



Glenn Springs Holdings, Inc.

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January 10, 2013

Mr. Thomas Taccone
Western New York Remediation Section
Emergency and Remedial Response Division
United States Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Mr. Taccone:

Re: Quarterly Report - Fourth Quarter 2012 (October through December)
Administrative Orders Hooker Chemical/Ruco Polymer Corporation Site
Index Nos. II-CERCLA-80216, II-CERCLA-94-0210, and II-CERCLA-02-2001-2018

This submittal provides the Quarterly Progress Report covering October through December 2012 for the Hooker/Ruco Site in Hicksville, New York. This Report covers OU-1, OU-2, and OU-3. Please note that the next Quarterly Progress Report will be submitted by April 15, 2013 and will cover January through March 2013.

QUARTERLY PROGRESS REPORT

The following activities were performed during the period October through December 2012.

The Quarterly Progress Report for the time period July through September 2012 was submitted to the USEPA on October 10, 2012.

Operable Unit-1 (On-Site Soil)

All work has been successfully completed. OU-1 is closed.

Operable Unit-2 (Soils Impacted by On-Site Release of PCBs)

All work has been successfully completed. OU-2 is closed.

Operable Unit-3 (Off-Site Groundwater)

Supplemental Treatment System

- i) Operation and monitoring of the GP-1/GP-3 supplemental air treatment system continued
- ii) The carbon bed was changed out on October 11, 2012
- iii) The potassium permanganate bed was changed out on October 23, 2012
- iv) Evaluations of possible upgrade alternatives for the supplemental treatment system are ongoing

Biosparge System

See Figures 1 and 2 for system layout and Figures 3 and 4 for system cross-sections.

The expanded biosparge system started full-time operation on September 17 with the start of the initial 40-hour air injections. The initial 40-hour injections were completed during the first week of October 2012. The weekly 8-hour air injections (which will comprise the routine mode of operation going forward) were started on November 12 after completion of the biosparge system performance monitoring event described below.

On September 12, EPA requested that stratigraphic logs for a subset of GSHI's wells be submitted in the EPA's electronic format. A listing of proposed wells was submitted to the EPA on October 9.

On October 4, EPA requested that well nests MW-63 and MW-64 be sampled and analyzed. Access permission for MW-64 was obtained in October. Attempts to obtain access permission for MW-63 are ongoing. It is planned to sample these two well nests in April 2013 as part of a larger area sampling event which includes the second quarterly biosparge performance monitoring event.

The draft electrical As-Built drawings of the completed biosparge injection system were submitted electronically to the EPA on October 10. This completes the submittals required documenting the as-built details of the construction components.

The PDB/HydraSleeve samplers for the quarterly performance monitoring event were inserted into 39 biosparge system wells between October 9 and 11. The biosparge system was shut down on October 5 in preparation for the sampling event. Retrieval of the samplers started on October 24. Sampling was halted on October 26 due to the pending arrival of Hurricane Sandy. The remaining samplers were retrieved on November 5. The samples from wells MW-75D2, MW-86D1, and MW89-D2 were split with the EPA. Samples were not collected from the following wells for the reasons stated:

- MW-61D2: The sampler would not penetrate the well beyond 70 ft bgs. The well will be checked and, if possible, the obstruction removed when the well rehabilitation contractor is on-site.
- MW-90D2: The weight had disconnected from the sampler and no water was contained within the sampler. A reinforced connection point is to be used for future sampling events.

The entire biosparge system was shut down on October 27 as a precaution due to the pending arrival of Hurricane Sandy. The hurricane caused only minor cosmetic damage to the exterior of the control building. The electrical power to the area was off for a few days and the biosparge system was re-energized on November 5. An update regarding the condition of the biosparge system was emailed to the EPA on November 6.

Startup activities identified five air injection wells which are not accepting air at the design flow rate of 100 scfm. It has been decided to attempt to rehabilitate the wells using a well screen acid solution that has met with good results at other Sites on Long Island. Technical information regarding the rehabilitation material proposed for use at the Site was submitted to the EPA on November 6. Arrangements have been made to redevelop these wells and will be implemented once EPA approval of the rehabilitation material is received.

Updating the Operation, Maintenance & Monitoring (O, M & M) Manual was completed and includes the April 2012 QAPP and an updated HASP. An inquiry regarding the means of distribution and to whom the Draft O, M & M Manual should be distributed was emailed to the USEPA on November 28.

Notification of the first 2013 quarterly biosparge system performance monitoring event was submitted to the USEPA on November 28. The PDB/HydraSleeve samplers are to be inserted starting January 8, 2013 and retrieved a minimum of 14 days after insertion.

Additional copies of the final QAPP dated April 2012 was submitted to the USEPA on December 7, 2012.

SUMMARY OF BIOSPARGE PILOT SYSTEM

The dissolved oxygen (DO), total volatile organic compounds (TVOC), and vinyl chloride monomer (VCM) concentration trends for the individual groundwater monitoring wells around the biosparge injection system are shown on Figures 5 through 23. To date, the results show that the biosparge system is operating successfully as demonstrated by the following:

- i. Dissolved oxygen (DO) levels in the groundwater have increased and, in general, are greater than the target concentration of 2 milligrams per liter (mg/L)
- ii. The VCM concentrations are decreasing as a result of the microbial biodegradation processes

PLANNED FIRST QUARTER 2013 ACTIVITIES

The following activities are planned for the first quarter of 2013:

- i) Continue operation and monitoring of the GP-1/GP-3 supplemental air treatment system.
- ii) Perform the first 2013 quarterly biosparge system performance monitoring event. PDB/HydraSleeve insertion is scheduled to start on January 8, 2013 with retrieval scheduled to start on January 24, 2013.
- iii) Change-out of the supplemental treatment system carbon bed is scheduled for the week of December 31, 2012.
- iv) Continue the weekly 8-hour air injections for the entire system except for the injection wells in the vicinity of the monitoring wells to be sampled in January 2013. The injection wells (i.e., IW-1 through IW-7, IW-15, and IW-20 through IW-21) will be shut down during the sampling period.

The following activities are pending an approval or review by the USEPA. The follow-up schedule is based on receipt of the review or approval:

- i) Provide stratigraphic well logs in electronic format upon receipt of USEPA acceptance of the well list submitted October 9
- ii) Redevelop five air injection wells upon receipt of USEPA approval of proposed well redevelopment materials submitted November 6
- iii) Distribute the Draft O, M & M Manual upon reply by the USEPA to GSHI's November 28 inquiry

Should you have any questions on the above, please do not hesitate to contact me at (972) 687-7516 or e-mail at Roger_Smith@oxy.com.

Yours sincerely,

A handwritten signature in blue ink that reads "Roger Smith". The signature is written in a cursive style with a large, stylized "R" and "S".

Roger Smith
Senior Project Manager

KDS/lp/006883/36
Encl.

cc: P. Mannino (USEPA)
M. E. Wieder (USEPA)
S. Scharf (NYSDEC - PDF on CD)
M. Popper (CDM)
T. Kelly (Nassau County)
D. Schnelzer (Bayer)
J. Kay (CRA)

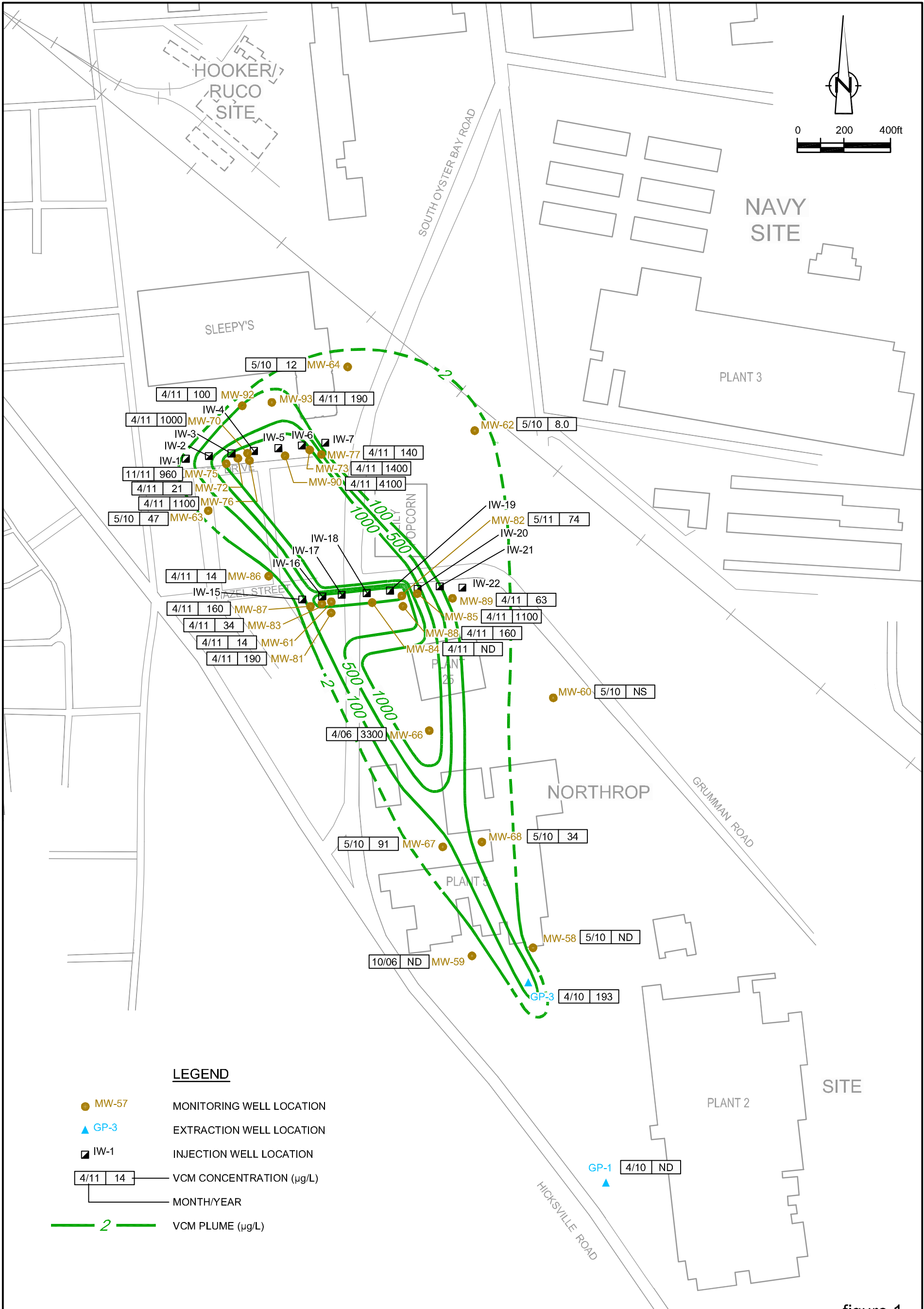
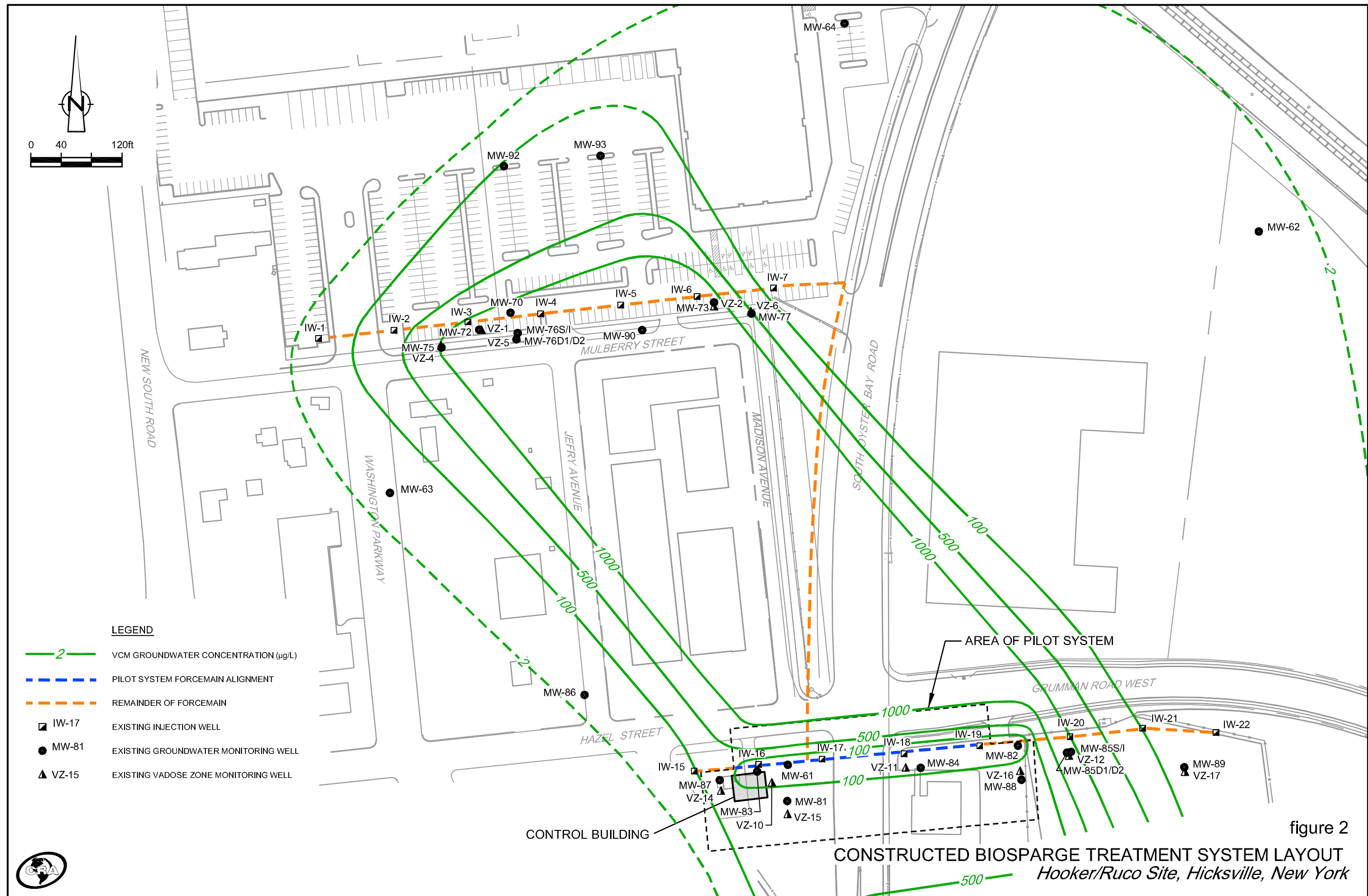
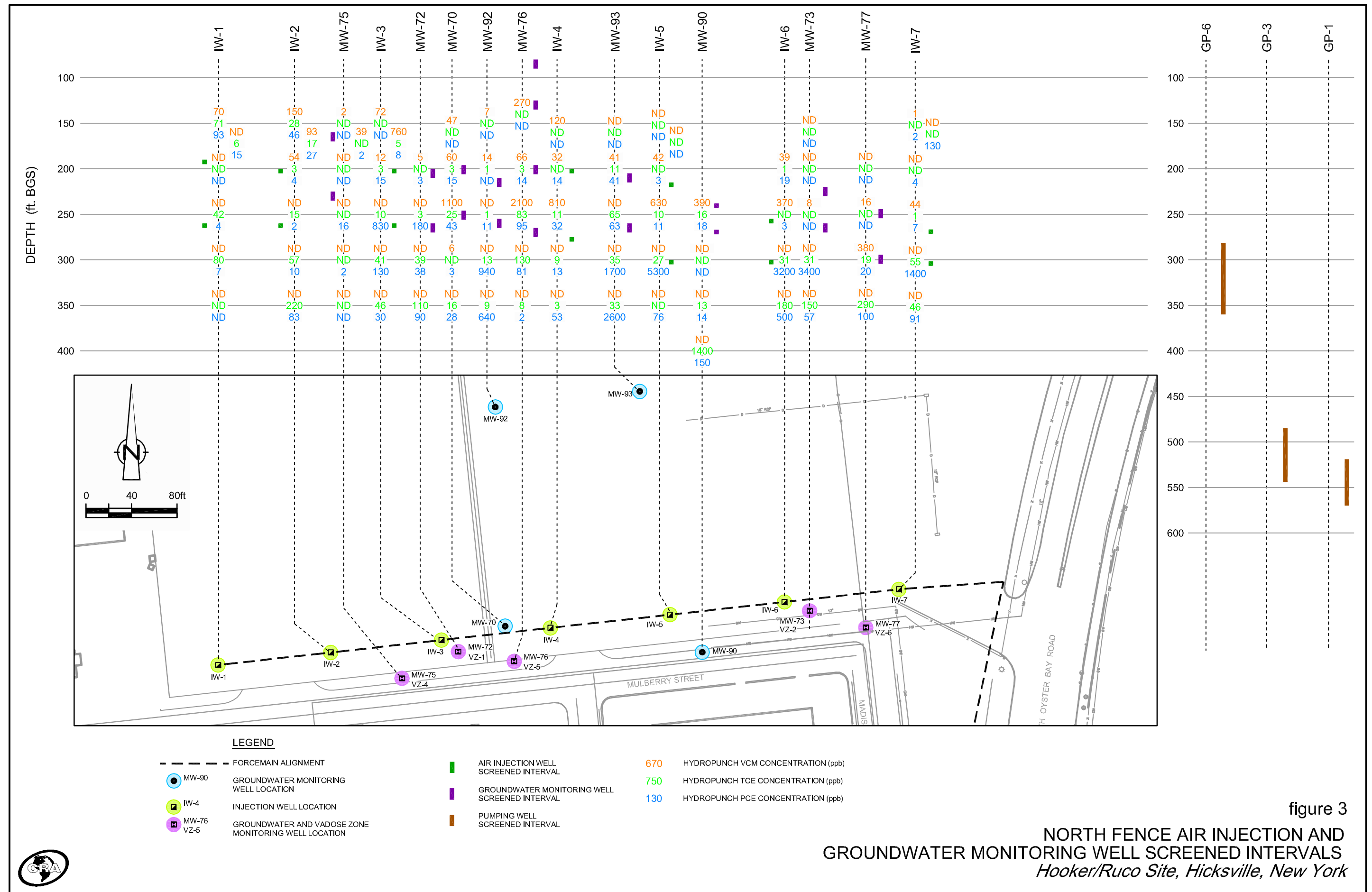


figure 1
RECENT VCM GROUNDWATER CONCENTRATIONS
Hooker/Ruco Site, Hicksville, New York







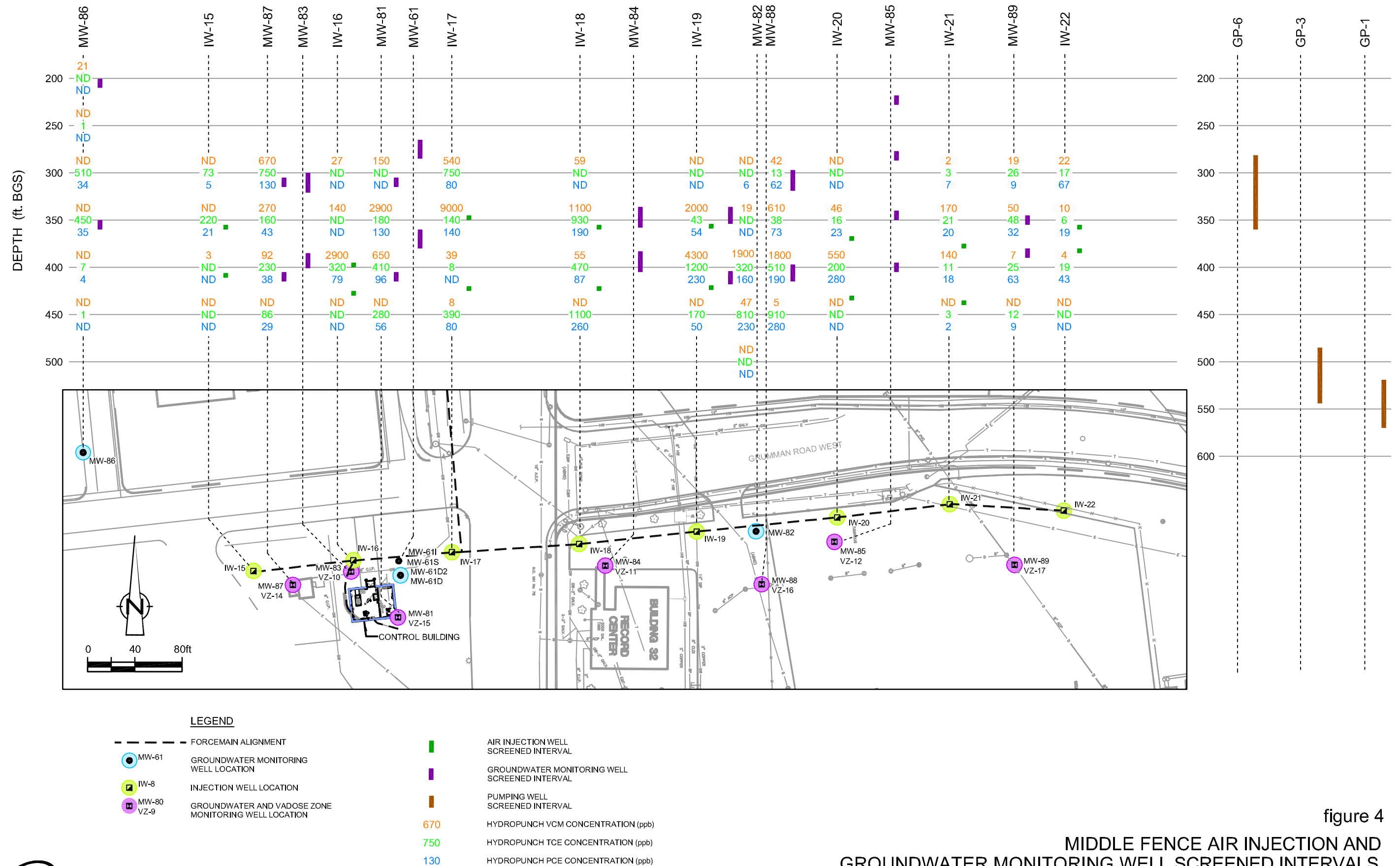
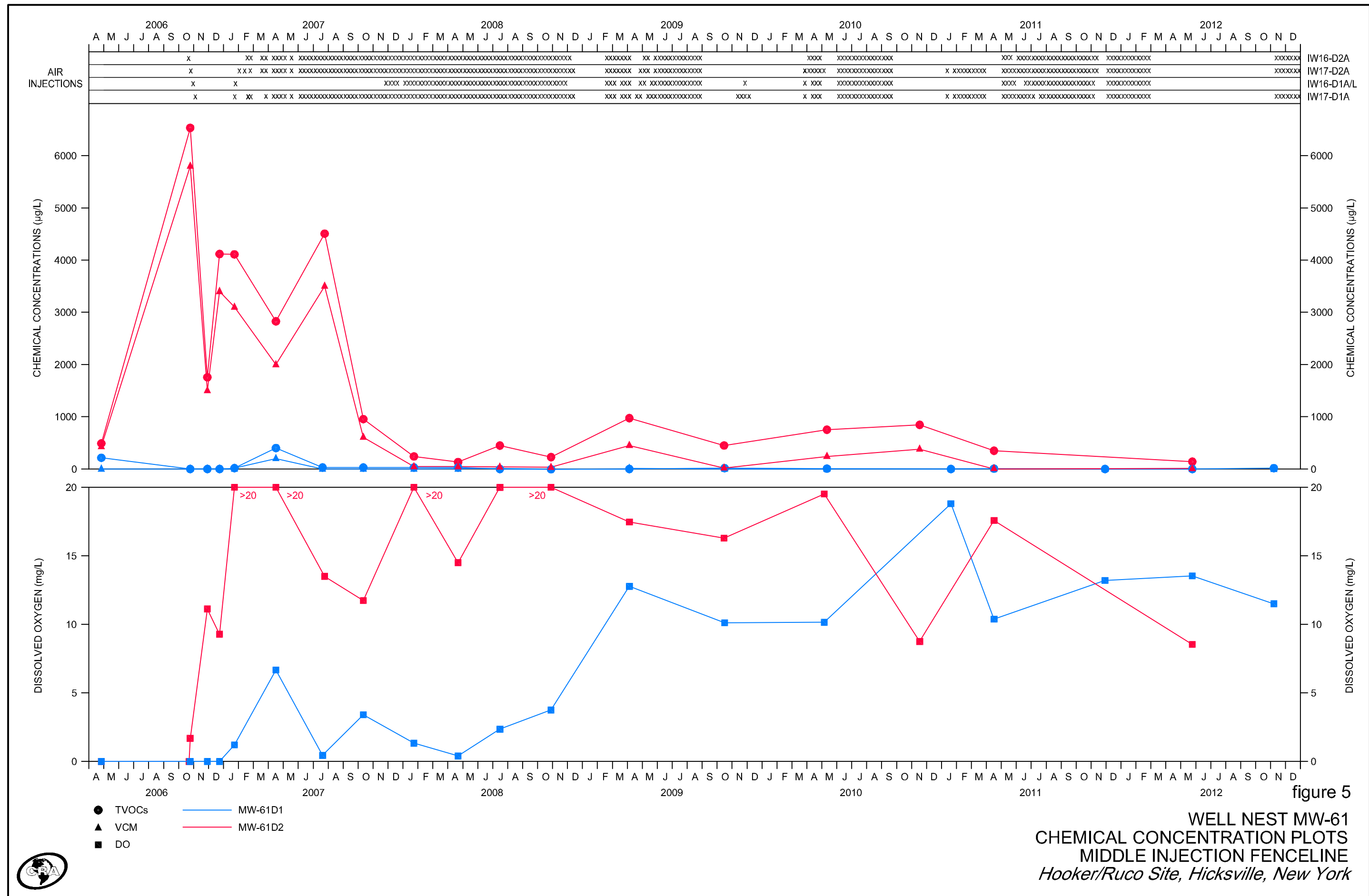


figure 4
MIDDLE FENCE AIR INJECTION AND
GROUNDWATER MONITORING WELL SCREENED INTERVALS
Hooker/Ruco Site, Hicksville, New York





