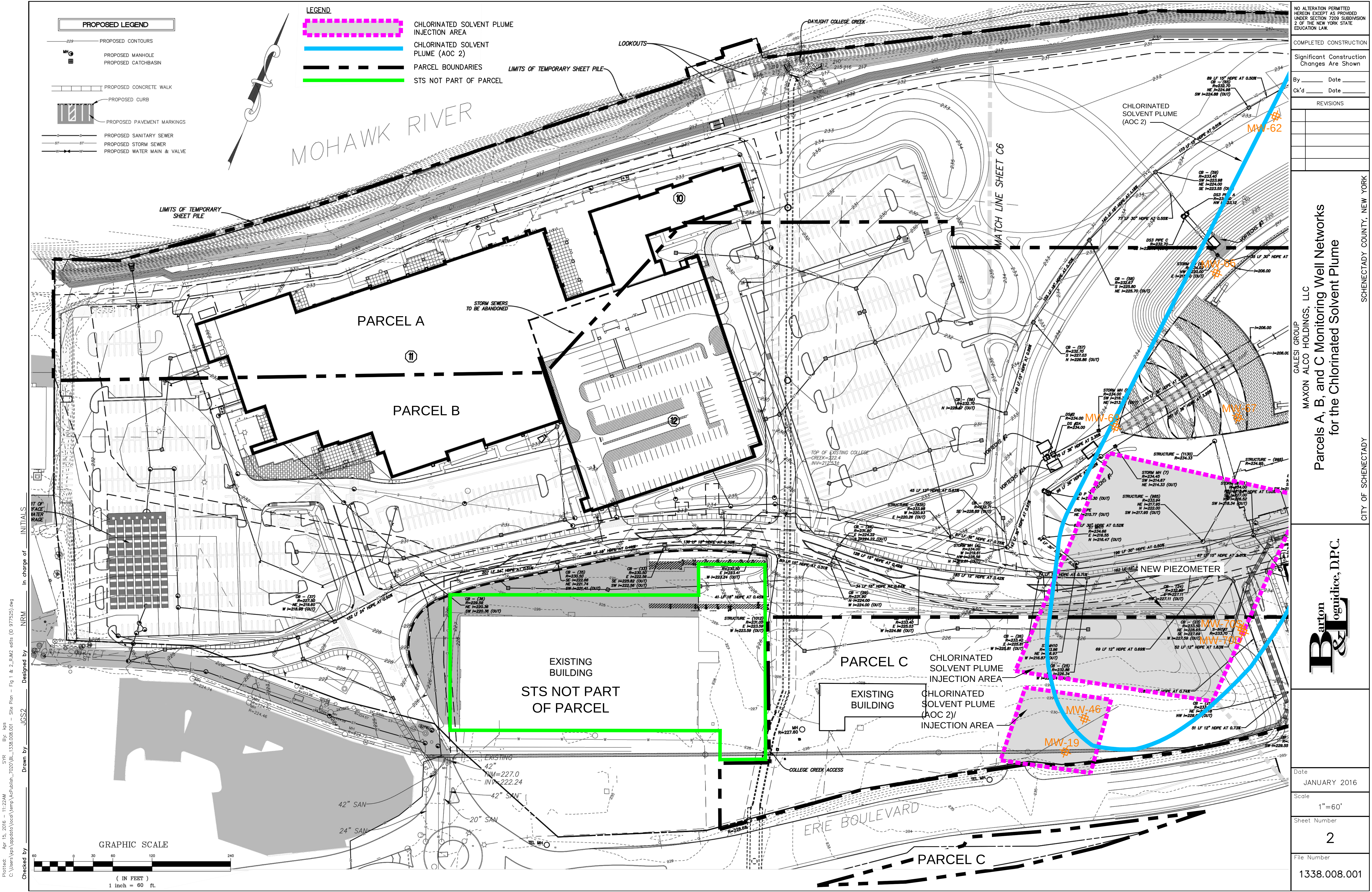
DF Dilution Factor

- Not Detected

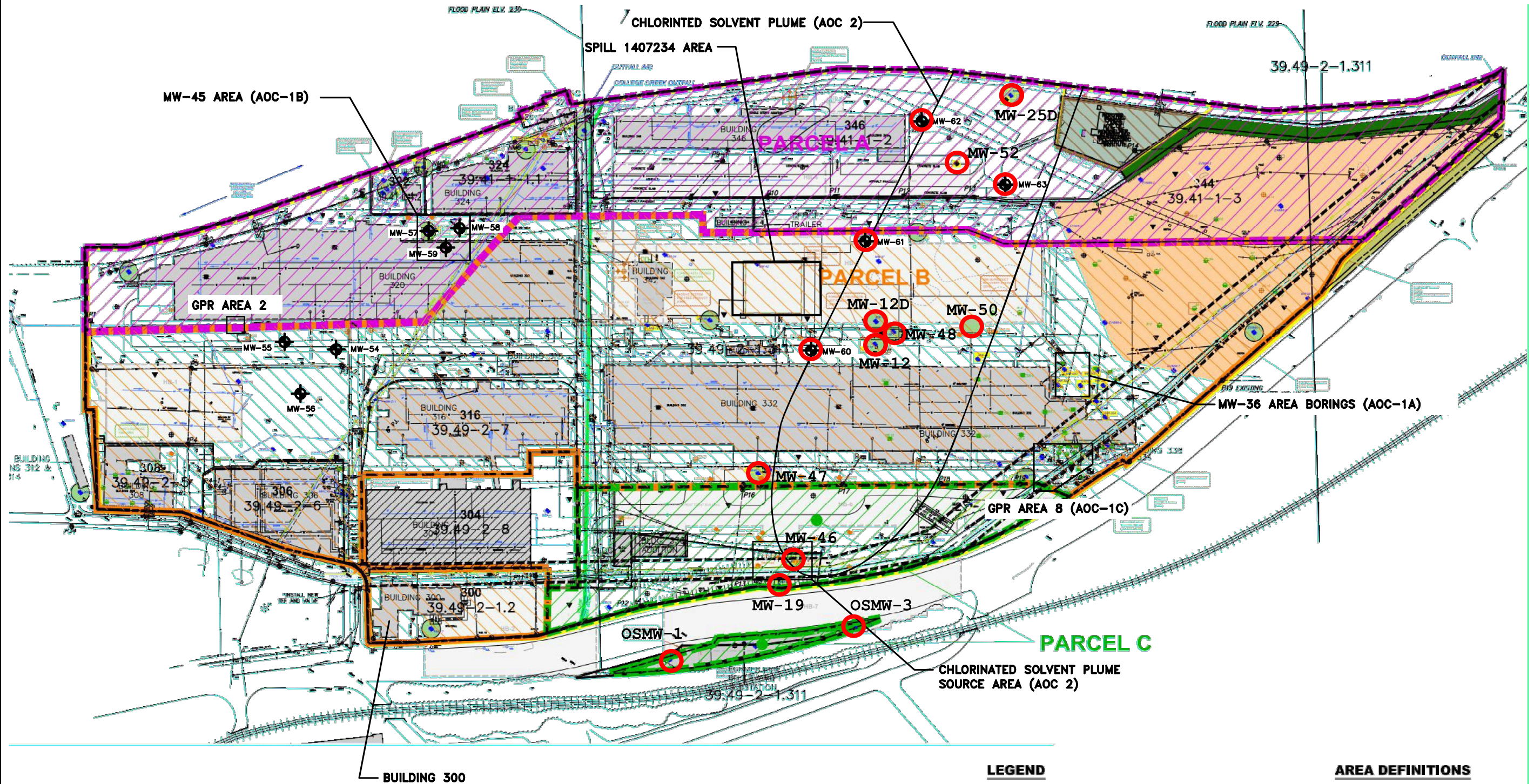
[] Guidance Value

NA Not Analyzed





Plotted: Mar 24, 2015 - 3:27PM SYR By: jgs
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\0\\765000-765099\\765084\\L\\1368001_IRM Work Plan-Figure 1 (ID 765084).dwg



MAP REFERENCE:

- 1) "SURVEY OF LANDS, ALCO LOCOMOTIVE, INC., CITY OF SCHENECTADY, COUNTY OF SCHENECTADY", DATED MARCH 1970, AS PREPARED BY C.T. MALE ASSOCIATES.
- 2) "A SUBDIVISION OF A PORTION OF LANDS OF SCHENECTADY INDUSTRIAL CORPORATION", DATED JUNE 30, 1988, AS PREPARED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP.
- 3) "SITE PLAN, PROPOSED C & D RECYCLING FACILITY, NOTT STREET INDUSTRIAL PARK", DATED FEBRUARY 1995, AS PREPARED BY INGALLS SMART ASSOCIATES.

