Glenn Springs Holdings, Inc.

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July 12, 2010

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, New York
U.S.A. 10007-1866

Dear Mr. Taccone:

Re: Quarterly Report – Second Quarter 2010 (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, respectively, and the USEPA approved 100% Biosparge System Design Report, this submittal provides the Quarterly Progress Report covering April through June 2010 for the Hooker/Ruco Site. This report covers OU-1, OU-2 and OU-3. Please note that the next Quarterly Progress Report will be submitted by October 15, 2010 and will cover July through September 2010.

Quarterly Progress Report

The following activities were performed in April through June 2010.

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 air treatment system continued

- The carbon bed was changed out on May 27, 2010
- The potassium permanganate bed was changed out on June 4, 2010
- Evaluations of possible upgrade alternatives for the supplemental treatment system are ongoing

Biosparge System (see Figure 1 for system layout and Figure 2 for system cross-section)

A contingency plan to prevent an extended shut-down period in the future has been implemented. The plan involved the purchase and installation of a second compressor. The second compressor was tested and became operational in April 2010.

Notification of the first semi-annual biosparge system performance monitoring event for 2010 was emailed to the USEPA on April 26, 2010. In conjunction with the biosparge sampling event, additional groundwater monitoring wells were sampled to provide current information on the nature and extent of the chemical concentrations within the VCM plume. Sample collection for this event occurred between May 3 and May 25, 2010. The QA/QC review is included in Attachment A.

USEPA response was received March 30, 2010 on the evaluation comparing low-flow purging (LFP) to permeable diffusion bag (PDB)/HydraSleeve™ sample results submitted by Langan Engineering and Environmental Services on February 11, 2010. USEPA requested that a work plan, including a Quality Assurance Project Plan (QAPP), for a controlled study be submitted for approval to further evaluate the use of PDB/HydraSleeve™ samplers. A letter dated May 12, 2010 was submitted to the USEPA requesting permission for submission of an Addendum to the current OU-3 QAPP rather than a stand-alone QAPP. USEPA approved this request and the QAPP Addendum was submitted on July 9, 2010.

As part of the biosparge system monitoring program, soil gas samples of the vadose zone have also been collected. The results (see Table 3) show that VCM concentrations were non-detect in each of the vadose zone monitoring wells. The May 2010 results are consistent with the findings from the April 2009 and October 2009 sampling events.

Summary of Biosparge Pilot System

To date, the biosparge system has operated 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 - see attached chemical concentration plot figures)

ii. The vinyl chloride monomer (VCM) concentrations are decreasing as a result of the microbial biodegradation processes (see attached chemical concentration plot figures)

Current Nature and Extent of VCM Plume

The May 2010 groundwater VCM concentrations are shown on Figure 10. Comparison with the 2006 VCM concentrations prior to operation of the Phase 1 Biosparge System (see Figure 11) shows the following:

i. The concentrations in the core of the VCM plume in the area of the Phase 1 system have decreased significantly. This is consistent with the information provided by letter dated November 30, 2009.

ii. The northern extent of the VCM plume (as defined by the 2 µg/L contour) appears to have moved approximately 600 feet down gradient from the area of well F-1 to the area just up gradient of well nest MW-64. This has reduced the overall areal extent of the VCM plume.

iii. The southerly extent (i.e., near Northrop well GP-3) and width of VCM plume are essentially the same between 2006 and 2010.

Due to the inability to sample well MW-90D1 (damaged during construction of the Sleepy's facility) and well nest MW-66 (paved over), the current VCM concentrations in these areas which had elevated VCM concentrations (>1,000 µg/L) in 2006 could not be determined. The repairs of MW-90D1 and well nest MW-66 will be performed during the time period when the remainder of the biosparge system middle fence is constructed.

Planned Third Quarter 2010 Activities

- The following activities are planned for the third quarter of 2010:

  i. Continue operation and monitoring of the GP-1/GP-3 supplemental air treatment system

  ii. Changeout of the supplemental treatment system carbon bed is tentatively planned for the week of August 16, 2010

  iii. Continue with arrangement of contractors for the installation of the remainder of the biosparge system middle fence and two locations within the north fence

- 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 approval of the QAPP Addendum

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 Kogut

Jeffrey A. Kogut

KDS/ev/006883/9
Encl.

cc: 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)

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

April through June 2010

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 - Revised	 100 100	 June 1, 1999 February 16, 2001		 June 11, 1999 May 28, 2001
• 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

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HOOKER/RUCO SITE
HICKSVILLE, NEW YORK

Groundwater Investigations Beyond the Ruco Property (OU-3)

April through June 2010

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

TABLE 1

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HICKSVILLE, NEW YORK

Groundwater Investigations Beyond the Ruco Property (OU-3)

April through June 2010

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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
• 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™ Evaluation	100			February 11, 2010
• Trailing Edge Proposal	100			March 15, 2010
• Distribution of RFP for Biosparge System Well Installation	100			June 25, 2010

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	04/07/2006	0.03	4.3	5.62	14.3	0.199	-7	0.00	0	1.60
	03/13/2007	0.20	6.1	6.34	14.8	0.652	5	1.64	58.4	1.66
MW-52 I	04/13/2006	0.04	4.5	4.56	15.0	0.121	303	9.77	12.4	0.05
	03/14/2007	0.05	4.9	5.42	14.6	0.192	259	5.85	44.8	0.04
MW-52D	03/14/2007	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	04/28/2006	0.00	4.6	5.68	14.3	0.221	139	0.00	121	1.76
	05/08/2006	0.08	1.9	4.86	14.9	0.182	136	0.00	64.7	1.49
	05/18/2006	0.20	2.9	4.90	16.1	0.155	123	0.00	571	2.16
	05/30/2006	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
	01/24/2007	-0.05	4.5	5.54	14.9	0.275	101	1.93	46.4	1.84
	04/19/2007	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
MW-61 D1	04/28/2006	0.00	4.7	6.07	14.5	0.210	122	0.00	356	1.78
	05/08/2006	0.05	5.7	5.07	15.0	0.210	101	0.00	172	2.77
	05/18/2006	0.16	2.9	5.18	16.2	0.170	91	0.00	>999	>3.30
	05/30/2006	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
	01/23/2007	0.00	8.1	5.73	14.3	0.389	54	1.21	137	1.84
	04/19/2007	0.14	8.1	6.19	14.6	0.304	79	6.66	95.9	0.26
	07/20/2007	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
MW-61 D2	04/28/2006	0.05	6.4	7.03	15.2	0.230	-186	0.00	413	2.00
	05/05/2006	0.00	10.5	6.65	15.1	0.370	-160	0.00	>999	10.08
	05/18/2006	0.30	4.9	6.63	16.1	0.294	-127	0.00	999	>3.30
	05/30/2006	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
	01/23/2007	0.10	5.1	6.62	14.0	0.273	131	>20	>999	0.89
	04/23/2007	0.05	8.6	5.38	15.1	0.189	361	>20	231	0.21
	07/23/2007	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

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-61D2	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
MW-62I	05/16/2007	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	05/16/2007	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	05/23/2006	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	05/24/2006	-0.21	5.5	5.30	15.0	0.152	246	0.41	6.5	NM
	06/14/2006	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	05/19/2006	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	05/23/2006	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	03/23/2006	0.10	2.9	5.83	14.3	0.188	-18	0.00	13.8	4.71
	04/26/2007	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	03/24/2006	-0.01	3.6	5.87	14.1	0.203	-38	0.00	0.0	3.21
	04/26/2007	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	04/26/2007	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	04/03/2006	0.03	5.2	5.23	15.2	0.197	-16	0.00	24.3	4.50
MW-67 S	03/28/2006	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	03/29/2006	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	04/06/2006	-0.10	5.1	8.87	17.4	0.144	-281	0.00	27.8	0.60
MW-68 D	03/31/2006	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
MW-81 D1	04/12/2006	0.16	2.9	6.44	14.5	0.228	-65	0.00	132	1.47
	05/02/2006	0.05	2.9	5.44	15.1	0.303	-31	0.00	0.9	3.20
	05/17/2006	0.00	3.9	6.04	16.8	0.263	-75	0.00	86.4	2.81
	05/25/2006	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
	01/29/2007	-0.07	6.1	6.19	13.1	0.429	-55	2.26	704	2.36
	04/19/2007	0.18	5.3	6.20	14.2	0.380	-128	0.00	629	2.06
	07/23/2007	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
MW-81 D2	04/12/2006	0.05	2.4	5.79	15.2	0.357	-51	0.00	4.1	5.04
	05/04/2006	0.00	5.8	6.12	16.8	0.204	-6	1.10	119	1.37
	05/18/2006	0.12	3.4	8.18	15.1	0.220	-58	0.00	906	>3.30
	05/26/2006	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
	01/24/2007	-0.05	5.9	7.21	13.1	0.234	-39	2.90	>999	0.98
	04/18/2007	0.00	1.3	9.84	12.5	0.301	-110	0.00	519	2.71
	07/19/2007	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
	04/18/2008	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	0.5

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 D1	04/17/2006	0.00	2.8	6.88	16.4	0.391	-126	0.00	10.8	1.28
	04/25/2006	0.12	4.9	6.23	17.2	0.351	-170	0.00	281	1.89
	05/11/2006	0.10	2.4	6.39	16.5	0.356	-190	0.00	150	4.32
	05/25/2006	0.00	6.6	6.27	17.8	0.341	-200	0.00	226	5.22
	05/31/2006	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
	01/25/2007	0.05	5.7	7.25	12.9	0.440	-145	1.21	48.8	1.94
	04/20/2007	0.05	2.6	6.76	18.1	0.305	-153	0.76	357	2.79
	07/25/2007	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
MW-82 D2	04/17/2006	0.08	3.6	6.14	16.2	0.256	-152	0.00	636	5.12
	04/24/2006	0.00	4.3	7.34	15.7	0.295	-367	0.00	315	1.64
	05/25/2006	0.00	2.9	6.06	17.2	0.239	-140	0.00	95	3.02
	06/05/2006	0.05	3.0	6.52	17.7	0.251	-139	0.00	65.1	6.40
	05/31/2006	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
	01/25/2007	0.00	3.2	7.23	13.5	0.284	-147	1.70	66.1	2.01
	04/20/2007	0.00	3.4	6.87	18.9	0.182	-183	0.61	182	1.91
	07/25/2007	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
MW-83 D1	04/11/2006	0.08	4.3	10.04	15.3	0.472	-195	0.00	648	0.20
	05/01/2006	0.07	4.5	10.35	17.1	0.518	-125	0.00	178	0.44
	05/16/2006	0.01	5.7	11.56	13.5	0.978	-235	0.00	>999	1.20
	05/24/2006	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
	01/30/2007	0.03	5.3	11.07	13.4	0.342	6	1.74	79.4	0.01
	04/18/2007	0.00	4.9	10.70	12.7	0.256	-70	0.00	690	0.00
	07/17/2007	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
MW-83 D2	05/02/2006	-0.25	3.6	6.00	15.0	0.235	50	1.70	0.0	0.49
	05/16/2006	0.08	4.5	6.88	15.0	0.224	42	2.02	0.0	0.02
	05/25/2006	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
	01/29/2007	0.00	2.9	6.55	10.3	0.197	249	13.20	69.3	0.00
	04/18/2007	0.21	3.4	8.16	13.0	0.233	97	0.00	103	0.00
	07/17/2007	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

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-83D2	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
MW-84 D1	05/23/2006	0.09	1.7	6.25	16.1	0.301	-71	0.00	18.5	3.19
	05/26/2006	0.00	3.4	6.45	16.8	0.305	-118	0.00	91.9	4.50
	06/06/2006	0.15	4.1	6.55	16.6	0.280	-139	0.00	10.3	5.50
	06/08/2006	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
	01/30/2007	0.00	3.6	6.16	13.1	0.254	160	7.53	188	1.24
	04/24/2007	0.00	3.6	6.49	16.5	0.249	282	>20	113	0.05
	07/24/2007	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	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
	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
MW-84 D2	05/23/2006	0.15	3.9	6.74	17.4	0.246	-131	0.00	780	12.68
	05/30/2006	0.20	2.4	6.59	18.8	0.241	-152	2.70	595	3.18
	06/06/2006	0.00	5.7	7.17	16.8	0.219	-221	0.00	228	2.70
	06/08/2006	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
	01/29/2007	0.00	1.9	9.97	12.2	0.322	7	3.91	199	0.18
	04/24/2007	0.10	6.7	10.22	16.5	0.339	138	16.31	470	0.30
	07/24/2007	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
MW-87 D1	04/05/2006	-0.04	2.9	5.04	12.8	0.197	142	0.00	64	0.99
	04/20/2006	0.02	3.9	4.94	17.5	0.184	218	0.00	43.8	0.30
	05/04/2006	0.02	2.6	5.03	16.2	0.187	231	0.00	0.0	0.34
	05/15/2006	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
	01/24/2007	0.10	2.1	5.31	14.7	0.200	248	0.78	11.0	0.10
	04/17/2007	0.10	5.3	5.47	14.5	0.999	169	0.00	62	0.14
	07/17/2007	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
MW-87 D2	04/05/2006	0.00	2.8	5.21	14.1	0.172	121	1.81	129	1.14
	04/25/2006	-0.05	5.1	5.40	15.5	0.163	149	2.62	42.8	0.20
	05/15/2006	0.32	4.3	5.80	15.4	0.152	104	1.59	54.8	NM
	05/24/2006	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
	01/24/2007	0.00	4.7	5.61	13.3	0.186	131	3.64	160	0.25
	04/17/2007	0.00	5.3	5.83	14.5	0.228	106	3.89	0.9	0.09
	07/16/2007	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

