Glenn Springs Holdings, Inc.

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July 14, 2009

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 – Second Quarter 2009 (April through June)
Administrative Orders Hooker Chemical/Ruco Polymer Corporation Site
Index Nos. II-CERCLA-80216, II-CERCLA-94-0210, and II-CERCLA-02-2001-2018

Consistent with Sections 42, 91, and 55 of the above-referenced orders and the USEPA approved 100% Biosparge System Design Report, this submittal provides the Quarterly Progress Report covering April through June 2009. This report covers OU-1, OU-2 and OU-3. Please note that the next Quarterly Progress Report will be submitted by October 15, 2009 and will cover July through September 2009.

Quarterly Progress Report

The following activities were performed in April through June 2009.

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

- Operation and monitoring of the GP-1/GP-3 supplemental treatment system continued
- The carbon bed was changed out on May 11, 2009
- Evaluations of possible upgrade alternatives for the supplemental treatment system are ongoing

Biosparge System (see Figure 1 for system layout)

The April 2008 semi-annual Phase I biopsparge system sampling event was performed from April 7 to 14, 2009 using the low-flow purging (LFP) method described in the USEPA approved Final 100% Design Report. Groundwater samples were also collected using passive diffusion bags (PDBs) and HydraSleeve samplers. The PDBs were installed on April 16 and recovered on April 30, 2009.

The PDBs were used for VOC parameters and the HydraSleeves were used for the inorganic parameters. Information regarding the PDB and HydraSleeve™ types of sample collection procedures is provided in Attachment A.

The QA/QC review of the results is attached. A summary of the field parameters is provided in Table 2 and the compounds detected are provided in Table 3.

Comparison of the LFP and PDB sample results provided in Table 3 show that:

i) Generally the analytical results for low level concentrations are the same for the two methods.

ii) At higher concentrations, there are a number of occurrences where the LFP results are greater than the PDB results and vice versa, but typically by less than a factor of 3.

iii) There is no consistent pattern of which sample collection method provides consistently similar or different results based on:

   a) Analytical parameters

   b) Concentration level

   c) Sample location

iv) For VOC parameters with concentrations greater than 5 µg/L, the same parameters were detected by both sample collection methods for all wells. There were only three minor exceptions to this (2-Butanone in MW-82D1 and MW-84D1 and toluene in MW-88D1). Based on the possibility of variability in the sampling data due to either the time differential or very slight differences in the exact sample intervals, such differences may be natural.

Considering that the same VOC parameters were detected by both sampling methods, it is proposed that future groundwater samples for VOCs be collected using PDBs.

Additional Considerations

The use of PDBs does not require purging prior to sample collection. One of the items that needs to be addressed if PDBs are used is how to measure the performance parameters obtained by field measurements during purging when LFP was used. The performance parameters are dissolved oxygen (DO) and ORP. The 100% Design Report sets a DO target concentration of >2 mg/l. Since the volume of the PDB is sufficient for only VOCs, the samples for DO, ORP, Ammonia-N, Nitrate (as N), and Nitrite (as N) will need to be collected using a HydraSleeve sampler, which also does not require purging. For the two inorganic parameters (phosphorous and TOC), it is recommended that they no longer be sampled and analyzed as they have consistently been non-detect.

A measure of the change from anaerobic conditions is an increase in the DO concentrations in the groundwater. As shown in the attached figures, the DO concentrations have achieved the target concentration of 2 mg/L in all monitoring wells except for MW-81D1 (0.04 mg/L) and MW-83D1 (DO = 1.44 mg/L). As shown on Figure 1, these wells are located in relatively close proximity to each other downgradient of injection well nests IW-16 and IW-17. As shown on the figures for MW-81 and MW-83, it took a long period of time for the DO in MW-81D1 and MW-83-D1 to initially respond to the air injections. The recent drop in DO levels in wells MW-81D1 and MW-83D1 is believed to be associated with the fact that the injection system was off for maintenance purposes from December 8, 2008 to February 9, 2009. Based on previous DO concentrations, it is anticipated that the DO concentrations in these wells will re-achieve the target of 2 mg/L within the next few months.

As part of the biosparge system monitoring program, soil gas samples of the vadose zone have also been collected. The results (see Table 4) show that VCM concentrations in the April 2009 samples were non-detect in all of the vadose zone wells except for a low level concentration in VZ-15D (12 ppbv). The April 2009 VCM concentrations are generally less than the concentrations of prior sampling events (see Table 4).

Summary of Biosparge Pilot System

To date, the biosparge system has operated successfully as demonstrated by the following:

i) The DO levels in the groundwater are increasing

ii) The VCM concentrations are decreasing as a result of the microbial biodegradation processes

iii) The aerobic total and cis-1,2-DCE specific microbial population counts are increasing (see 4th Quarter 2008 progress report submitted January 14, 2009)

Planned Third Quarter 2009 Activities

- The following activities are planned for the third quarter of 2009:

i) Continue operation and monitoring of the GP-1/GP-3 supplemental system

ii) Changeout of the supplemental treatment system carbon bed is planned for the weeks of July 13 and September 7, 2009

iii) Meet with USEPA to familiarize the new USEPA project manager with the Site and the status and effectiveness of the in place remedy.

iv) Changeout of the supplemental treatment system potassium permanganate bed is planned for July 2009

- 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) Awaiting USEPA review of the draft Declaration of Covenants and Restrictions for the Site, submitted on April 20, 2006 by Bayer

ii) Awaiting USEPA review of the Phase I As-Built drawings, O&M Manual, and HASP submitted February 1, 2007

iii) Awaiting USEPA approved of the change in groundwater sample collection methodology and cessation of phosphorus and TOC monitoring

Should you have any questions on the above, please do not hesitate to contact me at (972) 687-7511 or e-mail at Jeffrey_Kogut@oxy.com.