SOURCE:

- 1) ABD ENGINEERS AND SURVEYORS FEBRUARY 1988, REVISED NOVEMBER 1999.
- 2) HISTORIC BUILDING (HB) LOCATIONS BASED ON A "FUEL OIL PIPING" PLAN, PREPARED FOR AMERICAN LOCOMOTIVE CO., REVISED AUGUST 22, 195.

LEGEND		AREA DEFINITIONS	
	PROPERTY BOUNDARY		BUILDINGS/STRUCTURES
	BCP SITE BOUNDARY		FORMER BUILDINGS (PREVIOUSLY DEMOLISHED)
	MANHOLE WITH DRAINAGE STRUCTURE NUMBER		"EVI" PARCEL
	CATCH BASIN WITH DRAINAGE STRUCTURE NUMBER		"RPI" PARCEL
	LIFT STATION WITH DRAINAGE STRUCTURE NUMBER		OTHER PROPERTIES NO PART OF SITE
	MANHOLE (M.H.)		REMEDATION AREA
	CATCH BASIN (C.B.)		FORMER UST/AST LOCATIONS
	MONITORING WELL (MW)		
	TEMPORARY MONITORING WELL (TMW)		
	RECOVERY WELL		
	PIEZOMETER		
	GEOPROBE BORING		
	SURFACE SOIL SAMPLE LOCATION (SS)		
	SOIL BORING LOCATION		

MW-63 MONITORING WELL (SRI INVESTIGATION 2013) Chlorinated Solvent Plume MW

MAXON ALCO HOLDINGS, LLC

Former Monitoring Well Network for the Chlorinated Solvent Plume

CITY OF SCHENECTADY

NEW YORK

Barton
Loguidice, DPC.

Date
MARCH, 2015

Scale
1" = 100'

Figure Number
3

Project Number
1368.001.001

June 13, 2016

Mr. John R. Strang, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Region 4
1130 South Westcott Road
Schenectady, New York 12306-2014

Via Electronic Mail

Re: Chlorinated Solvent Plume- Monitoring Well Baseline Sampling
Parcel A Monitoring Well Network
ALCO – BCP Site C447042
Schenectady, NY

Dear Mr. Strang:

On behalf of Maxon ALCO Holdings, LLC, Barton & Loguidice, Inc. (B&L) has prepared the following report for the results of the Parcel A Monitoring Well Network (Network) post remedial injection work sampling for the Chlorinated Solvent Plume.

Summary of IRM Activities

The Parcel A Monitoring Well Network sampling activities were undertaken in accordance with the January 2016 approved Parcel A Remedial Design Report dated December 2015. The Network is composed of the following:

MW	PARCEL	DEPTH*
MW-65	A	69.65
MW-64S	A	38.55
MW-64D	A	70.15
MW-62	A	63.2

*measured from top of casing

Groundwater sampling of the Network was conducted on May 10, 2016; four weeks post remedial injection work.

Summary of Sample Results

A total of five (5) groundwater samples (including a duplicate) were collected from monitoring wells shown on the attached figure. Groundwater samples were analyzed for volatile organic compounds (VOCs), sodium, potassium, calcium, magnesium, sulfate, chloride, hardness, and nitrate. Detections are summarized on the attached table. The five (5) groundwater samples had one or more of the following at concentrations above their respective 6 NYCRR Part 703.5 Groundwater Quality Standards:





Mr. John R. Strang, P.E.
NYSDEC
June 13, 2016
Page 2

- 1,1-Dichloroethene,
- cis-1,2-Dichloroethene,
- Tetrachloroethene,
- trans-1,2-Dichloroethene,
- Trichloroethene,
- Vinyl chloride,
- Chloride, and
- Sodium.

As discussed in the Supplemental Remedial Investigation (SRI) Report (B&L, 2013), the plume moves across the site towards the Mohawk River, along the established hydraulic gradient, moving deeper with distance from the source. Some breakdown of the original source area contaminant is evident as the plume traverses the site. Within the source area on Parcel C, tetrachloroethene (PCE) is the primary contaminant, while its breakdown cis-1,2-dichloroethene (12 -DCE) is the primary contaminant at the extremities of the plume on Parcel A. The sequential breakdown of chlorinated solvents such as PCE and trichloroethene (TCE) in the subsurface due to biological and chemical processes has been documented in numerous sites in New York and in research articles, and is discussed in detail in Weidemeier, et al, 1999. Such degradation is at work at this site.

The post remedial injection work groundwater samples exhibit lower concentrations of the observed contaminants when compared to the baseline samples collected on February 29, 2016.

Additional sampling of the Network will be conducted eight (8) weeks post remedial injection work on Parcels B and C. Please feel free to contact the undersigned at (518) 218-1801 with any questions or need for additional information.

Very truly yours,

BARTON & LOGUIDICE, INC.

Andrew J. Barber
Sr. Environmental Consultant

AJB/akd
Enclosure

cc:	Steve Porter, Esq.	- Maxon ALCO Holdings LLC
	Steve Luciano	- Maxon ALCO Holdings LLC
	Paul Fallati	- Maxon ALCO Holdings LLC
	Dean Sommer, Esq.	- Young Sommer
	Rich Ostrov	- NYSDEC Region 4, OGC
	Al DeMarco	-NYSDOH

			Four Weeks Post Remedial Injection Work Sampling							
			MW-62		MW-64S		MW-64D		MW-65	
			5/10/16							
Parameter	PART 703	Units	Result	DF	Result	DF	Result	DF	Result	DF
1,1-Dichloroethane	5	µg/l	-	1	-	1	-	1	-	1
1,1-Dichloroethene	5	µg/l	-	1	-	1	7.7	1	-	1
Acetone	50	µg/l	-	1	-	1	-	1	1.4 J	1
Chloroform	7	µg/l	-	1	-	1	-	1	-	1
cis-1,2-Dichloroethene	5	µg/l	430 D	5	-	1	1000 D	10	320 D	5
Methyl tert-butyl ether	10	µg/l	-	1	-	1	-	1	-	1
Tetrachloroethene	5	µg/l	-	1	-	1	-	1	170	1
trans-1,2-Dichloroethene	5	µg/l	29	1	-	1	29	1	2.4	1
Trichloroethene	5	µg/l	1.6	1	-	1	550 D	10	94	1
Vinyl chloride	2	µg/l	89	1	-	1	230 Dc	10	97	1
Calcium	-	MG/L	187	1	212	1	114	1	169	1
Magnesium	[35]	MG/L	29.6	1	45.1	1	15.2	1	35.5	1
Potassium	-	MG/L	6.47	1	6.37	1	9.31	1	5.27	1
Sodium	20	MG/L	352	1	376	1	32.2	1	218	1
Chloride	250	MG/L	517 D	100	33.9	1	582 D	100	352	1
Sulfate	250	MG/L	56 D	5	-	1	58.9	5	26.2	1
Nitrate	10	MG/L	0.212	1	-	1	-	1	-	1
Hardness	-	MG/L	589	1	347	1	714	1	569	1

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

The concentration given is an approximate value.

EJ - Result exceeded the calibration range. Analyte is present, but the reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

DF Dilution Factor

- Not Detected

[] Guidance Value

			PARCEL A																																	
			MW-52			MW-25D			MW-63	MW-62				MW-64S		MW-64D		MW-65																		
			4/23/2012	4/23/2012	6/17/2013	4/23/2012	4/23/2012	6/17/2013	6/17/2013	6/17/2013	9/11/2015	2/29/2016	5/10/2016	2/29/2016	5/10/2016	2/29/2016	5/10/2016	2/29/2016	5/10/2016																	
Parameter	Part 703	Units	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF														
1,1-Dichloroethane	5	µg/l	-	1	-	20	1.52	1	-	1	-	4	-	1	3.41	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1		
1,1-Dichloroethene	5	µg/l	5.2 J	1	13 J	20	-	1	0.63 J	1	-	4	-	1	-	1	2.7	1	-	1	-	1	-	1	9.7	1	7.7	1	1.6	1	-	1	-	1		
Acetone	50	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	-	1	-	1	2.7	1	-	1	1.2	1	-	1	6.5	1	1.4 J	1		
Chloroform	7	µg/l	-	1	-	20	-	1	0.47 J	1	-	4	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1		
cis-1,2-Dichloroethene	5	µg/l	450 EJ	1	970	20	111	1	220 EJ	1	280	4	109	1	2720	1	2260	1	1000 D	10	420	3	430 D	5	-	1	-	1	1100	10	1000 D	10	570	5	320 D	5
Methyl tert-butyl ether	10	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	NA	1	-	1	-	1	-	1	-	1	-	1	1.7	1	-	1		
Tetrachloroethene	5	µg/l	25 J	1	43	20	-	1	28	1	34	4	17.3	1	82.7	1	-	1	NA	1	-	1	-	1	-	1	-	1	-	1	390	5	170	1		
trans-1,2-Dichloroethene	5	µg/l	13 J	1	30	20	-	1	-	1	-	4	-	1	48.5	1	48.4	1	NA	1	24	1	29	1	-	1	-	1	40	1	29	1	5.6	1	2.4	1
Trichloroethene	5	µg/l	400 EJ	1	760	20	17.4	1	34	1	42	4	14.9	1	206	1	18.7	1	NA	1	1.5	1	1.6	1	-	1	-	1	900	10	550 D	10	260	5	94	1
Vinyl chloride	2	µg/l	25 J	1	47 J	20	5.94	1	6.1	1	7.8	4	-	1	21	1	-	1	NA	1	120	1	89	1	-	1	-	1	820	10	230 Dc	10	590	5	97	1
Calcium	-	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		152	1	187	1	108	1	212	1	172	1	114	1	171	1	169	1
Magnesium	[35]	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		26.4	1	29.6	1	15.5	1	45.1	1	39.2	1	15.2	1	32.4	1	35.5	1
Potassium	-	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		6.66	1	6.47	1	7.37	1	6.37	1	5.88	1	9.31	1	6.15	1	5.27	1
Sodium	20	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		395	1	352	1	31.4	1	376	1	347	1	32.2	1	219	1	218	1
Chloride	250	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		498 D	100	517 D	100	22.6	1	33.9	1	509 D	100	582 D	100	418 D	10	352	1
Sulfate	250	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		47.9 D		56 D	5	2.48 J	1	-	1	54 D	10	58.9	5	29.8	1	26.2	1
Nitrate	10	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		-	1	0.212	1	-	1	-	1	-	1	-	1	-	1	-	1
Hardness	-	mg/l	NA		NA		NA		NA		NA		NA		NA		NA		NA		450 D	10	589	1	310 D	10	347	1	570 D	10	714	1	530 D	10	569	1