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-87 D2	5/5/2010	0.05	0.2	4.34	15.3	0.138	222	4.15	17.1	NM
MW-88 D1	04/19/2006	0.08	2.9	6.09	17.9	0.273	-90	0.00	>999	9.64
	04/26/2006	0.32	6.7	5.99	16.7	0.204	-53	0.00	589	4.96
	05/10/2006	0.25	4.2	5.68	15.4	0.200	-2	0.00	393	2.75
	05/30/2006	0.00	3.6	5.90	17.1	0.188	-65	3.13	408	3.62
	06/01/2006	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
	01/30/2007	0.10	2.9	6.12	11.8	0.193	-45	1.16	257	2.01
	04/19/2007	0.03	4.9	5.84	15.4	0.187	172	11.88	334	1.84
	07/26/2007	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
MW-88 D2	04/20/2006	0.00	3.7	6.25	17.4	0.244	-152	0.00	951	6.16
	05/10/2006	0.03	3.5	8.05	16.6	0.330	-331	0.00	>999	9.44
	06/01/2006	0.00	4.9	7.24	18.5	0.287	-210	0.00	>999	12.95
	06/07/2006	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
	01/25/2007	0.00	8.5	9.17	11.3	0.323	-315	0.82	993	0.16
	04/19/2007	0.10	4.0	7.13	16.8	0.278	-219	0.37	>999	2.17
	07/26/2007	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
MW-90 D1	06/13/2006	0.10	7.8	6.25	17.0	0.230	-112	0.00	76.8	4.10
	04/25/2007	0.00	4.9	6.07	16.1	0.231	-100	0.93	542	2.30
MW-90 D2	06/13/2006	0.05	7.8	5.91	18.4	0.191	-9	0.20	95.3	3.06
	04/25/2007	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	2.50

Notes:

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

TABLE 3

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

	VZ-10S								
Parameter	*11/28/2006*	*07/25/2007*	*10/15/2007*	*1/24/2008*	*7/18/2008*	*10/27/2008*	*4/9/2009*	*10/15/2009*	*5/14/2010*
Acetone	12,000	51,000	4,500	14,200	1,390	13,800	1,430	6,500	1.8
Carbon Disulfide	ND	123J	101	69	105	107	85	885	ND
Ethanol	ND	24	ND	54	57	43	ND	1.4	3.7
Methyl Ethyl Ketone	160,000	1,220,000	144,000	277,000	36,200	347,000	28,500	130,000	11
Methyl Chloride	ND	ND	114	106	154	139	42	ND	ND
Tetrachloroethene	ND	1.9J	ND	ND	ND	3.5	ND	ND	3.4
Tetrahydrofuran	100,000	480,000	56,500	96,600	13,500	125,000	9,890	57,700	4.4
Toluene	960	21	13	5.6	11	13	ND	ND	ND
Vinyl Chloride	ND	28	18	21	28	29	ND	ND	ND

	VZ-10D								
Parameter	*11/28/2006*	*07/25/2007*	*10/15/2007*	*1/24/2008*	*7/18/2008*	*10/27/2008*	*4/9/2009*	*10/15/2009*	*5/14/2010*
Acetone	ND/ND	9.8	16	3.5/1.7	8.5	7.2	18	0.90	1750
Carbon Disulfide	ND/ND	0.36J	ND	ND/ND	ND	ND	ND	ND	ND
Ethanol	ND/ND	23	8.4	13/11	5.2	ND	20	1.4	ND
Methyl Ethyl Ketone	22/22	104	629	88/41	42	374	122	23.5	32,100
Tetrachloroethene	1.1/0.92	2.6	9.2	14/9.4	8.8	8.4	7.5	18	ND
Tetrahydrofuran	13/14	28	506	45/24	6.8	250	70	23	20,100
Toluene	ND/ND	ND	ND	0.38/ND	ND	ND	2.8	ND	ND
Vinyl Chloride	0.68/ND	ND	ND	ND/ND	ND	ND	ND	ND	ND

Notes:

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

TABLE 3

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

	VZ-11S								
Parameter	*11/28/2006*	*07/25/2007*	*10/15/2007*	*1/24/2008*	*7/18/2008*	*10/29/2008*	*4/13/2009*	*10/20/2009*	*5/14/2010*
Acetone	5.7	6.7	4.7	3.7	4.1	1.7	ND	0.83	3.4
Carbon Disulfide	ND	0.69J	ND	ND	0.20J	ND	ND	ND	ND
Ethanol	6.1	7.0	1.5	16	2.3	1.9	ND	1.5	4.0
Methyl Ethyl Ketone	100	119	96	360	21	8.1	563	17	100
Methyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.3	3.3	6.6	3.2	20	23	ND	11	6.3
Tetrahydrofuran	96	30	35	183	4.9	29	445	18	97
Toluene	4.3	0.2	ND	ND	0.20	ND	ND	ND	1.3
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND

	VZ-11D									
Parameter	*10/26/2006*	*11/28/2006*	*07/25/2007*	*10/15/2007*	*1/24/2008*	*7/18/2008*	*10/30/2008*	*4/13/2009*	*10/20/2009*	*5/14/2010*
Acetone	ND	ND/12	32	213	61	5.7	2.6	92	3.0	3.6
Carbon Disulfide	ND	2.4J/9.2J	6.0J	33	6.0J	0.91	ND	22	0.61	0.54
Ethanol	ND	4.1/5.4	14	5.9	24	3.0	3.3	ND	27	5.8
Methyl Ethyl Ketone	7,600	780/700	5,540	49,800	4,880	26	77	3,990	90	100
Methyl Chloride	ND	ND	ND	58	4.4	ND	ND	39	ND	0.43
Tetrachloroethene	ND	4.8/4.6	0.7	5.2	5.6	18	16	ND	0.87	23
Tetrahydrofuran	1,900	190/140	912	15,500	1,560	6.9	23	3,860	114	111
Toluene	ND	ND1.3	0.4	ND	ND	0.34	ND	ND	ND	0.38J
Vinyl Chloride	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND

Notes:

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

TABLE 3

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***	***10/15/2009***	***5/14/2010***
Acetone	3.5	4.4	8.2	8.1	1.4	9.0
Carbon Disulfide	0.79	ND	ND	ND	ND	ND
Ethanol	ND	4.6	2.2	4.2	1.8	4.1
Methyl Ethyl Ketone	80	41	167	54	2.7	1.4
Tetrachloroethene	1.5	10	103	30	56	17
Tetrahydrofuran	39	53	113	35	5.8	15
Trichloroethene	ND	ND	15	2.7	1.5	0.38J
Vinyl Chloride	0.90	ND	ND	ND	ND	ND

	VZ-14D					
Parameter	***11/28/2006***	***10/15/2007***	***10/27/2008***	***4/9/2009***	***10/15/2009***	***5/14/2010***
Acetone	150	3,600	2,600	256	2,160	222
Carbon Disulfide	ND	110	63	39	697	39J
Ethanol	ND	ND	6.1	ND	1,130	ND
Methyl Ethyl Ketone	4,200	351,000	128,000	15,200	61,400	10,600
Methyl Chloride	ND	101	93	30	ND	ND
Tetrachloroethene	ND	6.4	11	ND	ND	ND
Tetrahydrofuran	2,800	306,000	118,000	13,900	67,600	9,750
Trichloroethene	ND	ND	ND	ND	252	ND
Vinyl Chloride	17	6.7	6.1	ND	ND	ND

Notes:

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

TABLE 3

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*	*10/15/2009*	*6/8/2010*
Acetone	ND	30	2.8	13	0.65	55
Carbon Disulfide	ND	ND	ND	ND	ND	19J
Ethanol	ND	ND	2.0J	5.3	1.2	41
Methyl Ethyl Ketone	15,000	7,370	224	552	19	ND
Methyl Chloride	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	9.2	19	5.2	ND
Tetrahydrofuran	4,700	1,690	52	168	22	5,210
Vinyl Chloride	ND	ND	ND	ND	ND	ND

	VZ-15D					
Parameter	*11/28/2006*	*10/16/2007*	*10/29/2008*	*4/9/2009*	*10/15/2009*	*6/8/2010*
Acetone	16	51	12	10	237	3.6
Carbon Disulfide	2.9	21	30	21	82	ND
Ethanol	8.9	ND	4.3J	7.3	150	2.0
Methyl Ethyl Ketone	150	2,340	268	83	75	83
Methyl Chloride	19	91	88	25	ND	ND
Tetrachloroethene	590	7	6.3	3.1	ND	23
Tetrahydrofuran	16	16,000	6,290	113	6,420	28
Vinyl Chloride	ND	7.8	16	12	ND	ND

Notes:

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

TABLE 3

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***	***10/20/2009***	***5/14/2010***
Acetone	2.9	2.5	2.6	3.9	9.3
Carbon Disulfide	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND
Ethanol	1.9	0.71	0.73	8.2	4.5
Methyl Ethyl Ketone	9.6	1.7	23	9.3	2.0
Methyl Chloride	ND	0.35	ND	0.29	0.33J
Tetrachloroethene	12	2.4	7.2	18	27
Tetrahydrofuran	31	2.8	30	11	1.0
Toluene	2.6	1.1	ND	0.48	2.9
Vinyl Chloride	ND	ND	ND	ND	ND

	VZ-16D				
Parameter	***10/17/2007***	***10/30/2008***	***4/13/2009***	***10/20/2009***	***5/14/2010***
Acetone	144,000	145,000	22,900	9,890	8,240
Carbon Disulfide	120,000	60,000	ND	774	ND
Chloroethane	120,000	152	ND	ND	ND
Ethanol	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	3,240,000	2,580,000	308,000	156,000	182,000
Methyl Chloride	120,000	60,000	ND	ND	ND
Tetrachloroethene	3.6	6.4	ND	ND	ND
Tetrahydrofuran	1,500,000	1,530,000	230,000	88,500	104,000
Toluene	44	28	ND	ND	ND
Vinyl Chloride	262	157	ND	ND	ND

Notes:

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

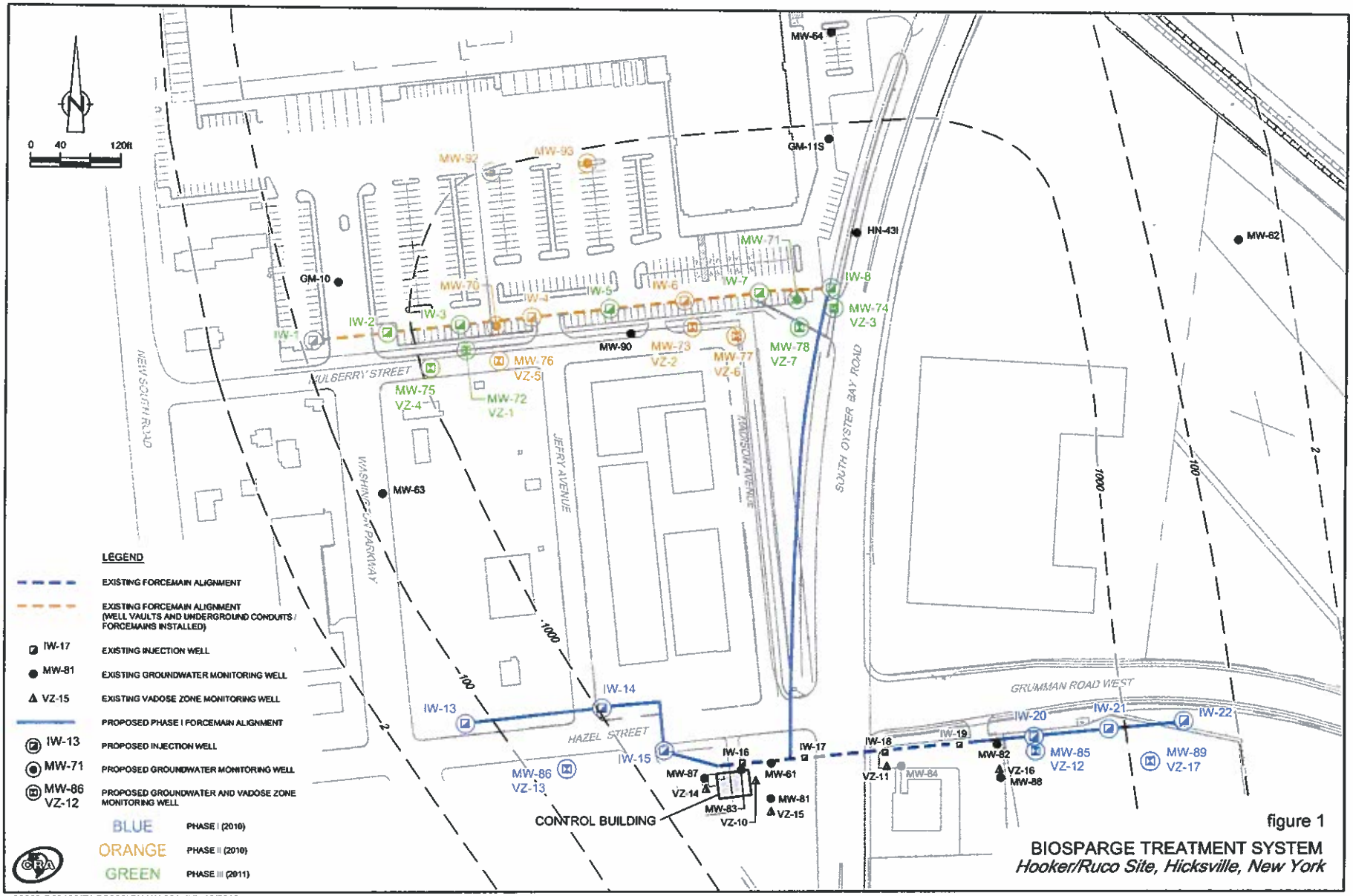
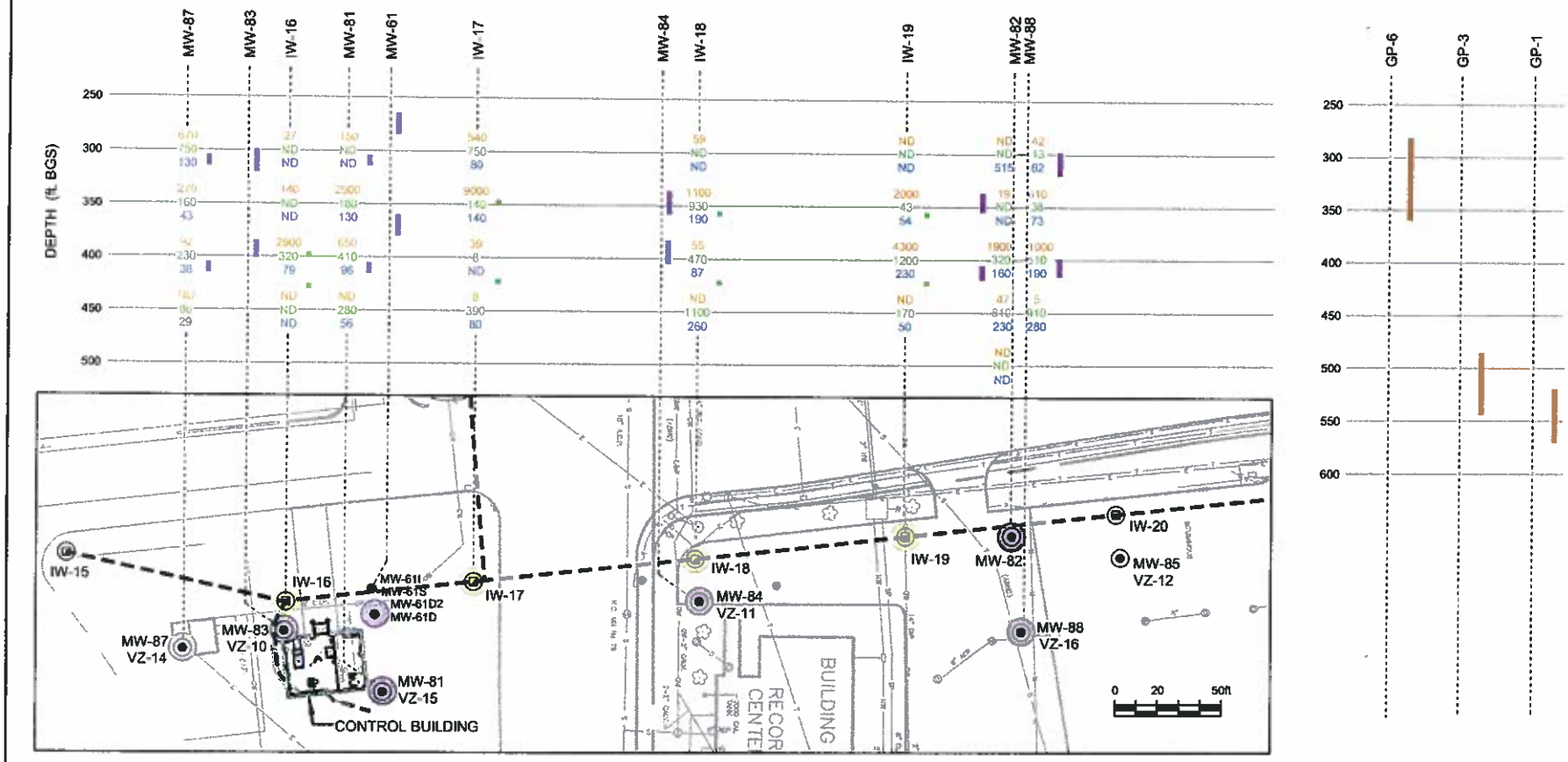


figure 1

BIOSPARGE TREATMENT SYSTEM

Hooker/Ruco Site, Hicksville, New York

06883-D23102(TACC009)GN-WA001 JUL 12/2010



LEGEND

- GM-11S — MONITORING WELL LOCATION
- FORCEMAIN ALIGNMENT
- IW-8 — INJECTION WELL LOCATION
- MW-60 VZ-9 — GROUNDWATER AND VADOSE ZONE MONITORING WELL LOCATION
- IW-16 — PHASE I INJECTION WELL LOCATION
- PHASE 1 INJECTION WELL SCREENED INTERVAL
- MW-87 — PHASE I MONITORING WELL LOCATION
- PHASE 1 MONITORING WELL SCREENED INTERVAL
- PUMPING WELL SCREENED INTERVAL
- 670 — HYDROPUNCH VCM CONCENTRATION (ppb)
- 750 — HYDROPUNCH TCE CONCENTRATION (ppb)
- 130 — HYDROPUNCH PCE CONCENTRATION (ppb)