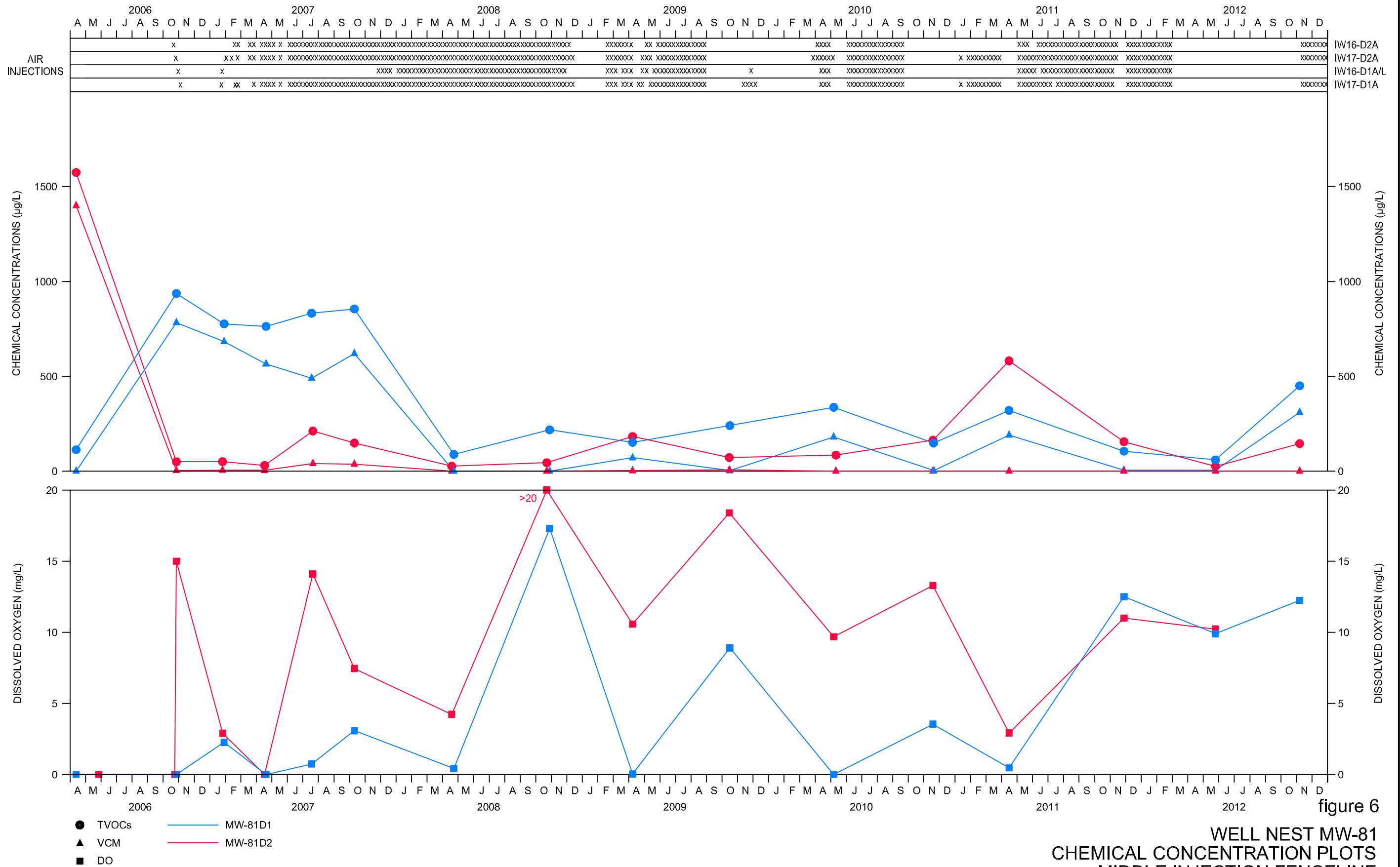
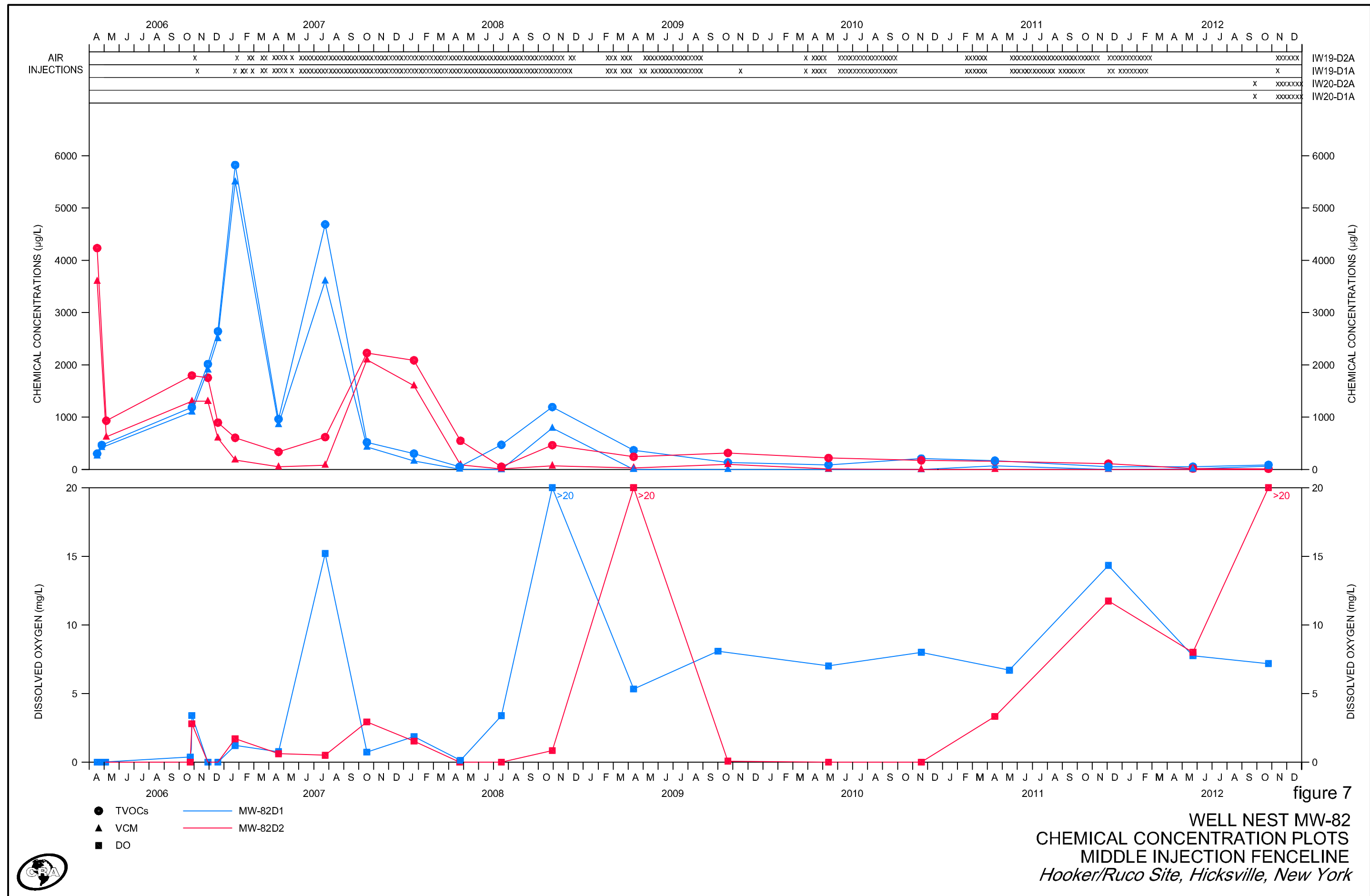
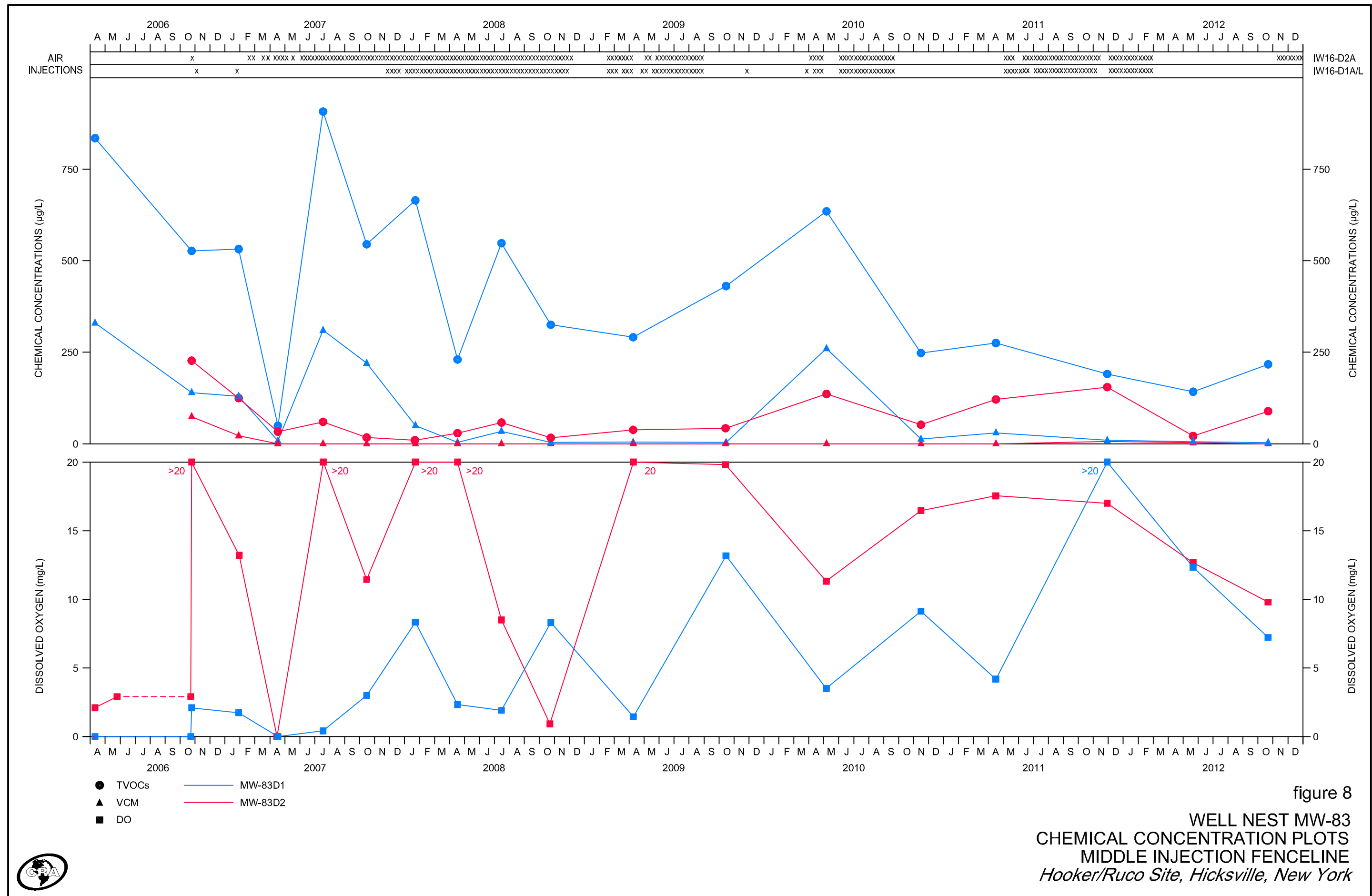
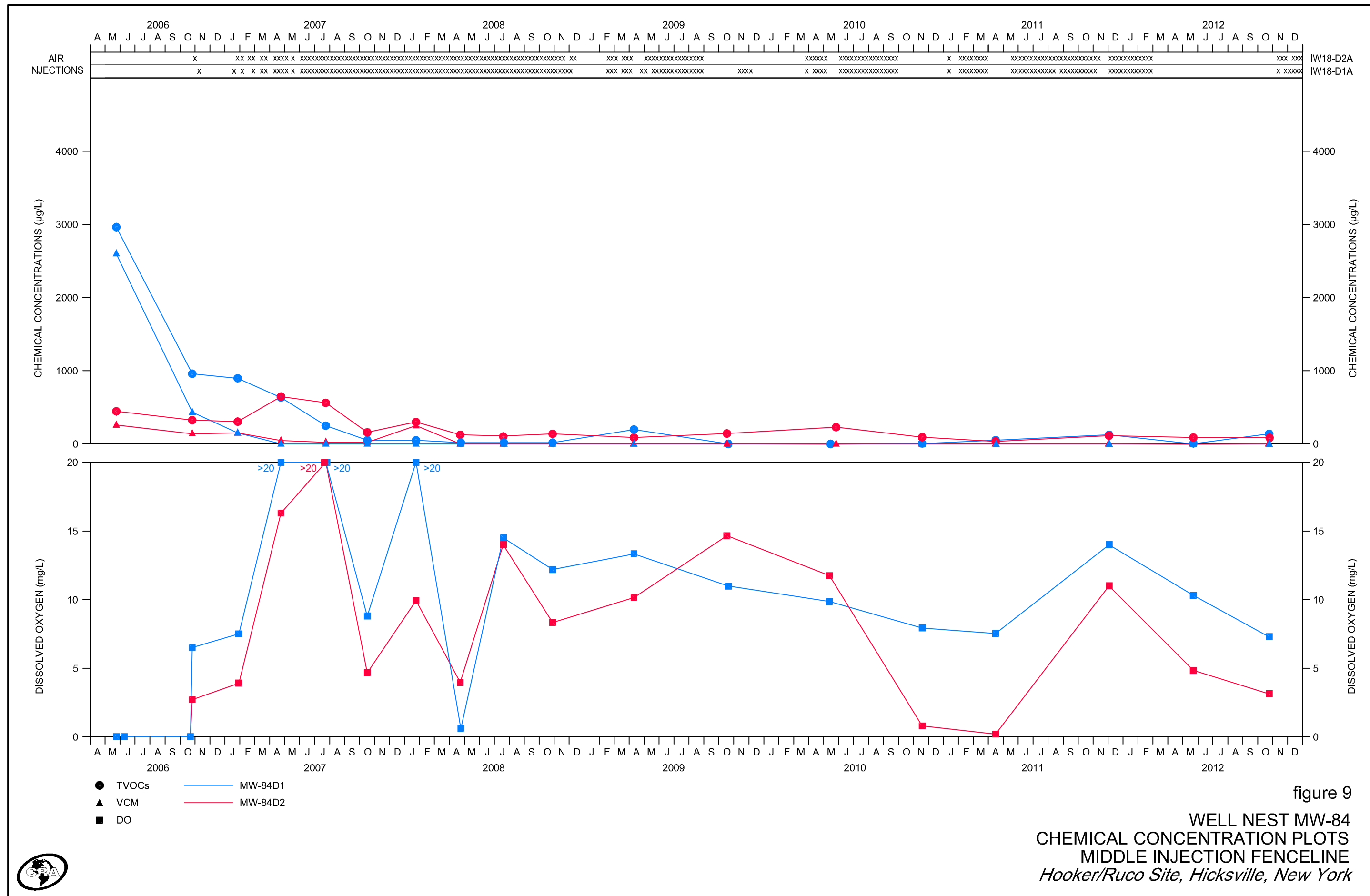


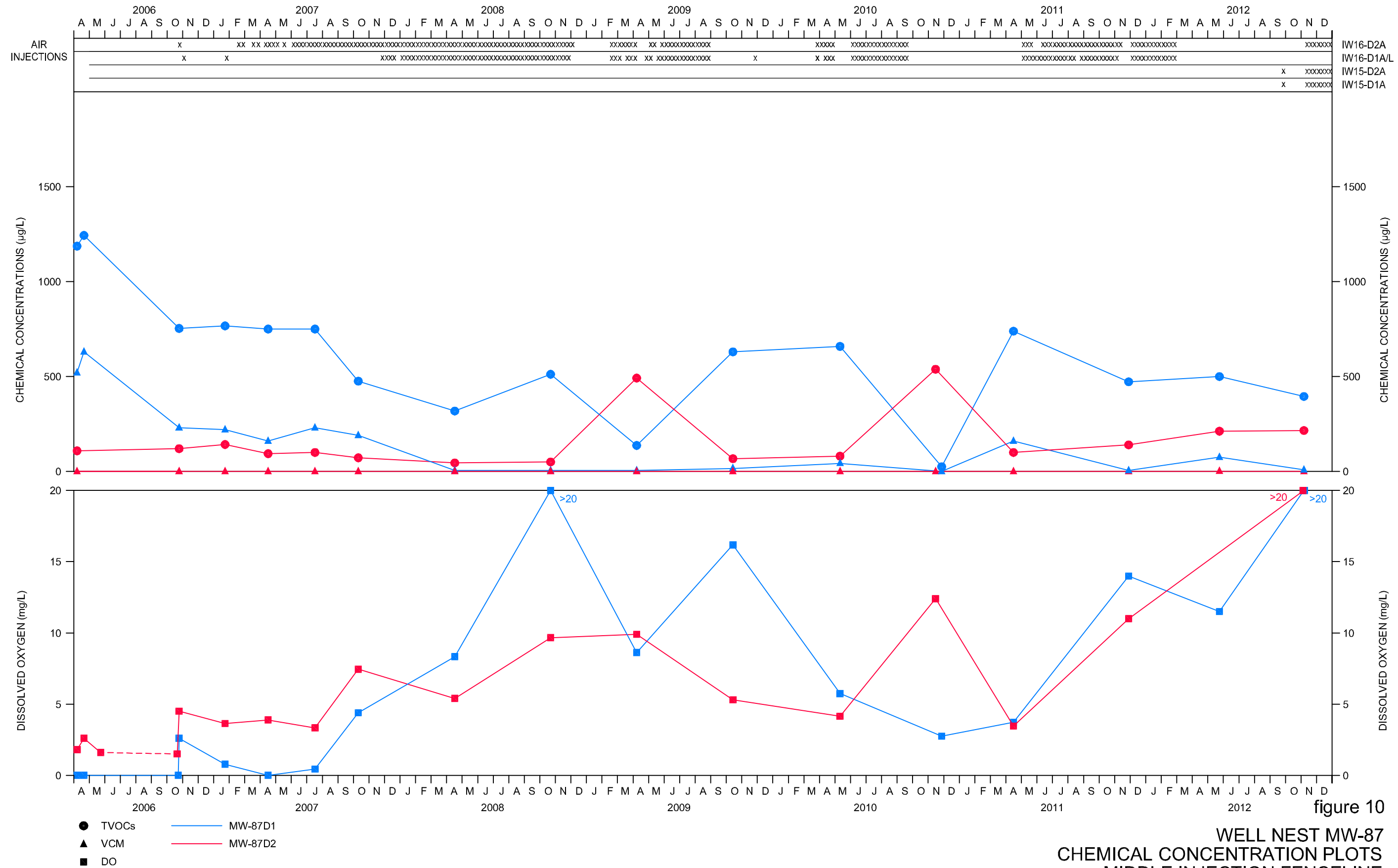
figure 6
WELL NEST MW-81
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