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

 The concentration given is an approximate value.

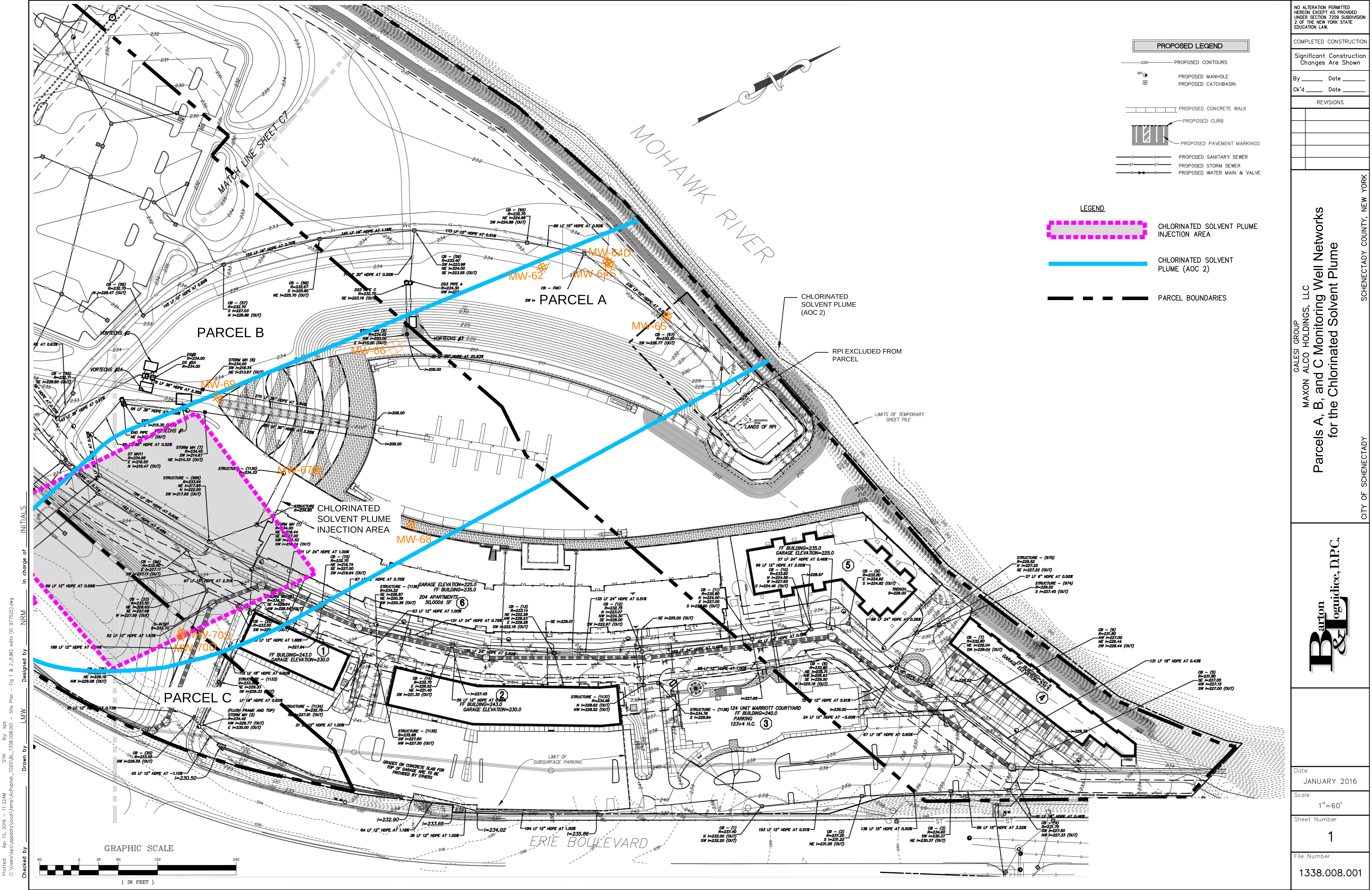
EJ - Result exceeded the calibration range. Analyte is present, but the reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

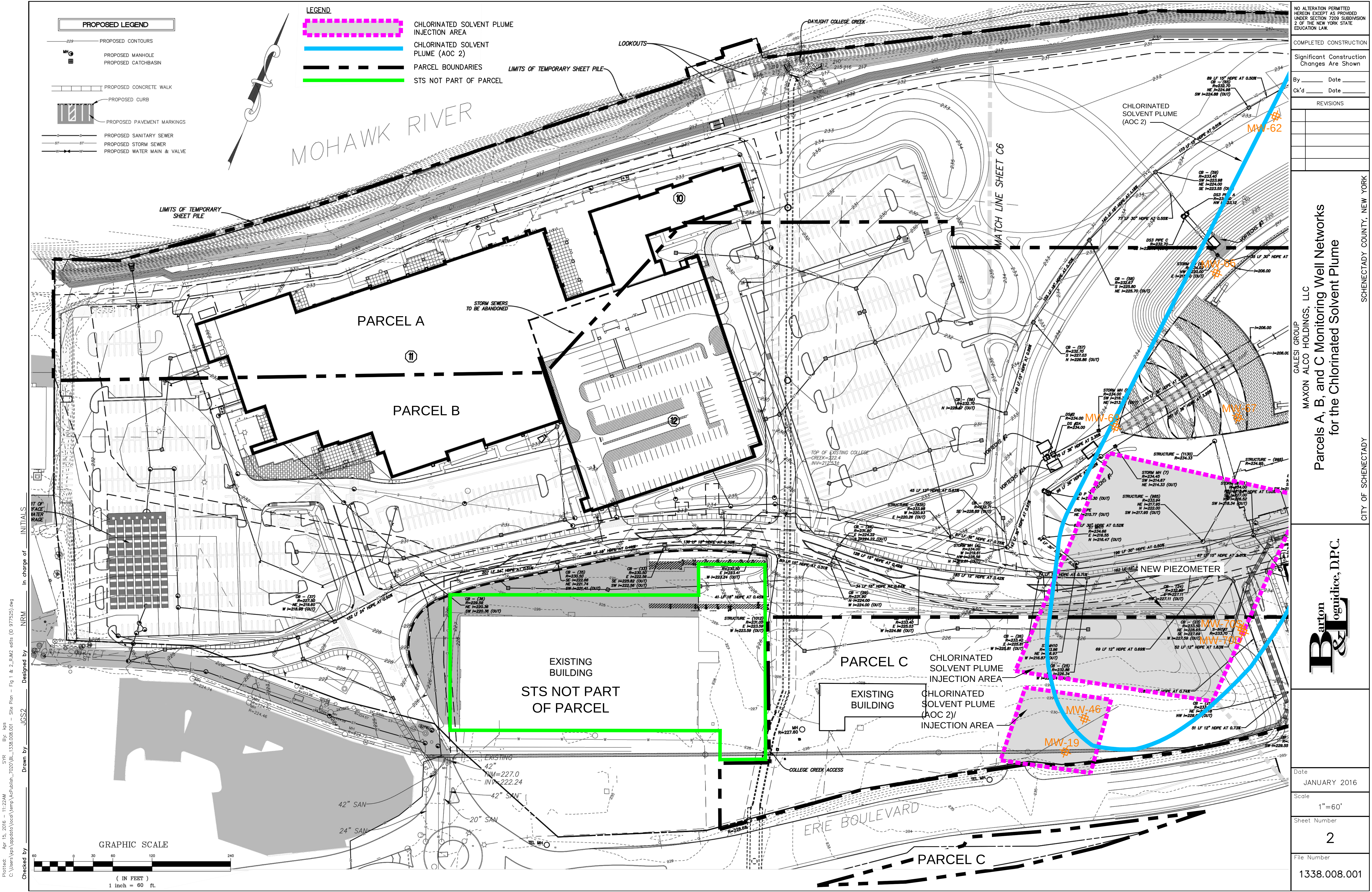
DF Dilution Factor

- Not Detected

[] Guidance Value

NA Not Analyzed





NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7208 SUBDIVISION
2 OF THE NEW YORK STATE
EDUCATION LAW.