figure 2

INJECTION AND MONITORING WELL SCREENED INTERVALS

Hooker-Ruco Site, Hicksville, New York

06883-D23102(TACC009)GN-WA002 JUL 09/2010

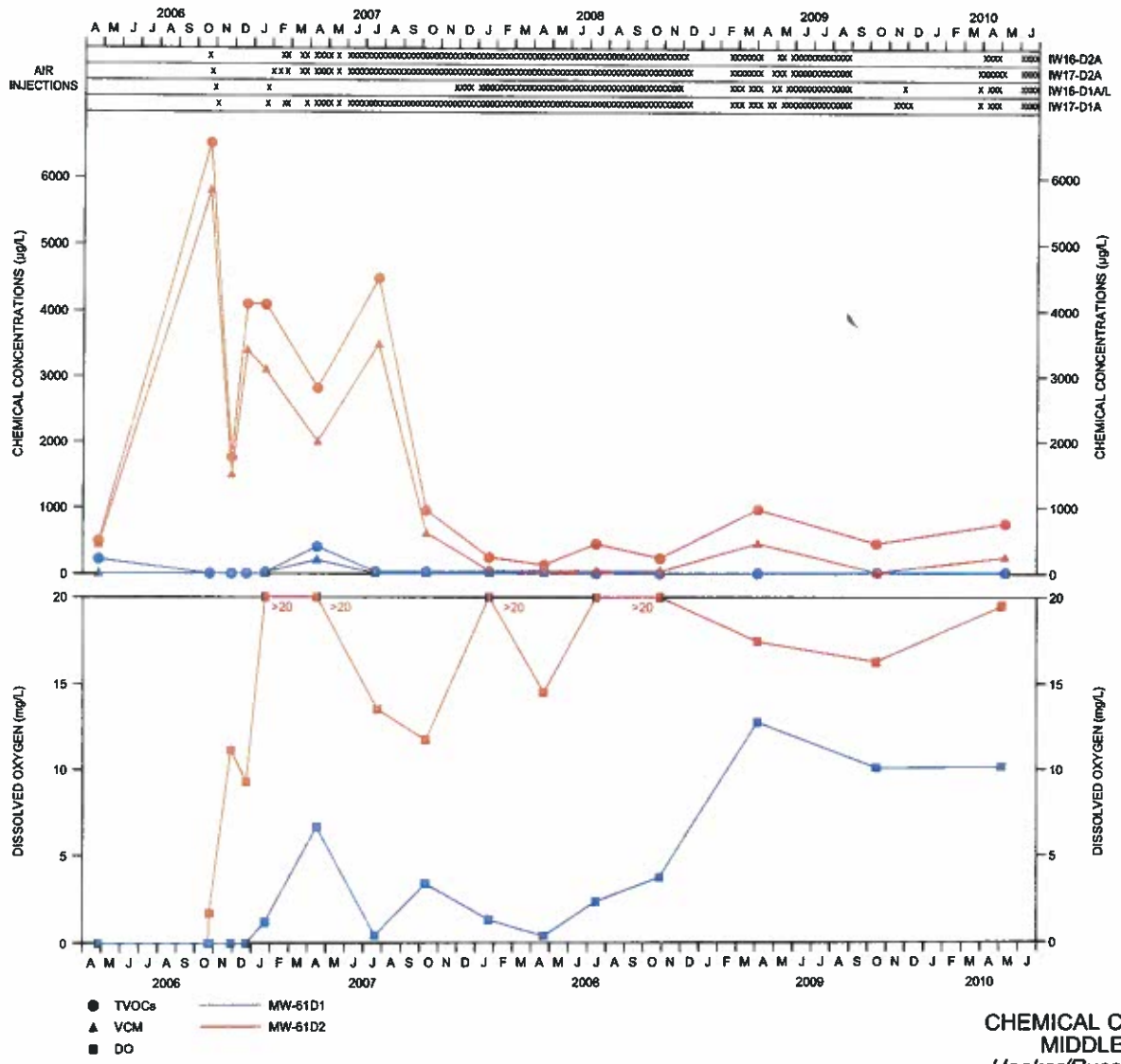


figure 3

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

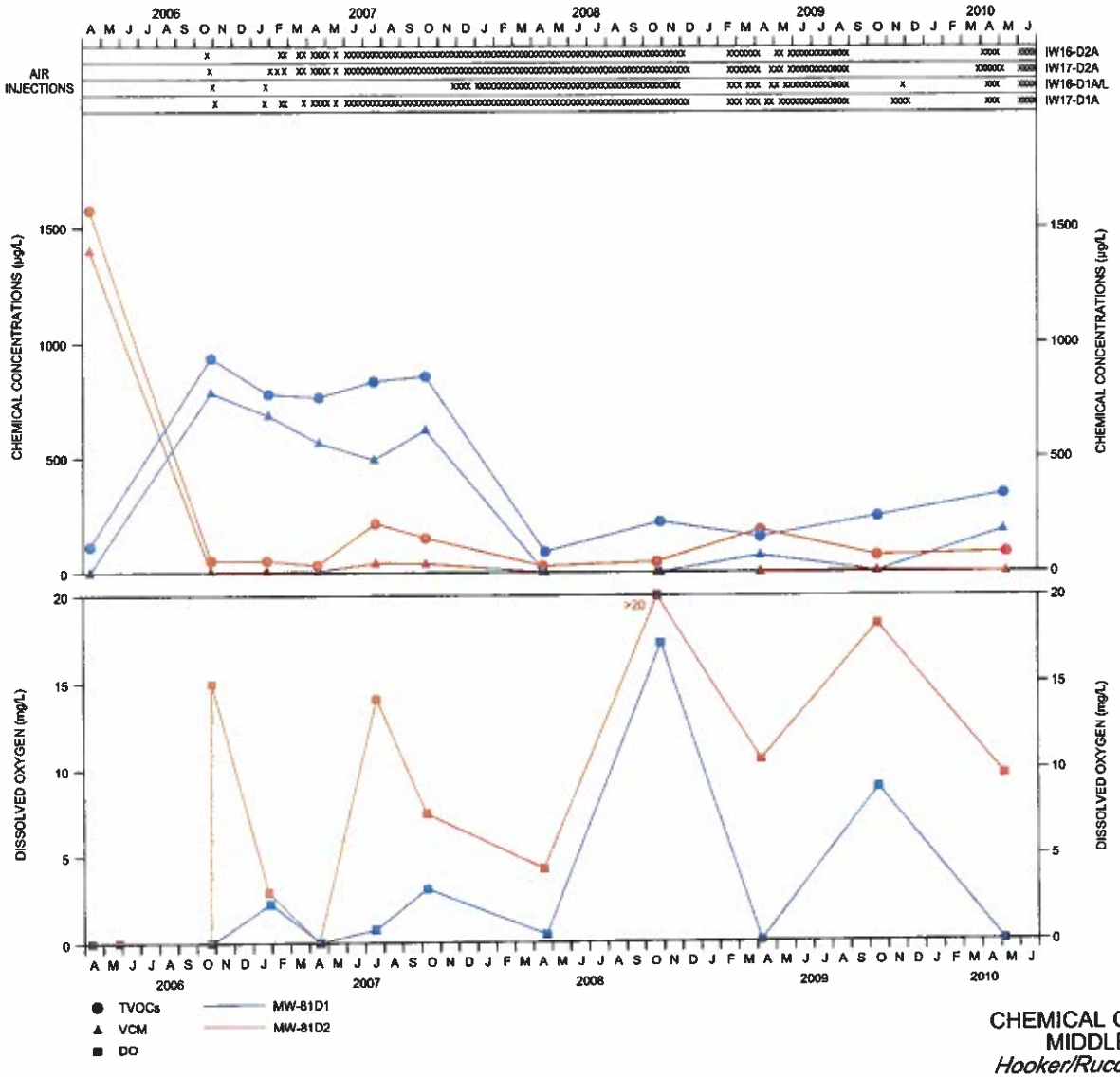


figure 4

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

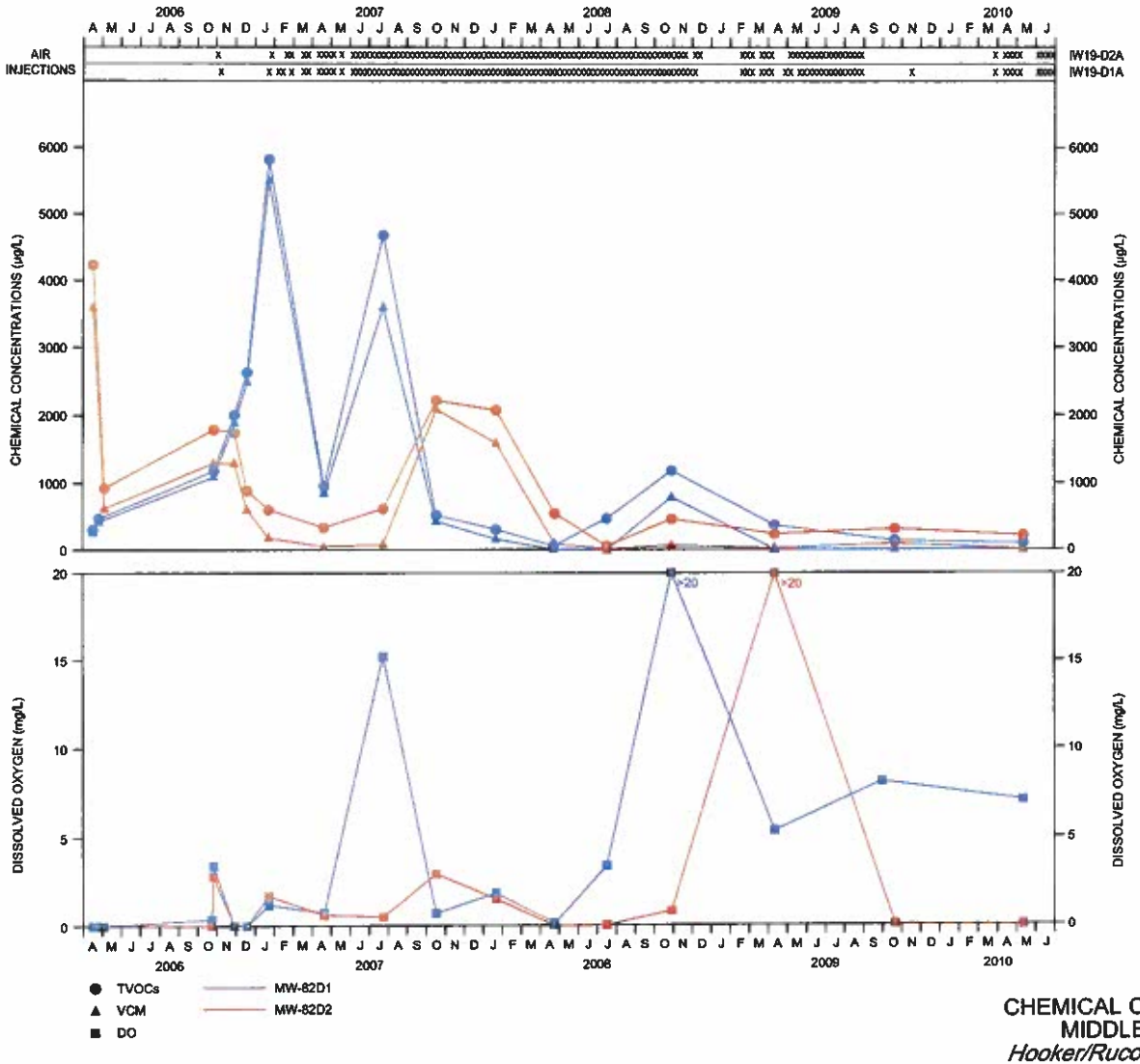


figure 5

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

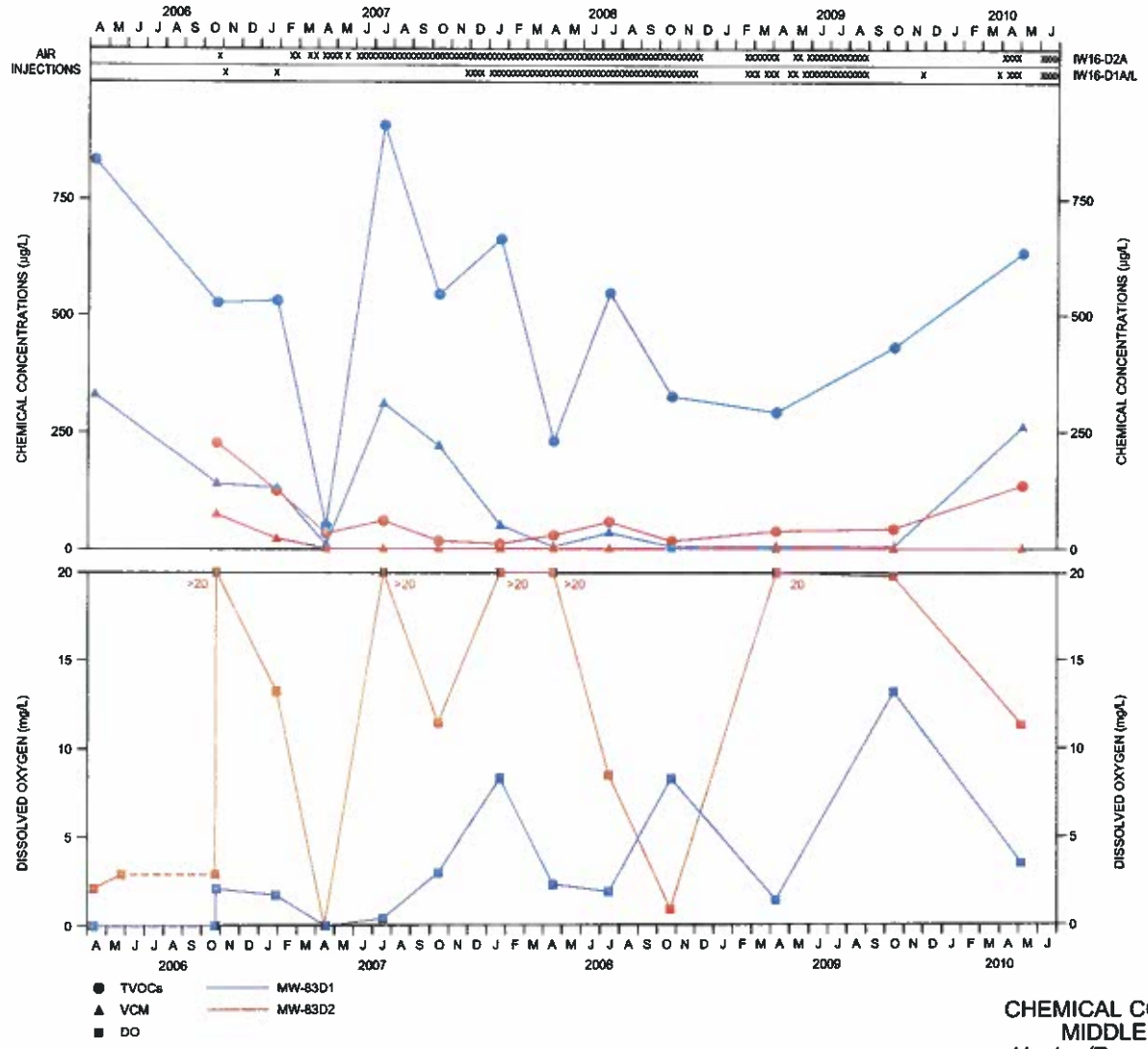


figure 6

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

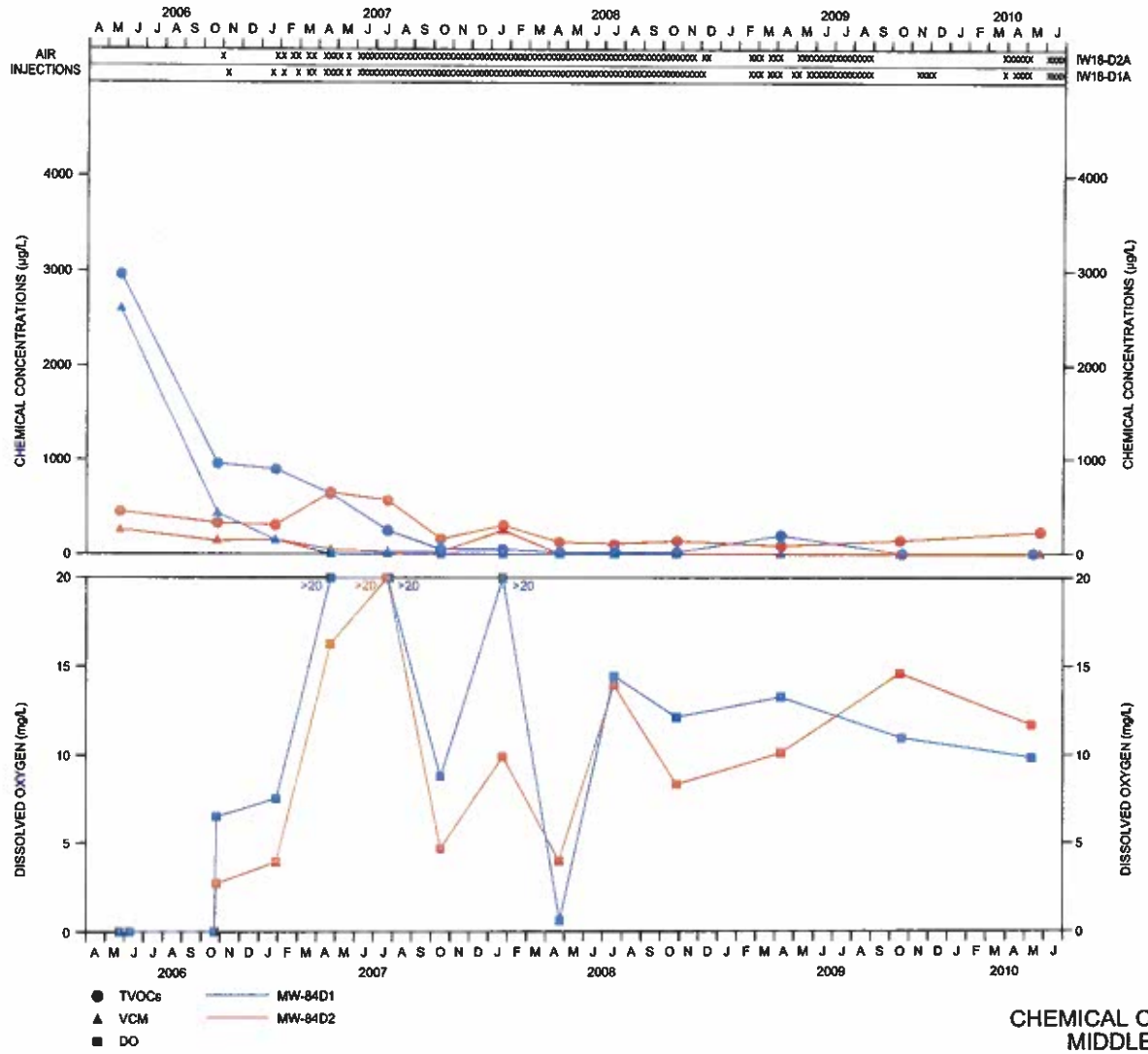


figure 7

WELL NEST MW-84
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

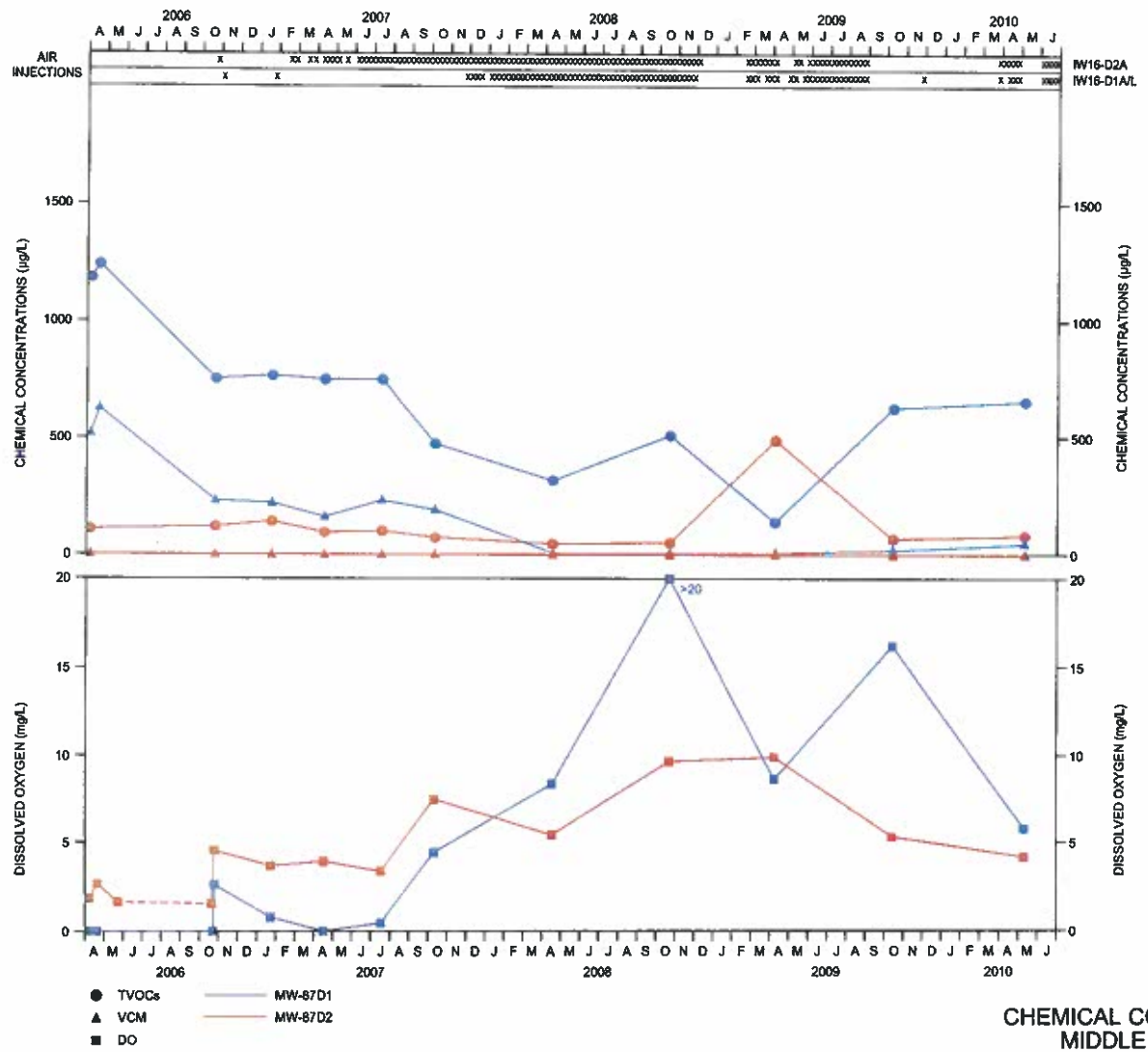


figure 8