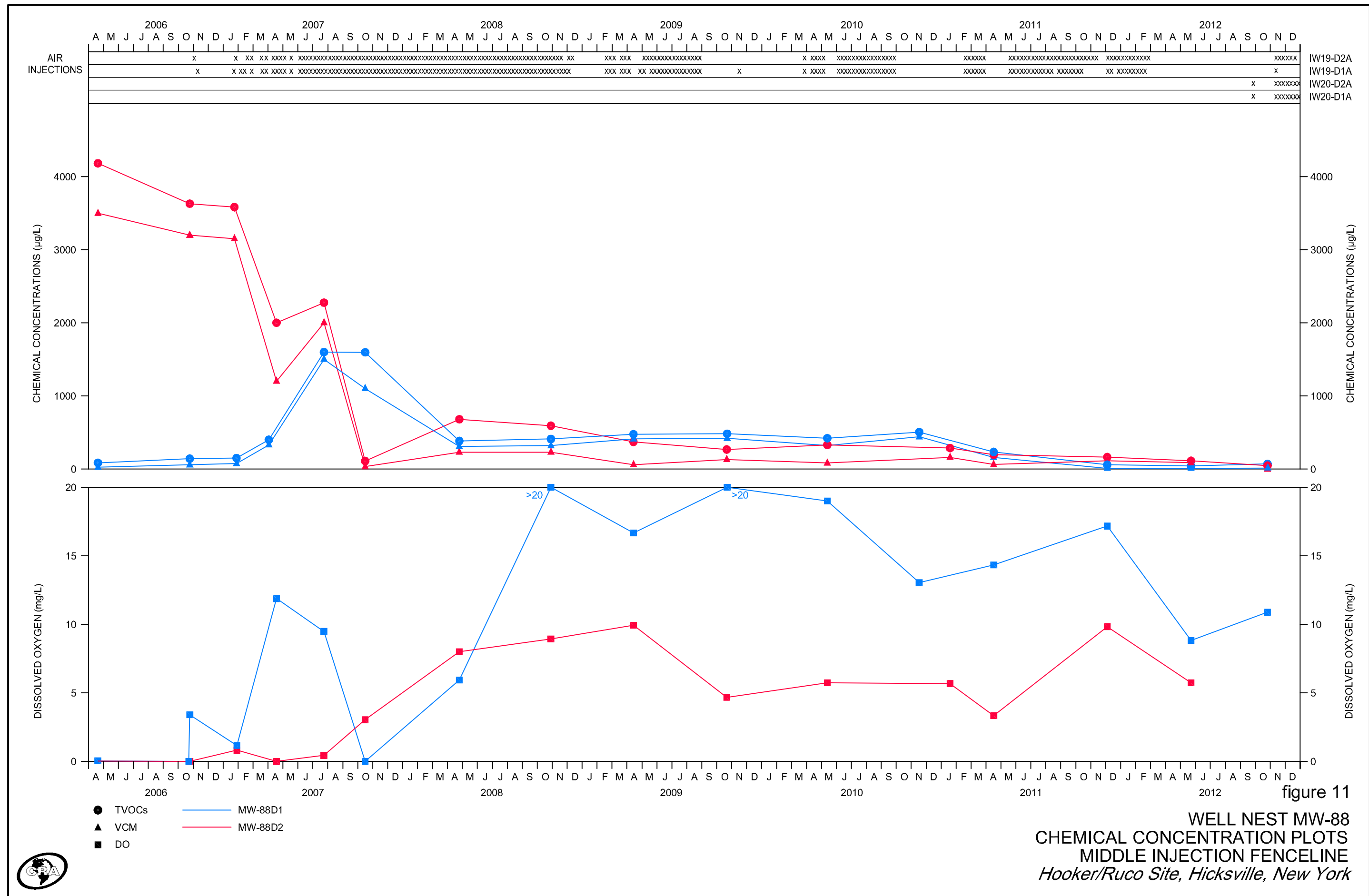












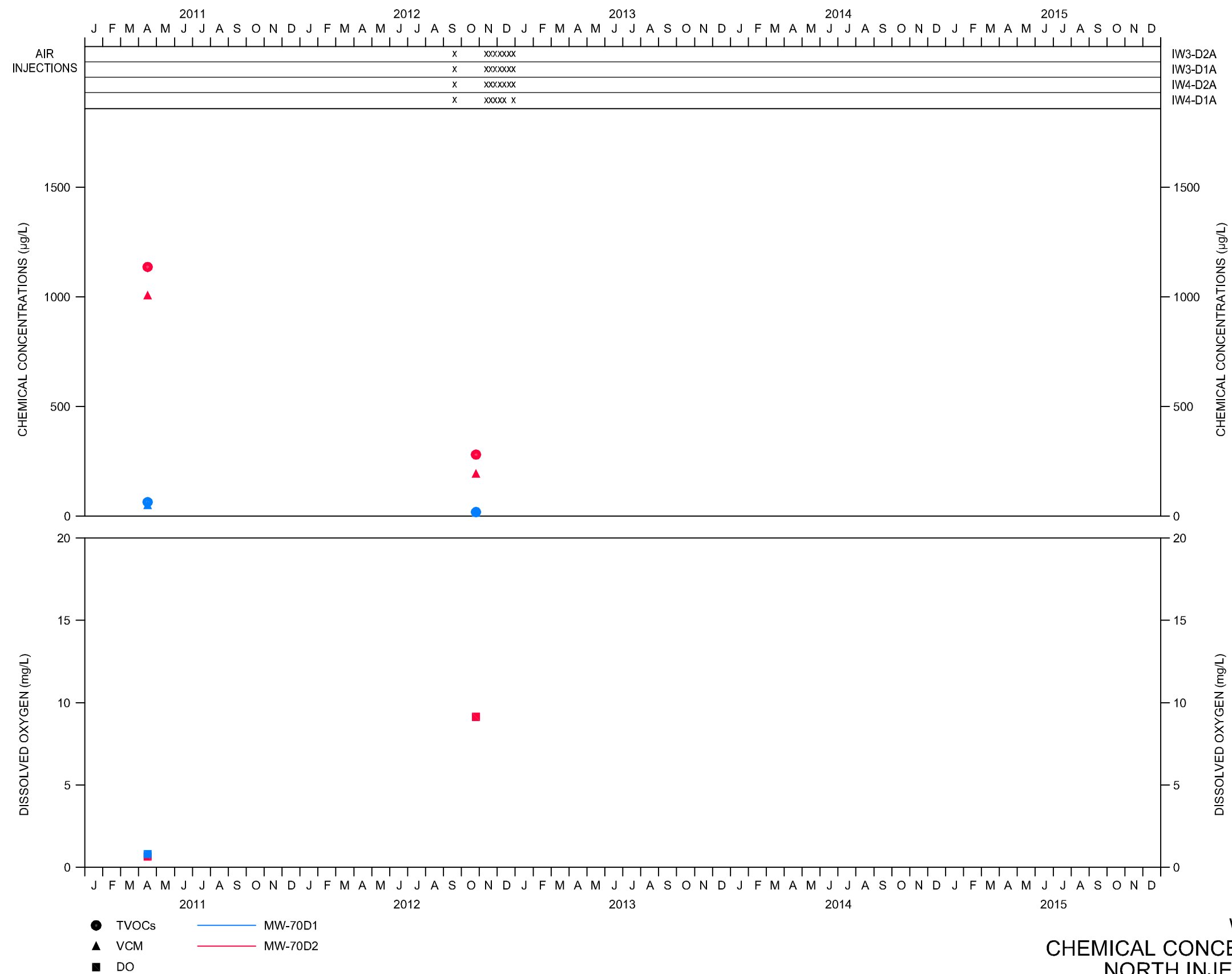


figure 12

WELL NEST MW-70
CHEMICAL CONCENTRATION PLOTS
NORTH INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



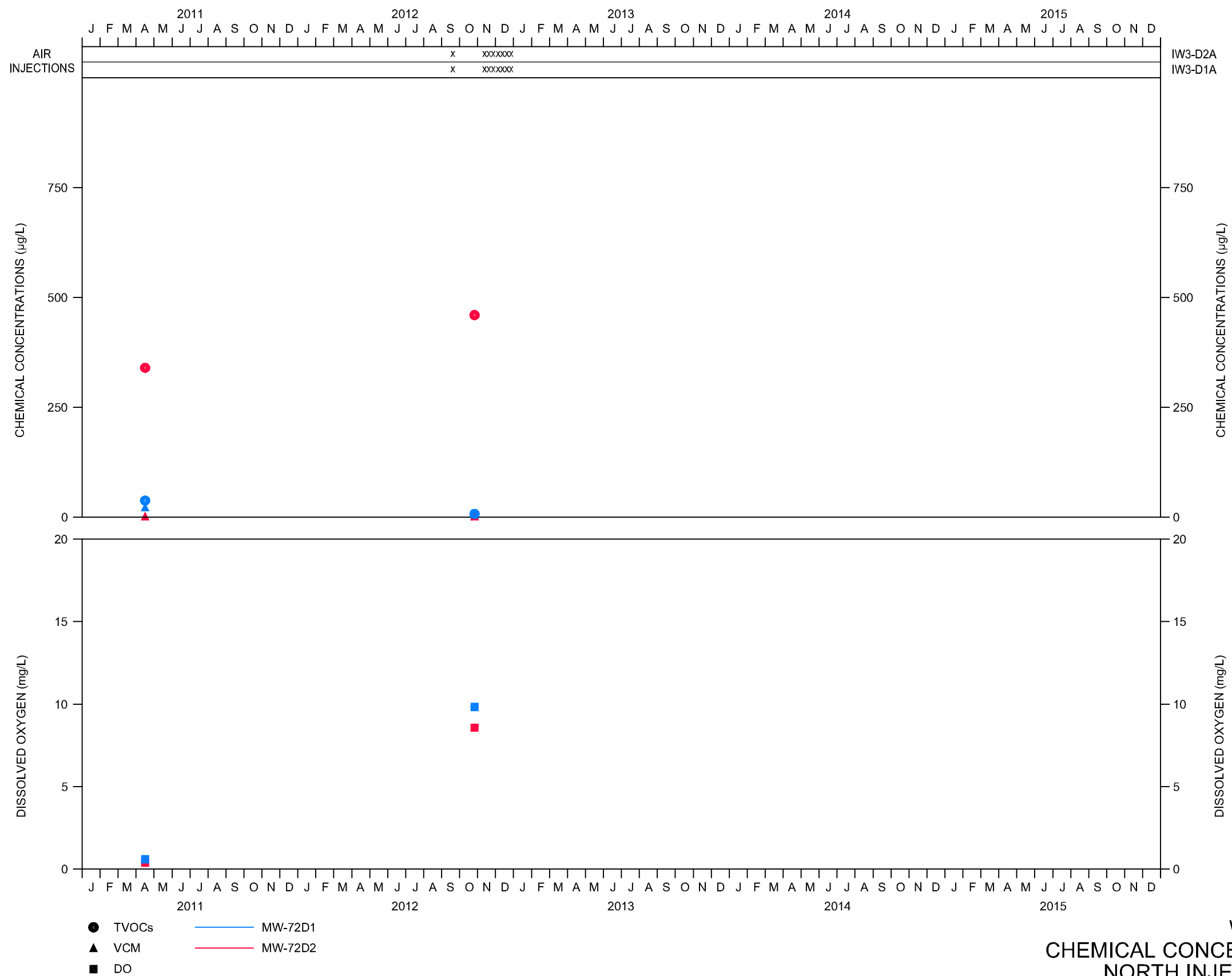


figure 13
 WELL NEST MW-72
 CHEMICAL CONCENTRATION PLOTS
 NORTH INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



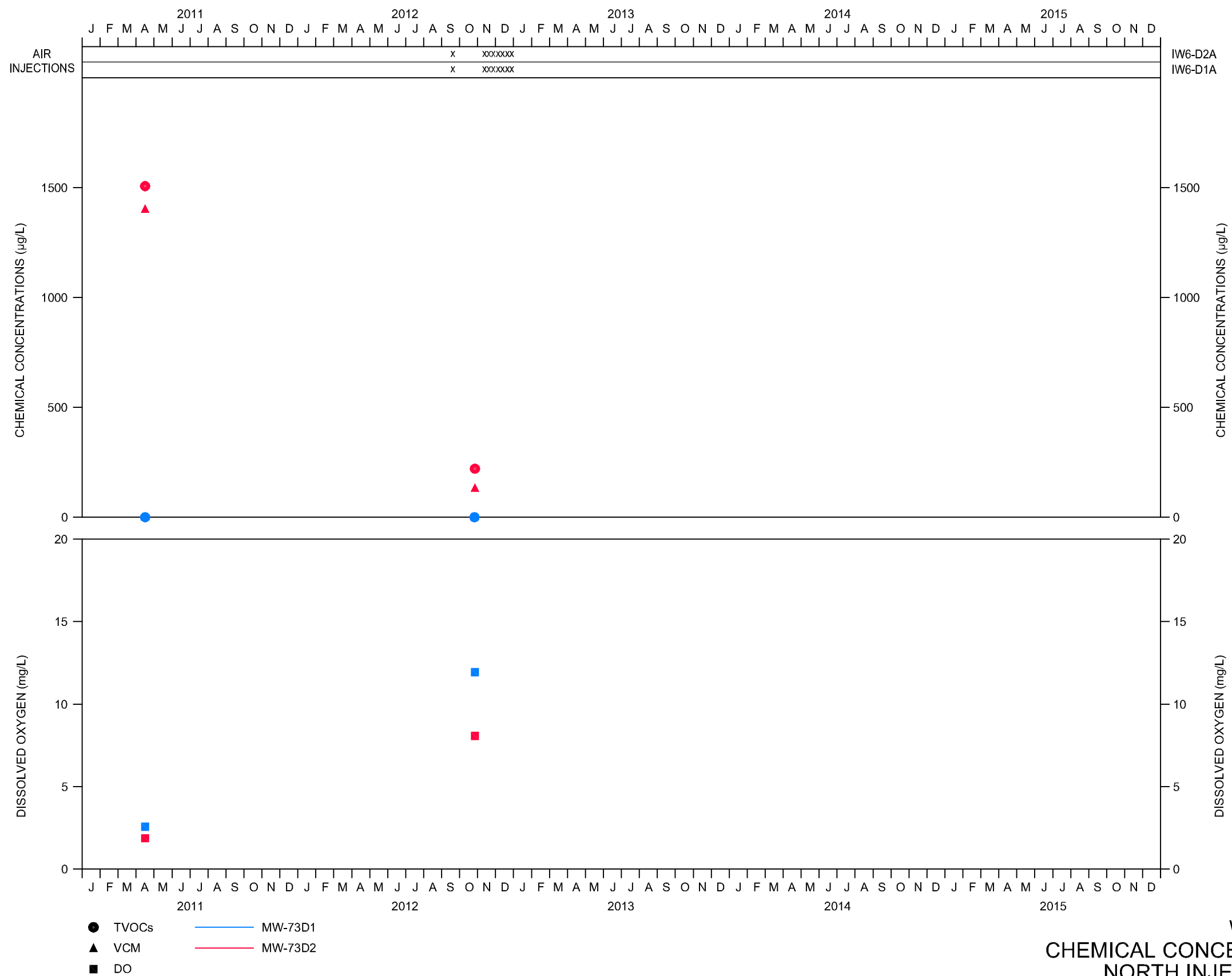


figure 14
 WELL NEST MW-73
 CHEMICAL CONCENTRATION PLOTS
 NORTH INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



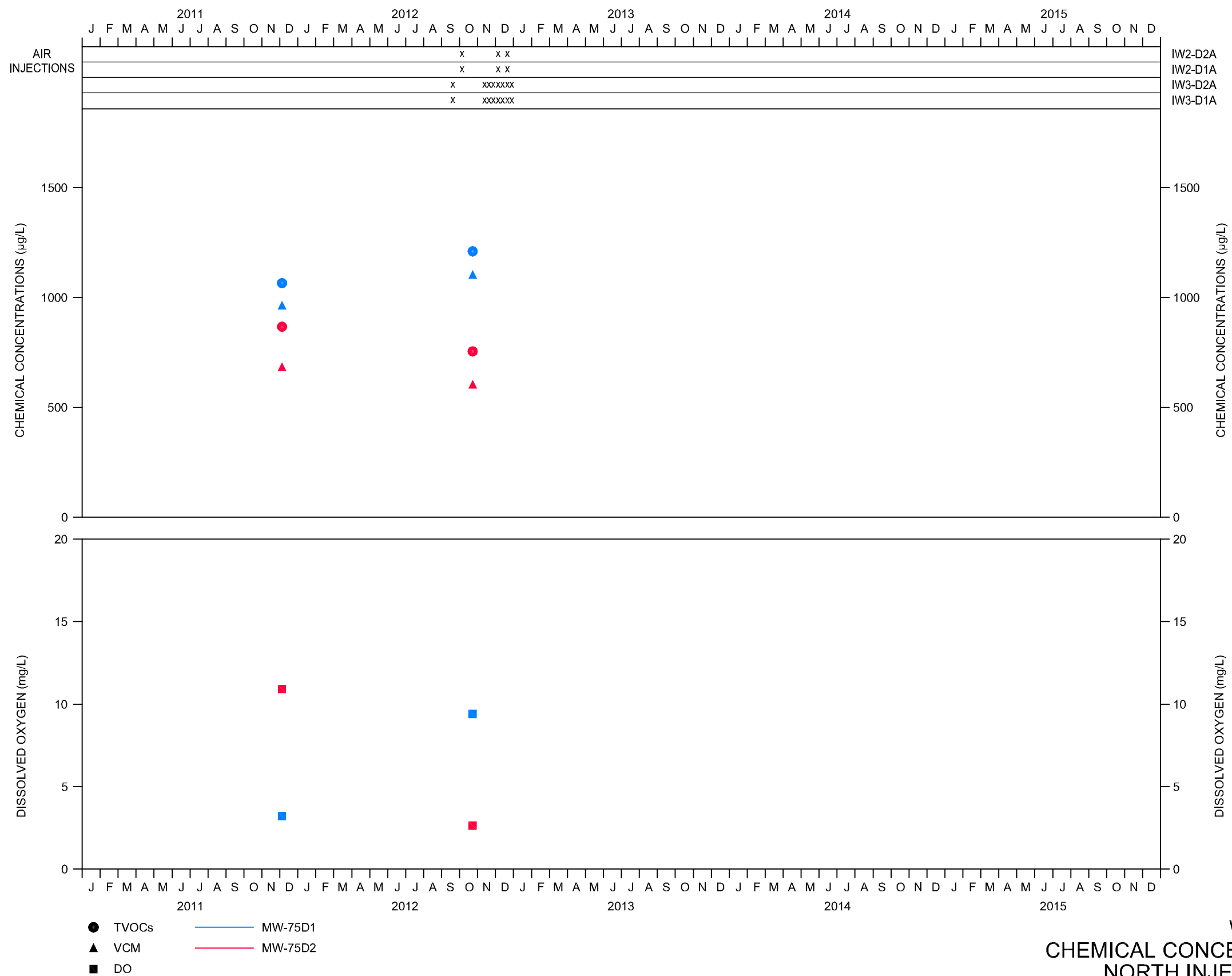


figure 15
WELL NEST MW-75
CHEMICAL CONCENTRATION PLOTS
NORTH INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



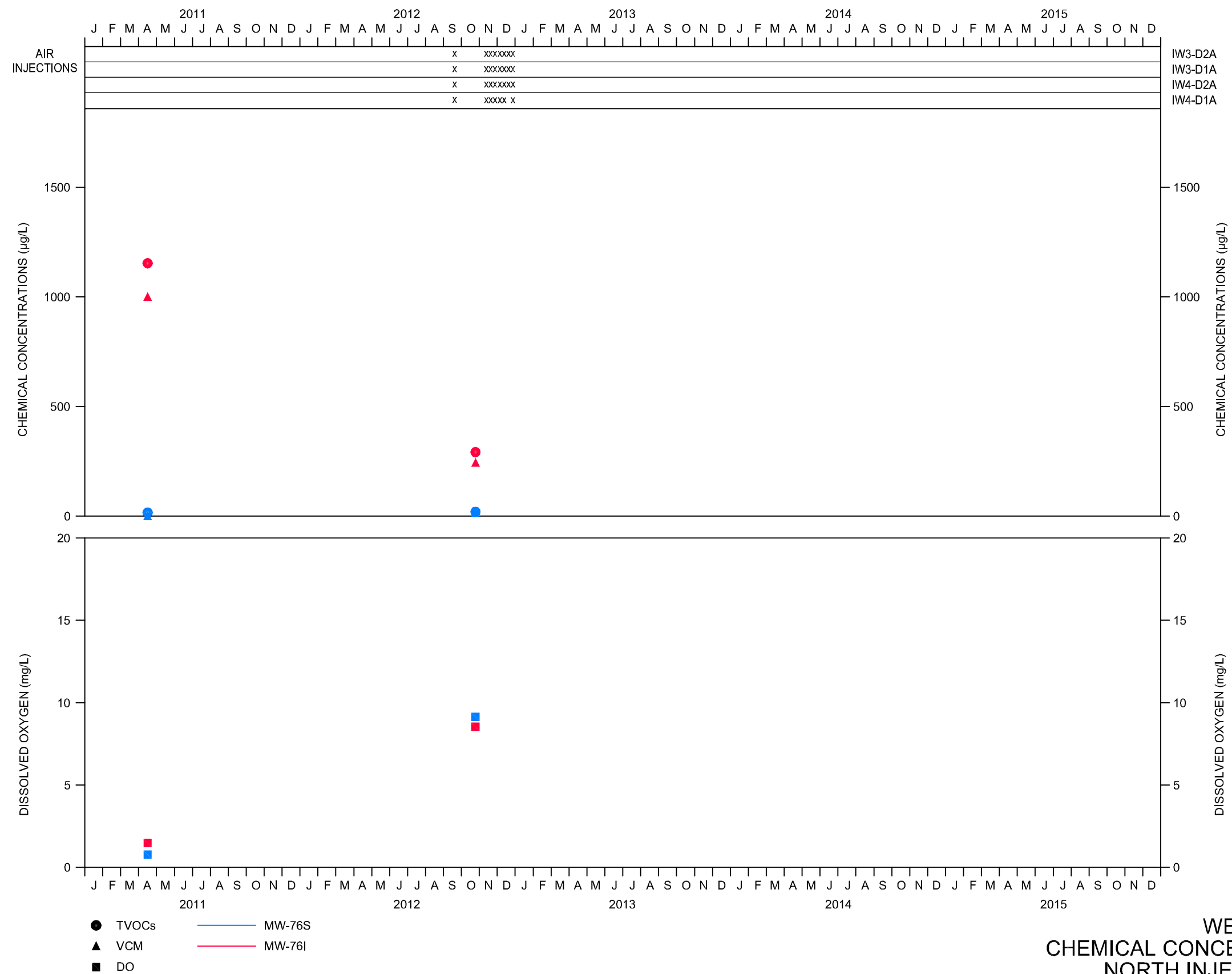


figure 16
 WELL NEST MW-76S/I
 CHEMICAL CONCENTRATION PLOTS
 NORTH INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



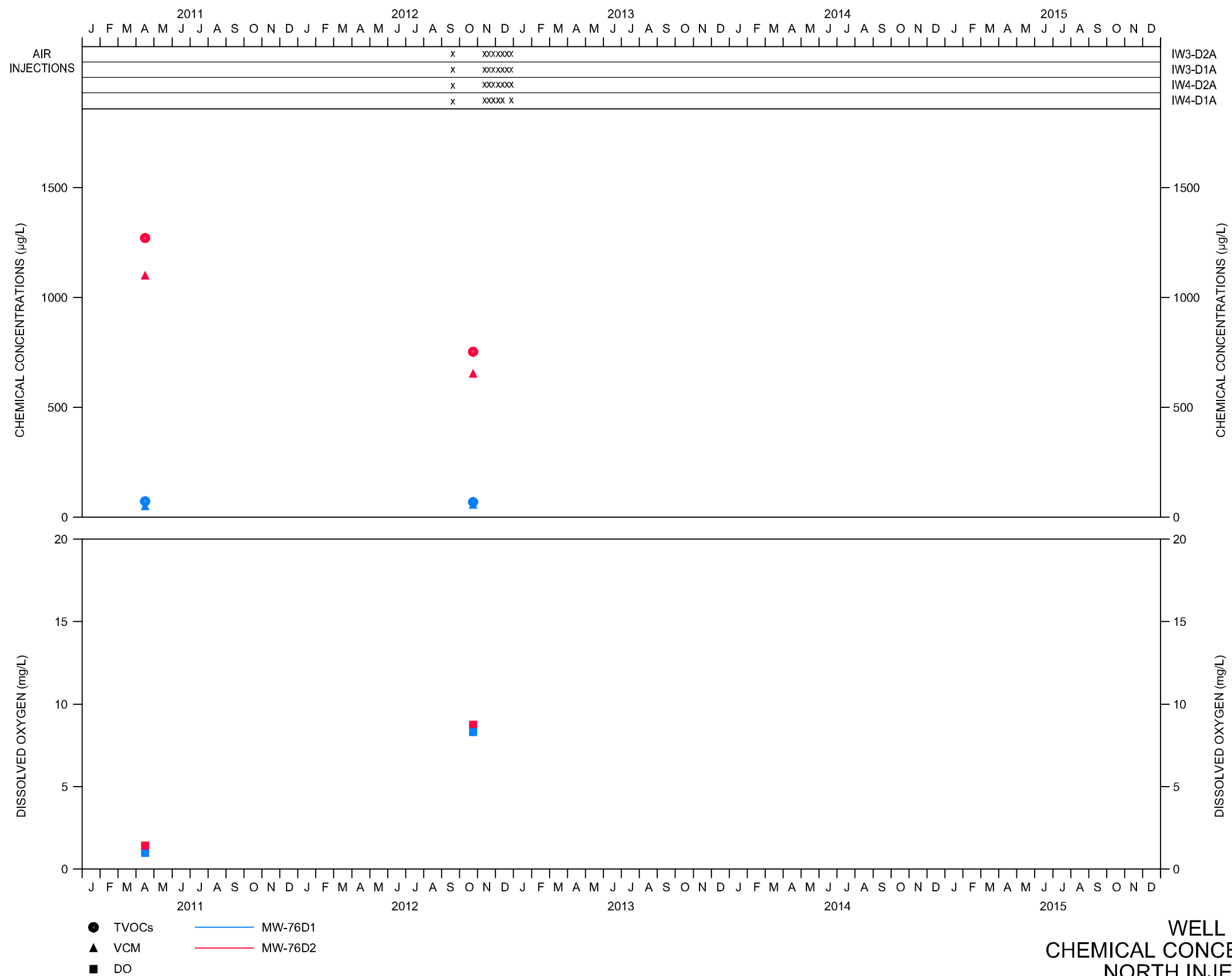


figure 17
 WELL NEST MW-76D1/D2
 CHEMICAL CONCENTRATION PLOTS
 NORTH INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



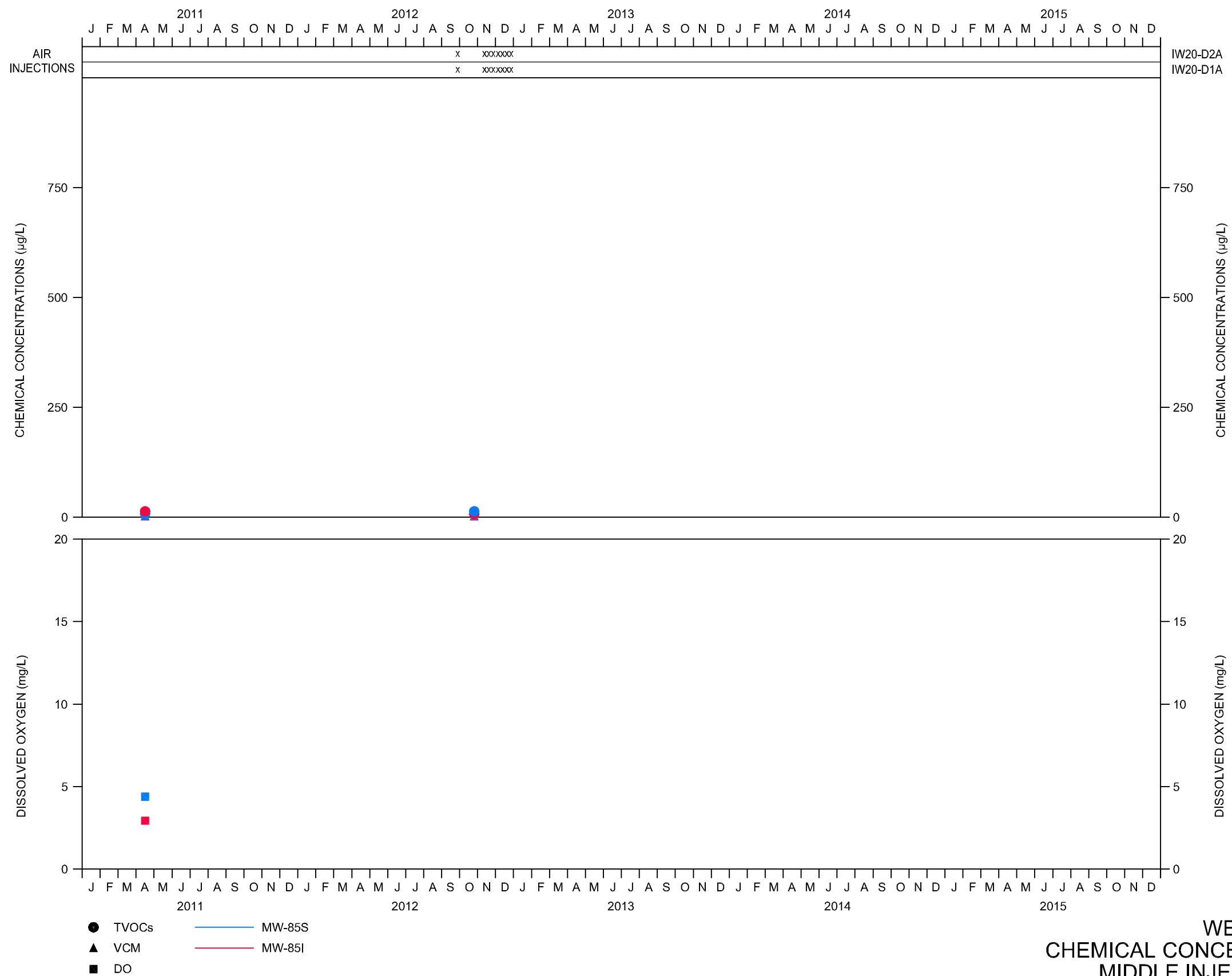


figure 19
 WELL NEST MW-85S/I
 CHEMICAL CONCENTRATION PLOTS
 MIDDLE INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