COMPLETED CONSTRUCTION

Significant Construction
Changes Are Shown

By _____ Date _____
Ck'd _____ Date _____

REVISIONS

SALES GROUP
MAXON ALCO HOLDINGS, LLC

Parcels A, B, and C Monitoring Well Networks
for the Chlorinated Solvent Plume

SCENECTADY COUNTY, NEW YORK

Baron
B&L
ognidice, D.P.C.

City of Schenectady

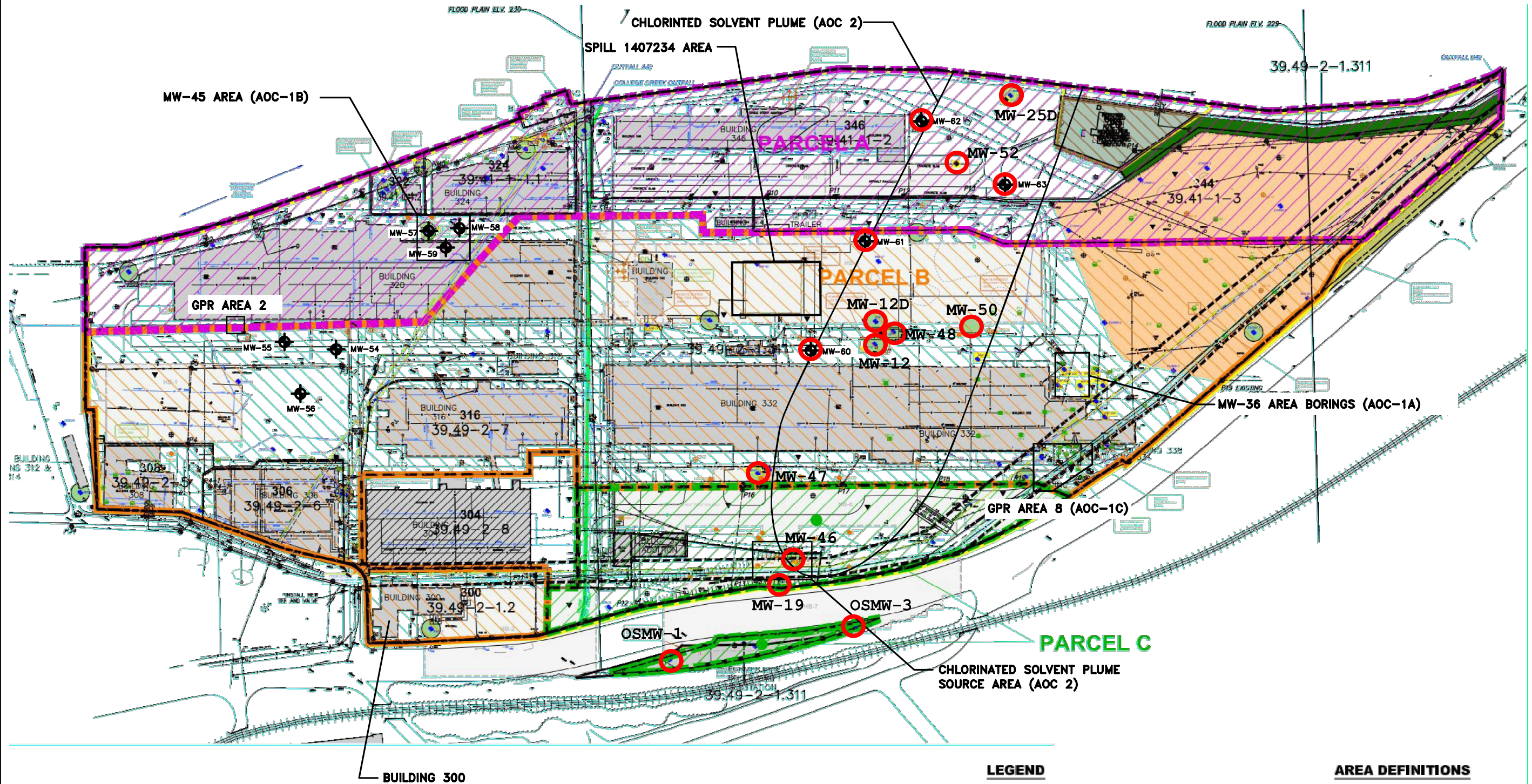
Date
JANUARY 2016

Scale
1"=60'

Sheet Number
2

File Number
1338.008.001

Plotted: Mar 24, 2015 - 3:27PM SYR By: jgs
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\0\\765000-765099\\765084\\L\\1368001_IRM Work Plan-Figure 1 (ID 765084).dwg



MAP REFERENCE:

- 1) "SURVEY OF LANDS, ALCO LOCOMOTIVE, INC., CITY OF SCHENECTADY, COUNTY OF SCHENECTADY", DATED MARCH 1970, AS PREPARED BY C.T. MALE ASSOCIATES.
- 2) "A SUBDIVISION OF A PORTION OF LANDS OF SCHENECTADY INDUSTRIAL CORPORATION", DATED JUNE 30, 1988, AS PREPARED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP.
- 3) "SITE PLAN, PROPOSED C & D RECYCLING FACILITY, NOTT STREET INDUSTRIAL PARK", DATED FEBRUARY 1995, AS PREPARED BY INGALLS SMART ASSOCIATES.

SOURCE:

- 1) ABD ENGINEERS AND SURVEYORS FEBRUARY 1988, REVISED NOVEMBER 1999.
- 2) HISTORIC BUILDING (HB) LOCATIONS BASED ON A "FUEL OIL PIPING" PLAN, PREPARED FOR AMERICAN LOCOMOTIVE CO., REVISED AUGUST 22, 195.

LEGEND		AREA DEFINITIONS	
	PROPERTY BOUNDARY		BUILDINGS/STRUCTURES
	BCP SITE BOUNDARY		FORMER BUILDINGS (PREVIOUSLY DEMOLISHED)
	MANHOLE WITH DRAINAGE STRUCTURE NUMBER		"EVI" PARCEL
	CATCH BASIN WITH DRAINAGE STRUCTURE NUMBER		"RPI" PARCEL
	LIFT STATION WITH DRAINAGE STRUCTURE NUMBER		OTHER PROPERTIES NO PART OF SITE
	MANHOLE (M.H.)		REMEDATION AREA
	CATCH BASIN (C.B.)		FORMER UST/AST LOCATIONS
	MONITORING WELL (MW)		
	TEMPORARY MONITORING WELL (TMW)		
	RECOVERY WELL		
	PIEZOMETER		
	GEOPROBE BORING		
	SURFACE SOIL SAMPLE LOCATION (SS)		
	SOIL BORING LOCATION		

MW-63 MONITORING WELL (SRI INVESTIGATION 2013) Chlorinated Solvent Plume MW

MAXON ALCO HOLDINGS, LLC

Former Monitoring Well Network for the Chlorinated Solvent Plume

CITY OF SCHENECTADY

NEW YORK



Date
MARCH, 2015

Scale
1" = 100'

Figure Number
3

Project Number
1368.001.001

August 23, 2016

Mr. John R. Strang, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Region 4
1130 South Westcott Road
Schenectady, New York 12306-2014

Via Electronic Mail

Re: Chlorinated Solvent Plume- Monitoring Well Baseline Sampling
Parcel A Monitoring Well Network
ALCO – BCP Site C447042
Schenectady, NY

Dear Mr. Strang:

On behalf of Maxon ALCO Holdings, LLC, Barton & Loguidice, Inc. (B&L) has prepared the following report for the results of the Parcel A Monitoring Well Network (Network) post remedial injection work sampling for the Chlorinated Solvent Plume.