Sincerely yours,

Jeffrey A. Kogut
Project Manager

KDS/cb/006883/1
Encl.

c.c.: P. Olivio (USEPA)
K. Lynch (USEPA)
M. E. Wieder (USEPA)
S. Scharf (NYSDEC – pdf on CD)
M. Popper (CDM)
T. Kelly (Nassau County)
W. Baldwin (Bayer)
J. Kay (CRA)

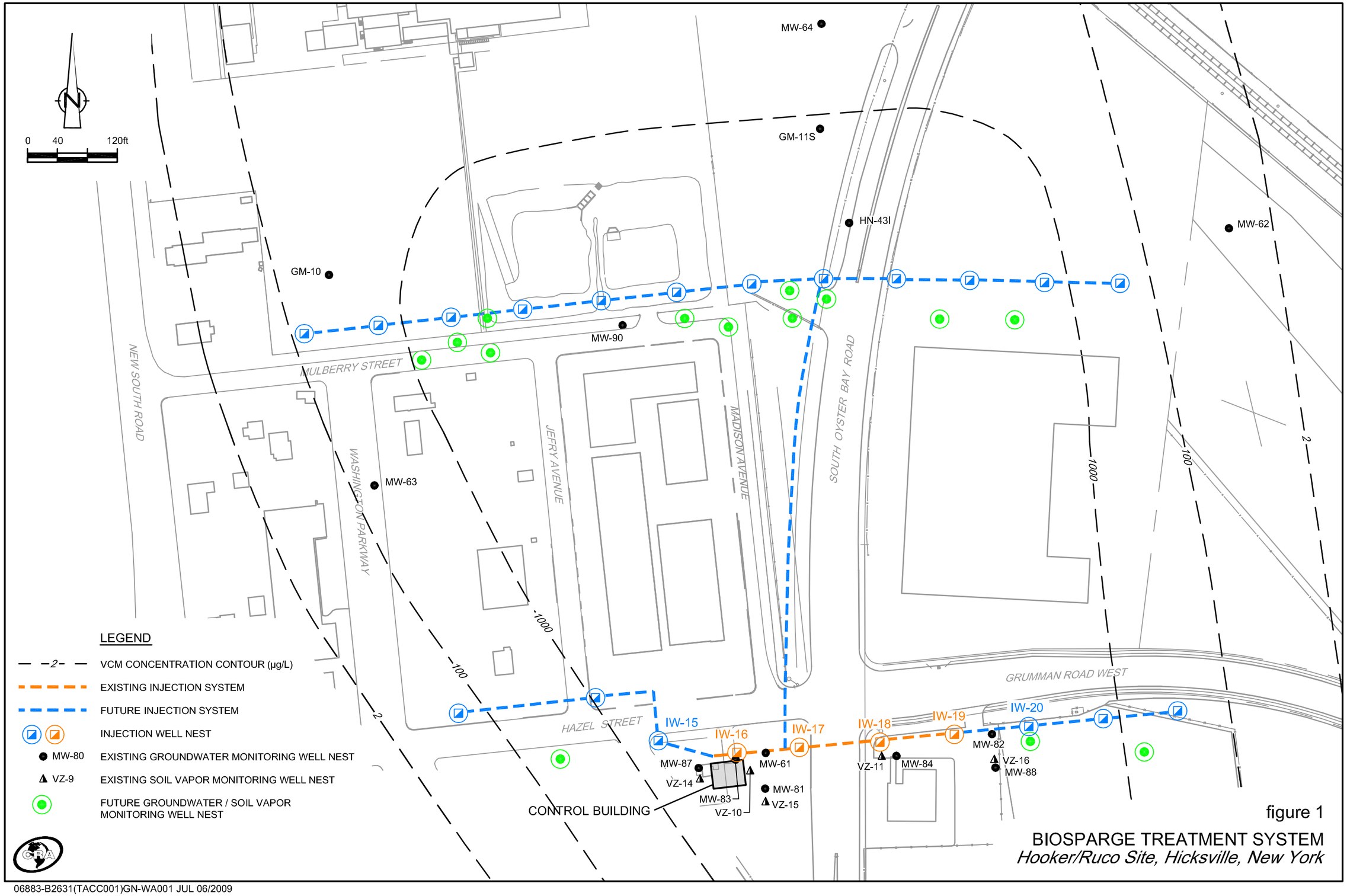
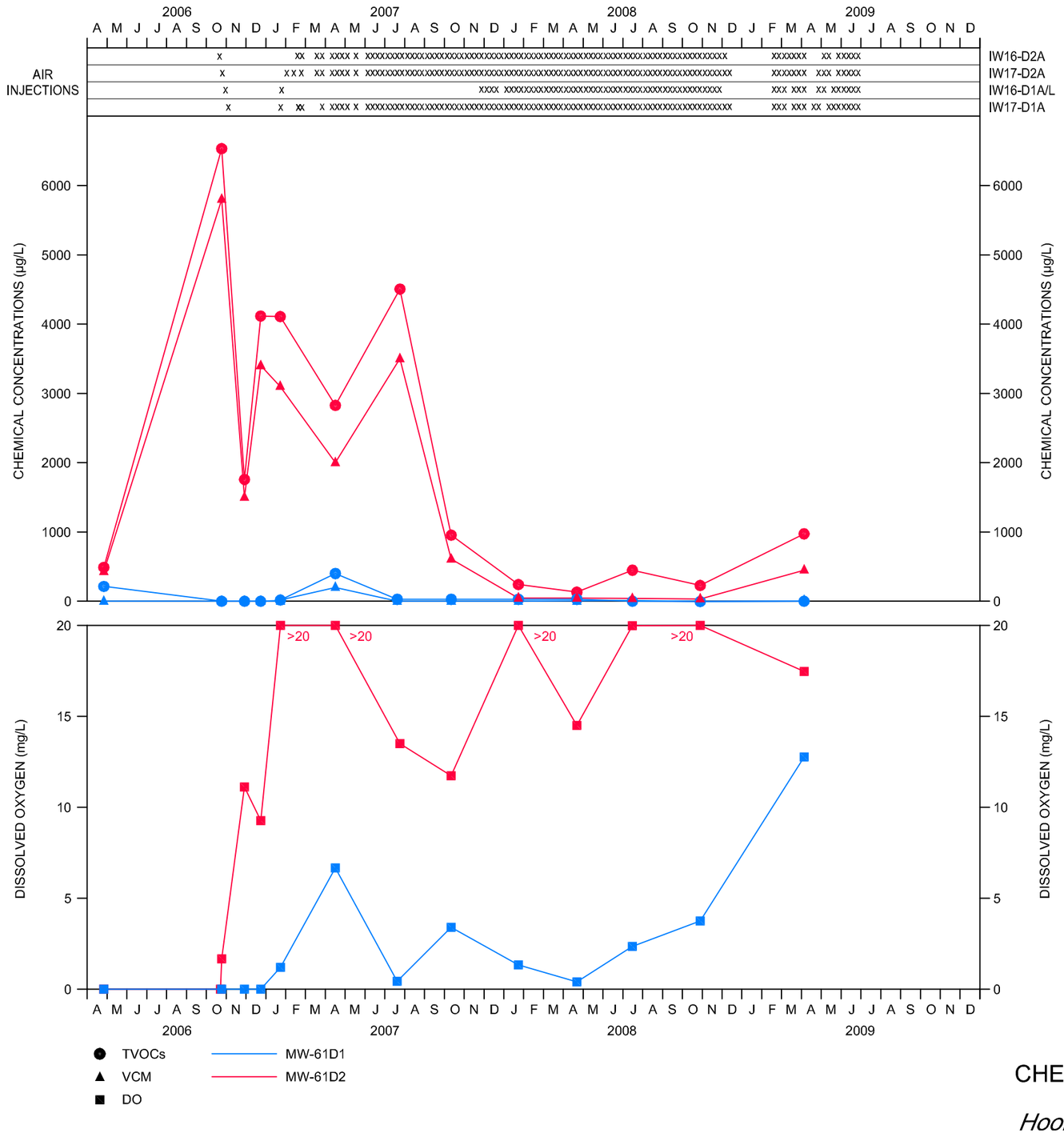