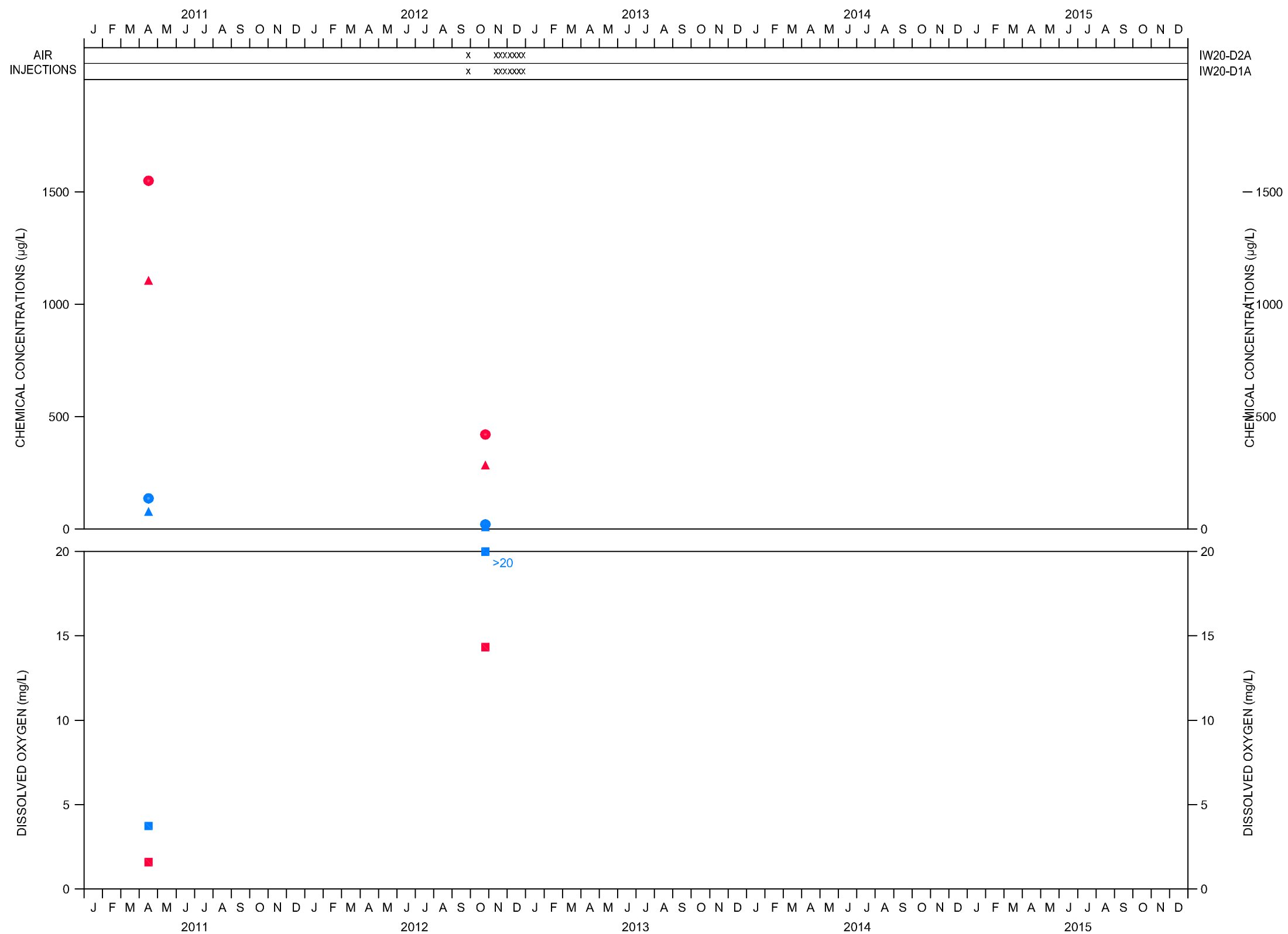


figure 20
 WELL NEST MW-85D1/D2
 CHEMICAL CONCENTRATION PLOTS
 MIDDLE INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



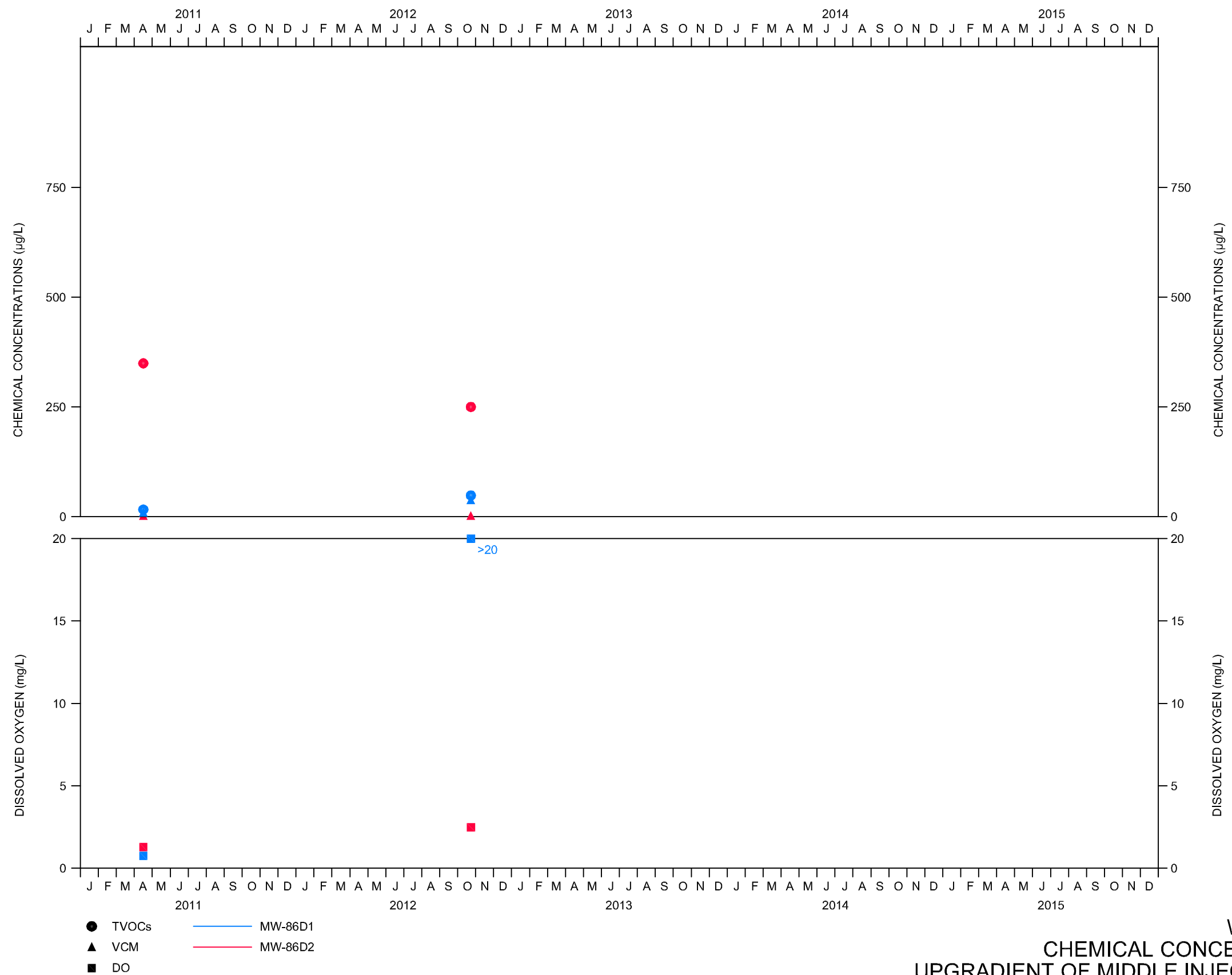


figure 21
 WELL NEST MW-86
 CHEMICAL CONCENTRATION PLOTS
 UPGRADEMENT OF MIDDLE INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



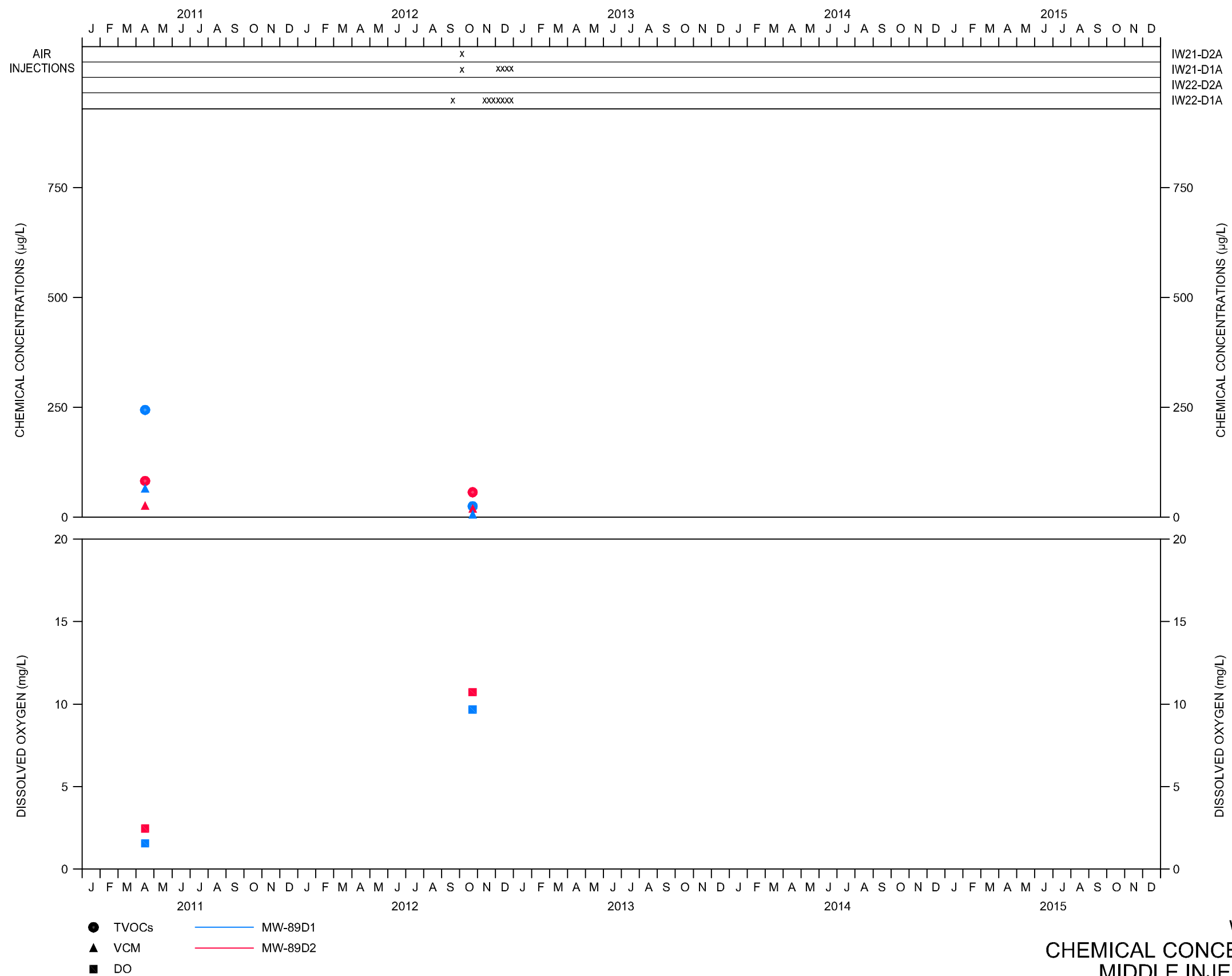


figure 22
 WELL NEST MW-89
 CHEMICAL CONCENTRATION PLOTS
 MIDDLE INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



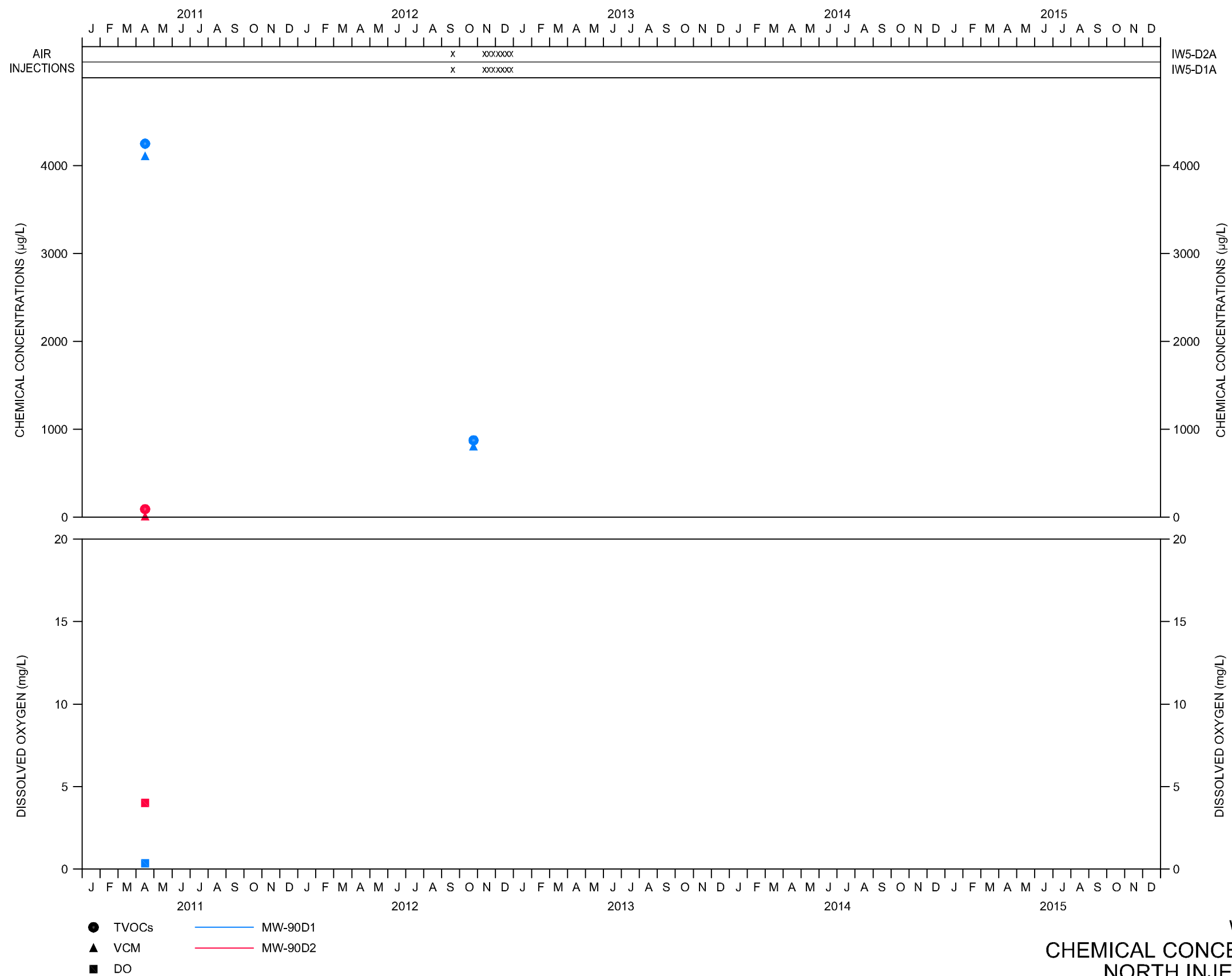


figure 23

WELL NEST MW-90
 CHEMICAL CONCENTRATION PLOTS
 NORTH INJECTION FENCELINE
 Hooker/Ruco Site, Hicksville, New York



TABLE 1

GLENN SPRINGS HOLDINGS INC.
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK

Groundwater Investigations Beyond the Ruco Property (OU-3)
October through December

<i>Task and Activity</i>	<i>Percentage of Activity Completed</i>	<i>Start Date</i>	<i>Scheduled Completion Date</i>	<i>Completion Date</i>
• Work Plan	100	July 1993		September 23, 1993
• Borehole/Well Installation (MW-50, MW-53, MW-54 and MW-55)	100	September 30, 1994		June 19, 1995
• Well Development, Sampling and Analysis	100	July 10, 1995		August 9, 1995
• Water Level Measurements	100	August 15, 1995		April, 1996
• Interim Report	100	May 23, 1995		June 15, 1995
• Interim Report - Addendum No. 1	100	July 28, 1995		August 2, 1995
• Grumman Production Wells Sample Collection and Analysis	100	August 1, 1995		October 4, 1995
• Well Installation (MW-51, MW-52, MW-56 and MW-57)	100	August 30, 1995		January 26, 1996
• Regional Groundwater Level Monitoring Event	100	October 3, 1995		October 3, 1995
• Well Development, Sampling and Analysis	100	January 22, 1996		July 5, 1996
• Grumman Groundwater Model	100	July 27, 1995		November 20, 1997
• Phase I Report	100	February 21, 1996		April 26, 1996
• Supporting Documentation Regarding the Effectiveness of In Situ Remediation	100	June 10, 1996		August 9, 1996
• Phase II Report	100	February 21, 1996		August 12, 1996
• Comments on DEC Draft Supplemental Feasibility Study	100	September 23, 1996		October 17, 1996
• Responses to Northrop Comments on the Phase I Report	100	April 17, 1997		June 6, 1997
• Comments on DEC Supplemental Feasibility Study	100	June 1, 1997		June 20, 1997
• Comments on Navy Regional Groundwater Feasibility Study	100	July 28, 1997		October 8, 1997
• Revised Pages for Navy Regional Groundwater Feasibility Study	100	July 28, 1997		November 3, 1997
• Comments on Groundwater Flow Model Report	100	November 20, 1997		December 5, 1997
• Comments on Draft Final Regional Groundwater Feasibility Study	100	March 27, 1998		May 1, 1998
• Comments on Northrop Letter Report	100	May 20, 1998		June 4, 1998
• Evaluation of MW-52 Area Groundwater Extraction System	100	July 1, 1998		July 29, 1998
• Remedial Investigation Report	100	December 1, 1998		January 21, 1999
• Feasibility Study Report	100	December 1, 1998		March 16, 1999
• Groundwater Treatability Study (GTS)	100	December 16, 1998		July 19, 1999
• Responses to EPA Comments on RI Report	100	May 25, 1999		June 11, 1999
• Responses to EPA Comments on FS Report	100	June 21, 1999		July 7, 1999
• Scope of Predesign Investigative Activities - Initial	100	June 1, 1999		June 11, 1999
- Revised	100	February 16, 2001		May 28, 2001

**GLENN SPRINGS HOLDINGS INC.
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

Groundwater Investigations Beyond the Ruco Property (OU-3)

October through December

<i>Task and Activity</i>	<i>Percentage of Activity Completed</i>	<i>Start Date</i>	<i>Scheduled Completion Date</i>	<i>Completion Date</i>
• Revised RI Report	100	May 25, 1999		November 16, 1999
• Revised FS Report	100	July 7, 1999		December 22, 1999
• Responses to EPA Comments on GTS	100	October 14, 1999		November 3, 1999
• Responses to EPA Comments on FS Report Responses	100	October 14, 1999		November 3, 1999
• Obtain access agreements	100	June 1999		December 2001
• Final RI Report	100	March 15, 2000		July 21, 2000
• Final FS Report	100	April 10, 2000		July 25, 2000
• PRAP	100			July 28, 2000
• ROD	100			September 29, 2000
• Unilateral Administrative Order	100			April 26, 2001
• Evaluate VCM presence in GP-3	100			August 15, 2001
• Design Supplemental System for VCM in GP-3	100	August 15, 2001		December 2001
• EPA Conditional Approval for Predesign Activities	100			September 28, 2001
• Issued Request for Bid for Well Installation	100			October 26, 2001
• Contractor Arrangements	100			January 15, 2002
• Arrangements for Biosparge Testing of Existing Wells	100			April 12, 2002
• Biosparge Testing of Existing Wells	100	April 15, 2002		August 13, 2002
• Phase 1 Well Installation	100	February 4, 2002		June 28, 2002
• Upgrade of GP-1/GP-3 Treatment System	100	April 8, 2002		July 9, 2003
• Sample Wells	100	June 17, 2002		July 12, 2002
• Evaluate Pre-Design Information /Develop Scope of Biosparge	100			November 22, 2002
• Install 2 Additional Wells (MW-67/68)	100	December 18, 2002		February 14, 2003
• Sample Wells MW-67 & MW-68				March 25/26, 2003
• Responses to EPA comments on Predesign Information Report	100	March 6, 2003		March 27, 2003
• EPA Meeting				April 17, 2003
• Closed Well T-1	100			May 12, 2003
• MW-67/68 Installation Report	100			May 23, 2003
• Responses to EPA comments on March 27, 2003 Responses	100	June 25, 2003		July 29, 2003
• Pre-Final (95%) RD Report	100	July 7, 2003		October 31, 2003
• Responses to EPA comments on 95% RD Report	100	April 12, 2004		May 27, 2004
• Submitted Due Diligence Request to Northrop	100			May 10, 2004
• Follow up Due Diligence Clarification to Northrop 6/11 Data Package	100			June 25, 2004
• Offer to Northrop for Property Purchase	100			October 1, 2004

**GLENN SPRINGS HOLDINGS INC.
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

Groundwater Investigations Beyond the Ruco Property (OU-3)

October through December

<i>Task and Activity</i>	<i>Percentage of Activity Completed</i>	<i>Start Date</i>	<i>Scheduled Completion Date</i>	<i>Completion Date</i>
• Sample 13 Wells and Submit Results	100	August 23, 2004		October 14, 2004
• Responses to EPA Comments on 95% RD Report	100	November 17, 2004		December 6, 2004
• Revised Property Purchase offer submitted to Northrop	100	December 22, 2004		December 22, 2004
• Prepare 100% RD Report	100	January 12, 2005		May 27, 2005
• Property Purchased	100			June 2005
• 100% Design Approved	100			July 7, 2005
• Obtain Building Permits	100	July 11, 2005		November 10, 2005
• Arrange Contractors	100	January 2005		July 22, 2005
• Well Installation	100	September 13, 2005		April 28, 2006
• Biosparge System Installation	100	November 2005		May 2006
• Closure of On-Site and Off-Site Wells	100	November 2005		May 10, 2006
• OU-1 Soil Borings	100	November 2005		January 11, 2006
• Background Groundwater Sampling	100	March 27, 2006		June 14, 2006
• Pre-Start Sampling	100			October 24, 25, and 26, 2006
• Final Inspection	100			October 27, 2006
• Biosparge System Start-Up	100			October 27, 2006
• First Monthly Sampling	100			November 28 to 30, 2006
• Second Monthly Sampling	100			December 20 and 21, 2006
• Noise Survey	100			January 18, 2007
• 2007 First Quarterly Sampling	100			January 23 to 30, 2007
• Submission of Phase I Construction Documents	100			February 1, 2007
• 2007 Second Quarterly Sampling	100			April 18 to 27, 2007
• 2007 Third Quarterly Sampling	100			July 16 to 27, 2007
• 2007 Fourth Quarterly Sampling	100			October 8 to 18, 2007
• Evaluation/Recommendation for Design Modifications	100			January 15, 2008
• 2008 First Quarterly Sampling	100			January 22 to 28, 2008
• 2008 Second Quarterly Sampling	100			April 16 to 25, 2008
• 2008 Third Quarterly Sampling	100			July 15 to 18, 2008
• 2008 Fourth Quarterly Sampling	100			October 21 to 30, 2008
• Construction of North Fence Underground Components	100			December 23, 2008
• 2009 First Semi-Annual Sampling	100			April 7 to 14, 2009
• Response to USEPA Biosparge System Comments	100	August 27, 2009		September 23, 2009

**GLENN SPRINGS HOLDINGS INC.
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

Groundwater Investigations Beyond the Ruco Property (OU-3)