Summary of IRM Activities

The Parcel A Monitoring Well Network sampling activities were undertaken in accordance with the January 2016 approved Parcel A Remedial Design Report dated December 2015. The Network is composed of the following:

MW	PARCEL	DEPTH*
MW-65	A	69.65
MW-64S	A	38.55
MW-64D	A	70.15
MW-62	A	63.2

*measured from top of casing

Groundwater sampling of the Network was conducted on June 15, 2016 and July 13, 2016; eight and twelve weeks post remedial injection work.

Summary of Sample Results

A total of five (5) groundwater samples (including a duplicate) were collected from monitoring wells shown on the attached figure during each sampling event. Groundwater samples were analyzed for volatile organic compounds (VOCs), sodium, potassium, calcium, magnesium, sulfate, chloride, hardness, and nitrate. Detections are summarized on the attached table. The five (5) groundwater samples had one or more of the following at concentrations above their respective 6 NYCRR Part 703.5 Groundwater Quality Standards:





Mr. John R. Strang, P.E.
NYSDEC
August 23, 2016
Page 2

- 1,1-Dichloroethene,
- cis-1,2-Dichloroethene,
- Tetrachloroethene,
- trans-1,2-Dichloroethene,
- Trichloroethene,
- Vinyl chloride,
- Chloride, and
- Sodium.

As discussed in the Supplemental Remedial Investigation (SRI) Report (B&L, 2013), the plume moves across the site towards the Mohawk River, along the established hydraulic gradient, moving deeper with distance from the source. Some breakdown of the original source area contaminant is evident as the plume traverses the site. Within the source area on Parcel C, tetrachloroethene (PCE) is the primary contaminant, while its breakdown cis-1,2-dichloroethene (12-DCE) is the primary contaminant at the extremities of the plume on Parcel A. The sequential breakdown of chlorinated solvents such as PCE and trichloroethene (TCE) in the subsurface due to biological and chemical processes has been documented in numerous sites in New York and in research articles, and is discussed in detail in Weidemeier, et al, 1999.

The eight and twelve weeks post remedial injection work groundwater samples exhibit slightly elevated concentrations of the observed contaminants when compared to the baseline samples collected on February 29, 2016. When compared to the samples collected four weeks post remedial work, the eight and twelve weeks post remedial injection work groundwater samples exhibit similar or slightly elevated concentrations of the observed contaminants.

Concentrations of 1,2-dichloroethene (12-DCE) have increased from the baseline sampling in both wells MW-62 and MW-64D, which is consistent with experience with oxidant injection at other sites in New York State. The increase results from residual oxidant action that liberates sorbed contaminant, temporarily putting more contaminant mass into dissolved phase.

Additional sampling of the Network will be conducted sixteen (16) weeks post remedial injection work on Parcels B and C. Please feel free to contact the undersigned at (518) 218-1801 with any questions or need for additional information.

Very truly yours,

BARTON & LOGUIDICE, INC.

A handwritten signature in black ink, reading "Andrew J. Barber".

Andrew J. Barber
Sr. Environmental Consultant

AJB/akd
Enclosure



Mr. John R. Strang, P.E.
NYSDEC
August 23, 2016
Page 2

cc:	Steve Porter, Esq.	- Maxon ALCO Holdings LLC
	Steve Luciano	- Maxon ALCO Holdings LLC
	Paul Fallati	- Maxon ALCO Holdings LLC
	Dean Sommer, Esq.	- Young Sommer
	Rich Ostrov	- NYSDEC Region 4, OGC
	Al DeMarco	-NYSDOH

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

[illegible]

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

	ORGANIC PARAMETERS

[illegible][illegible]

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

	FIELD PARAMETERS					INORGANIC PARAMETERS				TOTAL METALS				ORGANIC PARAMETERS
GROUNDWATER														
	TEMP. (deg. 4)	Eh (mV)	pH (Std Units)	SPEC. COND. (uS/cm)	TURB. (NTU)	HARD. (mg/l CaCO3)	NO3-N (mg/l)	Cl (mg/l)	SO4 (mg/l)	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	Acetone (ug/l)
6NYCRR Part 703 GROUNDWATER STANDARD	-	-	6.5-8.5	-	5	-	10	250	250	-	[35]	-	20	50
Shallow Monitoring Well MW-64S														
30-Sep-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Jun-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
01-Mar-16	52.70	-	6.74	1100	-	310	D <0.165 U 22.6	2.48 J	108	15.5	7.37	31.4	2.7	J
10-May-16						347	<0.165 U 33.9	<5.0 U	114 E	15.2 E	9.31	32.2 E	< 10.0	
15-Jun-16	58.10		6.88	1030	-	339	<0.165 U 27.7	<5.0 U	110	15	7.7	34	< 10.0	
13-Jul-16	62.90	-	7.02	1000	-		<0.165 U 18.9	<5.0 U	116	14.8	7.21 E	32.3	< 10.0	
Baseline														

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

[illegible]

	ALCO Brownfield Site 301 Nott Road, Schenectady, NY CHLORINATED SOLVENT PLUME WATER QUALITY DATA				
	ORGANIC PARAMETERS				
GROUNDWATER	1,1-Dichloroethene (ug/l)	cis-1,2-Dichloroethene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloroethene (ug/l)	Vinyl chloride (ug/l)
6NYCRR Part 703 GROUNDWATER STANDARD	5	5	5	5	2
Shallow Monitoring Well MW-64D					
27-Sep-11	-	-	-	-	-
18-Jun-13	-	-	-	-	-
11-Sep-15	-	-	-	-	-
01-Mar-16	9.7	1100.0 D	40.0	900.0 D	820.0
10-May-16	7.7	1000.0 D	29.0	550.0	230.0
15-Jun-16	9.9	1100.0 D	36.0	570.0 D	170.0 D
13-Jul-16	11.0 c	1400.0 D	40.0	670.0 D	250.0 D
Baseline					

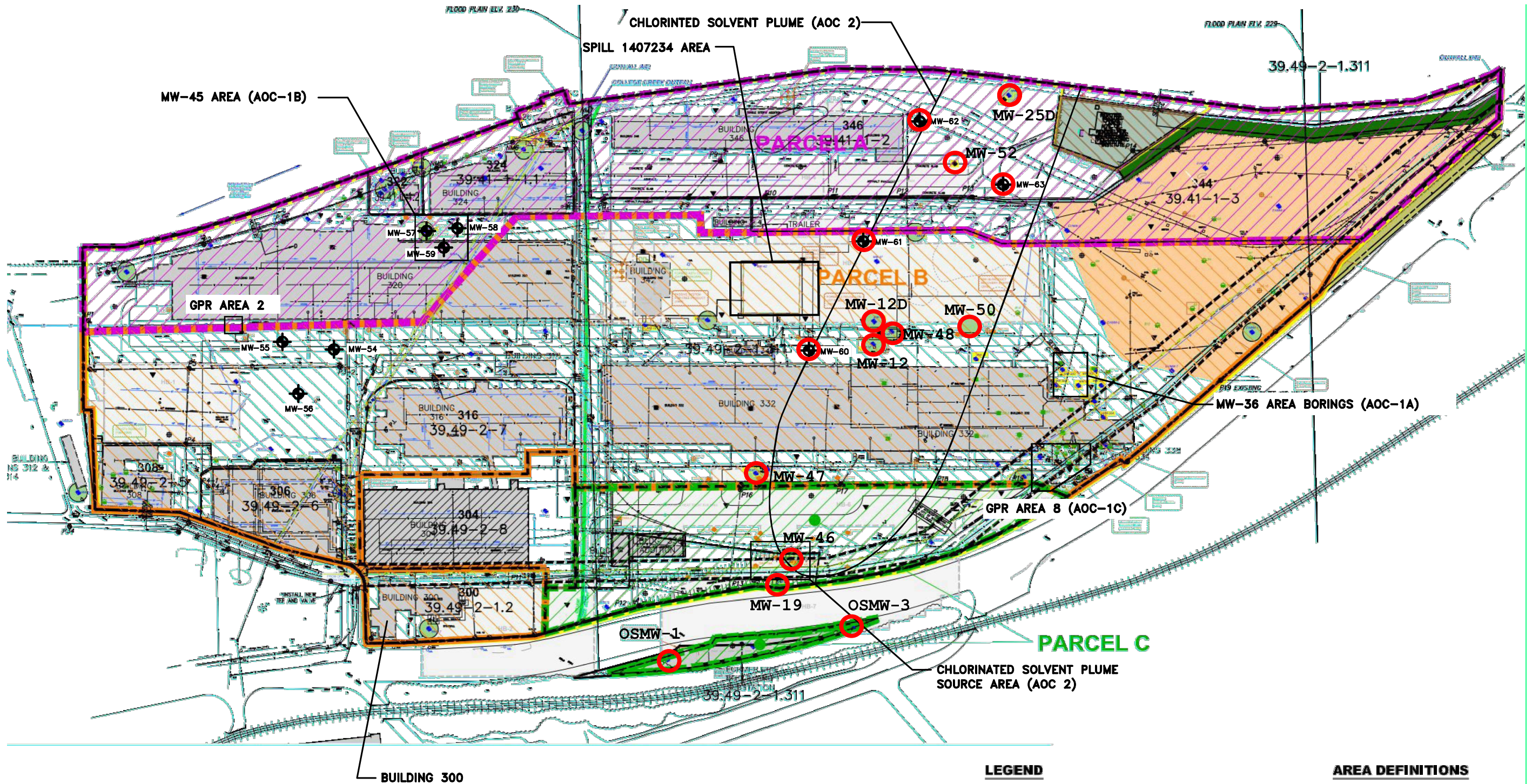
ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