figure 1

BIOSPARGE TREATMENT SYSTEM

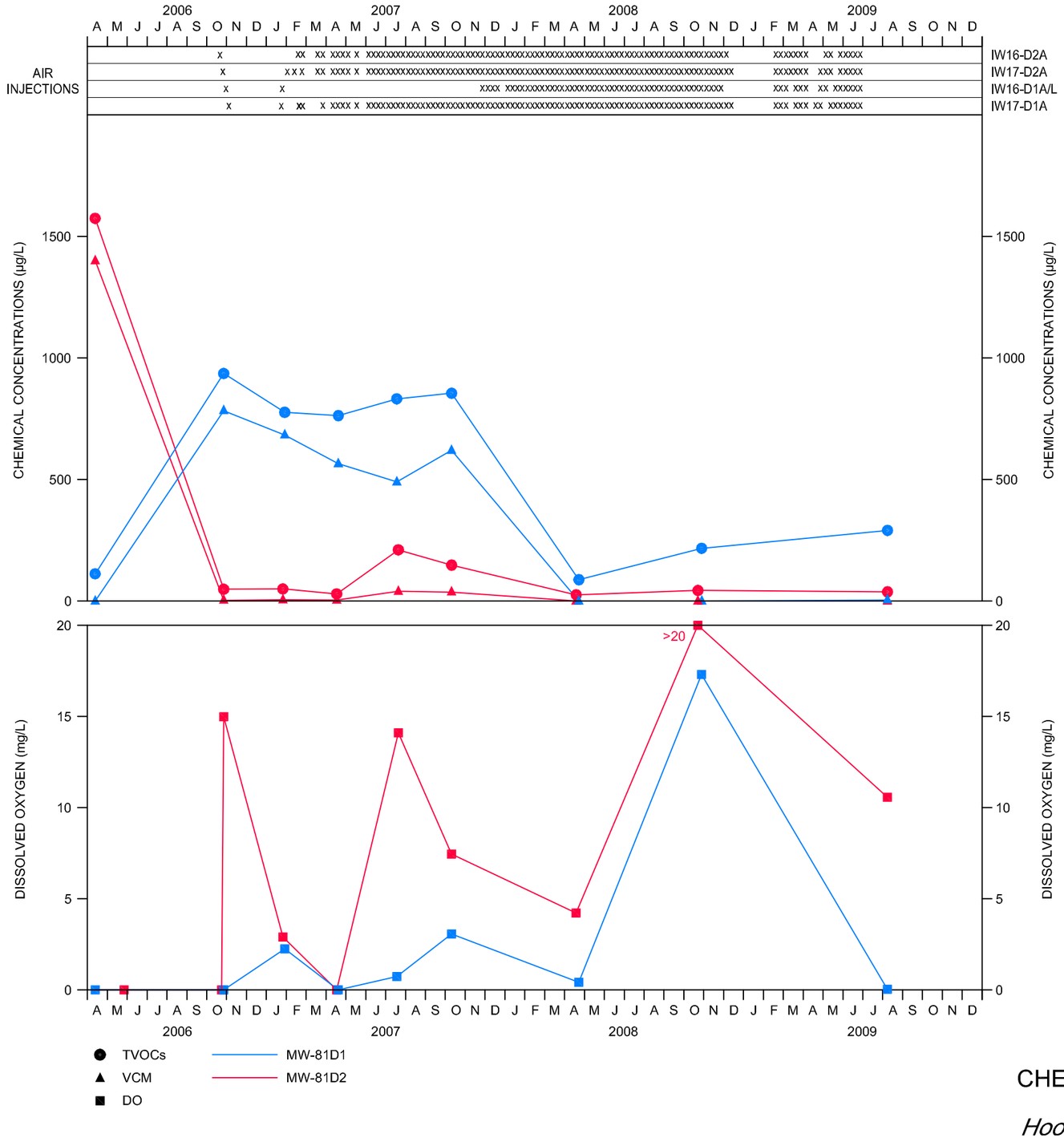
Hooker/Ruco Site, Hicksville, New York

06883-B2631(TACC001)GN-WA001 JUL 06/2009