October through December

<i>Task and Activity</i>	<i>Percentage of Activity Completed</i>	<i>Start Date</i>	<i>Scheduled Completion Date</i>	<i>Completion Date</i>
• 2009 Second Semi-Annual Sampling	100			October 13 to 21, 2009
• Submittal of Biodegradation Supporting Information	100			November 30, 2009
• Submittal of Revised Schedule	100			February 3, 2010
• Submittal of PDB/HydraSleeve ^{1M} Evaluation	100			February 11, 2010
• Trailing Edge Proposal	100			March 15, 2010
• 2010 First Semi-Annual Sampling	100			May 3 to 25, 2012
• Distribution of RFP for Biosparge System Well Installation	100			June 25, 2010
• Contracted Well Driller	100			August 3, 2010
• 2010 Second Semi-Annual Sampling	100			November 15 to 29, 2010
• Install Biosparge System Wells	100	September 20, 2010		May 15, 2011
• 2011 First Semi-Annual Sampling & Site Wide Event	100			April 7 to May 19, 2011
• Distribution of RFP for Biosparge System Expansion	100			May 4, 2011
• Receipt of Bids	100			June 17, 2011
• Submittal of PDB/HydraSleeve ^{1M} Evaluation	100			August 31, 2011
• USEPA Concurrence For Use of PDB Samplers	100			September 22, 2011
• Update QAPP	100	September 22, 2011		October 24, 2011
• 2011 Second Semi-Annual Sampling	100			Nov. 30 to Dec. 1, 2011
• Revise Updated QAPP	100	December 6, 2011		January 3, 2012
• Address EPA Comments on revised updated QAPP and resubmit	100	February 17, 2012		April 13, 2012
• Construction of Remainder of Biosparge System	100	March 5, 2012		August 15, 2012
• 2012 First Semi-Annual Sampling	100			May 23 and 24, 2012
• Submit Interim Remedial Action Report	100			September 26, 2012
• Submit Electrical As-Built Drawings	100			October 10, 2012
• 2012 Second Semi-annual Sampling	100			October 24 to November 25, 2012

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-52 S	4/7/2006	0.03	4.3	5.62	14.3	0.199	-7	0.00	0	1.60
	3/13/2007	0.20	6.1	6.34	14.8	0.652	5	1.64	58.4	1.66
MW-52 I	4/13/2006	0.04	4.5	4.56	15.0	0.121	303	9.77	12.4	0.05
	3/14/2007	0.05	4.9	5.42	14.6	0.192	259	5.85	44.8	0.04
MW-52D	3/14/2007	0.00	5.3	5.67	14.7	0.314	226	3.07	307	0.11
MW-58 D	10/26/2006	0.01	3.4	5.69	16.8	0.192	21	2.42	58.1	4.30
	5/18/2010	0.00	8.4	5.52	16.1	0.201	30	0.00	25	1.8
MW-58 D1	10/26/2006	0.14	3.2	6.34	16.9	0.222	-101	2.58	68.6	8.80
	5/19/2010	0.00	10.4	6.21	16.3	0.221	-50	0.00	198	2.2
MW-58 D2	10/25/2006	0.11	2.8	6.95	17.3	0.266	-198	0.00	15.1	5.16
MW-59 D1	10/25/2006	0.00	2.0	6.07	17.4	0.432	-20	0.58	261	3.24
MW-59 D2	10/25/2006	0.02	5.5	6.50	17.5	0.452	-99	0.47	240	2.00
MW-59 D	10/26/2006	0.07	4.5	10.29	17.1	0.364	-108	0.00	9.6	2.65
MW-61S	10/19/2009	0.00	2.9	5.12	14.8	0.184	372	>20	165	0.02
	5/10/2010	0.00	5.5	6.81	14.6	0.223	100	10.95	0	0.0
MW-61 I	4/28/2006	0.00	4.6	5.68	14.3	0.221	139	0.00	121	1.76
	5/8/2006	0.08	1.9	4.86	14.9	0.182	136	0.00	64.7	1.49
	5/18/2006	0.20	2.9	4.90	16.1	0.155	123	0.00	571	2.16
	5/30/2006	0.20	5.7	5.10	15.7	0.167	118	0.00	110	2.61
	10/24/2006	0.14	4.3	5.53	15.1	0.999	102	0.00	166	2.76
	10/25/2006	0.00	4.1	5.32	15.1	0.202	112	0.41	370	3.04
	10/26/2006	0.02	3.9	5.33	14.6	0.251	133	0.00	900	2.49
	11/29/2006	0.10	5.1	5.58	14.8	0.242	60	0.00	397	1.96
	11/29/2006	0.10	5.1	5.58	14.8	0.242	60	0.00	397	1.96
	12/21/2006	0.08	5.2	5.20	14.4	0.185	118	0.00	18.2	2.17
	1/24/2007	-0.05	4.5	5.54	14.9	0.275	101	1.93	46.4	1.84
	4/19/2007	0.00	6.1	5.88	14.7	0.320	124	3.21	254	0.03
	7/20/2007	0.16	9.3	5.29	15.7	0.189	90	0.37	2	5.19
	10/11/2007	0.22	10.7	5.61	15.6	0.193	50	3.56	33.6	3.12
	1/24/2008	-0.02	6.2	5.56	14.5	0.216	86	1.44	87.2	3.11
	4/23/2008	0.23	9.3	5.88	15.2	0.216	60	0.45	0	2.83
	7/16/2008	0.20	4.0	5.60	16.6	0.183	69	2.78	0	10.82
	10/28/2008	0.26	5.6	5.02	14.9	0.199	351	7.11	4.2	1.11
	4/8/2009	0.07	2.1	5.21	10.9	0.178	306	12.18	7.0	0.05
	10/15/2009	0.00	2.4	5.25	14.5	0.172	366	17.66	0	0.49
	5/10/2010	0.00	10.6	6.30	14.6	0.178	120	10.65	0	0.0
	1/20/2011	0.00	4.4	5.90	11.6	0.253	266	11.10	45	0.0
	4/19/2011	0.02	3.7	5.69	13.4	0.217	249	10.10	39.9	0.0
	11/30/2011	NA	NA	6.27	10.5	0.191	NM	12.81	280	NM
	5/23/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
	11/5/2012	NA	NA	6.28	11.1	0.220	111	11.23	130	3.99
MW-61 D1	4/28/2006	0.00	4.7	6.07	14.5	0.210	122	0.00	356	1.78
	5/8/2006	0.05	5.7	5.07	15.0	0.210	101	0.00	172	2.77
	5/18/2006	0.16	2.9	5.18	16.2	0.170	91	0.00	>999	>3.30
	5/30/2006	0.25	4.5	5.27	15.9	0.196	93	0.00	138	4.66
	10/24/2006	0.01	4.4	5.49	15.2	0.999	110	0.00	72.4	2.30
	10/25/2006	0.08	4.1	5.33	15.1	0.201	107	0.65	129	3.74
	10/26/2006	0.03	3.9	5.41	14.9	0.273	109	0.00	86	2.99
	11/29/2006	0.00	3.6	5.72	14.9	0.246	54	0.00	310	1.92
	12/21/2006	0.08	5.8	5.29	14.6	0.192	90	0.00	80.7	2.59
	1/23/2007	0.00	8.1	5.73	14.3	0.389	54	1.21	137	1.84
	4/19/2007	0.14	8.1	6.19	14.6	0.304	79	6.66	95.9	0.26
	7/20/2007	0.23	11.7	5.31	16.4	0.163	83	0.44	20	3.30
	10/10/2007	0.00	4.9	5.84	15.5	0.198	26	3.39	27.2	4.20
	1/24/2008	0.18	5.4	5.58	14.4	0.244	78	1.33	38.7	3.21
	4/22/2008	0.08	13.1	5.90	15.5	0.220	60	0.41	321	2.91
	7/16/2008	0.36	6.2	5.42	16.1	0.158	87	2.35	0	2.13
	10/28/2008	0.06	1.8	4.88	15.1	0.182	335	3.75	215	0.21
	4/8/2009	0.15	8.8	5.23	14.5	0.183	267	12.77	9.2	0.08
	10/15/2009	0.00	3.4	5.32	14.2	0.179	336	10.11	0	0.96
	5/10/2010	0.00	7.7	6.18	14.5	0.223	140	10.15	0	0.0

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-61D1	1/20/2011	0.00	3.1	6.16	10.1	0.346	231	18.80	42.5	0.0
	4/19/2011	-0.01	3.7	5.76	13.5	0.227	248	10.38	*	0.0
	11/30/2011	NA	NA	6.19	10.6	0.168	NM	13.21	177	NM
	5/23/2012	NA	NA	6.04	18.1	0.182	170	13.55	170	1.8
	11/5/2012	NA	NA	5.96	10.2	0.237	124	11.85	212	3.0
MW-61D2	4/28/2006	0.05	6.4	7.03	15.2	0.230	-186	0.00	413	2.00
	5/5/2006	0.00	10.5	6.65	15.1	0.370	-160	0.00	>999	10.08
	5/18/2006	0.30	4.9	6.63	16.1	0.294	-127	0.00	999	>3.30
	5/30/2006	0.00	4.4	6.32	15.8	0.249	-100	0.00	84.6	2.99
	10/24/2006	0.10	6.4	6.22	14.9	0.904	37	0.00	>999	0.15
	10/25/2006	0.20	4.4	5.77	15.1	0.236	27	1.42	316	5.46
	10/26/2006	0.25	4.2	5.63	14.9	0.233	62	1.94	550	4.04
	11/29/2006	0.00	4.4	6.25	14.8	0.253	110	11.12	>999	1.91
	12/21/2006	0.19	5.1	5.58	14.2	0.216	120	9.28	89.4	2.36
	1/23/2007	0.10	5.1	6.62	14.0	0.273	131	>20	>999	0.89
	4/23/2007	0.05	8.6	5.38	15.1	0.189	361	>20	231	0.21
	7/23/2007	0.04	5.1	5.19	17.6	0.219	71	13.45	>999	1.34
	10/11/2007	0.00	2.0	5.95	15.4	0.211	300	11.71	>999	0.21
	1/24/2008	-17.50	5.3	6.30	13.1	0.195	326	>20	228	0.78
	4/22/2008	7.38	6.0	6.73	14.1	0.239	248	14.49	>999	0.09
	7/15/2008	0.24	3.6	6.40	16.0	0.187	173	19.99	486	0.08
	10/27/2008	NM	6.7	5.92	15.6	0.222	381	>20	220	0.18
	4/9/2009	0.28	2.4	5.67	13.7	0.208	319	17.47	943	1.95
	10/14/2009	0.00	6.7	5.50	14.6	0.227	155	16.29	>999	2.80
	5/10/2010	0.00	4.9	5.70	14.8	0.153	224	19.51	60	0.0
	11/16/2010	0.00	3.1	7.42	14.5	0.210	55	8.75	*	(2)
	4/7/2011	0.00	3.1	6.42	12.8	0.204	196	17.58	389	(2)
	5/23/2012	NA	NA	7.88	19.3	0.123	123	8.54	244	9
MW-62I	5/16/2007	0.10	7.1	5.31	14.1	0.278	59	0.00	113	0.69
	5/25/2010	0.00	3.1	5.08	16.5	0.152	14.8	0.00	0	4.2
MW-62D	5/16/2007	0.15	5.4	10.56	14.9	0.119	-125	0.00	570	0.38
	5/25/2010	0.00	4.9	7.23	16.8	0.186	-200	0.00	200	6.2
MW-63 D1	5/23/2006	0.20	2.4	5.03	15.9	0.152	230	0.00	0.0	0.13
	5/24/2010	0.00	1.8	5.25	16.1	0.191	166	0.00	20	0.0
MW-63 D2	5/24/2006	-0.21	5.5	5.30	15.0	0.152	246	0.41	6.5	NM
	6/14/2006	0.05	5.1	5.01	16.3	0.171	222	0.92	3.5	NM
	5/24/2010	0.00	4.1	5.28	16.0	0.199	169	0.00	NM	0.00
MW-63 S	5/19/2006	0.12	2.4	5.20	14.8	0.150	238	0.16	411	0.18
	5/21/2010	0.00	5.8	5.82	16.2	0.172	-111	0.00	132	0.06
MW-63 I	5/23/2006	0.20	4.6	5.09	15.4	0.154	241	0.00	0.0	0.03
	5/21/2010	0.00	6.1	4.73	15.5	0.217	-102	0.00	130	0.0
MW-64 S	3/23/2006	0.10	2.9	5.83	14.3	0.188	-18	0.00	13.8	4.71
	4/26/2007	0.00	5.3	6.71	14.2	0.304	-114	0.00	53.6	2.37
	5/24/2010	0.00	2.5	6.46	15.3	0.201	-98	0.00	10	4.0
MW-64 I	3/24/2006	-0.01	3.6	5.87	14.1	0.203	-38	0.00	0.0	3.21
	4/26/2007	0.00	6.1	6.78	14.2	0.317	-121	0.00	17.5	1.87
	5/24/2010	0.00	3.3	6.62	15.3	0.218	-110	0.00	11	4.0
MW-64D	4/26/2007	0.00	2.7	6.72	14.6	0.324	-115	0.00	22.9	1.98
	5/24/2010	0.05	1.8	6.63	15.3	0.218	-107	0.00	16	2.30
MW-66 D2	4/3/2006	0.03	5.2	5.23	15.2	0.197	-16	0.00	24.3	4.50
MW-67 S	3/28/2006	0.35	5.2	5.88	15.7	0.206	-117	0.00	271	4.36
	5/20/2010	0.00	4.9	6.73	18.4	0.354	-170	0.00	NM	7.0
MW-67 D	3/29/2006	0.47	4.3	5.64	17.1	0.223	86	0.50	>999	4.22
	5/20/2010	0.00	7.4	6.60	18.3	0.234	-187	1.30	NM	0.2
MW-68 S	4/6/2006	-0.10	5.1	8.87	17.4	0.144	-281	0.00	27.8	0.60
MW-68 D	3/31/2006	0.10	5.1	5.67	17.6	0.165	-150	0.00	440	4.86
	5/19/2010	0.00	9.2	5.89	16.2	0.157	-29	0.00	79	2.40

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-70D1	4/11/2011	0.00	2.5	6.90	15.3	0.220	-135	0.69	13.8	4.0
	10/25/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-70D2	4/11/2011	0.00	3.1	6.72	16.8	0.270	-122	0.66	26.0	2.0
	10/25/2012	NA	NA	6.54	14.7	0.237	-4	8.78	350	3.2
MW-72D1	4/12/2011	0.01	1.7	7.08	14.4	0.224	-159	0.57	109	3.5
	10/25/2012	NA	NA	5.00	14.7	0.141	139	9.82	470	1.0
MW-72D2	4/13/2011	0.00	3.1	7.25	12.8	0.224	-210	0.37	290	2.0
	10/25/2012	NA	NA	4.16	15.3	0.281	76	7.52	85.2	0.8
MW-73D1	4/25/2011	-0.87	2.5	7.02	15.0	0.218	-155	2.56	48.4	3.5
	10/26/2012	NA	NA	6.34	17.8	0.104	7	11.93	800	5.0
MW-73D2	4/25/2011	0.00	3.1	6.29	15.1	0.204	-53	1.86	0.7	3.5
	10/26/2012	NA	NA	6.42	18.6	0.139	12	8.07	800	5.0
MW-75D1	12/1/2011	NA	NA	6.96	15.1	0.337	NM	3.20	101	NM
	10/24/2012	NA	NA	6.48	17.3	0.497	-35	9.41	25.7	1.6
MW-75D2	12/1/2011	NA	NA	8.11	13.0	0.171	NM	10.91	107	NM
	10/24/2012	NA	NA	6.50	16.9	0.229	-23	2.63	0	0.0
MW-76S	4/6/2011	0.00	3.1	6.87	14.0	0.441	-148	0.78	85.6	7.0
	10/25/2012	NA	NA	6.04	14.5	0.242	45	9.18	104	1.6
MW-76I	4/8/2011	0.00	2.5	6.84	12.7	0.628	159	1.48	71.8	4.0
	10/25/2012	NA	NA	6.46	14.5	0.408	-23	8.51	166.0	4.25
MW76-D1	4/11/2011	0.00	3.1	6.91	13.8	0.185	-123	0.98	45.0	2.0
	10/25/2012	NA	NA	6.45	14.6	0.375	-14	8.32	295	5.00
MW-76D2	4/8/2011	0.00	3.1	6.53	13.6	0.248	-59	1.37	178	4.8
	10/25/2012	NA	NA	6.52	14.6	0.253	-19	8.71	163	0.0
MW-77D1	4/14/2011	0.00	3.1	6.20	15.6	0.297	-194	0.24	36.4	3.5
	10/25/2012	NA	NA	6.20	15.5	0.106	5	9.93	252	0.0
MW-77D2	4/14/2011	0.00	3.1	6.66	14.2	0.206	-111	0.72	11.2	4.0
	10/25/2012	NA	NA	6.60	15.2	0.190	-35	14.28	31	0.0
MW-81 D1	4/12/2006	0.16	2.9	6.44	14.5	0.228	-65	0.00	132	1.47
	5/2/2006	0.05	2.9	5.44	15.1	0.303	-31	0.00	0.9	3.20
	5/17/2006	0.00	3.9	6.04	16.8	0.263	-75	0.00	86.4	2.81
	5/25/2006	0.07	2.5	5.62	15.6	0.268	-32	0.00	31.1	>3.3
	10/24/2006	0.08	4.0	5.72	14.5	0.420	15	2.26	14	3.23
	10/25/2006	0.21	0.7	5.77	15.3	0.349	-55	3.01	0.0	9.76
	10/26/2006	-0.08	1.3	6.02	14.7	0.321	-25	0.00	0.0	10.12
	1/29/2007	-0.07	6.1	6.19	13.1	0.429	-55	2.26	704	2.36
	4/19/2007	0.18	5.3	6.20	14.2	0.380	-128	0.00	629	2.06
	7/23/2007	0.07	5.3	6.13	15.9	0.247	-22	0.74	9.2	5.19
	10/9/2007	0.00	7.9	6.02	15.8	0.228	-77	3.08	5.1	4.98
	4/21/2008	0.06	3.6	6.67	15.5	0.181	-99	0.92	0.0	2.69
	10/28/2008	0.00	4.0	5.13	15.3	0.215	292	17.31	336	2.04
	4/7/2009	0.07	4.7	5.75	13.1	0.274	158	0.04	0.0	5.52
	10/15/2009	0.00	1.3	5.30	13.8	0.210	216	8.90	30.7	0.71
	5/6/2010	0.00	2.7	6.03	16.5	0.159	72	0.00	54.3	2.2
	11/17/2010	-0.02	1.8	5.75	15.1	0.116	327	3.54	0.0	0.0
	4/7/2011	0.41	4.3	6.22	13.7	0.210	27	0.48	229	2.2
	11/30/2011	NA	NA	7.16	10.8	0.146	NM	12.58	77.4	NM
	5/23/2012	NA	NA	8.72	18.6	0.135	80	9.90	156	0.44
	11/5/2012	NA	NA	*	12.9	0.182	112	12.24	79.5	2.88
MW-81 D2	4/12/2006	0.05	2.4	5.79	15.2	0.357	-51	0.00	4.1	5.04
	5/4/2006	0.00	5.8	6.12	16.8	0.204	-6	1.10	119	1.37
	5/18/2006	0.12	3.4	8.18	15.1	0.220	-58	0.00	906	>3.30
	5/26/2006	0.21	3.2	8.58	15.8	0.225	-129	0.00	>999	>3.3
	10/24/2006	0.09	3.2	6.33	14.5	0.263	78	16.87	396	2.37
	10/25/2006	-0.04	1.9	6.49	15.7	0.251	73	17.96	170	0.40
	10/26/2006	0.21	1.9	7.64	15.1	0.229	93	15.00	>999	0.74
	1/24/2007	-0.05	5.9	7.21	13.1	0.234	-39	2.90	>999	0.98
	4/18/2007	0.00	1.3	9.84	12.5	0.301	-110	0.00	519	2.71
	7/19/2007	0.08	2.6	6.03	17.6	0.181	48	14.10	121	1.48
	10/10/2007	0.18	7.5	6.72	15.3	0.180	35	7.45	413	9.39
	4/18/2008	0.00	2.4	6.50	15.8	0.171	81	4.23	130	0.45
	10/22/2008	0.10	1.8	7.20	15.6	0.147	107	>20	0.0	0.09
	4/7/2009	0.07	1.3	6.12	12.4	0.161	326	10.58	31.8	0.45
	10/14/2009	0.03	3.4	6.13	15.1	0.162	227	18.39	14.9	0.50
	5/10/2010	-0.06	1.9	6.41	14.9	0.133	93	9.69	0.0	0.50
	11/16/2010	-0.24	4.3	6.32	14.5	0.137	254	13.28	297	1.0

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-81 D2	4/7/2011	0.00	4.9	6.46	13.6	0.181	85	2.92	0.0	0.0
	11/30/2011	NA	NA	6.57	12.8	0.184	NM	11.01	83.0	NM
	5/23/2012	NA	NA	8.90	17.8	0.128	64	10.23	0	1.8
	11/5/2012	NA	NA	*	NM	NM	NM	NM	NM	NM
MW-82 D1	4/17/2006	0.00	2.8	6.88	16.4	0.391	-126	0.00	10.8	1.28
	4/25/2006	0.12	4.9	6.23	17.2	0.351	-170	0.00	281	1.89
	5/11/2006	0.10	2.4	6.39	16.5	0.356	-190	0.00	150	4.32
	5/25/2006	0.00	6.6	6.27	17.8	0.341	-200	0.00	226	5.22
	5/31/2006	0.00	5.0	6.98	20.8	0.374	-214	0.00	297	5.28
	10/24/2006	0.23	0.9	6.44	14.5	0.411	-119	1.93	202	6.14
	10/25/2006	0.00	1.6	7.37	14.5	0.491	-154	0.00	9	9.36
	10/26/2006	0.02	1.0	6.63	16.0	0.317	-142	2.77	116	6.32
	11/30/2006	-0.30	2.6	7.39	15.8	0.463	-158	0.00	252	1.86
	12/20/2006	0.05	2.3	6.89	12.9	0.327	-149	0.00	146	1.98
	1/25/2007	0.05	5.7	7.25	12.9	0.440	-145	1.21	48.8	1.94
	4/20/2007	0.05	2.6	6.76	18.1	0.305	-153	0.76	357	2.79
	7/25/2007	0.05	3.0	5.39	23.0	0.186	95	15.15	73	2.58
	10/18/2007	0.04	3.6	6.04	18.1	0.219	125	0.73	339	5.25
	1/23/2008	0.00	4.2	6.13	13.3	0.239	-38	1.89	7.8	5.82
	4/25/2008	0.45	4.3	4.35	17.5	0.183	108	0.13	81.2	1.49
	7/18/2008	0.03	5.3	5.73	17.6	0.147	96	3.38	0	NM
	10/30/2008	0.00	3.7	4.79	15.9	0.168	309	<20	137	NM
	4/13/2009	0.04	3.5	5.81	14.3	0.184	328	5.35	145	0.21
	10/20/2009	0.03	2.7	5.50	16.4	0.176	231	8.08	0.0	0.26
	5/12/2010	-0.06	1.8	5.81	14.2	0.161	53	7.01	527	0.0
	11/17/2010	0.02	1.8	6.12	16.5	0.097	307	8.00	321	NM
	5/19/2011	0.20	3.1	5.95	15.5	0.161	277	6.70	9.7	0.0
	12/1/2011	NA	NA	7.14	10.7	0.178	NM	14.35	151.0	NM
	5/23/2012	NA	NA	6.77	18.1	0.138	138	7.91	130.0	5.0
	10/26/2012	NA	NA	7.40	18.5	0.154	95	7.18	43.3	0.67
MW-82 D2	4/17/2006	0.08	3.6	6.14	16.2	0.256	-152	0.00	636	5.12
	4/24/2006	0.00	4.3	7.34	15.7	0.295	-367	0.00	315	1.64
	5/25/2006	0.00	2.9	6.06	17.2	0.239	-140	0.00	95	3.02
	6/5/2006	0.05	3.0	6.52	17.7	0.251	-139	0.00	65.1	6.40
	5/31/2006	0.00	3.9	6.54	16.7	0.239	-125	0.00	27.9	6.58
	10/24/2006	0.07	4.1	6.91	16.3	0.231	-166	0.38	234	10.44
	10/25/2006	-0.08	1.0	6.07	15.4	0.282	-95	1.98	6.8	11.64
	10/26/2006	0.14	1.3	6.23	17.5	0.260	-110	3.37	59	8.60
	11/30/2006	0.00	2.7	7.48	16.6	0.313	-179	0.00	37.9	2.31
	12/20/2006	0.00	3.4	7.11	14.1	0.226	-178	0.00	14.1	0.34
	1/25/2007	0.00	3.2	7.23	13.5	0.284	-147	1.70	66.1	2.01
	4/20/2007	0.00	3.4	6.87	18.9	0.182	-183	0.61	182	1.91
	7/25/2007	0.05	3.7	6.49	18.9	0.211	-192	0.50	47	6.56
	10/18/2007	0.05	5.2	9.88	20.6	0.499	-359	2.93	760	1.22
	1/23/2008	0.00	4.2	6.59	13.9	0.183	-147	1.51	61.5	4.74
	4/24/2008	0.28	2.9	7.80	19.0	0.217	-352	0.00	0	2.43
	7/18/2008	0.00	4.7	7.66	25.0	0.153	-472	0.00	0	16.32
	10/30/2008	0.00	1.9	5.62	15.4	0.169	-3	0.84	138	3.01
	4/13/2009	0.03	3.6	6.49	16.5	0.249	282	>20	113	0.05
	10/20/2009	0.09	4.4	6.98	16.5	0.197	-260	0.07	4.5	1.13
	5/12/2010	0.00	3.1	7.38	15.1	0.165	-137	0.00	42	1.0
	11/18/2010	0.17	1.5	6.75	14.8	0.109	276	0.83	21	1.2
	4/27/2011	0.02	4.9	6.52	15.8	0.187	-19	3.38	4.5	1.0
	12/1/2011	NA	NA	8.64	10.4	0.160	NM	11.74	477	NM
	5/23/2012	NA	NA	7.43	17.9	0.159	123	7.97	474	5.0
	10/26/2012	NA	NA	7.91	18.3	0.162	56	>20	0	3.2