	FIELD PARAMETERS					INORGANIC PARAMETERS				TOTAL METALS			
GROUNDWATER													
	TEMP. (deg. 4)	Eh (mV)	pH (Std Units)	SPEC. COND. (uS/cm)	TURB. (NTU)	HARD. (mg/l CaCO3)	NO3-N (mg/l)	Cl (mg/l)	SO4 (mg/l)	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)
6NYCRR Part 703 GROUNDWATER STANDARD	-	-	6.5-8.5	-	5	-	10	250	250	-	[35]	-	20
Shallow Monitoring Well MW-65													
30-Sep-11	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Jun-13	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-	-	-	-	-	-
01-Mar-16	53.78	-	6.90	2140	-	530	D <0.165 U	418	D 29.8	171	32.4	6.15	219
10-May-16		-			-	569	<0.165 U	352	D 26.2	169	E 35.5	E 5.27	218
15-Jun-16	62.10	-	6.92	2200	-	545	<0.165 U	412	DW 21	160	34	<5.0	230
13-Jul-16	63.30	-	7.08	2120	-		<0.165 U	418	D 23	179	36.2	4.95	220
Baseline													

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

[illegible]

Plotted: Mar 24, 2015 - 3:27PM SYR By: jgs
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\0\\765000-765084\\L\\1368001_IRM Work Plan-Figure 1 (ID 765084).dwg



MAP REFERENCE:

- 1) "SURVEY OF LANDS, ALCO LOCOMOTIVE, INC., CITY OF SCHENECTADY, COUNTY OF SCHENECTADY", DATED MARCH 1970, AS PREPARED BY C.T. MALE ASSOCIATES.
- 2) "A SUBDIVISION OF A PORTION OF LANDS OF SCHENECTADY INDUSTRIAL CORPORATION", DATED JUNE 30, 1988, AS PREPARED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP.
- 3) "SITE PLAN, PROPOSED C & D RECYCLING FACILITY, NOTT STREET INDUSTRIAL PARK", DATED FEBRUARY 1995, AS PREPARED BY INGALLS SMART ASSOCIATES.

SOURCE:

- 1) ABD ENGINEERS AND SURVEYORS FEBRUARY 1988, REVISED NOVEMBER 1999.
- 2) HISTORIC BUILDING (HB) LOCATIONS BASED ON A "FUEL OIL PIPING" PLAN, PREPARED FOR AMERICAN LOCOMOTIVE CO., REVISED AUGUST 22, 1995.

MAXON ALCO HOLDINGS, LLC

Former Monitoring Well Network for the Chlorinated Solvent Plume

CITY OF SCHENECTADY

NEW YORK



Date
MARCH, 2015

Scale
1" = 100'

Figure Number
3

Project Number
1368.001.001

October 26, 2016

Mr. John R. Strang, P.E.
Environmental Engineer 2
New York State Department of Environmental Conservation
Region 4
1130 South Westcott Road
Schenectady, New York 12306-2014

Via Electronic Mail

Re: Chlorinated Solvent Plume- Monitoring Well Baseline Sampling
Parcel A Monitoring Well Network
ALCO – BCP Site C447042
Schenectady, NY

Dear Mr. Strang:

On behalf of Maxon ALCO Holdings, LLC, Barton & Loguidice, Inc. (B&L) has prepared the following report for the results of the Parcel A Monitoring Well Network (Network) post remedial injection work sampling for the Chlorinated Solvent Plume.

Summary of IRM Activities

The Parcel A Monitoring Well Network sampling activities were undertaken in accordance with the January 2016 approved Parcel A Remedial Design Report dated December 2015. The Network is composed of the following:

MW	PARCEL	DEPTH*
MW-65	A	68.65
MW-64S	A	38.55
MW-64D	A	70.15
MW-62	A	73.22

*measured from top of casing

Groundwater sampling of the Network was conducted on August 10, 2016 and September 08, 2016; sixteen and twenty weeks post remedial injection work.

Summary of Sample Results

A total of five (5) groundwater samples (including a duplicate) were collected from monitoring wells shown on the attached figure during each sampling event. Groundwater samples were analyzed for volatile organic compounds (VOCs), sodium, potassium, calcium, magnesium, sulfate, chloride, hardness, and nitrate. Detections are summarized on the attached table. The five (5) groundwater samples had one or more of the following at concentrations above their respective 6 NYCRR Part 703.5 Groundwater Quality Standards:





Mr. John R. Strang, P.E.
NYSDEC
October 26, 2016
Page 2

- 1,1-Dichloroethene,
- cis-1,2-Dichloroethene,
- Tetrachloroethene,
- trans-1,2-Dichloroethene,
- Trichloroethene,
- Vinyl chloride,
- Chloride, and
- Sodium.

As discussed in the Supplemental Remedial Investigation (SRI) Report (B&L, 2013), the plume moves across the site towards the Mohawk River, along the established hydraulic gradient, moving deeper with distance from the source. Some breakdown of the original source area contaminant is evident as the plume traverses the site. Within the source area on Parcel C, tetrachloroethene (PCE) is the primary contaminant, while its breakdown cis-1,2-dichloroethene (12-DCE) is the primary contaminant at the extremities of the plume on Parcel A. The sequential breakdown of chlorinated solvents such as PCE and trichloroethene (TCE) in the subsurface due to biological and chemical processes has been documented in numerous sites in New York and in research articles, and is discussed in detail in Weidemeier, et al, 1999.

The sixteen and twenty weeks post remedial injection work groundwater samples exhibit slightly elevated concentrations of the observed contaminants when compared to the baseline samples collected on February 29, 2016. When compared to the samples collected twelve weeks post remedial work, the twenty weeks post remedial injection work groundwater samples exhibit similar or slightly lower concentrations of the observed contaminants.

Concentrations of 1,2-dichloroethene (12-DCE) have increased from the baseline sampling in both wells MW-62 and MW-64D, which is consistent with experience with oxidant injection at other sites in New York State. The increase results from residual oxidant action that liberates sorbed contaminant, temporarily putting more contaminant mass into dissolved phase.

Additional sampling of the Network will be conducted twenty four (24) weeks post remedial injection work on Parcels B and C. Please feel free to contact the undersigned at (518) 218-1801 with any questions or need for additional information.

Very truly yours,

BARTON & LOGUIDICE, INC.

Andrew J. Barber
Sr. Environmental Consultant

AJB/akd
Enclosure

cc: Tom Owens, Esq. - Maxon ALCO Holdings LLC
Steve Luciano - Maxon ALCO Holdings LLC



Mr. John R. Strang, P.E.
NYSDEC
October 26, 2016
Page 3

Paul Fallati	- Maxon ALCO Holdings LLC
Dean Sommer, Esq.	- Young Sommer
Rich Ostrov	- NYSDEC Region 4, OGC
Al DeMarco	-NYSDOH

PARCEL	MW	DEPTH	INSTALLED	CONSULTANT	STATUS
A	MW-65	68.65	Feb-16	B&L	Preserved
A	MW-64S	38.55	Feb-16	B&L	Preserved
A	MW-64D	70.15	Feb-16	B&L	Preserved
A	MW-62	73.22	Feb-16	B&L	Preserved
A	MW-25D	63.00	Apr-12	CHA	Removed
A	MW-52	67.00	Apr-12	CHA	Removed
A	MW-63	65.00	May-13	B&L	Removed
B	MW-69	62.50	Feb-16	B&L	Preserved
B	MW-68	46.61	Feb-16	B&L	Preserved
B	MW-67	52.40	Feb-16	B&L	Preserved
B	MW-66	58.00	Feb-16	B&L	Preserved
B	MW-12	15.50	Mar-94	Dames & Moore	Removed
B	MW-12D	15.74	Dec-98	HLA	Removed
B	MW-47	55.20	May-01	BBL	Removed
B	MW-48	65.00	May-01	BBL	Removed
B	MW-50	57.00	Oct-05	-	LOST
B	MW-60	55.00	May-13	B&L	Removed
B	MW-61	60.00	May-13	B&L	Removed
C	MW-19	19.75	Nov-99	BBL	Preserved
C	MW-46	42.90	May-01	BBL	Preserved
C	MW-70S	30.90	Feb-16	B&L	Preserved
C	MW-70D	47.20	Feb-16	B&L	Preserved
C-Across Erie	OSMW-1	12.00	Aug-09	Kleinfelder	Removed
C-Across Erie	OSMW-3	20.00	Aug-09	Kleinfelder	Removed

Depth measured from top of casing

Removed- Due to construction

Lost- could not be located and were not sampled. It is anticipated that the sediment deposited on the Site during flooding associated with tropical storm Irene (August 29 th, 2011) may have buried some or all of the missing wells.