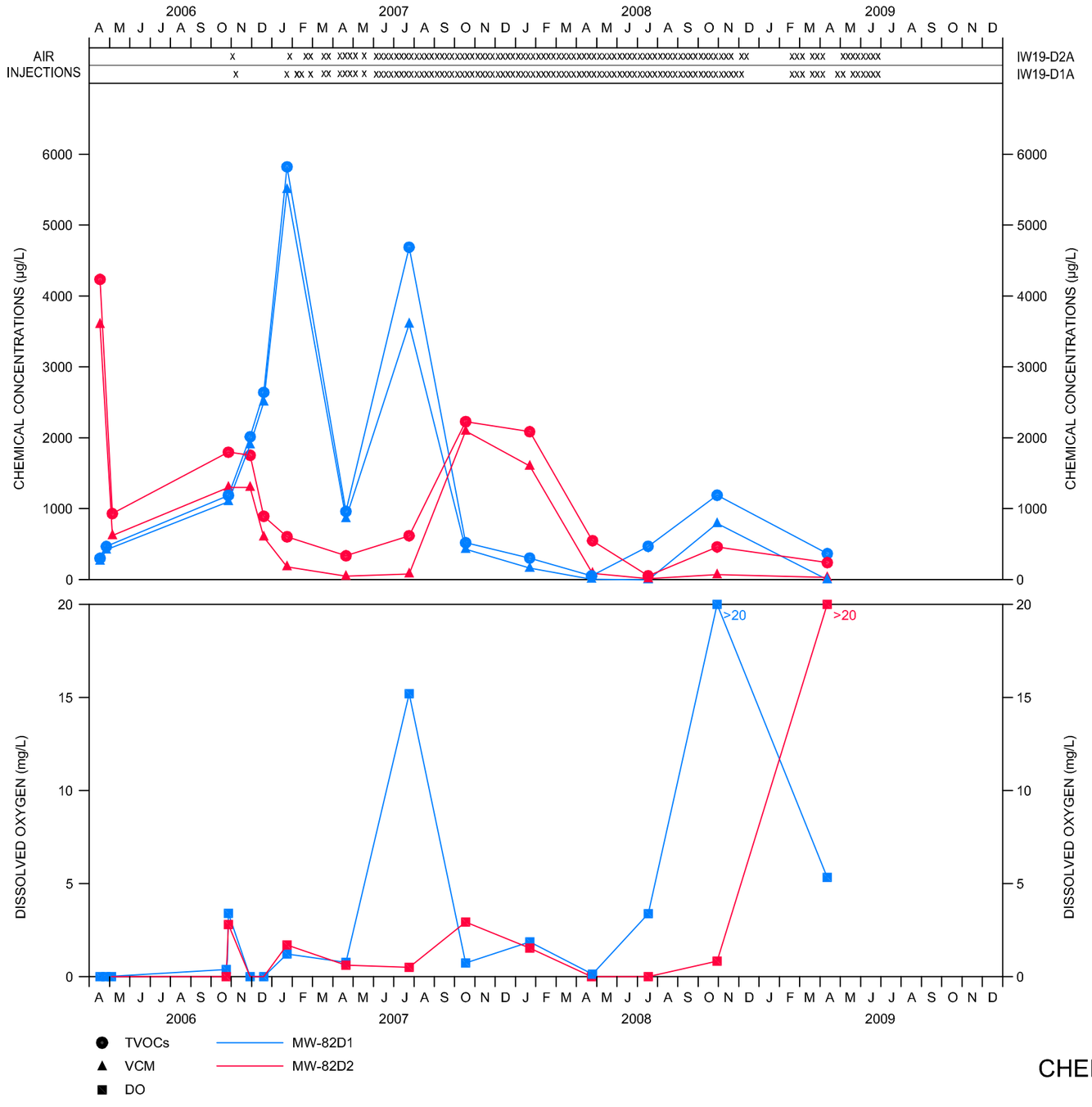


WELL NEST MW-61
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

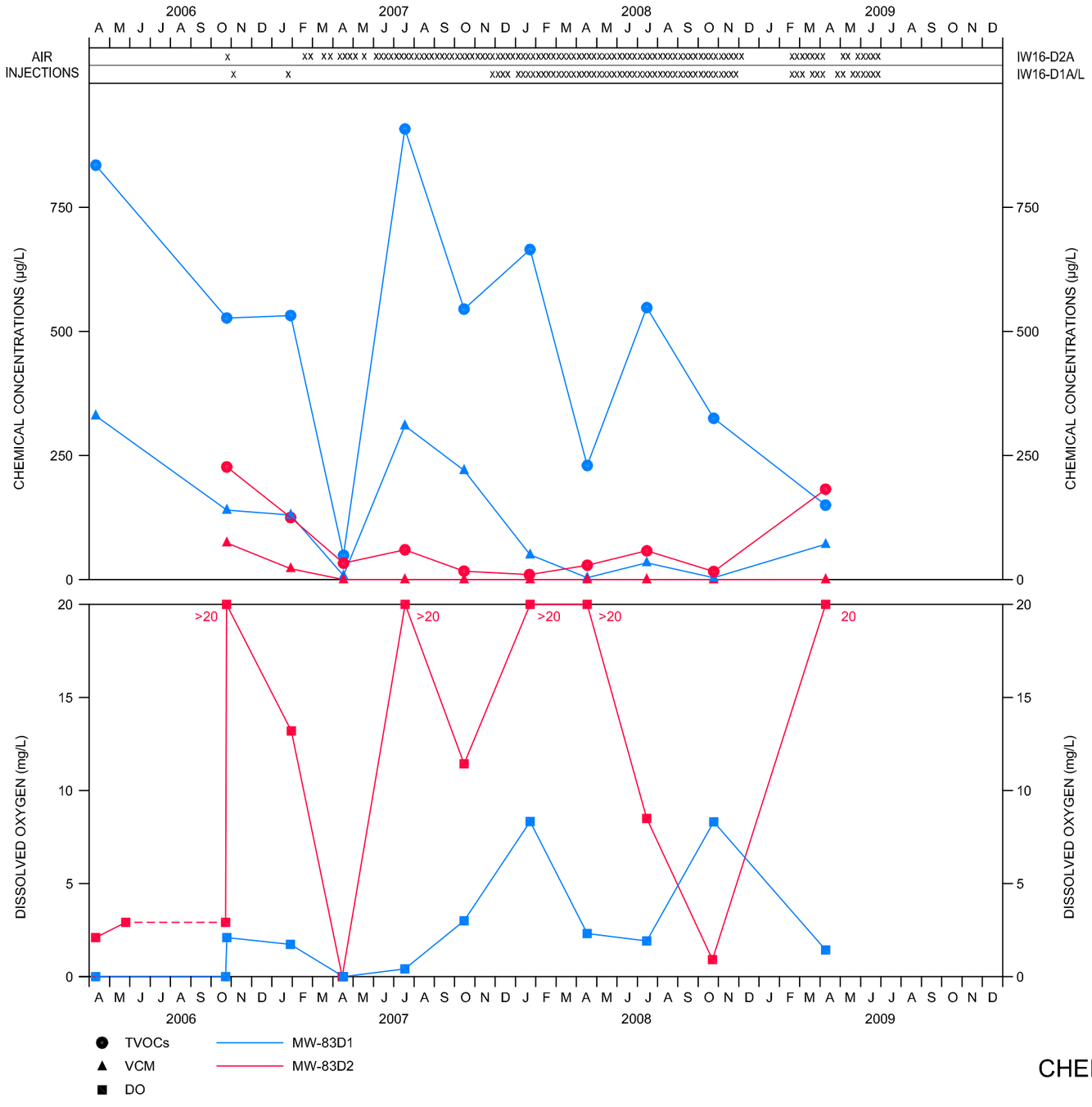
06883-B2631(TACC001)GN-WA002 JUL 06/2009