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

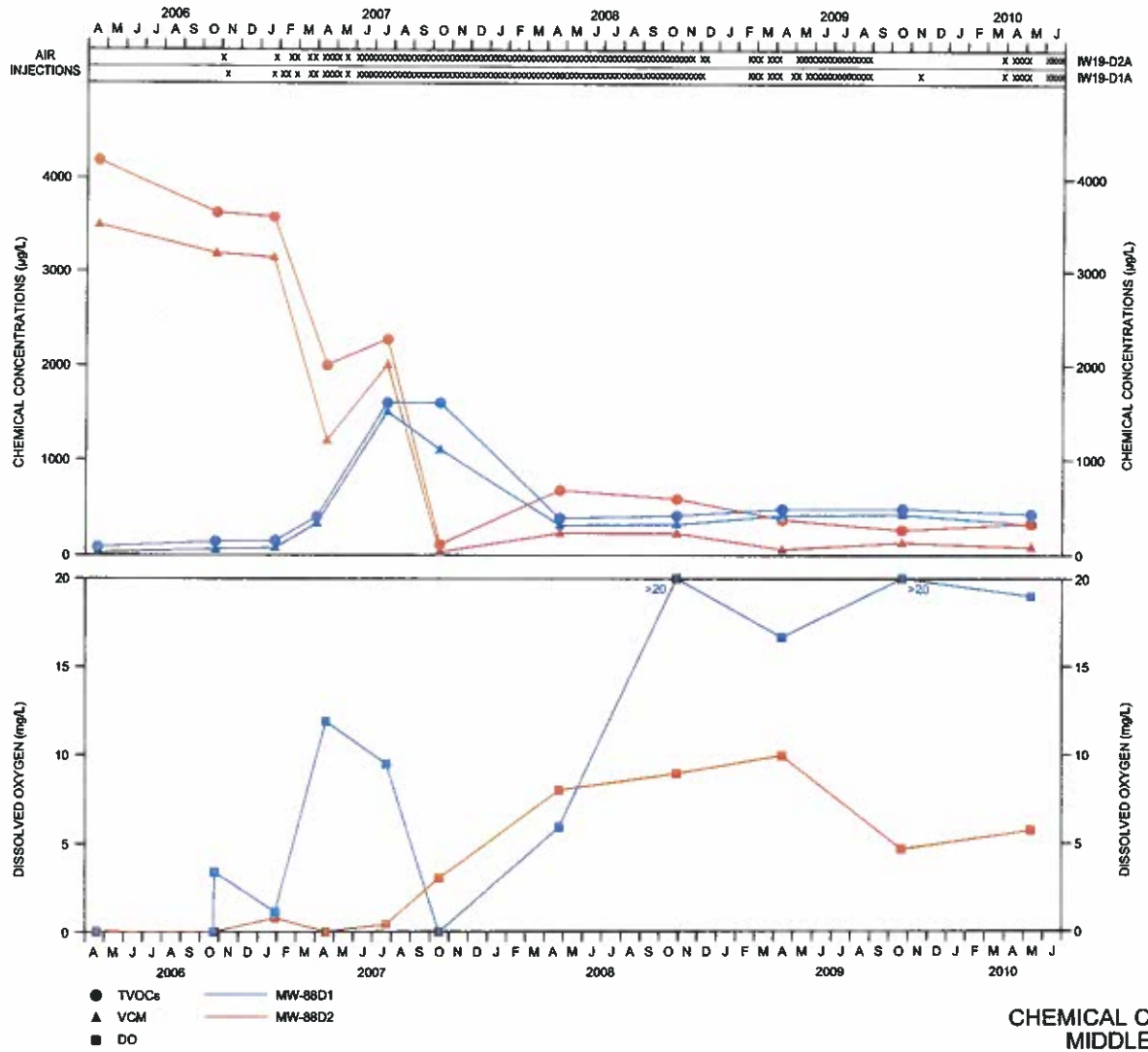


figure 9

WELL NEST MW-88
CHEMICAL CONCENTRATION PLOTS
MIDDLE INJECTION FENCELINE
Hooker/Ruco Site, Hicksville, New York

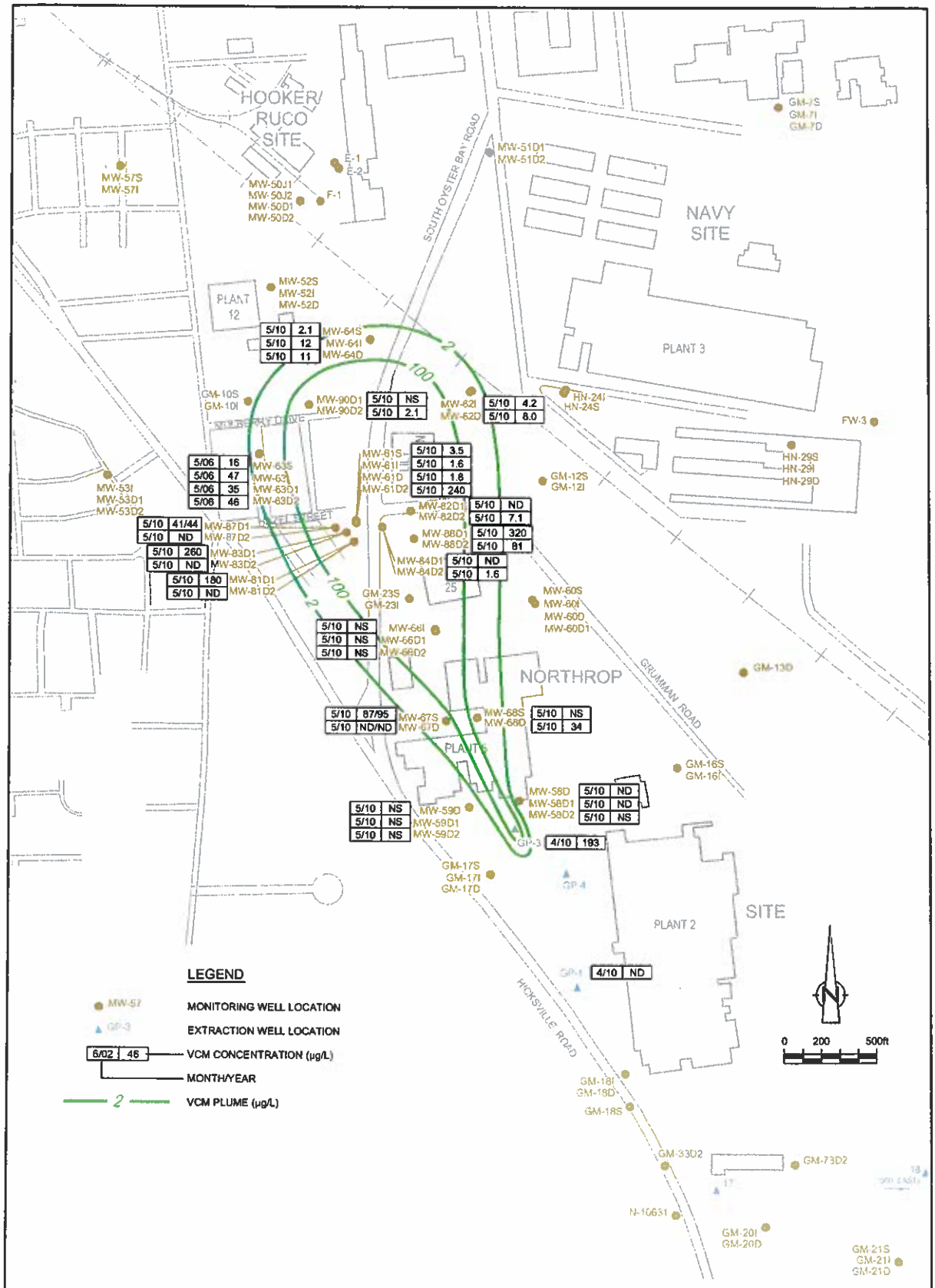


figure 10

2010 VCM GROUNDWATER CONCENTRATIONS
Hooker/Ruco Site, Hicksville, New York

06883-D23102(TACC009)GN-WA010 JUL 09/2010

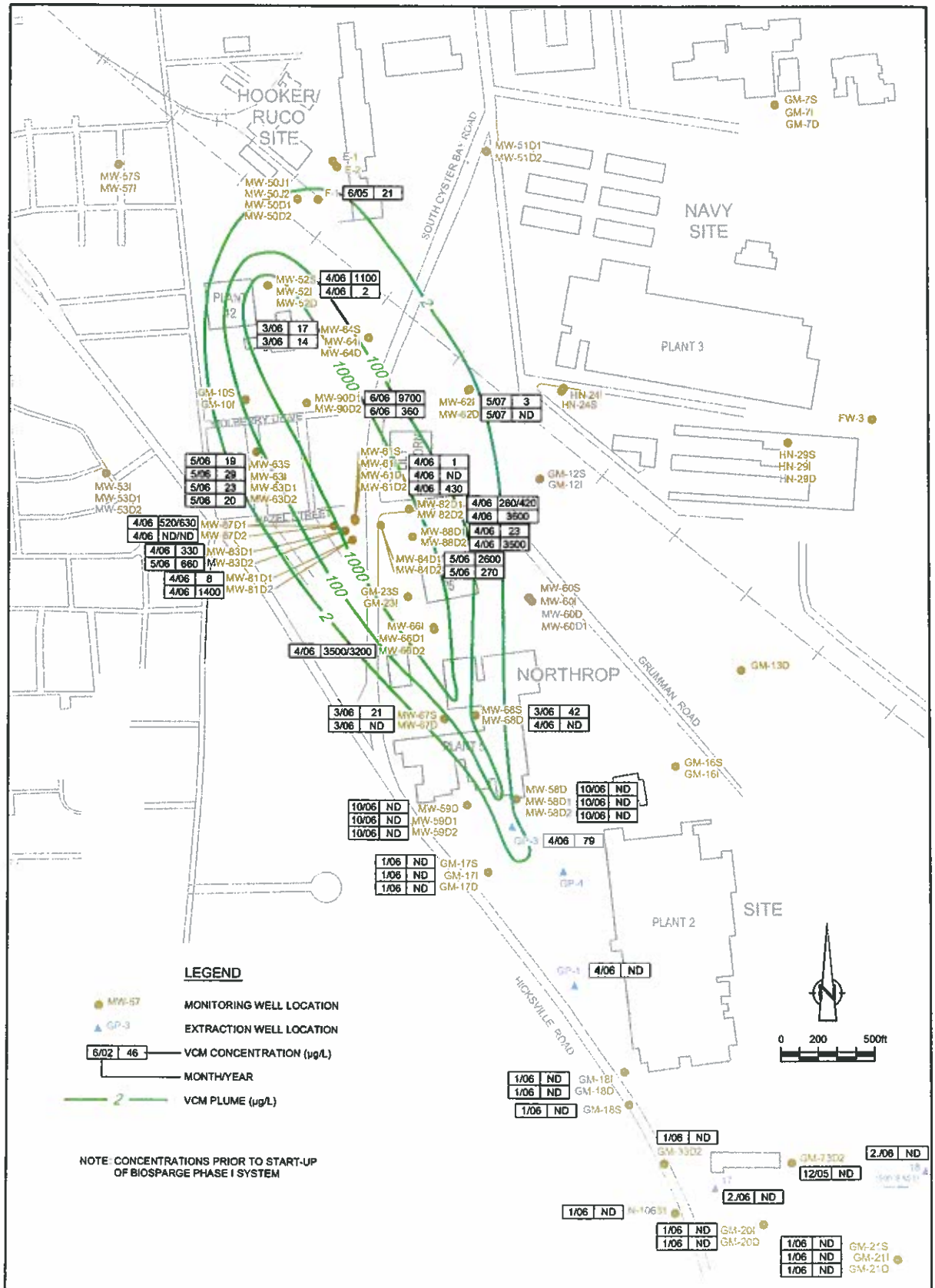


figure 11

2006 VCM GROUNDWATER CONCENTRATIONS

Hooker/Ruco Site, Hicksville, New York

06883-D23102(TACC009)GN-WA011 JUL 09/2010

ATTACHMENT A

MAY 2010 SAMPLING EVENT
QA/QC REVIEW

CONESTOGA-ROVERS
& ASSOCIATES

E-Mail Date: July 8, 2010
E-Mail To: Klaus Schmidtke
c.c.: Kathleen Willy
E-Mail and Hard Copy if Requested