			PARCEL A																	
			MW-52						MW-25D						MW-63		MW-62			
			4/23/2012		4/23/2012		6/17/2013		4/23/2012		4/23/2012		6/17/2013		6/17/2013		6/17/2013		9/11/2015	
Parameter	PART 703	Units	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF	Result	DF
1,1-Dichloroethane	5	µg/l	-	1	-	20	1.52	1	-	1	-	4	-	1	3.41	1	-	1	-	1
1,1-Dichloroethene	5	µg/l	5.2 J	1	13 J	20	-	1	0.63 J	1	-	4	-	1	-	1	-	1	2.7	1
Acetone	50	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	-	1
Chloroform	7	µg/l	-	1	-	20	-	1	0.47 J	1	-	4	-	1	-	1	-	1	-	1
cis-1,2-Dichloroethene	5	µg/l	450 EJ	1	970	20	111	1	220 EJ	1	280	4	109	1	2720	1	2260	1	1000 D	10
Methyl tert-butyl ether	10	µg/l	-	1	-	20	-	1	-	1	-	4	-	1	-	1	-	1	NA	1
Tetrachloroethene	5	µg/l	25 J	1	43	20	-	1	28	1	34	4	17.3	1	82.7	1	-	1	NA	1
trans-1,2-Dichloroethene	5	µg/l	13 J	1	30	20	-	1	-	1	-	4	-	1	48.5	1	48.4	1	NA	1
Trichloroethene	5	µg/l	400 EJ	1	760	20	17.4	1	34	1	42	4	14.9	1	206	1	18.7	1	NA	1
Vinyl chloride	2	µg/l	25 J	1	47 J	20	5.94	1	6.1	1	7.8	4	-	1	21	1	-	1	NA	1
Calcium	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	[35]	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	20	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Chloride	250	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Sulfate	250	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Nitrate	10	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Hardness	-	MG/L	NA		NA		NA		NA		NA		NA		NA		NA		NA	

1. 6 NYCRR Part 703.5 Groundwater Quality Standards

D Results for Dilution

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL.

EJ - Result exceeded the calibration range. Analyte is present, but the reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

DF Dilution Factor

- Not Detected

[] Guidance Value

NA Not Analyzed

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

	FIELD PARAMETERS					INORGANIC PARAMETERS				TOTAL METALS			
GROUNDWATER													
	TEMP. (deg. 4)	Eh (mV)	pH (Std Units)	SPEC. COND. (uS/cm)	TURB. (NTU)	HARD. (mg/l CaCO3)	NO3-N (mg/l)	Cl (mg/l)	SO4 (mg/l)	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)
6NYCRR Part 703 GROUNDWATER STANDARD	-	-	6.5-8.5	-	5	-	10	250	250	-	[35]	-	20
<i>Shallow Monitoring Well MW-62</i>													
27-Sep-11	-	-	-	-	-	-	-	-	-	-	-	-	-
17-Jun-13	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-	-	-	-	-	-
01-Mar-16	51.44	-	7.16	2650	-	450	D <0.165 U	498	D 47.9	152	26.4	6.66	395
10-May-16						589	0.212	517	D 56 D	187	E 29.6	E 6.47	352 E
15-Jun-16	60.80		6.94	3010	-	568	<0.165 U	615	D 60.1 D	180	30	5.7	390
13-Jul-16	65.40	-	7.10	2870	-		<0.165 U	468	D 12.8	188	30.2	6.82	E 396
10-Aug-16	61.10	-	7.09	2850	-		<0.165 U	644	D 62.7	177	29.2	5.81	389
08-Sep-16	63.40	-	6.83	3010	-	593	<0.165 U	594	D 58.5 D	190	31	8.7	370
05-Oct-16	61.80	-	6.89	2630	-								
		-			-								
		-			-								

	ALCO Brownfield Site 301 Nott Road, Schenectady, NY CHLORINATED SOLVENT PLUME WATER QUALITY DATA				
	ORGANIC PARAMETERS				
GROUNDWATER	1,1-Dichloroethene (ug/l)	cis-1,2-Dichloroethene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloroethene (ug/l)	Vinyl chloride (ug/l)
6NYCRR Part 703 GROUNDWATER STANDARD	5	5	5	5	2
Shallow Monitoring Well MW-62					
27-Sep-11	-	-	-	-	-
17-Jun-13	< 1.0	2260.0	48.4	18.7	< 1.0
11-Sep-15	2.7	1000.0			
01-Mar-16	< 1.0	420.0	24.0	1.5	120.0
10-May-16	< 1.0	430.0	29.0	1.6	89.0
15-Jun-16	< 10.0	640.0	40.0	2.0	110.0
13-Jul-16	1.2	770.0	47.0	1.7	120.0
10-Aug-16	< 1.0	860.0	56.0	< 1.0	140.0
08-Sep-16	< 5.0	710.0	44.0	< 5.0	110.0
05-Oct-16					

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

[illegible]

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

	FIELD PARAMETERS					INORGANIC PARAMETERS				TOTAL METALS			
GROUNDWATER													
	TEMP. (deg. 4)	Eh (mV)	pH (Std Units)	SPEC. COND. (uS/cm)	TURB. (NTU)	HARD. (mg/l CaCO3)	NO3-N (mg/l)	Cl (mg/l)	SO4 (mg/l)	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)
6NYCRR Part 703 GROUNDWATER STANDARD	-	-	6.5-8.5	-	5	-	10	250	250	-	[35]	-	20
Shallow Monitoring Well MW-64D													
27-Sep-11	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Jun-13	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-	-	-	-	-	-
01-Mar-16	53.06	-	7.13	2890	-	570	D <0.165 U	509	D 54 D	172	39.2	5.88	347
10-May-16						714	<0.165 U	582	D 58.9 D	212	E 45.1	E 6.37	376
15-Jun-16	58.40		6.92	3120	-	662	<0.165 U	685	D 58.2 D	200	42	5.4	400
13-Jul-16	64.30	-	7.06	3060	-		<0.165 U	654	D 13.6	225	46.5	5.81	E 398
10-Aug-16	60.10	-	7.11	2990	-		<0.165 U	734	D 70.9 D	199	42.8	5.05	366
08-Sep-16	59.60	-	6.79	3210	-	706	<0.165 U	728	D 69.2 D	210	44	7.3	370
05-Oct-16	59.80	-	7.04	2990	-								