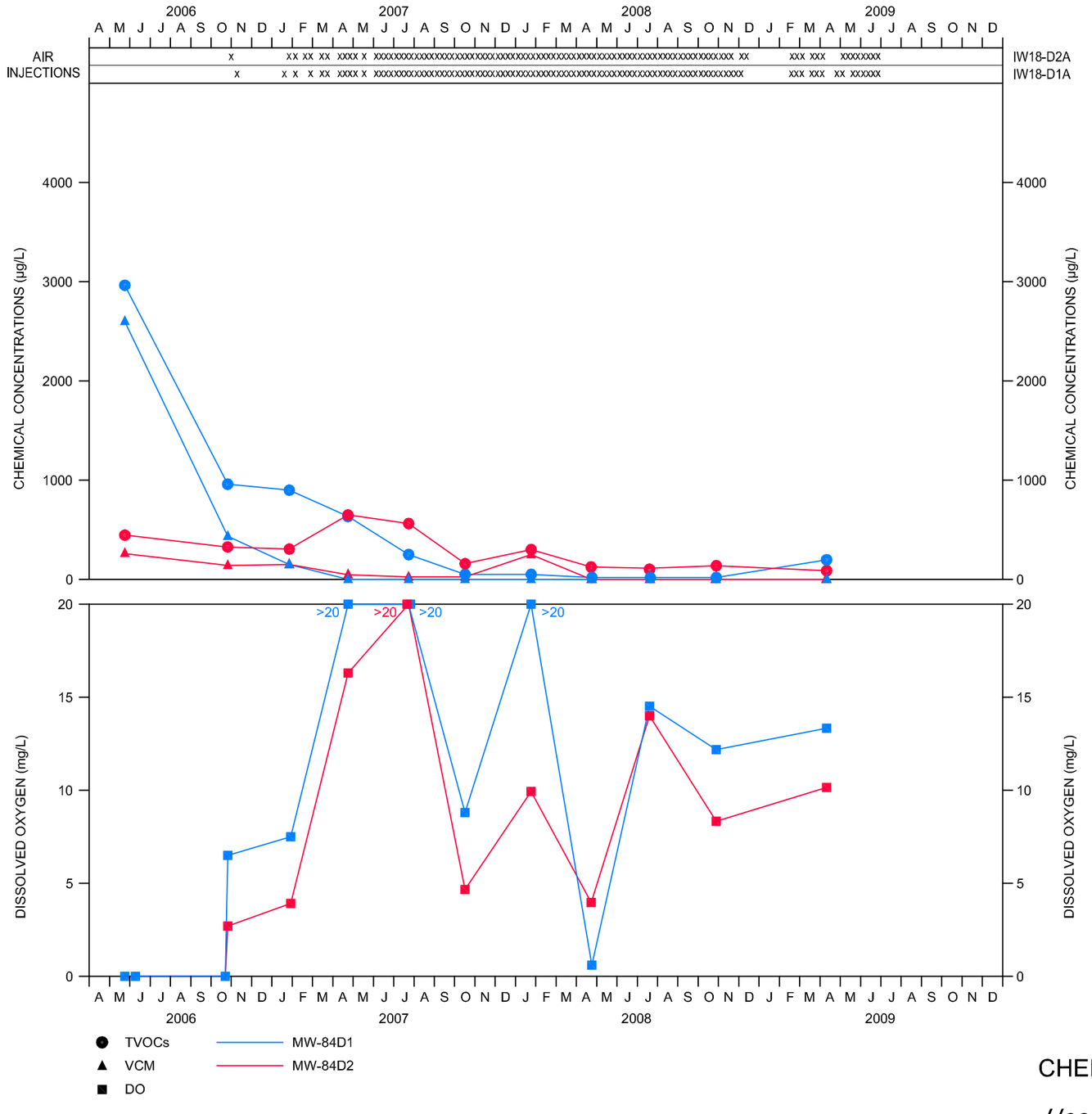
WELL NEST MW-81
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