ANALYTICAL DATA ASSESSMENT AND VALIDATION
HOOKER-RUCO BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HICKSVILLE, NEW YORK
MAY 2010

PREPARED BY:
CONESTOGA-ROVERS & ASSOCIATES
2055 Niagara Falls Blvd., Suite #3
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Date: July 8, 2010
Revision: July 8, 2010
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TABLE OF CONTENTS

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(Following Text)

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; and

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). Due to a miscommunication between the field and laboratory, the nitrate and nitrite analysis of sample GW52510VW036 was performed one day outside of hold time. Sample results have been qualified as estimated (see Table 3). All other sample extractions and/or analyses were performed within the specified holding times.

All samples were properly preserved and cooled to 4°C (±2°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, 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 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 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 and sensitivity for all compounds of interest.

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.

Calibration standards were analyzed at the required frequency and the results met the above criteria for instrument sensitivity and linearity of response with the exception of some %D recoveries. Associated sample results have been qualified as estimated (see Table 4).

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 methods employed, 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 calibration standard.

ii) 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 VOCs

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. The results showed acceptable accuracy and precision on this sample matrix with the exception of some low VOC recoveries. The associated sample results have been qualified as estimated to reflect the implied low bias (see Table 5).

7.0 MATRIX SPIKE (MS) 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 with the exception of a low recovery for 1,2,4-trichlorobenzene. Associated sample results have been qualified as estimated to reflect the implied low bias (see Table 6).

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.

10.0 TENTATIVELY IDENTIFIED COMPOUNDS (TICs) - SOIL VAPOR

Chromatographic peaks for VOC analyses, which are not target compounds, surrogates, or internal standards, are potential TICs. The ten largest TICs for the VOC analysis with areas greater than 10 percent of the area of the nearest IS are tentatively identified and quantitated.

A summary of the soil vapor TICs reported is presented in Table 7. TICs, which were present in laboratory blanks or were identified as aldol condensation products, were disregarded and are not included on the table.

11.0 FIELD QA/QC SAMPLES

The field QA/QC consisted of five trip blanks, one rinse blank, and two field duplicate sample sets.

The trip blanks and rinse blank were non-detect for the compounds of interest with the exception of a low level of trichloroethene in the rinse blank. Associated sample results with concentrations similar to that found in the rinse 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.

The field duplicate sample was collected as summarized in Table 1 and submitted "blind" to the laboratory for analysis. All sample results outside estimated ranges of detection showed acceptable sampling and analytical precision.

12.0 CONCLUSION

Based on the preceding assessment, the data summarized in Tables 2A and 2B are acceptable with the specific qualifications noted herein.

TABLES

TABLE 1

SAMPLING AND ANALYSIS SUMMARY
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

				Analysis/Parameters					
Sample ID	*Location ID*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*VOCs + TICs*	*NO2, NO3, NH3*	*TOC, Phosphorous*	*Methane*	*TO-15*	*Comments*
GW51010VW009	MW-81D2	05/10/10	12:10:00 PM	X	X	X			
GW51010VW010	MW-61D1	05/10/10	11:07:00 AM	X	X	X			
GW51010VW011	MW-61I	05/10/10	1:28:00 PM	X	X	X			
GW51010VW012	MW-61S	05/10/10	3:00:00 PM	X	X	X			
GW51010VW013	MW-61D2	05/10/10	2:49:00 PM	X	X	X			
GW51110VW014	MW-88D2	05/11/10	1:40:00 PM	X	X	X			
GW51110VW015	MW-88D1	05/11/10	2:10:00 PM	X	X	X			
GW51210VW016	MW-82D1	05/12/10	10:25:00 AM	X	X	X			
GW51210VW017	MW-82D2	05/12/10	11:10:00 AM	X	X	X			
GW51210VW018	MW-84D1	05/12/10	2:15:00 PM	X	X	X			
GW5410VW002	MW-87D1	05/04/10	10:00:00 AM	X	X	X			MS/MSD
GW5410VW003	MW-87D1	05/04/10	10:00:00 AM	X	X	X			Field duplicate of sample GW5410VW002
GW5510VW004	MW-87D2	05/05/10	11:10:00 AM	X	X	X			
GW5510VW005	MW-83D1	05/05/10	2:40:00 PM	X	X	X			
GW5610VW007	MW-83D2	05/06/10	10:00:00 AM	X	X	X			
GW5610VW008	MW-81D1	05/06/10	12:50:00 PM	X	X	X			
GW51710VW019	MW-90D2	05/17/10	12:10:00 PM	X					
GW51710VW020	MW-58D	05/17/10	12:10:00 PM	X					
GW51910MY021	MW-58D1	05/19/10	9:44:00 AM	X					
GW51910MY022	MW-68D	05/19/10	2:50:00 PM	X					
GW52010VW023	MW-67D	05/20/10	11:00:00 AM	X					MS/MSD
GW52010VW024	MW-67D	05/20/10	11:00:00 AM	X					
GW52010VW025	MW-67S	05/20/10	11:40:00 AM	X					

TABLE 1

SAMPLING AND ANALYSIS SUMMARY
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

				Analysis/Parameters					
Sample ID	*Location ID*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*VOCs + TICs*	*NO2, NO3, NH3*	*TOC, Phosphorous*	*Methane*	*TO-15*	*Comments*
GW52010VW026	MW-67S	05/20/10	11:40:00 AM	X					Field duplicate of sample GW52010VW025
GW52110VW027	MW-63S	05/21/10	12:00:00 PM	X					
GW52110VW028	MW-63I	05/21/10	2:45:00 PM	X					
GW52410VW029	MW-63D1	05/24/10	9:30:00 AM	X					
GW52410VW030	MW-63D2	05/24/10	10:35:00 AM	X					
GW52410VW031	MW-64S	05/24/10	12:20:00 PM	X					
GW52410VW032	MW-64I	05/24/10	1:20:00 PM	X					
GW52410VW033	MW-64D2	05/24/10	2:10:00 PM	X					
GW52510VW033	MW-62D	05/25/10	10:45:00 AM	X					
GW52510VW034	MW-62S	05/25/10	11:40:00 AM	X					
GW52510VW036	MW-84D2	05/25/10	2:30:00 PM	X	X	X			
GW5510VW006	-	05/05/10	3:30:00 PM	X	X	X			Field Blank
GW52510VW035	-	05/25/10	12:00:00 PM	X					Field Blank
TRIP BLANK 050510	-	05/05/10	-	X					Trip Blank
TRIP BLANK 051010	-	05/10/10	-	X					Trip Blank
TRIP BLANK 051210	-	05/12/10	-	X					Trip Blank
TB051710	-	05/17/10	-	X					Trip Blank
TB052010	-	05/20/10	-	X					Trip Blank
VP51410VW001	VZ-10 (D)	05/14/10	10:15:00 AM					X	
VP51410VW002	VZ-10 (S)	05/14/10	10:45:00 AM					X	
VP51410VW003	VZ-14 (D)	05/14/10	11:15:00 AM					X	
VP51410VW004	VZ-14 (S)	05/14/10	11:45:00 AM					X	
VP51410VW005	VZ-11 (D)	05/14/10	12:25:00 PM					X	

TABLE 1

SAMPLING AND ANALYSIS SUMMARY
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Sample ID	*Location ID*	*Collection Date (mm/dd/yy)*	*Collection Time (hr:min)*	*Analysis/Parameters*					*Comments*
				VOCs + TICs	*NO2, NO3, NH3*	*TOC, Phosphorous*	*Methane*	*TO-15*	
VP51410VW006	VZ-11 (S)	05/14/10	12:30:00 PM					X	
VP51410VW007	VZ-16 (D)	05/14/10	1:05:00 PM					X	
VP51410VW008	VZ-16 (S)	05/14/10	1:00:00 PM					X	
VP51410VW001	VZ-10 (D)	05/14/10	10:15:00 AM					X	
VP51410VW005	VZ-11 (D)	05/14/10	12:25:00 PM					X	
VP6810VW009	VZ-15 (S)	06/08/10	9:00:00 AM					X	
VP6810VW010	VZ-15 (D)	06/08/10	8:30:00 AM					X	

Notes:

-

MS Matrix Spike.
MSD Matrix Spike Duplicate.
NH_3 Total Ammonia.
NO_2 Nitrate.
NO_3 Nitrite.
TICs Tentatively Identified Compounds.
TOC Total Organic Carbon.
VOCs Volatile Organic Compounds.