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-83 D1	4/11/2006	0.08	4.3	10.04	15.3	0.472	-195	0.00	648	0.20
	5/1/2006	0.07	4.5	10.35	17.1	0.518	-125	0.00	178	0.44
	5/16/2006	0.01	5.7	11.56	13.5	0.978	-235	0.00	>999	1.20
	5/24/2006	0.05	6.3	10.89	16.0	0.375	-211	0.00	350	1.36
	10/24/2006	0.20	1.0	11.70	13.1	1.190	70	0.00	108	1.94
	10/25/2006	0.11	2.0	12.80	14.4	0.990	-146	0.00	102	0.23
	10/26/2006	0.24	3.1	10.30	14.1	0.561	-64	2.06	9.9	0.06
	1/30/2007	0.03	5.3	11.07	13.4	0.342	6	1.74	79.4	0.01
	4/18/2007	0.00	4.9	10.70	12.7	0.256	-70	0.00	690	0.0
	7/17/2007	0.00	2.4	10.70	16.3	0.271	-14	0.41	12	0.04
	10/12/2007	0.00	12.4	10.10	15.3	0.226	64	3.00	127	0.13
	1/22/2008	0.03	4.4	10.52	13.5	0.283	174	8.34	0.0	0.12
	4/17/2008	0.00	8.4	10.08	14.6	0.275	151	2.32	163	0.03
	7/15/2008	0.03	8.0	9.26	14.9	0.103	216	1.91	0	NM
	10/24/2008	0.03	4.1	8.65	15.6	0.264	291	8.31	35.1	0.04
	4/8/2009	0.10	6.2	7.71	13.7	0.276	274	1.44	61.1	0.09
	10/14/2009	0.01	4.0	7.01	14.9	0.285	361	13.17	141	0.41
	5/5/2010	0.02	6.1	5.50	15.3	0.254	284	3.50	9.1	NM
	11/15/2010	0.05	2.5	8.36	15.2	0.216	271	9.14	317	0.0
	4/7/2011	0.00	3.1	7.12	13.1	0.259	135	4.18	11.8	0.0
	11/30/2011	NA	NA	4.95	13.2	0.187	NM	>20	>999	NM
	5/23/2012	NA	NA	9.47	18.9	0.381	132	12.32	150	0.0
	10/24/2012	NA	NA	5.40	16.3	0.285	276	7.22	105	0.0
MW-83 D2	5/2/2006	-0.25	3.6	6.00	15.0	0.235	7.22	1.70	0.0	0.49
	5/16/2006	0.08	4.5	6.88	15.0	0.224	42	2.02	0.0	0.02
	5/25/2006	0.13	2.4	6.61	15.5	0.216	73	2.91	0.0	0.00
	10/24/2006	0.09	4.9	6.56	13.7	0.226	241	>19.99	17.5	9.88
	10/25/2006	0.10	1.2	6.18	14.3	0.297	179	>20	92	0.0
	10/26/2006	0.10	1.5	6.46	13.1	0.216	171	>20	0.0	0.06
	1/29/2007	0.00	2.9	6.55	10.3	0.197	249	13.20	69.3	0.0
	4/18/2007	0.21	3.4	8.16	13.0	0.233	97	0.00	103	0.0
	7/17/2007	0.04	3.0	6.42	17.3	0.147	289	>19.99	25	0.08
	10/15/2007	0.15	13.0	5.92	15.6	0.140	279	11.44	0.0	0.23
	1/22/2008	0.11	5.3	6.76	13.3	0.174	328	>20	0.0	0.14
	4/17/2008	0.10	11.1	6.35	15.2	0.169	295	>20	0.0	0.04
	7/15/2008	0.34	4.1	7.00	*	0.140	270	8.50	0.0	0.04
	10/21/2008	0.12	2.6	6.26	14.9	0.120	297	0.92	2.9	0.00
	4/8/2009	0.09	2.3	6.04	13.0	0.162	370	20.00	7.1	0.01
	10/13/2009	0.10	2.4	5.70	15.2	0.146	380	19.81	0.0	0.01
	5/6/2010	0.17	2.5	4.38	15.5	0.060	190	11.32	46	NM
	11/16/2010	0.00	2.5	6.85	14.7	0.127	370	16.45	632	0.0
	4/7/2011	0.00	4.3	6.12	13.3	0.170	249	17.54	16.6	0.0
	11/30/2011	NA	NA	6.26	14.2	0.146	NM	16.99	141	NM
	5/23/2012	NA	NA	8.84	17.7	0.156	79	12.67	75	0.0
	10/24/2012	NA	NA	6.53	16.3	0.165	225	9.81	70.8	0.0
MW-84 D1	5/23/2006	0.09	1.7	6.25	16.1	0.301	-71	0.00	18.5	3.19
	5/26/2006	0.00	3.4	6.45	16.8	0.305	-118	0.00	91.9	4.50
	6/6/2006	0.15	4.1	6.55	16.6	0.280	-139	0.00	10.3	5.50
	6/8/2006	0.00	5.1	6.58	16.3	0.263	-163	0.00	10.4	2.35
	10/24/2006	0.00	4.7	5.46	15.7	0.197	50	7.89	54.7	1.44
	10/25/2006	0.06	1.3	6.32	15.4	0.296	86	8.03	0.0	1.37
	10/26/2006	0.04	2.9	6.19	15.8	0.300	78	6.51	77	1.19
	1/30/2007	0.00	3.6	6.16	13.1	0.254	160	7.53	188	1.24
	4/24/2007	0.00	3.6	6.49	16.5	0.249	282	>20	113	0.05
	7/24/2007	0.10	5.1	6.26	19.2	0.137	301	>20	6.9	0.05
	10/17/2007	0.21	4.9	6.45	15.8	0.143	304	8.81	85	0.62
	1/28/2008	0.07	4.5	6.46	13.9	0.157	303	>20	70.4	0.0
	4/24/2008	0.04	4.4	7.34	17.2	0.165	210	0.60	83	0.03
	7/17/2008	0.17	2.8	6.93	20.0	0.141	95	14.51	0.0	0.13
	10/29/2008	0.03	2.8	5.69	14.1	0.125	319	12.18	231	0.0
	4/9/2009	0.14	4.4	5.71	15.2	0.142	214	13.34	12.5	0.0
	10/19/2009	0.10	3.6	6.01	15.5	0.137	271	10.98	0.0	0.19
	5/12/2010	0.00	2.4	6.63	14.7	0.125	127	9.85	30	NM

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-84D1	11/18/2010	0.00	0.6	6.66	15.4	0.137	207	7.94	6.7	NM
	4/27/2011	0.00	NM	6.45	15.6	0.129	210	7.54	5.3	NM
	12/1/2011	NA	NA	8.82	9.7	0.135	NM	13.98	250	NM
	5/24/2012	NA	NA	7.10	17.7	0.117	185	10.30	283	0.00
	10/26/2012	NA	NA	6.65	16.7	0.156	72	7.29	96.2	1.08
MW-84 D2	5/23/2006	0.15	3.9	6.74	17.4	0.246	-131	0.00	780	12.68
	5/30/2006	0.20	2.4	6.59	18.8	0.241	-152	2.70	595	3.18
	6/6/2006	0.00	5.7	7.17	16.8	0.219	-221	0.00	228	2.70
	6/8/2006	0.00	3.0	6.78	16.5	0.220	-162	0.00	230	3.78
	10/24/2006	0.00	6.8	8.47	14.9	0.295	-90	4.69	131	1.53
	10/25/2006	-0.02	1.0	8.68	15.1	0.395	-47	2.84	127	0.27
	10/26/2006	-0.01	5.0	8.00	15.5	0.393	-77	2.67	>999	0.64
	1/29/2007	0.00	1.9	9.97	12.2	0.322	7	3.91	199	0.18
	4/24/2007	0.10	6.7	10.22	16.5	0.339	138	16.31	470	0.30
	7/24/2007	0.10	8.9	10.33	20.6	0.313	139	>20	200	0.21
	10/17/2007	0.09	4.7	10.88	17.1	0.396	34	4.68	817	0.23
	1/28/2008	0.00	6.5	11.01	13.8	0.789	97	9.91	187	0.79
	4/23/2008	0.20	12.9	10.97	16.8	0.575	6	3.96	603	0.09
	7/17/2008	0.16	4.1	10.05	18.1	0.287	13	14.05	>999	0.27
	10/29/2008	0.00	2.4	10.12	15.6	0.351	160	8.33	320	0.25
	4/9/2009	0.00	4.9	10.45	15.7	0.316	70	10.15	367	0.08
	10/16/2009	0.00	5.8	10.19	14.6	0.257	135	14.65	>999	1.45
	5/25/2010	0.00	3.1	10.63	21.9	0.233	-20	11.75	430	0.0
	11/18/2010	0.00	2.5	10.67	15.3	0.235	-21	0.79	>999	0.0
	4/15/2011	0.00	3.1	10.65	13.4	0.056	-49	0.37	144	0.0
	12/1/2011	NA	NA	10.67	9.3	0.242	NM	11.00	885	NM
	5/24/2012	NA	NA	6.84	19.4	0.123	114	4.83	0	0.5
	10/26/2012	NA	NA	10.20	16.6	0.251	-28	3.14	800	5.0
MW-85S	4/20/2011	0.25	3.1	6.16	14.1	0.144	46	4.38	21.3	0.5
	10/26/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-85I	4/20/2011	0.13	3.1	6.14	14.5	0.144	93	2.90	67	2.4
	10/26/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-85D1	4/20/2011	0.00	2.6	6.87	15.1	0.253	-33	3.75	160	(3)
	10/26/2012	NA	NA	6.63	18.30	0.14	18	>20	286	5.0
MW-85D2	4/20/2011	0.00	3.7	6.35	14.7	0.201	-190	1.59	3.6	4.0
	10/26/2012	NA	NA	7.96	18.2	0.196	29	14.34	800	5.0
MW-86D1	4/18/2011	0.00	3.1	6.53	14.6	0.240	-107	0.74	79.0	2.0
	10/24/2012	NA	NA	6.23	16.8	0.226	67	>20	100	0.68
MW-86D2	4/18/2011	0.01	2.5	6.89	15.1	0.219	-107	1.24	34.6	3.0
	10/24/2012	NA	NA	6.80	16.9	0.178	-115	2.49	422	0.39
MW-87 D1	4/5/2006	-0.04	2.9	5.04	12.8	0.197	142	0.00	64	0.99
	4/20/2006	0.02	3.9	4.94	17.5	0.184	218	0.00	43.8	0.30
	5/4/2006	0.02	2.6	5.03	16.2	0.187	231	0.00	0.0	0.34
	5/15/2006	0.02	2.0	5.28	15.1	0.165	207	0.00	66.2	0.27
	10/24/2006	0.25	4.5	5.45	14.9	0.229	234	0.70	5.4	0.17
	10/25/2006	-0.01	2.8	5.23	15.9	0.224	221	0.00	0.0	0.35
	10/26/2006	0.03	2.1	5.26	15.0	0.192	226	2.63	22.2	0.05
	1/24/2007	0.10	2.1	5.31	14.7	0.200	248	0.78	11.0	0.10
	4/17/2007	0.10	5.3	5.47	14.5	0.999	169	0.00	62	0.14
	7/17/2007	0.00	4.0	5.30	17.2	0.186	223	0.44	54	0.09
	10/8/2007	0.00	5.7	5.30	19.1	0.229	203	4.39	17.3	0.40
	4/16/2008	0.07	9.0	5.04	15.7	0.193	322	8.35	220	0.05
	10/21/2008	0.00	3.4	4.34	15.0	0.193	463	>20	16.2	0.00
	4/7/2009	0.00	3.6	5.12	14.0	0.148	289	8.62	0.0	0.00
	10/13/2009	0.03	2.4	4.60	16.1	0.205	379	16.18	0.0	0.17
	5/3/2010	0.00	4.9	3.23	16.2	0.170	282	5.74	2.0	0.0
	11/29/2010	0.00	3.4	5.88	16.2	0.133	192	2.75	5.8	0.0
	4/19/2011	0.05	2.5	5.18	13.6	0.200	300	3.72	325	0.0
	11/30/2011	NA	NA	6.32	14.5	0.156	NM	13.98	80.2	NM
	5/24/2012	NA	NA	6.28	18.5	0.154	149	11.51	74.0	1.4
	11/5/2012	NA	NA	8.67	13.2	0.151	105	>20	104	1.6

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-87 D2	4/5/2006	0.00	2.8	5.21	14.1	0.172	121	1.81	129	1.14
	4/25/2006	-0.05	5.1	5.40	15.5	0.163	149	2.62	42.8	0.20
	5/15/2006	0.32	4.3	5.80	15.4	0.152	104	1.59	54.8	NM
	5/24/2006	0.10	4.9	5.45	16.2	0.155	163	1.62	0.0	1.36
	10/24/2006	0.13	3.9	5.69	15.5	0.183	212	4.00	131	0.08
	10/25/2006	0.06	1.5	5.34	15.5	0.173	137	6.68	25.5	0.09
	10/26/2006	-0.03	2.1	5.37	15.2	0.160	226	4.53	0.0	0.02
	1/24/2007	0.00	4.7	5.61	13.3	0.186	131	3.64	160	0.25
	4/17/2007	0.00	5.3	5.83	14.5	0.228	106	3.89	0.9	0.09
	7/16/2007	0.00	2.0	5.65	17.8	0.168	145	3.31	5.1	0.07
	10/9/2007	0.18	2.9	5.57	16.2	0.172	287	7.45	60.1	0.12
	4/16/2008	0.00	6.9	5.37	15.9	0.174	288	5.39	0.0	0.01
	10/21/2008	0.08	1.6	4.65	16.9	0.158	440	9.66	27	0.00
	4/7/2009	0.03	4.4	4.60	13.0	0.175	346	9.90	7.0	0.06
	10/13/2009	0.00	2.1	5.05	16.0	0.176	341	5.30	49.7	0.26
	5/5/2010	0.05	0.2	4.34	15.3	0.138	222	4.15	17.1	NM
	11/15/2010	0.01	2.5	5.21	15.4	0.148	397	12.41	7.7	0.0
	4/18/2011	0.00	3.1	5.52	14.9	0.173	234	3.46	5.6	0.0
	11/30/2011	NA	NA	6.94	12.7	0.110	NM	11.08	52.2	NM
	5/24/2012	NA	NA	NM	NM	NM	NM	NM	NM	2.1
	11/5/2012	NA	NA	7.91	18.3	0.162	86	>20	0.0	1.0
MW-88 D1	4/19/2006	0.08	2.9	6.09	17.9	0.273	-90	0.00	>999	9.64
	4/26/2006	0.32	6.7	5.99	16.7	0.204	-53	0.00	589	4.96
	5/10/2006	0.25	4.2	5.68	15.4	0.200	-2	0.00	393	2.75
	5/30/2006	0.00	3.6	5.90	17.1	0.188	-65	3.13	408	3.62
	6/1/2006	0.10	5.0	6.13	19.9	0.188	-73	0.00	367	5.12
	10/24/2006	0.06	1.8	6.06	15.6	0.252	-43	0.00	88.6	11.04
	10/25/2006	0.09	1.4	5.86	15.3	0.233	-13	0.00	4.7	10.20
	10/26/2006	0.00	3.4	5.59	15.6	0.317	33	3.36	415	6.56
	1/30/2007	0.10	2.9	6.12	11.8	0.193	-45	1.16	257	2.01
	4/19/2007	0.03	4.9	5.84	15.4	0.187	172	11.88	334	1.84
	7/26/2007	0.22	2.0	5.75	22.4	0.249	232	9.48	284	0.74
	10/16/2007	0.00	2.5	6.35	17.7	0.226	3	0.02	92	5.47
	4/25/2008	0.11	2.8	6.11	17.8	0.226	225	5.95	967	0.52
	10/30/2008	NM	3.8	5.06	15.8	0.200	339	>20	14.1	0.00
	4/13/2009	0.01	5.5	5.46	16.0	0.174	205	16.71	>999	0.31
	10/21/2009	0.02	2.1	5.66	16.0	0.235	253	>20	268	0.47
	5/11/2010	0.02	5.7	5.94	15.5	0.191	177	19.00	177	0.50
	11/17/2010	0.03	2.5	6.12	17.0	0.121	366	13.04	39.7	0.0
	4/15/2011	0.00	3.1	5.89	14.0	0.195	184	14.39	163	0.0
	12/1/2011	NA	NA	7.51	8.6	0.182	NM	17.16	>999	NM
	5/24/2012	NA	NA	9.06	18.7	0.252	65	8.82	594	0.0
	10/26/2012	NA	NA	6.94	17.6	0.200	83	10.88	204	1.15

TABLE 2

**SUMMARY OF PURGING FINAL STABILIZATION PARAMETER VALUES
HOOKER RUCO SITE
HICKSVILLE, NEW YORK**

<i>Well</i>	<i>Date Sampled</i>	<i>Drawdown from Initial Water Level ^{(1) (4)} (feet)</i>	<i>Well Screen Volumes Purged ⁽⁴⁾</i>	<i>pH (S.U.)</i>	<i>Temperature (Celsius)</i>	<i>Conductivity (mS/cm)</i>	<i>ORP (mV)</i>	<i>DO (mg/L)</i>	<i>Turbidity (NTU)</i>	<i>Fe ⁺² (mg/L)</i>
MW-88 D2	4/20/2006	0.00	3.7	6.25	17.4	0.244	-152	0.00	951	6.16
	5/10/2006	0.03	3.5	8.05	16.6	0.330	-331	0.00	>999	9.44
	6/1/2006	0.00	4.9	7.24	18.5	0.287	-210	0.00	>999	12.95
	6/7/2006	0.10	4.3	8.44	15.9	0.320	-380	0.00	>999	12.52
	10/24/2006	0.00	5.8	9.10	15.8	0.387	-282	1.44	>999	18.96
	10/25/2006	0.17	1.0	9.44	15.0	0.426	-253	1.97	>999	11.40
	10/26/2006	0.00	1.5	7.33	17.7	0.286	-212	0.00	>999	NM
	1/25/2007	0.00	8.5	9.17	11.3	0.323	-315	0.82	993	0.16
	4/19/2007	0.10	4.0	7.13	16.8	0.278	-219	0.37	>999	2.17
	7/26/2007	0.31	2.5	9.18	31.2	0.427	-333	0.44	>999	1.21
	10/16/2007	0.03	5.7	7.48	18.2	0.192	-291	3.04	145	9.39
	4/25/2008	1.60	4.3	6.28	17.0	0.164	40	8.02	>999	2.65
	10/31/2008	0.00	5.3	6.64	17.5	0.191	45	8.94	435	2.70
	4/14/2009	0.08	11.9	5.99	13.9	0.206	41	9.94	>999	0.98
	10/20/2009	0.03	9.2	6.94	16.2	0.265	-3	4.67	325	4.49
	5/11/2010	-0.13	4.7	7.30	15.5	0.230	-5	5.70	697	0.50
	1/20/2011	0.00	1.9	9.99	11.3	0.450	232	5.58	206	0.00
	4/19/2011	0.00	1.9	10.35	14.4	0.522	-585	3.35	320	0.0
	12/1/2011	NA	NA	9.87	12.0	0.470	NM	9.81	85.2	NM
	5/24/2012	NA	NA	10.36	18.0	0.403	22	5.73	304.0	0.0
	10/26/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-89D1	4/21/2011	0.00	3.7	6.77	15.2	0.401	-142	1.57	558	6.0
	10/24/2012	NA	NA	8.12	15.8	0.190	17	9.68	102	0.0
MW-89D2	4/21/2011	0.00	3.1	7.60	14.6	0.373	-154	2.43	118	1.0
	10/24/2012	NA	NA	8.56	16.2	0.355	-95	10.73	141	0.0
MW-90 D1	6/13/2006	0.10	7.8	6.25	17.0	0.230	-112	0.00	76.8	4.10
	4/25/2007	0.00	4.9	6.07	16.1	0.231	-100	0.93	542	2.30
	4/13/2011	-0.01	1.8	6.54	12.9	0.256	-103	0.34	14.6	NM
	10/25/2012	NA	NA	NM	NM	NM	NM	NM	NM	NM
MW-90 D2	6/13/2006	0.05	7.8	5.91	18.4	0.191	-9	0.20	95.3	3.06
	4/25/2007	0.05	4.7	5.95	15.3	0.209	-47	1.38	102	1.76
	5/17/2010	0.00	12.9	5.75	15.5	0.186	-112	0.00	147	2.5
	4/14/2011	0.02	3.1	6.09	15.3	0.197	12	4.03	0.0	1.0
MW-92D1	4/12/2011	0.00	1.8	7.10	12.1	0.421	-190	1.13	34.0	4.0
MW-92D2	4/25/2011	0.02	3.1	6.69	15.7	0.206	-156	2.00	1.3	1.5
MW-93D1	4/26/2011	0.00	3.7	7.11	16.0	0.245	-191	2.18	800	2.5
MW-93D2	4/26/2011	0.00	3.1	7.34	15.6	0.203	-219	2.96	35.1	2.0

Notes:

(1) Negative indicates groundwater level during purging higher than initial water level

(2) Orange colored

(3) Black coloured water prevented reading on colorimetric meter

(4) Samples during and subsequent to November 2011 were collected using PDB/HydraSleeve samplers. No purging was required.