WELL NEST MW-82
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

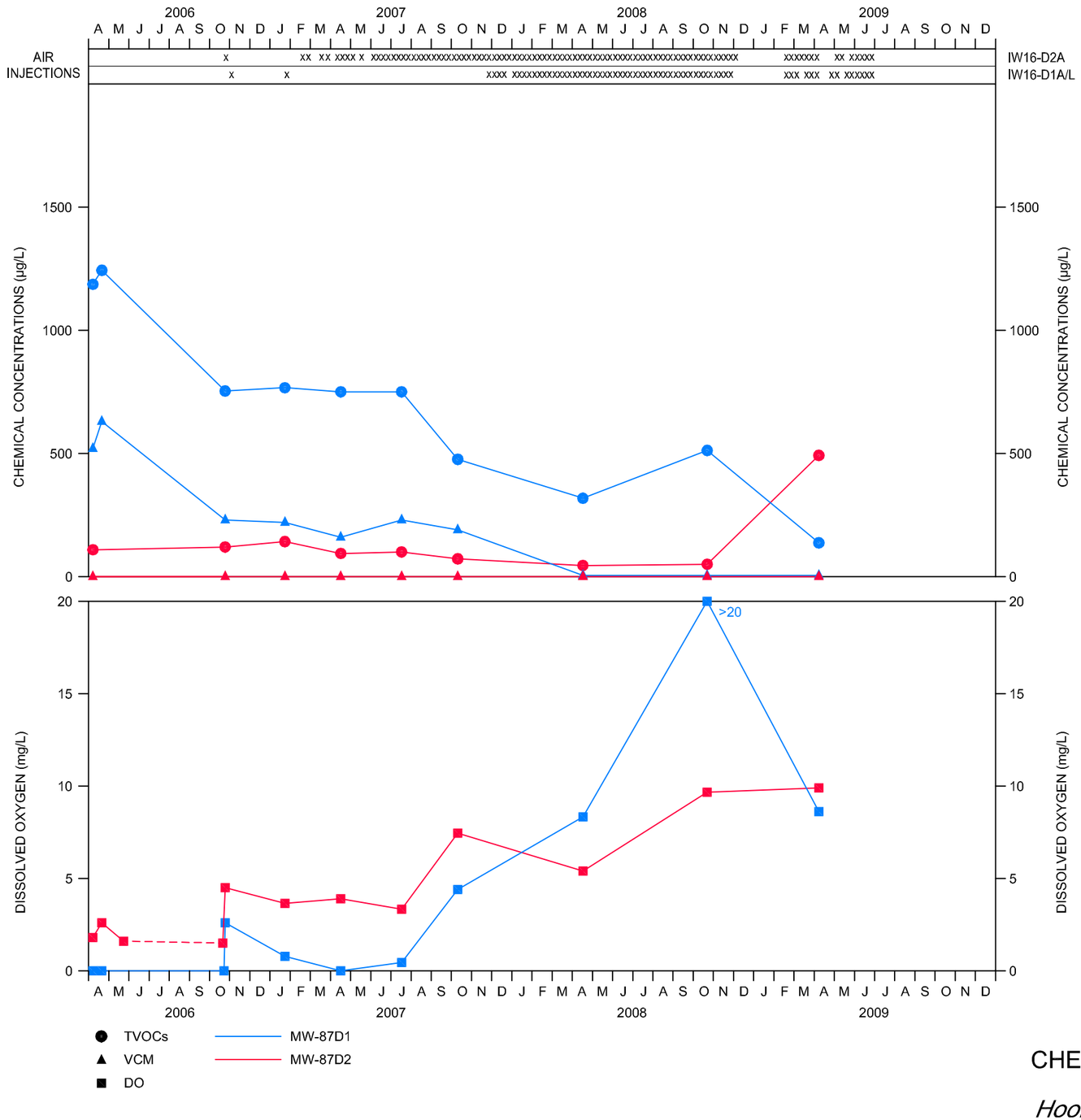


WELL NEST MW-83
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

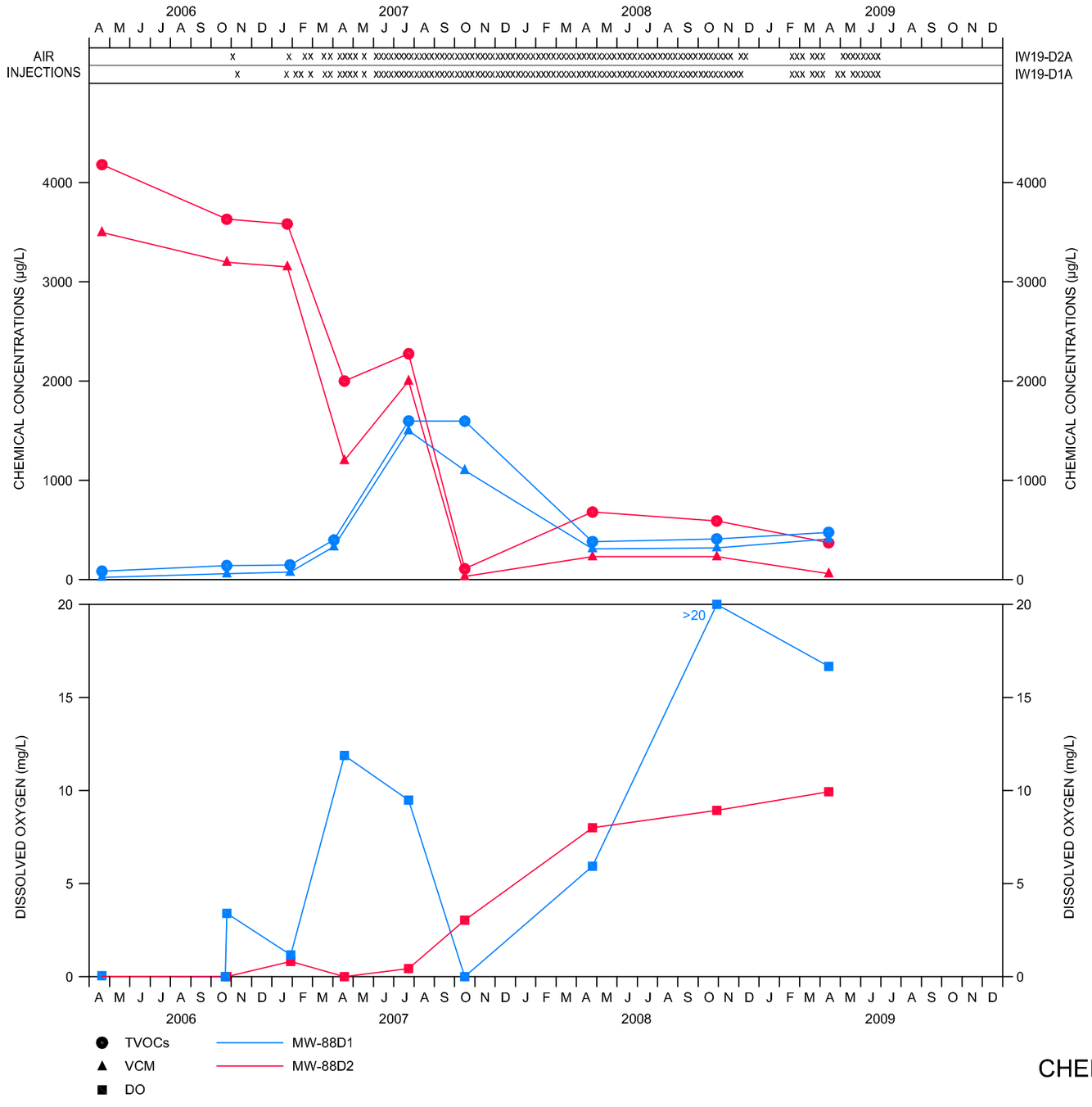


WELL NEST MW-84
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE

Hooker/Ruco Site, Hicksville, New York



WELL NEST MW-87
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York



WELL NEST MW-88
CHEMICAL CONCENTRATION PLOTS
MIDDLE 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)

April through June 2009

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

April through June 2009

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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 Remedy	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

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

April through June 2009

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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
• 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
• Evalution/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

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [1] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
MW-52 S	4/7/2006	0.03	4.3	5.62	14.3	0.199	-7	0.00	0.0	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
MW-58 D1	10/26/2006	0.14	3.2	6.34	16.9	0.222	-101	2.58	68.6	8.80
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-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
	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
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
MW-61 D2	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

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [(1)] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
MW-62I	5/16/2007	0.10	7.1	5.31	14.1	0.278	59	0.00	113	0.69
MW-62D	5/16/2007	0.15	5.4	10.56	14.9	0.119	-125	0.00	570	0.38
MW-63 D1	5/23/2006	0.20	2.4	5.03	15.9	0.152	230	0.00	0.0	0.13
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
MW-63 S	5/19/2006	0.12	2.4	5.20	14.8	0.150	238	0.16	411	0.18
MW-63 I	5/23/2006	0.20	4.6	5.09	15.4	0.154	241	0.00	0.0	0.03
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
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
MW-64D	4/26/2007	0.00	2.7	6.72	14.6	0.324	-115	0.00	22.9	1.98
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
MW-67 D	3/29/2006	0.47	4.3	5.64	17.1	0.223	86	0.50	>999	4.22
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
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
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
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

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [1] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
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
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	0.00
	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
MW-83 D2	5/2/2006	-0.25	3.6	6.00	15.0	0.235	50	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	0.00
	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	0.00
	4/18/2007	0.21	3.4	8.16	13.0	0.233	97	0.00	103	0.00
	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	0.23
	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	0.04
	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
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	0.00
	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	0.13
	10/29/2008	0.03	2.8	5.69	14.1	0.125	319	12.18	231	0.00
	4/9/2009	0.14	4.4	5.71	15.2	0.142	214	13.34	12.5	0.00

TABLE 2

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HOOKER RUCO SITE
HICKSVILLE, NEW YORK

Well	*Date Sampled*	*Drawdown from Initial Water Level* [(1)] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
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
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	0.00	0.00
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
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

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [(1)] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
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
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
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

Notes:

(1) Negative indicates groundwater level during purging higher than initial water level
NM - Not measured
* - Probe malfunctioned.