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-10 (D)*	*VZ-10 (S)*	*VZ-11 (D)*	*VZ-11 (S)*	*VZ-14 (D)*	*VZ-14 (S)*	*VZ-15 (D)*
	Sample ID:	*VP51410VW001*	*VP51410VW002*	*VP51410VW005*	*VP51410VW006*	*VP51410VW003*	*VP51410VW004*	*VP6810VW010*
	Sample Date:	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*6/8/2010*
Parameters	*Units*							
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,1,1-Trichloroethane	ppbv	200 U	0.500 U	1.08	0.390 J	50.0 U	0.500 U	0.500 U
1,1,2,2-Tetrachloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,1,2-Trichloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,1-Dichloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,1-Dichloroethene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,2,4-Trichlorobenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 UJ
1,2,4-Trimethylbenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	47.0 J	0.500 U	0.500 U
1,2-Dibromoethane (Ethylene dibromide)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,2-Dichlorobenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,2-Dichloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,2-Dichloropropane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,3,5-Trimethylbenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,3-Butadiene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,3-Dichlorobenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
1,4-Dichlorobenzene	ppbv	200 U	0.500 U	0.500 U	0.590	50.0 U	0.370 J	0.500 U
1,4-Dioxane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	32100	10.7	100	14.5	10600	1.42	82.9
2-Hexanone	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
2-Phenylbutane (sec-Butylbenzene)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
4-Ethyl toluene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Acetone	ppbv	1750	1.81	3.62	3.42	222	9.04	3.56
Acrylonitrile	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Benzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Benzyl chloride	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Bromodichloromethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Bromoform	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Bromomethane (Methyl bromide)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-10 (D)*	*VZ-10 (S)*	*VZ-11 (D)*	*VZ-11 (S)*	*VZ-14 (D)*	*VZ-14 (S)*	*VZ-15 (D)*
	Sample ID:	*VP51410VW001*	*VP51410VW002*	*VP51410VW005*	*VP51410VW006*	*VP51410VW003*	*VP51410VW004*	*VP6810VW010*
	Sample Date:	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*6/8/2010*
Parameters	*Units*							
Volatile Organic Compounds (Cont'd.)								
Carbon disulfide	ppbv	200 U	0.500 U	0.540	0.500 U	39.0 J	0.500 U	0.500 U
Carbon tetrachloride	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Chlorobenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Chloroethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Chloroform (Trichloromethane)	ppbv	200 U	0.500 U	1.02	0.500 U	50.0 U	0.600	0.500 U
Chloromethane (Methyl chloride)	ppbv	200 U	0.500 U	0.430 J	0.500 U	50.0 U	1.62	0.500 U
cis-1,2-Dichloroethene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
cis-1,3-Dichloropropene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Cyclohexane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Cymene (p-Isopropyltoluene)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Dibromochloromethane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Dichlorodifluoromethane (CFC-12)	ppbv	200 U	0.670	0.980	0.730	50.0 U	0.750	0.480 J
Ethanol	ppbv	200 U	3.65	5.83	4.02	50.0 U	4.13	1.98
Ethyl acetate	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Ethylbenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Hexachlorobutadiene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Hexane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.400 J	0.500 U
Isopropyl alcohol	ppbv	316	0.460 J	0.500	0.400 J	57.0	0.440 J	0.270 J
Isopropyl benzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
m&p-Xylene	ppbv	200 U	0.500 U	0.500 U	0.500 U	55.0	0.860	0.500 U
Methyl tert butyl ether (MTBE)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Methylene chloride	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
N-Butylbenzene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
N-Heptane	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
o-Xylene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Propylene (propene)	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Styrene	ppbv	200 U	0.500 U	0.500 U	0.350 J	50.0 U	0.500 U	0.500 U
Tetrachloroethene	ppbv	200 U	3.39	23.2	6.32	50.0 U	17.3	23.0
Tetrahydrofuran	ppbv	20100	4.41	111	97.1	9750	15.0	27.5
Toluene	ppbv	200 U	0.500 U	0.380 J	1.33	50.0 U	1.23	0.500 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-10 (D)*	*VZ-10 (S)*	*VZ-11 (D)*	*VZ-11 (S)*	*VZ-14 (D)*	*VZ-14 (S)*	*VZ-15 (D)*
	Sample ID:	*VP51410VW001*	*VP51410VW002*	*VP51410VW005*	*VP51410VW006*	*VP51410VW003*	*VP51410VW004*	*VP6810VW010*
	Sample Date:	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*5/14/2010*	*6/8/2010*
Parameters	*Units*							
Volatile Organic Compounds (Cont'd.)								
trans-1,2-Dichloroethene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
trans-1,3-Dichloropropene	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
Trichloroethene	ppbv	200 U	4.10	0.500 U	0.500 U	50.0 U	0.380 J	4.27
Trichlorofluoromethane (CFC-11)	ppbv	200 U	0.410 J	1.11	0.420 J	50.0 U	0.500	0.390 J
Trifluorotrichloroethane (Freon 113)	ppbv	200 U	0.380 J	2.71	0.450 J	50.0 U	0.890	0.230 J
Vinyl chloride	ppbv	200 U	0.500 U	0.500 U	0.500 U	50.0 U	0.500 U	0.500 U
General Chemistry								
Methane	ppmv	20.0 U	10.0 U	10.0 U	10.0 U	20.0 U	10.0 U	10.0 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-15 (S)*	*VZ-16 (D)*	*VZ-16 (S)*
	Sample ID:	*VP6810VW009*	*VP51410VW007*	*VP51410VW008*
	Sample Date:	*6/8/2010*	*5/14/2010*	*5/14/2010*
Parameters	*Units*			
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	ppbv	30.0 U	2000 U	0.500 U
1,1,1-Trichloroethane	ppbv	30.0 U	2000 U	0.500 U
1,1,2,2-Tetrachloroethane	ppbv	30.0 U	2000 U	0.500 U
1,1,2-Trichloroethane	ppbv	30.0 U	2000 U	0.500 U
1,1-Dichloroethane	ppbv	30.0 U	2000 U	0.500 U
1,1-Dichloroethene	ppbv	30.0 U	2000 U	0.500 U
1,2,4-Trichlorobenzene	ppbv	30.0 UJ	2000 U	0.500 U
1,2,4-Trimethylbenzene	ppbv	30.0 U	2000 U	0.500 U
1,2-Dibromoethane (Ethylene dibromide)	ppbv	30.0 U	2000 U	0.500 U
1,2-Dichlorobenzene	ppbv	30.0 U	2000 U	0.500 U
1,2-Dichloroethane	ppbv	30.0 U	2000 U	0.500 U
1,2-Dichloropropane	ppbv	30.0 U	2000 U	0.500 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	30.0 U	2000 U	0.500 U
1,3,5-Trimethylbenzene	ppbv	30.0 U	2000 U	0.500 U
1,3-Butadiene	ppbv	30.0 U	2000 U	0.500 U
1,3-Dichlorobenzene	ppbv	30.0 U	2000 U	0.500 U
1,4-Dichlorobenzene	ppbv	30.0 U	2000 U	0.500 U
1,4-Dioxane	ppbv	30.0 U	2000 U	0.500 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	30.0 U	182000	2.02
2-Hexanone	ppbv	30.0 U	2000 U	0.500 U
2-Phenylbutane (sec-Butylbenzene)	ppbv	30.0 U	2000 U	0.500 U
4-Ethyl toluene	ppbv	30.0 U	2000 U	0.500 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	30.0 U	2000 U	0.500 U
Acetone	ppbv	54.6	8240	9.28
Acrylonitrile	ppbv	30.0 U	2000 U	0.500 U
Benzene	ppbv	30.0 U	2000 U	0.710
Benzyl chloride	ppbv	30.0 U	2000 U	0.500 U
Bromodichloromethane	ppbv	30.0 U	2000 U	0.500 U
Bromoform	ppbv	30.0 U	2000 U	0.500 U
Bromomethane (Methyl bromide)	ppbv	30.0 U	2000 U	0.500 U

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-15 (S)*	*VZ-16 (D)*	*VZ-16 (S)*
	Sample ID:	*VP6810VW009*	*VP51410VW007*	*VP51410VW008*
	Sample Date:	*6/8/2010*	*5/14/2010*	*5/14/2010*
Parameters	*Units*			
Volatile Organic Compounds (Cont'd.)				
Carbon disulfide	ppbv	19.2 J	2000 U	0.500 U
Carbon tetrachloride	ppbv	30.0 U	2000 U	0.500 U
Chlorobenzene	ppbv	30.0 U	2000 U	0.500 U
Chloroethane	ppbv	30.0 U	2000 U	0.500 U
Chloroform (Trichloromethane)	ppbv	30.0 U	2000 U	0.500 U
Chloromethane (Methyl chloride)	ppbv	30.0 U	2000 U	0.330 J
cis-1,2-Dichloroethene	ppbv	30.0 U	2000 U	0.500 U
cis-1,3-Dichloropropene	ppbv	30.0 U	2000 U	0.500 U
Cyclohexane	ppbv	30.0 U	2000 U	0.500 U
Cymene (p-Isopropyltoluene)	ppbv	30.0 U	2000 U	0.500 U
Dibromochloromethane	ppbv	30.0 U	2000 U	0.500 U
Dichlorodifluoromethane (CFC-12)	ppbv	30.0 U	2000 U	0.980
Ethanol	ppbv	41.4	2000 U	4.45
Ethyl acetate	ppbv	30.0 U	2000 U	0.500 U
Ethylbenzene	ppbv	30.0 U	2000 U	0.500 U
Hexachlorobutadiene	ppbv	30.0 U	2000 U	0.500 U
Hexane	ppbv	30.6	2000 U	0.300 J
Isopropyl alcohol	ppbv	48.0	2760	0.990
Isopropyl benzene	ppbv	30.0 U	2000 U	0.500 U
m&p-Xylene	ppbv	30.0 U	2000 U	0.770
Methyl tert butyl ether (MTBE)	ppbv	30.0 U	2000 U	0.500 U
Methylene chloride	ppbv	30.0 U	2000 U	0.280 J
N-Butylbenzene	ppbv	30.0 U	2000 U	0.500 U
N-Heptane	ppbv	30.0 U	2000 U	0.500 U
o-Xylene	ppbv	30.0 U	2000 U	0.500 U
Propylene (propene)	ppbv	30.0 U	2000 U	0.500 U
Styrene	ppbv	30.0 U	2000 U	0.500 U
Tetrachloroethene	ppbv	30.0 U	2000 U	26.5
Tetrahydrofuran	ppbv	5210	104000	1.00
Toluene	ppbv	30.0 U	2000 U	2.90

TABLE 2A

ANALYTICAL RESULTS SUMMARY - SOIL VAPOR
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*VZ-15 (S)*	*VZ-16 (D)*	*VZ-16 (S)*
	Sample ID:	*VP6810VW009*	*VP51410VW007*	*VP51410VW008*
	Sample Date:	*6/8/2010*	*5/14/2010*	*5/14/2010*
Parameters	*Units*			
Volatile Organic Compounds (Cont'd.)				
trans-1,2-Dichloroethene	ppbv	30.0 U	2000 U	0.500 U
trans-1,3-Dichloropropene	ppbv	30.0 U	2000 U	0.500 U
Trichloroethene	ppbv	30.0 U	2000 U	0.500 U
Trichlorofluoromethane (CFC-11)	ppbv	30.0 U	2000 U	1.00
Trifluorotrichloroethane (Freon 113)	ppbv	30.0 U	2000 U	2.25
Vinyl chloride	ppbv	30.0 U	2000 U	0.500 U
General Chemistry				
Methane	ppmv	12.0 U	20.0 U	10.0 U

Notes:

J - Estimated concentration.
U - Not present at or above the associated value.
UJ - Estimated reporting limit.

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-58D*	*MW-58D1*	*MW-61D1*	*MW-61D2*	*MW-61I*	*MW-61S*
	Sample ID:	*GW51710VW020*	*GW51910MY021*	*GW51010VW010*	*GW51010VW013*	*GW51010VW011*	*GW51010VW012*
	Sample Date:	*5/17/2010*	*5/19/2010*	*5/10/2010*	*5/10/2010*	*5/10/2010*	*5/10/2010*
Parameters	*Units*						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	2.8 J	2.8 J	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	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	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	1.9 J	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	9.8	9.2	5.0 U	1.3 J	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	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	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	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ
Benzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	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	5.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.3 J	1.2 J	5.0 U	29	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	18	18	6.3	120	6.9	5.4
Toluene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-58D*	*MW-58D1*	*MW-61D1*	*MW-61D2*	*MW-61I*	*MW-61S*
	Sample ID:	*GW51710VW020*	*GW51910MY021*	*GW51010VW010*	*GW51010VW013*	*GW51010VW011*	*GW51010VW012*
	Sample Date:	*5/17/2010*	*5/19/2010*	*5/10/2010*	*5/10/2010*	*5/10/2010*	*5/10/2010*
Parameters	*Units*						
Volatile Organic Compounds (Cont'd.)							
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	47	44	8.0 U	360	7.8 U	8.1 U
Vinyl chloride	µg/L	5.0 U	5.0 U	1.8 J	240	1.6 J	3.5 J
Xylene (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
General Chemistry							
Ammonia-N	mg/L	-	-	0.150	0.319	0.150	0.164
Nitrate (as N)	mg/L	-	-	0.815	2.31	0.536	0.840
Nitrite (as N)	mg/L	-	-	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Nitrite/Nitrate	mg/L	-	-	-	-	-	-
Phosphorus	mg/L	-	-	0.15	0.059	0.036	0.17
Total organic carbon (TOC)	mg/L	-	-	10 U	10 U	10 U	10 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-62D*	*MW-62S*	*MW-63D1*	*MW-63D2*	*MW-63I*	*MW-63S*
	Sample ID:	*GW52510VW033*	*GW52510VW034*	*GW52410VW029*	*GW52410VW030*	*GW52110VW028*	*GW52110VW027*
	Sample Date:	*5/25/2010*	*5/25/2010*	*5/24/2010*	*5/24/2010*	*5/21/2010*	*5/21/2010*
Parameters	*Units*						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	2.5 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	12	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	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	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	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Acetone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	1.1 J	5.0 U	3.2 J	3.4 J	3.7 J	2.1 J
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	30	2.4 J	9.6	11	11	8.6
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	2.4 J	5.1 J	6.4 J	6.4 J	5.4 J	2.4 J
Toluene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-62D*	*MW-62S*	*MW-63D1*	*MW-63D2*	*MW-63I*	*MW-63S*
	Sample ID:	*GW52510VW033*	*GW52510VW034*	*GW52410VW029*	*GW52410VW030*	*GW52110VW028*	*GW52110VW027*
	Sample Date:	*5/25/2010*	*5/25/2010*	*5/24/2010*	*5/24/2010*	*5/21/2010*	*5/21/2010*
Parameters	*Units*						
Volatile Organic Compounds (Cont'd.)							
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	8.2	5.0 U	9.2	9.1	8.3	4.3 J
Vinyl chloride	µg/L	8.0	4.2 J	35	46	47	16
Xylene (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
General Chemistry							
Ammonia-N	mg/L	-	-	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	-
Nitrite (as N)	mg/L	-	-	-	-	-	-
Nitrite/Nitrate	mg/L	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-
Total organic carbon (TOC)	mg/L	-	-	-	-	-	-