NA - Not applicable

NM - Not measured

* - Probe malfunctioned

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-1S</i>
	Well Screen Interval: 6.0 to 8.0 ft bgs <u>11/6/2012</u>
Acetone	14.3
Carbon Disulfide	ND
Ethanol	ND
Methyl Ethyl Ketone	505
Methyl Chloride	ND
Tetrachloroethene	3.5J
Tetrahydrofuran	1,320
Toluene	ND
Vinyl Chloride	ND

<i>Parameter</i>	<i>VZ-1D</i>
	Well Screen Interval: 41.0 to 46.0 ft bgs <u>11/6/2012</u>
Acetone	628
Carbon Disulfide	140
Ethanol	ND
Methyl Ethyl Ketone	1030
Methyl Chloride	ND
Tetrachloroethene	ND
Tetrahydrofuran	6020
Toluene	39
Vinyl Chloride	ND

Notes

(1) Units are ppbv

J - Estimated concentrations

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-2S</i>	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<i>4/28/2011</i>	<i>11/6/2012</i>
Acetone	4.4	22
Carbon Disulfide	ND	ND
Ethanol	2.6	40
Methyl Ethyl Ketone	0.52	ND
Methyl Chloride	ND	ND
Tetrachloroethene	0.33J	ND
Tetrahydrofuran	0.38J	ND
Toluene	0.85	ND
Vinyl Chloride	ND	ND

<i>Parameter</i>	<i>VZ-2D</i>	
	Well Screen Interval: 44.0 to 49.0 ft bgs	
	<i>4/28/2011</i>	<i>11/6/2012</i>
Acetone	ND	87
Carbon Disulfide	3.9	ND
Ethanol	4.3	ND
Methyl Ethyl Ketone	2.0J	334
Methyl Chloride	3.6	ND
Tetrachloroethene	1.8J	ND
Tetrahydrofuran	2.0J	1050
Toluene	18.0	ND
Vinyl Chloride	ND	ND

Notes

(1) Units are ppbv

J - Estimated concentrations

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-4S</i>	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<i>12/8/2011</i>	<i>11/6/2012</i>
Acetone	1.9J	287
Carbon Disulfide	ND	240
Ethanol	ND	ND
Methyl Ethyl Ketone	68.0	428
Methyl Chloride	ND	43
Tetrachloroethene	3.4	ND
Tetrahydrofuran	221.0	4,530
Toluene	ND	50
Vinyl Chloride	ND	ND

<i>Parameter</i>	<i>VZ-4D</i>	
	Well Screen Interval: 43.0 to 48.0 ft bgs	
	<i>12/8/2011</i>	<i>11/6/2012</i>
Acetone	5.8	4.3
Carbon Disulfide	66	ND
Ethanol	ND	2.6
Methyl Chloride	6.2	ND
Methyl Ethyl Ketone	45	16
Tetrachloroethene	9.4	1.2
Tetrahydrofuran	460	36
Toluene	ND	ND
Vinyl Chloride	ND	ND

Notes

(1) Units are ppbv

J - Estimated concentrations

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-5S</i>	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<u>4/26/2011</u>	<u>11/6/2012</u>
Acetone	7.7	43,100
Carbon Disulfide	0.23J	ND
Ethanol	2.6	ND
Methyl Ethyl Ketone	1.0	55,300
Methyl Chloride	ND	ND
Tetrachloroethene	0.99	ND
Tetrahydrofuran	1.0	141,000
Toluene	0.34J	871J
Vinyl Chloride	ND	ND

<i>Parameter</i>	<i>VZ-5D</i>	
	Well Screen Interval: 41.0 to 46.0 ft bgs	
	<u>4/26/2011</u>	<u>11/6/2012</u>
Acetone	2,640	118
Carbon Disulfide	21	156
Ethanol	48	ND
Methyl Ethyl Ketone	8.4J	75
Methyl Chloride	ND	26
Tetrachloroethene	ND	2.7J
Tetrahydrofuran	ND	561
Toluene	38	ND
Vinyl Chloride	ND	20

Notes

(1) Units are ppbv

J - Estimated concentrations

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-6S</i>	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<i>4/27/2011</i>	<i>11/6/2012</i>
Acetone	1.3	3.9
Carbon Disulfide	ND	1.8
Ethanol	2.0	ND
Methyl Ethyl Ketone	0.38J	30
Methyl Chloride	ND	0.86
Tetrachloroethene	0.56	ND
Tetrahydrofuran	0.35J	95
Toluene	0.20J	ND
Vinyl Chloride	ND	ND

<i>Parameter</i>	<i>VZ-6D</i>	
	Well Screen Interval: 44.0 to 49.0 ft bgs	
	<i>12/8/2011</i>	<i>11/6/2012</i>
Acetone	3.1	14
Carbon Disulfide	ND	120
Ethanol	1.0	ND
Methyl Chloride	0.41J	49
Methyl Ethyl Ketone	31	50
Tetrachloroethene	0.27J	ND
Tetrahydrofuran	65	920
Toluene	ND	ND
Vinyl Chloride	ND	ND

Notes

(1) Units are ppbv

J - Estimated concentrations

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	<i>VZ-12S</i>	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<i>4/21/2011</i>	<i>11/6/2012</i>
Acetone	4.6	13
Carbon Disulfide	0.19J	13
Ethanol	1.7	ND
Methyl Ethyl Ketone	1.5	590
Methyl Chloride	ND	8.2J
Tetrachloroethene	22	6.8J
Tetrahydrofuran	4.1	1010
Toluene	ND	ND
Vinyl Chloride	1.5	ND

<i>Parameter</i>	<i>VZ-12D</i>	
	Well Screen Interval: 43.5 to 48.5 ft bgs	
	<i>4/21/2011</i>	<i>11/6/2012</i>
Acetone	3.2	738
Carbon Disulfide	1.7	ND
Ethanol	1.3	ND
Methyl Chloride	0.56	ND
Methyl Ethyl Ketone	1.6	14,800
Tetrachloroethene	19	ND
Tetrahydrofuran	3.9	24,200
Toluene	0.23J	ND
Vinyl Chloride	ND	ND

Notes:

(1) Units are ppbv

J - Estimated Concentration

NL - Not Listed

**PRIMARY DETECTED COMPOUNDS IN VADOSE ZONE AIR
BIOSPARGE SYSTEM
HOOKER/RUCO SITE
HICKSVILLE, NEW YORK**

<i>Parameter</i>	VZ-17S	
	Well Screen Interval: 6.0 to 8.0 ft bgs	
	<u>4/21/2011</u>	<u>11/6/2012</u>
Acetone	3.7	2.6
Carbon Disulfide	0.52	1.5
Ethanol	4.8	0.73
Methyl Ethyl Ketone	1.4	30
Methyl Chloride	0.56	0.52
Tetrachloroethene	10	17
Tetrahydrofuran	3.2	24
Toluene	0.25J	ND
Vinyl Chloride	ND	ND

<i>Parameter</i>	VZ-17D	
	Well Screen Interval: 33.0 to 38.0 ft bgs	
	<u>4/21/2011</u>	<u>11/6/2012</u>
Acetone	16	39
Carbon Disulfide	1.5	23
Ethanol	8.9	1.0
Methyl Chloride	0.6	9.6
Methyl Ethyl Ketone	6.9	35
Tetrachloroethene	16	15
Tetrahydrofuran	8.5	27
Toluene	0.71	0.27J
Vinyl Chloride	0.37J	2.2

Notes:

- (1) Units are ppbv
- J - Estimated Concentration
- NL - Not Listed

ATTACHMENT 1

ANALYTICAL DATA ASSESSMENT AND VALIDATION



**CONESTOGA-ROVERS
& ASSOCIATES**

E-Mail Date: December 19, 2012
Revised: December 20, 2012
E-Mail To: Klaus Schmidtke
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ANALYTICAL DATA ASSESSMENT AND VALIDATION
HOOKER-RUCO BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HICKSVILLE, NEW YORK
NOVEMBER 2012

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1.0 INTRODUCTION

Groundwater and soil vapor samples were collected at the former Hooker-Ruco Site in Hicksville, New York (Site) in support of the biosparge system performance monitoring program. Analytical services were performed by Mitkem Laboratories, in Warwick, Rhode Island (Mitkem). A summary of the sampling and analysis scheme is presented in Table 1.

A summary of the analytical data is presented in Tables 2A and 2B. The groundwater samples were analyzed for volatile organic compounds (VOCs), total organic carbon (TOC), nitrite, nitrate, phosphorus, and ammonia. The soil vapor samples were analyzed for VOCs and methane.

The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical methods. Additional validation guidelines were referenced from the following documents:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," United States Environmental Protection Agency (USEPA) 540/R-94-012, February 1994
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," USEPA 540/R-94-013, February 1994

Full raw data deliverables were provided by the laboratory. The data quality assessment and validation presented in the following subsections were performed based on the sample results and supporting QA/QC provided.

2.0 SAMPLE HOLDING TIMES

The method-specific holding time criteria are summarized in Table 5.1 of the Quality Assurance Project Plan (QAPP). All sample extractions and/or analyses were performed within the specified holding times with the exception of some nitrate (as N) and nitrite (as N) samples, which were analyzed a few hours outside of the 48-hour hold time due to a shipping error. A summary of qualified results can be found in Table 3.

All samples were properly preserved and cooled to 4°C ($\pm 2^\circ\text{C}$) after collection. All samples were received by the laboratory in good condition.

3.0 INSTRUMENT CALIBRATION

3.1 GC/MS CALIBRATION - VOCs

3.1.1 TUNING AND MASS CALIBRATION

Prior to analysis, gas chromatograph/mass spectrometer (GC/MS) instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the VOC method requires the analysis of the specific tuning compounds bromofluorobenzene (BFB). The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours (24 hours for vapor) throughout sample analysis to ensure the continued optimization of the instrument.

Instrument tuning data were reviewed. Tuning compounds were analyzed at the required frequency throughout the VOC analysis period. All tuning criteria were met for the analyses, indicating proper optimization of the instrumentation.

3.1.2 INITIAL CALIBRATION

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

- i) All relative response factors (RRFs) must be greater than or equal to 0.05
- ii) When average response factors are employed, percent relative standard deviation (%RSD) values must not exceed 30 percent

The initial calibration data for VOCs were reviewed and met the above criteria for linearity for all compounds of interest. Acceptable sensitivity was achieved for all compounds of interest with the exception of acetone and 2-butanone, which yielded a response factor of <0.05. All associated positive sample results have been qualified as estimated, and associated sample results, which were non-detect, have been rejected due to poor analytical efficiency (see Table 4).

3.1.3 CONTINUING CALIBRATION

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

- i) All RRF values must be greater than or equal to 0.05
- ii) Percent difference (%D) values must not exceed 25 percent (30 percent for vapor)

Calibration standards were analyzed at the required frequency. Various VOCs exhibited variability between the initial and continuing calibration responses, and the associated results were qualified as estimated (see Table 5).

3.2 INSTRUMENTAL CALIBRATION - GENERAL CHEMISTRY

3.2.1 INITIAL CALIBRATION

Initial calibration of the instruments ensures that they are capable of producing satisfactory quantitative data at the beginning of a series of analyses. For general chemistry, calibration is performed based on the analysis of at least three standards and a blank. Resulting correlation coefficients for curves must be at least 0.995.

After calibration, an initial calibration verification (ICV) standard must be analyzed to verify the analytical accuracy of the calibration curves. All analyte recoveries from the analyses of the ICVs must be within control limits of 85 to 115 percent.

Upon review of the data, it was determined that all inorganic calibration curves and ICVs were analyzed at the proper frequencies and that all of the above-specified criteria were met. The laboratory effectively demonstrated that instrumentation used for these analyses were properly calibrated prior to sample analyses.

3.2.2 CONTINUING CALIBRATION

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside

the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. All analyte recoveries reported for the CCVs were within the specified limits.

4.0 SURROGATE COMPOUND ANALYSES - VOCs

In accordance with the method 8260, all samples, blanks, and standards analyzed for VOCs are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency and are assessed against method control limits.

Surrogates were added to all samples, blanks, and QC samples prior to analysis. Surrogate recoveries met the acceptance criteria for all samples, demonstrating acceptable analytical accuracy in this sample matrix.

5.0 INTERNAL STANDARD (IS) RECOVERIES - VOCs

To ensure that changes in GC/MS response and sensitivity do not affect sample analysis results, IS compounds are added to all samples, blanks, and spike samples prior to VOC analysis. All results are calculated as a ratio of the IS response. The criteria by which the IS results are assessed are as follows:

- i) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated method 8260 calibration standard
- ii) IS area counts must not vary by more than $\pm 40\%$ from the associated method TO15 calibration standard
- iii) The retention time of the IS must not vary more than ± 30 seconds from the associated calibration standard

The sample IS recoveries met the above criteria and were used to calculate all positive sample results.

6.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES ORGANICS

To evaluate the effects of sample matrices on the measurement procedures and accuracy of a particular analysis, samples are spiked in duplicate with a known concentration of the analytes of concern and analyzed as MS/MSD samples. Spike recoveries are not assessed for samples having original concentrations significantly greater than the spike concentration (>four times).

Analytical precision is evaluated based on the relative percent difference (RPD) between the MS and MSD.

MS/MSDs were performed at the required frequency for VOCs and TOC. The results showed acceptable accuracy and precision on this sample matrix with the exception of some low TOC recoveries. A summary of qualified results can be found in Table 6.

7.0 MATRIX SPIKE AND DUPLICATE ANALYSES - GENERAL CHEMISTRY

To evaluate the effects of sample matrices on the measurement procedures and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS samples. The established control limits for inorganic matrix spike recoveries are 75 to 125 percent. Spike recoveries are not assessed for samples having original concentrations significantly greater than the spike concentration (>four times).

Analytical precision is evaluated based on the analysis of duplicate samples. Laboratory duplicate results are assessed against a maximum RPD of 20 percent.

MS and duplicate analyses were performed at the required frequency for all general chemistry parameters. The results showed acceptable accuracy and precision on this sample matrix.

8.0 LABORATORY CONTROL SAMPLE (LCS) ANALYSES

The LCS serves as a monitor of the overall performance of all steps in the analysis, including the sample preparation. LCSs are analyzed using the same sample preparation, analytical methods, and QA/QC procedures employed for the investigative samples.

LCSs were prepared and analyzed for all general chemistry and VOC parameters. All LCS results were within acceptable limits showing good overall analytical accuracy.

9.0 METHOD BLANK ANALYSES

Method blanks are prepared from deionized water and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the procedures. Additionally, continuing calibration blanks (CCBs) are routinely analyzed after each CCV for the inorganic parameters.

For this study, method blanks were analyzed at a minimum frequency of one per analytical batch, and CCBs were analyzed for inorganic parameters after each CCV. The data were non-detect for the analytes of interest with the exception of some low levels of ammonia (as N) and TOC. Associated sample results with concentrations similar to that found in the method blank were qualified as non-detect (see Table 7). Sample results that were either non-detect or significantly greater than the concentration found in the blank were not impacted, and no qualification of the data was necessary.

10.0 FIELD QA/QC SAMPLES

The field QA/QC consisted of two trip blanks and three field blanks.

The trip blanks and field blanks were non-detect for the compounds of interest with the exception of a low level of vinyl chloride and phosphorus in the field blank. Associated sample results with concentrations similar to that found in the field blank were qualified as non-detect (see Table 8). Sample results that were either non-detect or significantly greater than the concentration found in the blank would not have been impacted.

11.0 CONCLUSION

Based on the preceding assessment, the data summarized in Tables 2A and 2B are acceptable with the specific qualifications with the exception of the following:

- 2-Butanone and acetone data were rejected in a number of samples due to initial calibration violations.

TABLES

TABLE 1
SAMPLING AND ANALYSIS SUMMARY
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOVER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample ID	Location ID	Collection Date (mm/dd/yy)	Collection Time (hr:min)	Analysis/Parameters						Comments
				VOCs	NO ₂ , NO ₃	NH ₃	TOC, Phosphorous	Methane	TO-15	
TB 10/24	Trip Blank	10/24/2012	-	X						Trip Blank
GW102412VW002	MW-83D1	10/24/2012	09:40	X	X	X	X			
GW102412VW003	MW-83D2	10/24/2012	09:53	X	X	X	X			
GW102412VW004	MW-86D1	10/24/2012	10:40	X	X	X	X			
GW102412VW005	MW-86D2	10/24/2012	10:55	X	X	X	X			
GW102412VW007	MW-75D2	10/24/2012	11:45	X	X	X	X			
GW102412VW006	MW-75D1	10/24/2012	12:00	X	X	X	X			
GW102412VW009	MW-89D2	10/24/2012	13:10	X	X	X	X			
GW102412VW008	MW-89D1	10/24/2012	13:20	X	X	X	X			
GW102412VW010	Field Blank	10/24/2012	13:30	X	X	X	X			Field Blank
GW102512VW012	MW-72D2	10/25/2012	09:20	X						
GW102512VW011	MW-72D1	10/25/2012	09:30	X						
GW102512VW013	MW-76S	10/25/2012	09:50	X						
GW102512VW014	MW-76I	10/25/2012	09:55	X						
GW102512VW016	MW-76D1	10/25/2012	10:40	X						
GW102512VW015	MW-76D2	10/25/2012	10:45	X						
GW102512VW018	MW-70D1	10/25/2012	11:30	X						
GW102512VW017	MW-70D2	10/25/2012	11:35	X						
GW102512VW019	MW-77D1	10/25/2012	13:20	X						
GW102512VW020	MW-77D2	10/25/2012	13:25	X						
GW102512VW021	MW-90D1	10/25/2012	13:50	X						
TB 10/26	Trip Blank	10/26/2012	-	X						Trip Blank
GW102612VW022	MW-73D1	10/26/2012	08:50	X	X	X	X			
GW102612VW023	MW-73D2	10/26/2012	08:55	X	X	X	X			
GW102612VW024	MW-85D1	10/26/2012	10:30	X	X	X	X			
GW102612VW025	MW-85D2	10/26/2012	10:35	X	X	X	X			
GW102612VW026	MW-85S	10/26/2012	11:15	X	X	X	X			
GW102612VW027	MW-85I	10/26/2012	11:20	X	X		X			
GW102612VW028	MW-82D1	10/26/2012	12:15	X	X	X	X			
GW102612VW029	MW-82D2	10/26/2012	12:20	X	X	X	X			
GW102612VW030	MW-88D1	10/26/2012	12:50	X	X	X	X			
GW102612VW031	MW-88D2	10/26/2012	12:55	X	X	X	X			
GW102612VW032	MW-84D1	10/26/2012	13:30	X	X	X	X			
GW102612VW033	MW-84D2	10/26/2012	13:55	X	X	X	X			
GW110512VW034	MW-87D1	11/5/2012	10:25	X	X	X	X			
GW110512VW035	MW-87D2	11/5/2012	10:30	X	X	X	X			
GW110512VW036	MW-81D1	11/5/2012	11:00	X	X	X	X			
GW110512VW037	MW-81D2	11/5/2012	11:10	X	X	X	X			
GW110512VW038	MW-61I	11/5/2012	11:30	X	X	X	X			
GW110512VW039	MW-61D1	11/5/2012	11:45	X	X	X	X			
GW110512VW040	Field Blank	11/5/2012	12:00	X	X	X	X			Field Blank
VZ110612VW014	VZ-17D	11/6/2012	10:00					X	X	
VZ110612VW013	VZ-17S	11/6/2012	10:15					X	X	
VZ110612VW012	VZ-12D	11/6/2012	10:29					X	X	
VZ110612VW011	VZ-12S	11/6/2012	10:44					X	X	
VZ110612VW010	VZ-6D	11/6/2012	12:00					X	X	
VZ110612VW009	VZ-6S	11/6/2012	12:14					X	X	
VZ110612VW007	VZ-5S	11/6/2012	12:29					X	X	
VZ110612VW008	VZ-5D	11/6/2012	12:44					X	X	
VZ110612VW001	VZ-1S	11/6/2012	12:59					X	X	
VZ110612VW002	VZ-1D	11/6/2012	13:15					X	X	
VZ110612VW005	VZ-4S	11/6/2012	13:29					X	X	
VZ110612VW006	VZ-4D	11/6/2012	13:44					X	X	
VZ110612VW003	VZ-2S	11/6/2012	14:00					X	X	
VZ110612VW004	VZ-2D	11/6/2012	14:14					X	X	

Notes:

NH₃ - Ammonia.NO₂ - Nitrite.NO₃ - Nitrate.

TOC - Total Organic Carbon.

VOCs - Volatile Organic Compounds.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

Sample Location:	MW-61D1	MW-61I	MW-81D1	MW-81D2
Sample ID:	GW110512VW039	GW110512VW038	GW110512VW036	GW110512VW037
Sample Date:	11/5/2012	11/5/2012	11/5/2012	11/5/2012
Parameters	Units			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	0.60 J
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	0.84 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	R	R	R
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U
Acetone	µg/L	7.1 J	7.2 J	5.8 J
Benzene	µg/L	5.0 U	5.0 U	0.58 J
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	18
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	18
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	4.2 J	4.4 J	14
Toluene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	3.9 J	4.8 J	86
Vinyl chloride	µg/L	5.0 U	5.0 U	310
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	<i>MW-61D1</i>	<i>MW-61I</i>	<i>MW-81D1</i>	<i>MW-81D2</i>
<i>Sample ID:</i>	<i>GW110512VW039</i>	<i>GW110512VW038</i>	<i>GW110512VW036</i>	<i>GW110512VW037</i>
<i>Sample Date:</i>	<i>11/5/2012</i>	<i>11/5/2012</i>	<i>11/5/2012</i>	<i>11/5/2012</i>

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	0.033 J	0.053 J	0.675	1.37
Nitrate (as N)	mg/L	1.13 J	1.36 J	1.59 J	0.830 J
Nitrite (as N)	mg/L	0.100 UJ	0.100 UJ	0.100 UJ	0.500 UJ
Phosphorus	mg/L	0.10	0.11	0.22	0.76
Total organic carbon (TOC)	mg/L	2.73 J	1.10 U	3.95 J	6.06 J

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-82D1	MW-82D2	MW-83D1	MW-83D2
<i>Sample ID:</i>		GW102612VW028	GW102612VW029	GW102412VW002	GW102412VW003
<i>Sample Date:</i>		10/26/2012	10/26/2012	10/24/2012	10/24/2012
<i>Parameters</i>	<i>Units</i>				
<i>Volatile Organic Compounds</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	3.7 J	1.7 J	0.57 J	0.74 J
1,1-Dichloroethene	µg/L	0.61 J	5.0 U	1.7 J	0.81 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	R	R	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	R	R	5.0 UJ	4.1 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	3.5 J	5.6	9.7	5.5
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	17	11	25	7.0
Toluene	µg/L	5.0 U	0.55 J	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	23	17	180	71
Vinyl chloride	µg/L	34	3.1 J	5.0 U	5.0 U
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-82D1	MW-82D2	MW-83D1	MW-83D2
<i>Sample ID:</i>		GW102612VW028	GW102612VW029	GW102412VW002	GW102412VW003
<i>Sample Date:</i>		10/26/2012	10/26/2012	10/24/2012	10/24/2012
<i>Parameters</i>	<i>Units</i>				
<i>General Chemistry</i>					
Ammonia-N	mg/L	0.100 U	2.06	0.100 U	0.100 U
Nitrate (as N)	mg/L	0.500 U	2.33	3.15	5.31
Nitrite (as N)	mg/L	0.500 U	0.500 U	0.500 U	0.250 U
Phosphorus	mg/L	0.069	0.25	0.15 U	0.18 U
Total organic carbon (TOC)	mg/L	1.00 U	3.77 J	1.27 UJ	0.916 UJ

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-84D1	MW-84D2	MW-87D1	MW-87D2
<i>Sample ID:</i>		GW102612VW032	GW102612VW033	GW110512VW034	GW110512VW035
<i>Sample Date:</i>		10/26/2012	10/26/2012	11/5/2012	11/5/2012
<i>Parameters</i>	<i>Units</i>				
<i>Volatile Organic Compounds</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	1.1 J	0.70 J	0.60 J	1.4 J
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	1.6 J	1.8 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	R	R	R	R
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	R	R	7.0 J	5.5 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	1.6 J	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	0.63 J	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.7 J	5.8	38	12
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	80	5.4	53	25
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	54	65	290	170
Vinyl chloride	µg/L	5.0 U	5.0 U	2.1 J	5.0 U
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	<i>MW-84D1</i>	<i>MW-84D2</i>	<i>MW-87D1</i>	<i>MW-87D2</i>
<i>Sample ID:</i>	<i>GW102612VW032</i>	<i>GW102612VW033</i>	<i>GW110512VW034</i>	<i>GW110512VW035</i>
<i>Sample Date:</i>	<i>10/26/2012</i>	<i>10/26/2012</i>	<i>11/5/2012</i>	<i>11/5/2012</i>

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	0.100 U	0.410	0.248	0.067 J
Nitrate (as N)	mg/L	4.56	2.08	1.35 J	3.29 J
Nitrite (as N)	mg/L	0.100 U	0.250 U	0.100 UJ	0.100 UJ
Phosphorus	mg/L	0.91	0.12	0.13	0.19
Total organic carbon (TOC)	mg/L	1.00 U	1.00 U	2.63 J	1.33 U

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

**ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012**

<i>Sample Location:</i>	<i>MW-88D1</i>	<i>MW-88D2</i>	<i>MW-90D1</i>	<i>MW-70D1</i>
<i>Sample ID:</i>	<i>GW102612VW030</i>	<i>GW102612VW031</i>	<i>GW102512VW021</i>	<i>GW102512VW018</i>
<i>Sample Date:</i>	<i>10/26/2012</i>	<i>10/26/2012</i>	<i>10/25/2012</i>	<i>10/25/2012</i>
<i>Parameters</i>	<i>Units</i>			
<i>Volatile Organic Compounds</i>				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	0.79 J	1.9 J	5.0 U
1,1-Dichloroethene	µg/L	0.68 J	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	R	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U
Acetone	µg/L	R	5.6 J	4.2 J
Benzene	µg/L	0.89 J	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	1.8 J	5.0 U	5.0 U
Chloroethane	µg/L	20	5.0 U	7.1
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	7.1	13	54
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	12	1.7 J	2.0 J
Toluene	µg/L	5.0 U	2.9 J	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	17	0.82 J	5.0 U
Vinyl chloride	µg/L	8.2	5.0 U	12
Xylenes (total)	µg/L	5.0 U	5.0 U	0.73 J

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	<i>MW-88D1</i>	<i>MW-88D2</i>	<i>MW-90D1</i>	<i>MW-70D1</i>
<i>Sample ID:</i>	<i>GW102612VW030</i>	<i>GW102612VW031</i>	<i>GW102512VW021</i>	<i>GW102512VW018</i>
<i>Sample Date:</i>	<i>10/26/2012</i>	<i>10/26/2012</i>	<i>10/25/2012</i>	<i>10/25/2012</i>

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	0.100 U	0.217	-	-
Nitrate (as N)	mg/L	0.795	5.20	-	-
Nitrite (as N)	mg/L	0.500 U	0.500 U	-	-
Phosphorus	mg/L	0.14	0.96	-	0.038 U
Total organic carbon (TOC)	mg/L	1.79	8.90	-	-

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-70D2	MW-73D1	MW-73D2	MW-75D1
<i>Sample ID:</i>		GW102512VW017	GW102612VW022	GW102612VW023	GW102412VW006
<i>Sample Date:</i>		10/25/2012	10/26/2012	10/26/2012	10/24/2012
<i>Parameters</i>	<i>Units</i>				
<i>Volatile Organic Compounds</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	0.53 J	5.0 U	5.0 U	0.73 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	R	R	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	5.5 J	R	R	4.9 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U	1.6 J
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	7.5	0.93 J	7.7	17
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	19	5.0 U	12	33
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	32	5.0 U	52	32
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	0.68 J
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	26	5.0 U	19	18
Vinyl chloride	µg/L	190	2.6 J	130	1100
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	0.82 J