TABLE 3

SUMMARY OF DETECTED COMPOUNDS (ug/l)
APRIL 2009 PHASE I
BIOSPARGE SYSTEM PERFORMANCE MONITORING
HICKSVILLE, NEW YORK

Well I.D	*MW-61I*		*MW-61D1*		*MW-61D2*		*MW-81D1*		*MW-81D2*	
Date	*4/8/2009*	*4/30/2009*	*4/8/2009*	*4/30/2009*	*4/9/2009*	*4/30/2009*	*4/8/2009*	*4/30/2009*	*4/8/2009*	*4/30/2009*
Sampling Method	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*
Compound										
1,1-DCA					1.9J	1.3J				
1,1-DCE					1.8J	ND5.0	1.0J	ND5.0	1.1J	2.0J
Chloroethane					48	26	2.6J	ND5.0	ND5.0	1.6J
Cis-1,2-DCE							13	15	2.1J	9.8
2-Butanone (MEK)										
PCE	3.7J	4.3J	3.9J/3.7J	3.3J	110	44	80	11	5.2	11
Toluene										
TCE	4.7J	5.7	4.4J/4.3J	5.0	360	210	190	62	30	120
Vinyl Chloride					450	98	4.3J	360		
Xylene (Total)					1.0J	ND5.0				
Ammonia-N	ND200	ND200	ND200/ND200	ND200	630	4900	ND200	967	ND200	1590
Nitrate(asN)	388	385	391/393	389	2770	902	859	64	3150	249
Nitrite (asN)	ND10	ND10	ND10/ND10	ND10	50	51J	41	11	ND10	ND10
Phosphorus	ND77	--	ND37/ND50	--	ND33	--	ND69	--	ND61	--
TOC	ND10,000	--	ND10,000/ND10,000	--	ND10,000	--	ND10,000	--	ND10,000	--

Notes:

J	Estimated Concentration
NDx	Not detected at or about associated value
LFP	Low Flow Purging
PDB	Passive Diffusion Bag
--	Not sampled

TABLE 3

SUMMARY OF DETECTED COMPOUNDS (ug/l)
APRIL 2009 PHASE I
BIOSPARGE SYSTEM PERFORMANCE MONITORING
HICKSVILLE, NEW YORK

Well I.D	*MW-82D1*		*MW-82D2*		*MW-83D1*		*MW-83D2*		*MW-84D1*		*MW-84D2*	
Date	*4/13/2009*	*4/30/2009*	*4/13/2009*	*4/30/2009*	*4/7/2009*	*4/30/2009*	*4/7/2009*	*4/30/2009*	*4/9/2009*	*4/30/2009*	*4/9/2009*	*4/30/2009*
Sampling Method	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*
Compound												
1,1-DCA	3.2J	3.9J	1.6J	1.8J			1.8J	ND5.0				
1,1-DCE	1.8J	2.3J			ND5.0	1.1J	1.5J	ND5.0				
Chloroethane	8.1	19			11	ND5.0						
Cis-1,2-DCE	44	30	13	18	7.1	27	13	1.7J			2.5J	3.0J
2-Butanone (MEK)	100	ND5.0							150	ND5.0		
PCE	47	90	130	160	14	46	13	4.1J	23	12	15J	3.9J
Toluene	ND5.0	8.4	ND5.0	2.2J	ND5.0	1.6J					ND5.0	2.0J
TCE	160	170	91	99	48	210	150	27	24	17	74J	53
Vinyl Chloride	1.7J	38	3.5J	ND5.0	71	36	2.4J	ND5.0				
Xylene (Total)												
Ammonia-N	ND200	ND200	858	1410	867	ND200	443	ND200	ND200	ND200	924	1,990
Nitrate(asN)	82	33	2070	91	108	1640	2,480	5,470	5,240	5,130	1,710	578
Nitrite (asN)	ND10	ND10	90	29	ND10	18	12	ND10	ND10	ND10	173	367
Phosphorus	ND33	--	ND33	--	ND33	--	ND79	--	ND33	--	ND33	--
TOC	ND10,000	--	ND10,000	--	ND10,000	--	ND10,000	--	ND10,000	--	ND10,000	--

Notes:

J	Estimated Concentration
NDx	Not detected at or about associated value
LFP	Low Flow Purging
PDB	Passive Diffusion Bag
--	Not sampled

TABLE 3

SUMMARY OF DETECTED COMPOUNDS (ug/l)
APRIL 2009 PHASE I
BIOSPARGE SYSTEM PERFORMANCE MONITORING
HICKSVILLE, NEW YORK

Well I.D	*MW-87D1*		*MW87-D2*		*MW-88D1*		*MW-88D2*	
Date	*4/7/2009*	*4/30/2009*	*4/7/2009*	*4/30/2009*	*4/13/2009*	*4/30/2009*	*4/14/2009*	*4/30/2009*
Sampling Method	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*	*LFP*	*PDB*
Compound								
1,1-DCA	2.0J	1.2J	1.3J	2.3J			1.5J	2.3J
1,1-DCE	1.6J	2.1J	1.9J	2.3J	1.2J	ND5.0		
Chloroethane	ND5.0	5.2						
Cis-1,2-DCE	1.7J	53	39	1.8J	9.0	5.4	21	53
2-Butanone (MEK)	100	11J			7.3	ND5.0		
PCE	10	73	76	8.1	27	8.8	200	51
Toluene					ND5.0	16	3.0J	32
TCE	22	440	370	29	17	20	86	15
Vinyl Chloride					410	54	59	950
Xylene (Total)					3.7J	ND5.0		
Ammonia-N	ND200	ND200	ND200	ND200	ND200	306J	ND200	1520
Nitrate(asN)	2,550	4,990	3,200	4,950	ND10	88	1180	123
Nitrite (asN)	ND10	ND10	ND10	11	31	ND10	26	18
Phosphorus	ND43	--	ND47	--	ND96	--	ND59	--
TOC	ND10,000	--	ND10,000	--	ND10,000	--	ND10,000	--

Notes:

J	Estimated Concentration
NDx	Not detected at or about associated value
LFP	Low Flow Purging
PDB	Passive Diffusion Bag
--	Not sampled