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-64D2*	*MW-64I*	*MW-64S*	*MW-67D*	*MW-67D*	*MW-67S*
	Sample ID:	*GW52410VW033*	*GW52410VW032*	*GW52410VW031*	*GW52010VW023*	*GW52010VW024*	*GW52010VW025*
	Sample Date:	*5/24/2010*	*5/24/2010*	*5/24/2010*	*5/20/2010*	*5/20/2010*	*5/20/2010*
Parameters	*Units*						
Volatile Organic Compounds							
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	2.0 J	2.2 J	1.1 J	1.4 J	1.4 J	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	1.6 J	1.2 J	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	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	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	5.0 U	5.6
2-Hexanone	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Acetone	µg/L	5.0 U	7.4	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 J
Bromodichloromethane	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	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	5.0 U	5.9
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.4 J
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.5 J	1.2 J	5.0 U	24	24	38
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 UJ	5.0 UJ	1.5 J	74	73	26
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.9 J
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-64D2*	*MW-64I*	*MW-64S*	*MW-67D*	*MW-67D*	*MW-67S*
	Sample ID:	*GW52410VW033*	*GW52410VW032*	*GW52410VW031*	*GW52010VW023*	*GW52010VW024*	*GW52010VW025*
	Sample Date:	*5/24/2010*	*5/24/2010*	*5/24/2010*	*5/20/2010*	*5/20/2010*	*5/20/2010*
Parameters	*Units*						
Volatile Organic Compounds (Cont'd.)							
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	280	280 J	37
Vinyl chloride	µg/L	11	12	2.1 J	5.0 U	5.0 U	87
Xylene (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
General Chemistry							
Ammonia-N	mg/L	-	-	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	-
Nitrite (as N)	mg/L	-	-	-	-	-	-
Nitrite/Nitrate	mg/L	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	-	-
Total organic carbon (TOC)	mg/L	-	-	-	-	-	-

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameters	*Units*	*Sample Location:* *MW-67S* *Sample ID:* *GW52010VW026* *Sample Date:* *5/20/2010 (Duplicate)*	*MW-68D* *GW51910MY022* *5/19/2010*	*MW-81D1* *GW5610VW008* *5/6/2010*	*MW-81D2* *GW51010VW009* *5/10/2010*	*MW-82D1* *GW51210VW016* *5/12/2010*	*MW-82D2* *GW51210VW017* *5/12/2010*	*MW-83D1* *GW5510VW005* *5/5/2010*
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	5.0 U	2.4 J	5.0 U	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	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	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	2.4 J	5.0 U	1.0 J	3.2 J	2.0 J	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	2.0 J	5.0 U	1.2 J	5.0 U	1.1 J	1.8 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	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	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	120	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 UJ	5.0 UJ	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	5.0 U	5.0 U	5.0 U
Acetone	µg/L	16	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U
Benzene	µg/L	2.0 J	5.0 U	5.0 U	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	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	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	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	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	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	6.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	4.4 J	5.0 U	23	5.0 U	5.0 U	5.0 U	3.7 J
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	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	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	37	5.9	13	5.0	3.9 J	11	33
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	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	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	5.0 U	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	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	27	320	16	14	16	100	96
Toluene	µg/L	2.9 J	5.0 U	5.4	5.0 U	5.0 U	4.0 J	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-67S*	*MW-68D*	*MW-81D1*	*MW-81D2*	*MW-82D1*	*MW-82D2*	*MW-83D1*
	Sample ID:	*GW52010VW026*	*GW51910MY022*	*GW5610VW008*	*GW51010VW009*	*GW51210VW016*	*GW51210VW017*	*GW5510VW005*
	Sample Date:	*5/20/2010 (Duplicate)*	*5/19/2010*	*5/6/2010*	*5/10/2010*	*5/12/2010*	*5/12/2010*	*5/5/2010*
Parameters	*Units*							
Volatile Organic Compounds (Cont'd.)								
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	39	970	99	63	64	92	240
Vinyl chloride	µg/L	95	34	180	5.0 U	5.0 U	7.1	260
Xylene (total)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
General Chemistry								
Ammonia-N	mg/L	-	-	0.744	0.486	0.100 U	1.02	0.200 U
Nitrate (as N)	mg/L	-	-	-	3.03	0.0100 U	1.96	-
Nitrite (as N)	mg/L	-	-	-	0.00819 J	0.0100 U	0.208	-
Nitrite/Nitrate	mg/L	-	-	0.192	-	-	-	1.99
Phosphorus	mg/L	-	-	0.17	0.038	0.033	0.071	0.047
Total organic carbon (TOC)	mg/L	-	-	10 U	10 U	10 U	10 U	10 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameters	Units	Sample Location: MW-83D2 Sample ID: GW5610VW007 Sample Date: 5/6/2010	MW-84D1 GW51210VW018 5/12/2010	MW-84D2 GW52510VW036 5/25/2010	MW-87D1 GW5410VW001 5/4/2010	MW-87D1 GW5410VW002 5/4/2010	MW-87D1 GW5410VW003 5/4/2010 (Duplicate)	MW-87D2 GW5510VW004 5/5/2010
Volatile Organic Compounds								
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	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	5.0 U	1.9 J
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	-	2.0 J	2.0 J	1.9 J
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	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	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	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Acetone	µg/L	5.0 U	5.0 U	4.8 J	-	5.0 U	5.0 U	5.0 U
Benzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	-	3.7 J	3.5 J	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	5.0 U	5.0 U	-	1.0 J	1.3 J	5.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	8.4	5.0 U	8.3	-	94	96	4.0 J
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	5.0 U	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	5.0 U	5.0 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	18	1.4 J	23 J	-	170	170	18
Toluene	µg/L	5.0 U	5.0 U	2.6 J	-	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	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-83D2*	*MW-84D1*	*MW-84D2*	*MW-87D1*	*MW-87D1*	*MW-87D1*	*MW-87D2*
	Sample ID:	*GW5610VW007*	*GW51210VW018*	*GW52510VW036*	*GW5410VW001*	*GW5410VW002*	*GW5410VW003*	*GW5510VW004*
	Sample Date:	*5/6/2010*	*5/12/2010*	*5/25/2010*	*5/4/2010*	*5/4/2010*	*5/4/2010 (Duplicate)*	*5/5/2010*
Parameters	*Units*							
Volatile Organic Compounds (Cont'd.)								
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	110	5.0 U	190	-	360	330	55
Vinyl chloride	µg/L	5.0 U	5.0 U	1.6 J	-	41	44	5.0 U
Xylene (total)	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	5.0 U	5.0 U
General Chemistry								
Ammonia-N	mg/L	0.100 U	0.100 U	1.14	1.18	1.06	1.11	0.200 U
Nitrate (as N)	mg/L	-	3.26	1.81 J	-	-	-	-
Nitrite (as N)	mg/L	-	0.0100 U	0.00677 J	-	-	-	-
Nitrite/Nitrate	mg/L	4.99	-	-	3.36	3.28	3.08	4.65
Phosphorus	mg/L	0.13	0.053	0.030 U	-	0.14	0.14	0.16
Total organic carbon (TOC)	mg/L	10 U	10 U	10 U	-	10 U	10 U	10 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-88D1*	*MW-88D2*	*MW-90D2*
	Sample ID:	*GW51110VW015*	*GW51110VW014*	*GW51710VW019*
	Sample Date:	*5/11/2010*	*5/11/2010*	*5/17/2010*
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	1.6 J	1.3 J
1,1-Dichloroethene	µg/L	5.0 UJ	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	6.7	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	5.0 U	5.0 U	5.0 U
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	1.7 J	5.0 U	5.0 U
Chloroethane	µg/L	12	5.0 U	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	26	6.8
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	28	130	26
Toluene	µg/L	5.0 U	6.1	5.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U

TABLE 2B

ANALYTICAL RESULTS SUMMARY - GROUNDWATER
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

	Sample Location:	*MW-88D1*	*MW-88D2*	*MW-90D2*
	Sample ID:	*GW51110VW015*	*GW51110VW014*	*GW51710VW019*
	Sample Date:	*5/11/2010*	*5/11/2010*	*5/17/2010*
Parameters	*Units*			
Volatile Organic Compounds (Cont'd.)				
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U
Trichloroethene	µg/L	32	85	68
Vinyl chloride	µg/L	320	81	2.1 J
Xylene (total)	µg/L	1.5 J	5.0 U	5.0 U
General Chemistry				
Ammonia-N	mg/L	0.100 U	0.248	-
Nitrate (as N)	mg/L	0.0100 U	1.11	-
Nitrite (as N)	mg/L	0.00778 J	0.0324	-
Nitrite/Nitrate	mg/L	-	-	-
Phosphorus	mg/L	0.073	0.20	-
Total organic carbon (TOC)	mg/L	10 U	10 U	-

Notes:

J - Estimated concentration.
U - Not present at or above the associated value.
UJ - Estimated reporting limit.
- Not analyzed.

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO HOLDING TIME EXCEEDANCES
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameter	*Analyte*	*Sample ID*	*Holding Time (hours)*	*Holding Time Criteria (hours)*	*Qualified Sample Results*	*Units*
General Chemistry	Nitrate (as N)	GW52510VW036	72	48	1.8 J	mg/L
General Chemistry	Nitrite (as N)	GW52510VW036	72	48	0.007 J	mg/L

Notes:

J Estimated.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameter	*Calibration Date*	*Compound*	*%D*	*Associated Sample ID*	*Qualified Sample Results*	*Units*
VOCs	05/19/10	1,1-Dichloroethene	27	GW51110VW015	5 UJ	µg/L
VOCs	05/13/10	Acetone	30	GW51010VW009	5 UJ	µg/L
				GW51010VW011	5 UJ	µg/L
				GW51010VW012	5 UJ	µg/L
				GW51010VW013	5 UJ	µg/L
				GW5610VW008	5 UJ	µg/L
VOCs	05/13/10	2-Hexanone	27	GW51010VW009	5 UJ	µg/L
				GW51010VW011	5 UJ	µg/L
				GW51010VW012	5 UJ	µg/L
				GW51010VW013	5 UJ	µg/L
				GW5610VW008	5 UJ	µg/L
VOCs	05/29/10	Tetrachloroethene	31	GW52110VW027	2.4 J	µg/L
				GW52110VW028	5.4 J	µg/L
				GW52410VW029	6.4 J	µg/L
VOCs	05/30/10	Tetrachloroethene	32	GW52410VW030	6.4 J	µg/L
				GW52410VW031	1.5 J	µg/L
				GW52410VW032	5 UJ	µg/L
				GW52410VW033	5 UJ	µg/L
				GW52510VW033	2.4 J	µg/L
				GW52510VW034	5.1 J	µg/L
				GW52510VW036	23 J	µg/L

Notes:

VOCs Volatile Organic Compounds.
%D Percent Difference.
J Estimated.
UJ Not detected, estimated reporting limit.

TABLE 5

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameter	*Associated Sample ID*	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Qualified Sample Result*	*Units*
						Recovery (percent)	*RPD (percent)*		
VOCs	GW5410VW002	1,1-Dichloroethene	65	103	45	70 - 130	40	2 J	µg/L
VOCs	GW52010VW024	Trichloroethene	40	38	3	70 - 125	40	280 J	µg/L

Notes:

VOCs Volatile Organic Compounds.
MS Matrix Spike.
MSD Matrix Spike Duplicate.
RPD Relative Percent Difference.
J Estimated.

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameter	*Compound*	*Percent Recovery*	*Control Limits (percent)*	*Associated Sample ID*	*Qualified Sample Results*	*Units*
VOCs	1,2,4-Trichlorobenzene	58	70 - 130	VP6810VW010	0.5 UJ	ppbv
				VP6810VW09	30 UJ	ppbv

Notes:

VOCs Volatile Organic Compounds.
UJ Not detected, estimated reporting limit.

TABLE 7

TENTATIVELY IDENTIFIED COMPOUNDS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Sample ID	*Volatile Organics*	*Estimated Concentration (ppbv)*	*Semi-Volatile Organics*	*Estimated Concentration (ppbv)*
GW51910MY021	Decane	5.5J	-	-
	Undecane	14J	-	-
	Dodecane	8.9J	-	-
	Naphthalene, 1-methyl-	46J	-	-
	Naphthalene, 1,2,3,4-tetrahy	7.3J	-	-
	Naphthalene, 2,3-dimethyl-	12.1J	-	-
	Unknown	5.9J	-	-
GW51910MY022	Undecane	9.0J	-	-
	Naphthalene, 1-methyl-	9.3J	-	-
	Naphthalene, 2-methyl-	8.0J	-	-
	Unknown	8.3J	-	-
GW52010VW023	Undecane	5.8J	-	-
	Dodecane	5.2J	-	-
GW52010VW025	Cyclohexene, 4-ethenyl-	17J	-	-
	Unknown	59.5J	-	-
GW52010VW026	Cyclohexene, 4-ethenyl-	17J	-	-
	Unknown	74.8J	-	-
GW52510VW033	Fluorodichloromethane	2.8J	-	-
GW52510VW036	4-Bromo-3-chloroaniline	5.2J	-	-
	Dodecanoic acid, 11-amino-,	18J	-	-
	Benzene, fluoro-	41J	-	-
GW51010VW010	Unknown	16J	-	-
GW51110VW015	Unknown	5.6J	-	-

Notes:

J Estimated.
- Not analyzed.

TABLE 8

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE RINSE BLANKS
BIOSPARGE SYSTEM PERFORMANCE SAMPLING
GLENN SPRINGS HOLDINGS, INC.
HOOKER-RUCO SITE
HICKSVILLE, NEW YORK
MAY 2010

Parameter	*Rinse Blank Date*	*Analyte*	*Blank Result*	*Sample ID*	*Qualified Sample Result*	*Units*
VOCs	05/05/10	Trichloroethene	4.6J	GW51010VW010	8.0 U	µg/L
				GW51010VW011	7.8 U	µg/L
				GW51010VW012	8.1 U	µg/L
				GW51210VW018	5.0 U	µg/L

Notes:

VOCs Volatile Organic Compounds.
J Estimated.
U Not detected.