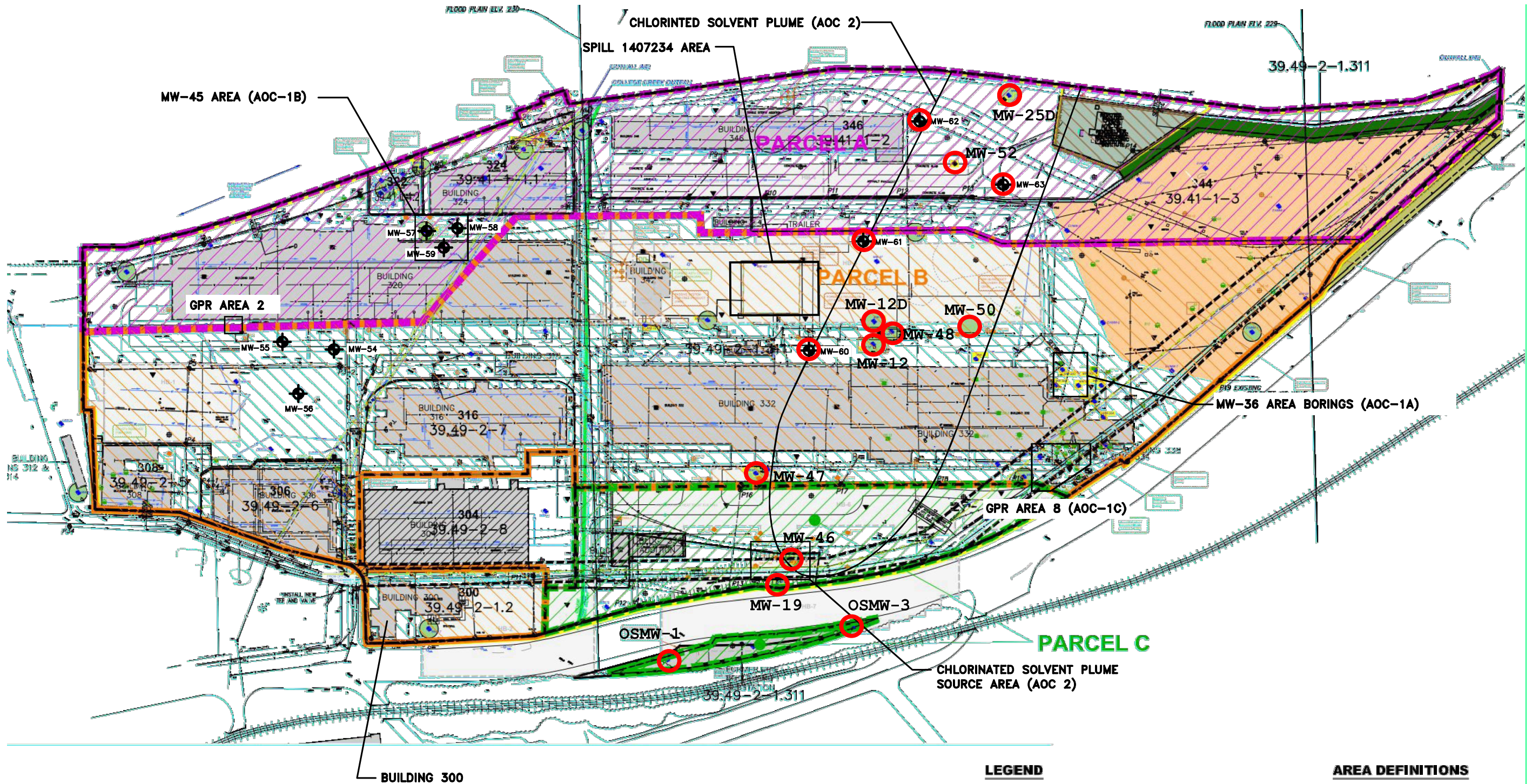
ALCO Brownfield Site 301 Nott Road, Schenectady, NY CHLORINATED SOLVENT PLUME WATER QUALITY DATA					
ORGANIC PARAMETERS					
GROUNDWATER	1,1-Dichloroethene (ug/l)	cis-1,2-Dichloroethene (ug/l)	trans-1,2-Dichloroethene (ug/l)	Trichloroethene (ug/l)	Vinyl chloride (ug/l)
6NYCRR Part 703 GROUNDWATER STANDARD	5	5	5	5	2
Shallow Monitoring Well MW-64D					
27-Sep-11	-	-	-	-	-
18-Jun-13	-	-	-	-	-
11-Sep-15	-	-	-	-	-
01-Mar-16	9.7	1100.0 D	40.0	900.0 D	820.0
10-May-16	7.7	1000.0 D	29.0	550.0	230.0
15-Jun-16	9.9	1100.0 D	36.0	570.0 D	170.0 D
13-Jul-16	11.0 c	1400.0 D	40.0	670.0 D	250.0 D
10-Aug-16	11.0 D	1500.0 D	41.0 D	630.0 D	240.0 D
08-Sep-16	13.0 Dc	1400.0 D	37.0 D	600.0 D	190.0 D
05-Oct-16					

ALCO Brownfield Site 301 Nott Road, Schenectady, NY CHLORINATED SOLVENT PLUME WATER QUALITY DATA													
	FIELD PARAMETERS					INORGANIC PARAMETERS				TOTAL METALS			
GROUNDWATER													
	TEMP. (deg. F)	Eh (mV)	pH (Std Units)	SPEC. COND. (uS/cm)	TURB. (NTU)	HARD. (mg/l CaCO3)	NO3-N (mg/l)	Cl (mg/l)	SO4 (mg/l)	Ca (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)
6NYCRR Part 703 GROUNDWATER STANDARD	-	-	6.5-8.5	-	5	-	10	250	250	-	[35]	-	20
Shallow Monitoring Well MW-65													
30-Sep-11	-	-	-	-	-	-	-	-	-	-	-	-	-
18-Jun-13	-	-	-	-	-	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-	-	-	-	-	-
01-Mar-16	53.78	-	6.90	2140	-	530	D <0.165 U	418	D 29.8	171	32.4	6.15	219
10-May-16		-			-	569	<0.165 U	352	D 26.2	169	E 35.5	E 5.27	218
15-Jun-16	62.10	-	6.92	2200	-	545	<0.165 U	412	DN 21	160	34	<5.0	230
13-Jul-16	63.30	-	7.08	2120	-		<0.165 U	418	D 23	179	36.2	4.95	Bi 220
10-Aug-16	60.00	-	7.05	2220	-		<0.165 U	480	D 21.9	173	37.9	4.89	J 225
08-Sep-16	60.40	-	6.71	2440	-	610	<0.165 U	516	D 23.9	180	39	7.5	220
05-Oct-16	59.40	-	6.93	2330	-								

ALCO Brownfield Site
301 Nott Road, Schenectady, NY
CHLORINATED SOLVENT PLUME WATER QUALITY DATA

ORGANIC PARAMETERS								
GROUNDWATER	1,1-Dichloroethene	Acetone	cis-1,2-Dichloroethene	Methyl tert-butyl ether	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
6NYCRR Part 703 GROUNDWATER STANDARD	5	50	5	10	5	5	5	2
Shallow Monitoring Well MW-65								
30-Sep-11	-	-	-	-	-	-	-	-
18-Jun-13	-	-	-	-	-	-	-	-
11-Sep-15	-	-	-	-	-	-	-	-
01-Mar-16	1.6	6.5 J	570.0	1.7 D	390.0 D	5.6	260.0 D	590.0 D
10-May-16	< 1.0	1.4 J	320.0	D < 1.0	170.0	2.4	94.0	97.0
15-Jun-16	< 1.0	< 10.0	310.0	D < 1.0	140.0	5.9	100.0	84.0 c
13-Jul-16	1.0	c < 10.0	500.0	D < 1.0	160.0	4.6	110.0	130.0
10-Aug-16	1.2	< 10.0	490.0	D < 1.0	170.0 c	4.0	130.0	170.0
08-Sep-16	< 1.0	< 10.0	360.0	D < 1.0	140.0	2.4	93.0	100.0
05-Oct-16								

Plotted: Mar 24, 2015 - 3:27PM SYR By: jgs
Z: \\BL-Vault\\D2\\18217AD2-1C71-4823-8927-99D5C4054147\\0\\765000-765084\\L\\1368001_IRM Work Plan-Figure 1 (ID 765084).dwg



MAP REFERENCE:

- 1) "SURVEY OF LANDS, ALCO LOCOMOTIVE, INC., CITY OF SCHENECTADY, COUNTY OF SCHENECTADY", DATED MARCH 1970, AS PREPARED BY C.T. MALE ASSOCIATES.
- 2) "A SUBDIVISION OF A PORTION OF LANDS OF SCHENECTADY INDUSTRIAL CORPORATION", DATED JUNE 30, 1988, AS PREPARED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP.
- 3) "SITE PLAN, PROPOSED C & D RECYCLING FACILITY, NOTT STREET INDUSTRIAL PARK", DATED FEBRUARY 1995, AS PREPARED BY INGALLS SMART ASSOCIATES.

SOURCE:

- 1) ABD ENGINEERS AND SURVEYORS FEBRUARY 1988, REVISED NOVEMBER 1999.
- 2) HISTORIC BUILDING (HB) LOCATIONS BASED ON A "FUEL OIL PIPING" PLAN, PREPARED FOR AMERICAN LOCOMOTIVE CO., REVISED AUGUST 22, 1995.

LEGEND

	PROPERTY BOUNDARY		MONITORING WELL (MW)
	BCP SITE BOUNDARY		TEMPORARY MONITORING WELL (TMW)
	MANHOLE WITH DRAINAGE STRUCTURE NUMBER		RECOVERY WELL
	CATCH BASIN WITH DRAINAGE STRUCTURE NUMBER		PIEZOMETER
	LIFT STATION WITH DRAINAGE STRUCTURE NUMBER		GEOPROBE BORING
	MANHOLE (M.H.)		SURFACE SOIL SAMPLE LOCATION (SS)
	CATCH BASIN (C.B.)		SOIL BORING LOCATION

AREA DEFINITIONS

	BUILDINGS/STRUCTURES
	FORMER BUILDINGS (PREVIOUSLY DEMOLISHED)
	"ENV" PARCEL
	"RPI" PARCEL
	OTHER PROPERTIES NOT PART OF SITE
	REMEDIAL AREA
	FORMER UST/AST LOCATIONS



MW-63 MONITORING WELL (SRI INVESTIGATION 2013)



Chlorinated Solvent Plume MW

MAXON ALCO HOLDINGS, LLC

Former Monitoring Well Network for the Chlorinated Solvent Plume



Date
MARCH, 2015

Scale
1" = 100'

Figure Number
3

Project Number
1368.001.001

CITY OF SCHENECTADY

NEW YORK