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	MW-70D2	MW-73D1	MW-73D2	MW-75D1
<i>Sample ID:</i>	GW102512VW017	GW102612VW022	GW102612VW023	GW102412VW006
<i>Sample Date:</i>	10/25/2012	10/26/2012	10/26/2012	10/24/2012

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	-	0.306	0.787	0.598
Nitrate (as N)	mg/L	-	0.500 U	0.500 U	0.500 U
Nitrite (as N)	mg/L	-	0.500 U	0.500 U	0.500 U
Phosphorus	mg/L	0.030 U	0.097	0.043	0.046 U
Total organic carbon (TOC)	mg/L	-	1.00 U	2.69 J	11.9 J

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

**ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012**

<i>Sample Location:</i>		MW-72D1	MW-75D2	MW-72D2	MW-76D1
<i>Sample ID:</i>		GW102512VW011	GW102412VW007	GW102512VW012	GW102512VW016
<i>Sample Date:</i>		10/25/2012	10/24/2012	10/25/2012	10/25/2012
<i>Parameters</i>	<i>Units</i>				
<i>Volatile Organic Compounds</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	0.87 J	1.3 J	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	4.1 J	4.3 J	4.2 J	4.4 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	7.7	5.0 U	1.4 J
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	0.50 J	46	36	5.2
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	0.50 J	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	3.2 J	34	380	6.2
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	1.1 J	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	63	37	5.0 U
Vinyl chloride	µg/L	5.0 U	600	5.0 U	52
Xylenes (total)	µg/L	5.0 U	0.75 J	5.0 U	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	MW-72D1	MW-75D2	MW-72D2	MW-76D1
<i>Sample ID:</i>	GW102512VW011	GW102412VW007	GW102512VW012	GW102512VW016
<i>Sample Date:</i>	10/25/2012	10/24/2012	10/25/2012	10/25/2012

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	-	0.413	-	-
Nitrate (as N)	mg/L	-	1.00 U	-	-
Nitrite (as N)	mg/L	-	1.00 U	-	-
Phosphorus	mg/L	-	0.046 U	0.037 U	0.030 U
Total organic carbon (TOC)	mg/L	-	2.23 UJ	-	-

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

Sample Location:	MW-76D2	MW-76I	MW-76S	MW-77D1
Sample ID:	GW102512VW015	GW102512VW014	GW102512VW013	GW102512VW019
Sample Date:	10/25/2012	10/25/2012	10/25/2012	10/25/2012
Parameters	Units			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	0.66 J	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U
Acetone	µg/L	4.3 J	9.3 J	4.2 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	0.84 J	0.75 J
Chloroethane	µg/L	9.5	6.6	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	19	31	6.7
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	44	1.1 J	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	1.8 J	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	25	5.0 U	5.0 U
Vinyl chloride	µg/L	650	240	9.2
Xylenes (total)	µg/L	0.92 J	1.5 J	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	<i>MW-76D2</i>	<i>MW-76I</i>	<i>MW-76S</i>	<i>MW-77D1</i>
<i>Sample ID:</i>	<i>GW102512VW015</i>	<i>GW102512VW014</i>	<i>GW102512VW013</i>	<i>GW102512VW019</i>
<i>Sample Date:</i>	<i>10/25/2012</i>	<i>10/25/2012</i>	<i>10/25/2012</i>	<i>10/25/2012</i>

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-
Nitrite (as N)	mg/L	-	-	-	-
Phosphorus	mg/L	0.030 U	0.033 U	0.032 U	0.030 U
Total organic carbon (TOC)	mg/L	-	-	-	-

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-77D2	MW-85D1	MW-85D2	MW-85I
<i>Sample ID:</i>		GW102512VW020	GW102612VW024	GW102612VW025	GW102612VW027
<i>Sample Date:</i>		10/25/2012	10/26/2012	10/26/2012	10/26/2012
<i>Parameters</i>	<i>Units</i>				
<i>Volatile Organic Compounds</i>					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.3	3.4 J	5.0 U
1,1-Dichloroethene	µg/L	0.66 J	5.0 U	1.0 J	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	R	R	R
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	4.3 J	R	R	R
Benzene	µg/L	5.0 U	0.52 J	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	1.4 J	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	1.6 J	4.0 J	21	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	2.5 J	5.0 U	13	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.2	5.0 U	66	2.6 J
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	12	5.0 U	37	0.54 J
Vinyl chloride	µg/L	80	9.9	280	5.0 U
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>	MW-77D2	MW-85D1	MW-85D2	MW-85I
<i>Sample ID:</i>	GW102512VW020	GW102612VW024	GW102612VW025	GW102612VW027
<i>Sample Date:</i>	10/25/2012	10/26/2012	10/26/2012	10/26/2012

*Parameters**Units**General Chemistry*

Ammonia-N	mg/L	-	0.100 U	0.100 U	-
Nitrate (as N)	mg/L	-	1.54	0.730	0.915
Nitrite (as N)	mg/L	-	0.500 U	0.500 U	0.500 U
Phosphorus	mg/L	0.030 U	0.030 U	0.030 U	-
Total organic carbon (TOC)	mg/L	-	3.59 J	4.44 J	21.4 J

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample Location:	MW-85S	MW-86D1	MW-86D2	MW-89D1	MW-89D2
Sample ID:	GW102612VW026	GW102412VW004	GW102412VW005	GW102412VW008	GW102412VW009
Sample Date:	10/26/2012	10/24/2012	10/24/2012	10/24/2012	10/24/2012
Parameters	Units				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	0.62 J	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	0.99 J	1.6 J
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	1.6 J	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	R	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	R	3.9 J	4.8 J	4.4 J
Benzene	µg/L	5.0 U	5.0 U	5.0 U	0.79 J
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	0.94 J
Chloroethane	µg/L	5.0 U	2.5 J	5.0 U	1.1 J
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	2.9 J	63	7.5
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	2.0 J	2.4 J	8.2	2.9 J
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	0.60 J	0.66 J	170	5.0 U
Vinyl chloride	µg/L	0.89 J	36	5.0 U	6.7
Xylenes (total)	µg/L	5.0 U	5.0 U	5.0 U	0.76 J

TABLE 2A

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
 BIOSPARGE SYSTEM PERFORMANCE SAMPLING
 GLENN SPRINGS HOLDINGS, INC.
 HOOKER-RUCO SITE
 HICKSVILLE, NEW YORK
 NOVEMBER 2012

<i>Sample Location:</i>		MW-85S	MW-86D1	MW-86D2	MW-89D1	MW-89D2
<i>Sample ID:</i>		GW102612VW026	GW102412VW004	GW102412VW005	GW102412VW008	GW102412VW009
<i>Sample Date:</i>		10/26/2012	10/24/2012	10/24/2012	10/24/2012	10/24/2012
<i>Parameters</i>	<i>Units</i>					
<i>General Chemistry</i>						
Ammonia-N	mg/L	0.396	0.105 U	2.40	0.100 U	0.337
Nitrate (as N)	mg/L	0.675	1.00 U	0.500 U	0.500 U	0.500 U
Nitrite (as N)	mg/L	0.500 U	1.00 U	0.500 U	0.500 U	0.500 U
Phosphorus	mg/L	0.030 U	0.12 U	0.030 U	0.030 U	0.030 U
Total organic carbon (TOC)	mg/L	2.95 J	2.42 UJ	1.62 UJ	16.0 J	1.02 UJ

Notes:

J - Estimated concentration.

R - Rejected.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

- Not analyzed.

TABLE 2B

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample Location:		VZ-1D	VZ-1S	VZ-2D	VZ-2S	VZ-4D	VZ-4S	VZ-5D
Sample ID:		VZ110612VW002	VZ110612VW001	VZ110612VW004	VZ110612VW003	VZ110612VW006	VZ110612VW005	VZ110612VW008
Sample Date:		11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012
Parameters	Units							
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,1,1-Trichloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.310 J	30.0 U	5.00 U
1,1,2,2-Tetrachloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,1,2-Trichloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,1-Dichloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,1-Dichloroethene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2,4-Trichlorobenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2,4-Trimethylbenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2-Dibromoethane (Ethylene dibromide)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2-Dichlorobenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2-Dichloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2-Dichloropropane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,3,5-Trimethylbenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,3-Butadiene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,3-Dichlorobenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,4-Dichlorobenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
1,4-Dioxane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	1030	505	334	8.00 U	16.4	428	75.4
2-Hexanone	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
2-Phenylbutane (sec-Butylbenzene)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
4-Ethyl toluene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Acetone	ppbv	628	143	86.6	21.6	4.28	287	118
Acrylonitrile	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Benzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Benzyl chloride	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Bromodichloromethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Bromoform	ppbv	57.5 UJ	4.00 UJ	10.0 UJ	8.00 UJ	0.500 UJ	30.0 UJ	5.00 UJ
Bromomethane (Methyl bromide)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Carbon disulfide	ppbv	140	4.00 U	10.0 U	8.00 U	0.500 U	240	156
Carbon tetrachloride	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Chlorobenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Chloroethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	29.3
Chloroform (Trichloromethane)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Chloromethane (Methyl chloride)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	43.2	26.0
cis-1,2-Dichloroethene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
cis-1,3-Dichloropropene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Cyclohexane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample Location:		VZ-1D	VZ-1S	VZ-2D	VZ-2S	VZ-4D	VZ-4S	VZ-5D
Sample ID:		VZ110612VW002	VZ110612VW001	VZ110612VW004	VZ110612VW003	VZ110612VW006	VZ110612VW005	VZ110612VW008
Sample Date:		11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012
Parameters	Units							
Volatile Organic Compounds - Continued								
Cymene (p-Isopropyltoluene)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Dibromochloromethane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Dichlorodifluoromethane (CFC-12)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.530	30.0 U	5.00 U
Ethanol	ppbv	57.5 U	4.00 U	10.0 U	39.5	2.62	30.0 U	5.00 U
Ethyl acetate	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Ethylbenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Hexachlorobutadiene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Hexane	ppbv	28.8 J	6.56	10.0 U	42.7	0.360 J	31.2	5.00 U
Isopropyl alcohol	ppbv	57.5 U	4.00 U	10.0 U	16.3	1.12	16.8 J	5.00 U
Isopropyl benzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
m&p-Xylenes	ppbv	115 U	8.00 U	20.0 U	16.0 U	1.00 U	33.0 J	10.0 U
Methyl tert butyl ether (MTBE)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Methylene chloride	ppbv	57.5 U	4.00 U	10.0 U	790	0.500 U	30.0 U	5.00 U
Naphthalene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
N-Butylbenzene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
N-Heptane	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
o-Xylene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Propylene (propene)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Styrene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Tetrachloroethene	ppbv	57.5 U	3.52 J	10.0 U	8.00 U	1.21	30.0 U	2.70 J
Tetrahydrofuran	ppbv	6020	1320	1050	8.00 U	36.2	4530	561
Toluene	ppbv	39.1 J	4.00 U	10.0 U	8.00 U	0.500 U	50.4	5.00 U
trans-1,2-Dichloroethene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
trans-1,3-Dichloropropene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	5.00 U
Trichloroethene	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	22.2 J	5.00 U
Trichlorofluoromethane (CFC-11)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	2.07	30.0 U	8.10
Trifluorotrichloroethane (Freon 113)	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	28.7
Vinyl chloride	ppbv	57.5 U	4.00 U	10.0 U	8.00 U	0.500 U	30.0 U	20.3
General Chemistry								
Methane	ppmv	1600	10.0 U	10.0 U	40.0 U	12.4	87.9	1200

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 2B

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample Location:		VZ-5S	VZ-6D	VZ-6S	VZ-12D	VZ-12S	VZ-17D	VZ-17S
Sample ID:		VZ110612VW007	VZ110612VW010	VZ110612VW009	VZ110612VW012	VZ110612VW011	VZ110612VW014	VZ110612VW013
Sample Date:		11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012
Parameters	Units							
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,1,1-Trichloroethane	ppbv	1210 U	10.0 U	0.220 J	238 U	10.0 U	0.500 U	0.500 U
1,1,2,2-Tetrachloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,1,2-Trichloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,1-Dichloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,1-Dichloroethene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2,4-Trichlorobenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2,4-Trimethylbenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2-Dibromoethane (Ethylene dibromide)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2-Dichlorobenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2-Dichloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2-Dichloropropane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,3,5-Trimethylbenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,3-Butadiene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,3-Dichlorobenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,4-Dichlorobenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
1,4-Dioxane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	55300	50.4	29.5	14800	589	34.8	29.8
2-Hexanone	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
2-Phenylbutane (sec-Butylbenzene)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
4-Ethyl toluene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.310 J	0.500 U
Acetone	ppbv	43100	14.4	3.87	738	13.4	3.94	2.64
Acrylonitrile	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Benzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.180 J	0.500 U
Benzyl chloride	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Bromodichloromethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Bromoform	ppbv	1210 UJ	10.0 UJ	0.500 UJ	238 UJ	10.0 UJ	0.500 UJ	0.500 UJ
Bromomethane (Methyl bromide)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Carbon disulfide	ppbv	1210 U	122	1.82	238 U	12.6	22.9	1.46
Carbon tetrachloride	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Chlorobenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Chloroethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	1.31	0.500 U
Chloroform (Trichloromethane)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Chloromethane (Methyl chloride)	ppbv	1210 U	48.8	0.860	238 U	8.20 J	9.58	0.520
cis-1,2-Dichloroethene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.480 J	0.500 U
cis-1,3-Dichloropropene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Cyclohexane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

Sample Location:		VZ-5S	VZ-6D	VZ-6S	VZ-12D	VZ-12S	VZ-17D	VZ-17S
Sample ID:		VZ110612VW007	VZ110612VW010	VZ110612VW009	VZ110612VW012	VZ110612VW011	VZ110612VW014	VZ110612VW013
Sample Date:		11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012	11/6/2012
Parameters	Units							
Volatile Organic Compounds - Continued								
Cymene (p-Isopropyltoluene)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Dibromochloromethane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Dichlorodifluoromethane (CFC-12)	ppbv	1210 U	10.0 U	0.500	238 U	10.0 U	1.00	0.730
Ethanol	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	3.89	1.83
Ethyl acetate	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Ethylbenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Hexachlorobutadiene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Hexane	ppbv	726 J	10.0 U	0.460 J	238 U	10.0 U	2.33	2.03
Isopropyl alcohol	ppbv	1210 U	6.60 J	0.590	238 U	10.0 U	1.68	0.610
Isopropyl benzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
m&p-Xylenes	ppbv	2420 U	20.0 U	1.00 U	476 U	20.0 U	1.00 U	1.00 U
Methyl tert butyl ether (MTBE)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Methylene chloride	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.460 J	18.7
Naphthalene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
N-Butylbenzene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
N-Heptane	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.220 J	0.500 U
o-Xylene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Propylene (propene)	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Styrene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Tetrachloroethene	ppbv	1210 U	10.0 U	0.500 U	238 U	6.80 J	14.5	16.5
Tetrahydrofuran	ppbv	141000	920	94.6	24200	1010	27.1	23.7
Toluene	ppbv	871 J	10.0 U	0.500 U	238 U	10.0 U	0.270 J	0.500 U
trans-1,2-Dichloroethene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
trans-1,3-Dichloropropene	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	0.500 U	0.500 U
Trichloroethene	ppbv	1210 U	10.0 U	0.960	238 U	10.0 U	0.500 U	0.500 U
Trichlorofluoromethane (CFC-11)	ppbv	1210 U	10.0 U	1.25	238 U	10.0 U	1.00	0.860
Trifluorotrichloroethane (Freon 113)	ppbv	1210 U	29.6	0.440 J	238 U	10.0 U	2.51	1.79
Vinyl chloride	ppbv	1210 U	10.0 U	0.500 U	238 U	10.0 U	2.19	0.500 U
General Chemistry								
Methane	ppmv	10.0 U	915	10.0 U	10.0 U	10.0 U	10.0 U	20.2

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

UJ - Estimated reporting limit.

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO HOLDING TIME EXCEEDANCES
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Sample ID</i>	<i>Holding Time (hrs)</i>	<i>Holding Time Criteria (hrs)</i>	<i>Qualified Sample Results</i>	<i>Units</i>
Nitrate (as N)	GW110512VW034	55	48	1.35 J	mg/L
	GW110512VW035	55	48	3.29 J	mg/L
	GW110512VW036	55	48	1.59 J	mg/L
	GW110512VW037	55	48	0.830 J	mg/L
	GW110512VW038	55	48	1.36 J	mg/L
	GW110512VW039	55	48	1.13 J	mg/L
Nitrite (as N)	GW110512VW034	55	48	0.100 UJ	mg/L
	GW110512VW035	55	48	0.100 UJ	mg/L
	GW110512VW036	55	48	0.100 UJ	mg/L
	GW110512VW037	55	48	0.500 UJ	mg/L
	GW110512VW038	55	48	0.100 UJ	mg/L
	GW110512VW039	55	48	0.100 UJ	mg/L

Notes:

J - Estimated concentration.
 UJ - Estimated reporting limit.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKE-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Compound</i>	<i>Calibration Date</i>	<i>%RSD</i>	<i>RRF</i>	<i>Associated Sample ID</i>	<i>Qualified Sample Results</i>	<i>Units</i>
VOCs	Acetone	11/03/12	-	0.036	GW102612VW022	R	µg/L
					GW102612VW023	R	µg/L
					GW102612VW024	R	µg/L
					GW102612VW025	R	µg/L
					GW102612VW025	R	µg/L
					GW102612VW026	R	µg/L
					GW102612VW027	R	µg/L
					GW102612VW028	R	µg/L
					GW102612VW029	R	µg/L
					GW102612VW030	R	µg/L
					GW102612VW031	R	µg/L
					GW102612VW032	R	µg/L
					GW102612VW033	R	µg/L
VOCs	2-Butanone	11/03/12	-	0.030	GW102612VW022	R	µg/L
					GW102612VW023	R	µg/L
					GW102612VW024	R	µg/L
					GW102612VW025	R	µg/L
					GW102612VW025	R	µg/L
					GW102612VW026	R	µg/L
					GW102612VW027	R	µg/L
					GW102612VW028	R	µg/L
					GW102612VW029	R	µg/L
					GW102612VW030	R	µg/L
					GW102612VW031	R	µg/L
					GW102612VW032	R	µg/L
					GW102612VW033	R	µg/L
VOCs	Acetone	11/13/12	-	0.032	GW110512VW034	R	µg/L
					GW110512VW036	R	µg/L
					GW110512VW034	7.0 J	µg/L
					GW110512VW035	5.5 J	µg/L
					GW110512VW036	5.8 J	µg/L
					GW110512VW037	5.9 J	µg/L
					GW110512VW038	7.2 J	µg/L
					GW110512VW039	7.1 J	µg/L
VOCs	2-Butanone	11/13/12	-	0.033	GW110512VW034	R	µg/L
					GW110512VW034	R	µg/L
					GW110512VW035	R	µg/L
					GW110512VW036	R	µg/L
					GW110512VW036	R	µg/L
					GW110512VW037	R	µg/L
					GW110512VW038	R	µg/L
					GW110512VW039	R	µg/L

Notes:

J - Estimated concentration.

R - Rejected.

VOCs - Volatile organic compounds.

RRF - Relative response factors.

RSD - Relative standard deviation.

TABLE 5

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKE-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Calibration Date</i>	<i>Compound</i>	<i>%D</i>	<i>Associated Sample ID</i>	<i>Sample Results</i>	<i>Units</i>
VOCs	10/26/12	Acetone	27	GW102412VW002	5.0 UJ	µg/L
				GW102412VW004	3.9 J	µg/L
				GW102412VW005	4.8 J	µg/L
				GW102412VW006	4.9 J	µg/L
				GW102412VW007	4.3 J	µg/L
				GW102412VW009	4.4 J	µg/L
				GW102412VW010	5.0 UJ	µg/L
				GW102512VW011	4.1 J	µg/L
				GW102512VW012	4.2 J	µg/L
				GW102512VW014	9.3 J	µg/L
				GW102512VW015	4.3 J	µg/L
				GW102512VW017	5.5 J	µg/L
				GW102512VW019	4.5 J	µg/L
				GW102512VW020	4.3 J	µg/L
				GW102512VW021	5.6 J	µg/L
VOCs	10/29/12	Carbon tetrachloride	32	GW102412VW003	5.0 UJ	µg/L
				GW102412VW008	5.0 UJ	µg/L
				GW102512VW013	5.0 UJ	µg/L
				GW102512VW016	5.0 UJ	µg/L
				GW102512VW018	5.0 UJ	µg/L
VOCs	11/12/12	Bromoform	33	VZ110612VW001	4.00 UJ	ppbv
				VZ110612VW002	57.5 UJ	ppbv
				VZ110612VW003	8.00 UJ	ppbv
				VZ110612VW004	10.0 UJ	ppbv
				VZ110612VW005	30.0 UJ	ppbv
				VZ110612VW006	0.500 UJ	ppbv
				VZ110612VW007	1210 UJ	ppbv
VOCs	11/15/12	Bromoform	33	VZ110612VW008	5.00 UJ	ppbv
				VZ110612VW009	0.500 UJ	ppbv
				VZ110612VW010	10.0 UJ	ppbv
				VZ110612VW011	10.0 UJ	ppbv
				VZ110612VW012	238 UJ	ppbv
				VZ110612VW013	0.500 UJ	ppbv
				VZ110612VW014	0.500 UJ	ppbv

Notes:

J - Estimated concentration.

UJ - Estimated reporting limit.

VOCs - Volatile organic compounds.

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOVER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Associated Sample ID</i>	<i>Analyte</i>	<i>MS Recovery (percent)</i>	<i>MSD Recovery (percent)</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Sample Result</i>	<i>Units</i>
						<i>Recovery (percent)</i>	<i>RPD (percent)</i>		
General Chemistry	GW102412VW002	TOC	64	62	2	70 - 130	30	1.27 UJ	mg/L
	GW102412VW003							0.916 UJ	mg/L
	GW102412VW004							2.42 UJ	mg/L
	GW102412VW005							1.62 UJ	mg/L
	GW102412VW006							11.9 J	mg/L
	GW102412VW007							2.23 UJ	mg/L
	GW102412VW008							16.0 J	mg/L
	GW102412VW009							1.02 UJ	mg/L
	GW102412VW010							0.401 UJ	mg/L

Notes:

- J - Estimated concentration.
- UJ - Estimated reporting limit.
- MS - Matrix spike.
- MSD - Matrix spike duplicate.
- RPD - Relative percent difference.
- TOC - Total organic carbon.

TABLE 7

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANK
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKE-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Analysis Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Sample Result</i>	<i>Units</i>
General Chemistry	11/2/2012	Ammonia-N	0.066 J	GW102412VW008	0.10 U	mg/L
General Chemistry	11/1/2012	TOC	0.509 J	GW102412VW002	1.27 U	mg/L
				GW102412VW003	1.00 U	mg/L
				GW102412VW004	2.42 U	mg/L
				GW102412VW005	1.62 U	mg/L
				GW102412VW007	2.23 U	mg/L
				GW102412VW009	1.02 U	mg/L
				GW102412VW010	1.00 U	mg/L
General Chemistry	11/2/2012	Ammonia-N	0.036 J	GW102612VW025	0.10 U	mg/L
				GW102612VW028	0.10 U	mg/L
General Chemistry	11/5/2012	TOC	0.341 J	GW102612VW022	1.00 U	mg/L
				GW102612VW028	1.00 U	mg/L
				GW102612VW032	1.00 U	mg/L
				GW102612VW033	1.00 U	mg/L
General Chemistry	11/14/2012	TOC	0.360 J	GW110512VW035	1.33 U	mg/L
				GW110512VW038	1.10 U	mg/L

Notes:

J - Estimated concentration.

TOC - Total organic carbon.

U - Not present at or above the associated value.

TABLE 8

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE FIELD BLANK
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOVER-RUCO SITE
HICKSVILLE, NEW YORK
NOVEMBER 2012

<i>Parameter</i>	<i>Rinse Blank Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Sample ID</i>	<i>Qualified Sample Result</i>	<i>Units</i>
VOCs	10/24/12	Vinyl chloride	0.93 J	GW102412VW010	5.0 U	µg/L
				GW102512VW011	5.0 U	µg/L
				GW102512VW012	5.0 U	µg/L
General Chemistry	10/24/12	Phosphorous	0.057 J	GW102412VW002	0.15 U	mg/L
				GW102412VW003	0.18 U	mg/L
				GW102412VW004	0.12 U	mg/L
				GW102412VW006	0.046 U	mg/L
				GW102412VW007	0.046 U	mg/L
				GW102412VW008	0.030 U	mg/L
				GW102512VW012	0.037 U	mg/L
				GW102512VW013	0.032 U	mg/L
				GW102512VW014	0.033 U	mg/L
				GW102512VW018	0.038 U	mg/L

Notes:

J - Estimated concentration.

U - Not present at or above the associated value.

VOCs - Volatile organic compounds.