TABLE 4

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

	VZ-10S						
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/27/2008***	***4/9/2009***
Acetone	12,000	51,000	4,500	14,200	1,390	13,800	1,430
Carbon Disulfide	ND	123J	101	69	105	107	85
Ethanol	ND	24	ND	54	57	43	ND
Methyl Ethyl Ketone	160,000	1,220,000	144,000	277,000	36,200	347,000	28,500
Methyl Chloride	ND	ND	114	106	154	139	42
Tetrachloroethene	ND	1.9J	ND	ND	ND	3.5	ND
Tetrahydrofuran	100,000	480,000	56,500	96,600	13,500	125,000	9,890
Toluene	960	21	13	5.6	11	13	ND
Vinyl Chloride	ND	28	18	21	28	29	ND

	VZ-10D						
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/27/2008***	***4/9/2009***
Acetone	ND/ND	9.8	16	3.5/1.7	8.5	7.2	18
Carbon Disulfide	ND/ND	0.36J	ND	ND/ND	ND	ND	ND
Ethanol	ND/ND	23	8.4	13/11	5.2	ND	20
Methyl Ethyl Ketone	22/22	104	629	88/41	42	374	122
Tetrachloroethene	1.1/0.92	2.6	9.2	14/9.4	8.8	8.4	7.5
Tetrahydrofuran	13/14	28	506	45/24	6.8	250	70
Toluene	ND/ND	ND	ND	0.38/ND	ND	ND	2.8
Vinyl Chloride	0.68/ND	ND	ND	ND/ND	ND	ND	ND

Notes:

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

TABLE 4

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

	VZ-11S						
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/29/2008***	***4/13/2009***
Acetone	5.7	6.7	4.7	3.7	4.1	1.7	ND
Carbon Disulfide	ND	0.69J	ND	ND	0.20J	ND	ND
Ethanol	6.1	7.0	1.5	16	2.3	1.9	ND
Methyl Ethyl Ketone	100	119	96	360	21	8.1	563
Methyl Chloride	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.3	3.3	6.6	3.2	20	23	ND
Tetrahydrofuran	96	30	35	183	4.9	29	445
Toluene	4.3	0.2	ND	ND	0.20	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND

	VZ-11D							
Parameter	***10/26/2006***	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/30/2008***	***4/13/2009***
Acetone	ND	ND/12	32	213	61	5.7	2.6	92
Carbon Disulfide	ND	2.4J/9.2J	6.0J	33	6.0J	0.91	ND	22
Ethanol	ND	4.1/5.4	14	5.9	24	3.0	3.3	ND
Methyl Ethyl Ketone	7,600	780/700	5,540	49,800	4,880	26	77	3,990
Methyl Chloride	ND	ND	ND	58	4.4	ND	ND	39
Tetrachloroethene	ND	4.8/4.6	0.7	5.2	5.6	18	16	ND
Tetrahydrofuran	1,900	190/140	912	15,500	1,560	6.9	23	3,860
Toluene	ND	ND1.3	0.4	ND	ND	0.34	ND	ND
Vinyl Chloride	ND	ND	ND	2.5	ND	ND	ND	ND

Notes:

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

TABLE 4

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

	VZ-14S			
Parameter	***11/28/2006***	***10/15/2007***	***10/27/2008***	***4/9/2009***
Acetone	3.5	4.4	8.2	8.1
Carbon Disulfide	0.79	ND	ND	ND
Ethanol	ND	4.6	2.2	4.2
Methyl Ethyl Ketone	80	41	167	54
Tetrachloroethene	1.5	10	103	30
Tetrahydrofuran	39	53	113	35
Trichloroethene	ND	ND	15	2.7
Vinyl Chloride	0.90	ND	ND	ND

	VZ-14D			
Parameter	***11/28/2006***	***10/15/2007***	***10/27/2008***	***4/9/2009***
Acetone	150	3,600	2,600	256
Carbon Disulfide	ND	110	63	39
Ethanol	ND	ND	6.1	ND
Methyl Ethyl Ketone	4,200	351,000	128,000	15,200
Methyl Chloride	ND	101	93	30
Tetrachloroethene	ND	6.4	11	ND
Tetrahydrofuran	2,800	306,000	118,000	13,900
Trichloroethene	ND	ND	ND	ND
Vinyl Chloride	17	6.7	6.1	ND

Notes:

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

TABLE 4

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

	VZ-15S			
Parameter	***11/28/2006***	***10/16/2007***	***10/29/2008***	***4/9/2009***
Acetone	ND	30	2.8	13
Carbon Disulfide	ND	ND	ND	ND
Ethanol	ND	ND	2.0J	5.3
Methyl Ethyl Ketone	15,000	7,370	224	552
Methyl Chloride	ND	ND	ND	ND
Tetrachloroethene	ND	ND	9.2	19
Tetrahydrofuran	4,700	1,690	52	168
Vinyl Chloride	ND	ND	ND	ND

	VZ-15D			
Parameter	***11/28/2006***	***10/16/2007***	***10/29/2008***	***4/9/2009***
Acetone	16	51	12	10
Carbon Disulfide	2.9	21	30	21
Ethanol	8.9	ND	4.3J	7.3
Methyl Ethyl Ketone	150	2,340	268	83
Methyl Chloride	19	91	88	25
Tetrachloroethene	590	7	6.3	3.1
Tetrahydrofuran	16	16,000	6,290	113
Vinyl Chloride	ND	7.8	16	12

Notes:

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

TABLE 4

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

	VZ-16S		
Parameter	***10/17/2007***	***10/30/2008***	***4/13/2009***
Acetone	2.9	2.5	2.6
Carbon Disulfide	ND	ND	ND
Chloroethane	ND	ND	ND
Ethanol	1.9	0.71	0.73
Methyl Ethyl Ketone	9.6	1.7	23
Methyl Chloride	ND	0.35	ND
Tetrachloroethene	12	2.4	7.2
Tetrahydrofuran	31	2.8	30
Toluene	2.6	1.1	ND
Vinyl Chloride	ND	ND	ND

	VZ-16D		
Parameter	***10/17/2007***	***10/30/2008***	***4/13/2009***
Acetone	144,000	145,000	22,900
Carbon Disulfide	120,000	60,000	ND
Chloroethane	120,000	152	ND
Ethanol	ND	ND	ND
Methyl Ethyl Ketone	3,240,000	2,580,000	308,000
Methyl Chloride	120,000	60,000	ND
Tetrachloroethene	3.6	6.4	ND
Tetrahydrofuran	1,500,000	1,530,000	230,000
Toluene	44	28	ND
Vinyl Chloride	262	157	ND

Notes:

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