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April 13, 2011

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 10007-1866

Re: Quarterly Report – First Quarter 2011 (January through March)
Administrative Orders – Hooker Chemical/Ruco Polymer Corporation Site
Index Nos. II-CERCLA-80216, II-CERCLA-94-0210, and II-CERCLA-02-2001-2018

Dear Mr. Taccone:

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 the period between January and March 2011 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 July 15, 2011 and will cover April through June 2011.

Quarterly Progress Report

The following activities were performed in January through March 2011.

Operable Unit-1 (Onsite Soil)

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

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

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

Operable Unit-3 (Offsite 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 February 10, 2011.
- The potassium permanganate bed was changed out on March 2, 2011.
- Evaluations of possible upgrade alternatives for the supplemental treatment system are ongoing.

Biosparge System

Installation of the monitoring and injection wells for the biosparge system expansion started on September 20, 2010. As of March 31, 2010, the following injection well nests and monitoring well nests were completed IW-3, IW-4, IW-6, IW-7, IW-15, IW-20 through IW-22, MW-70, MW-72/VZ-1, MW-73/VZ-2, MW-76/VZ-5, MW-77/VZ-6, MW-85/VZ-12, MW-86, and MW-89/VZ-17.

USEPA approved the GROWS Landfill in Morrisville, PA for the disposal of drill cuttings and the Cycle Chem facility in Elizabeth, New Jersey for use as a transfer facility. The first roll off was delivered to the Cycle Chem facility on March 23, 2011.

A Modification of the QAPP Addendum for the evaluation comparing low-flow purging to permeable diffusion bag/HydraSleeve™ (PDB) sample results was approved by the USEPA on March 21, 2011. Notification of the first 2011 semi-annual biosparge performance monitoring event was submitted to the USEPA on March 21, 2011. The notification included repeating the PDB trial sampling program.

The results of the samples collected between November 15 and 24, 2010 by Low Flow Purging (LFP) methods from 12 of the 15 wells in the pilot system performance monitoring program are provided in the attached QA/QC report. LFP samples were collected on January 20, 2011 from the remaining three wells (i.e., MW-61I, IW-61D1, and MW-88D2) which were not completed in November 2010 due to the PDBs being stuck in the wells. The results are provided in the attached QA/QC report.

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 in the November 2010 samples were non-detect in all of the vadose zone wells. The November 2010 non-detect VCM concentrations are consistent with the non-detect concentrations of prior

sampling events. In accordance with Section 9.2 of the 100% Final Design Report dated May 2005, further sampling of these ten existing vadose zone wells is no longer needed.

Summary of Biosparge Pilot System

The dissolved oxygen (DO), total volatile organic compounds (TVOCs), and vinyl chloride monomer (VCM) concentration trends over time are presented on Figures 4 through 10.

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

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

Planned Second Quarter 2011 Activities

- The following activities are planned for the second quarter of 2011:

  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 May 2, 2011.
  iii. Complete the installation of injection and monitoring wells along the north fence by the end of April 2011.
  iv. Select contractor and start installation of the vaults, piping, conduit, etc. for the remainder of the biosparge system middle fence and the north fence.
  v. Perform the first 2011 semi-annual groundwater performance monitoring event which is scheduled to start on April 4, 2011.

- 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. No activities for this quarter.

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

Sincerely yours,

Jeffrey A. Kogut

Enclosures

cc: P. Olivio (USEPA)
K. Lynch (USEPA)
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W. Baldwin (Bayer)
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Thomas Taccone
April 13, 2011

bcc: F. Parigi
J. Cofman (Northrop)
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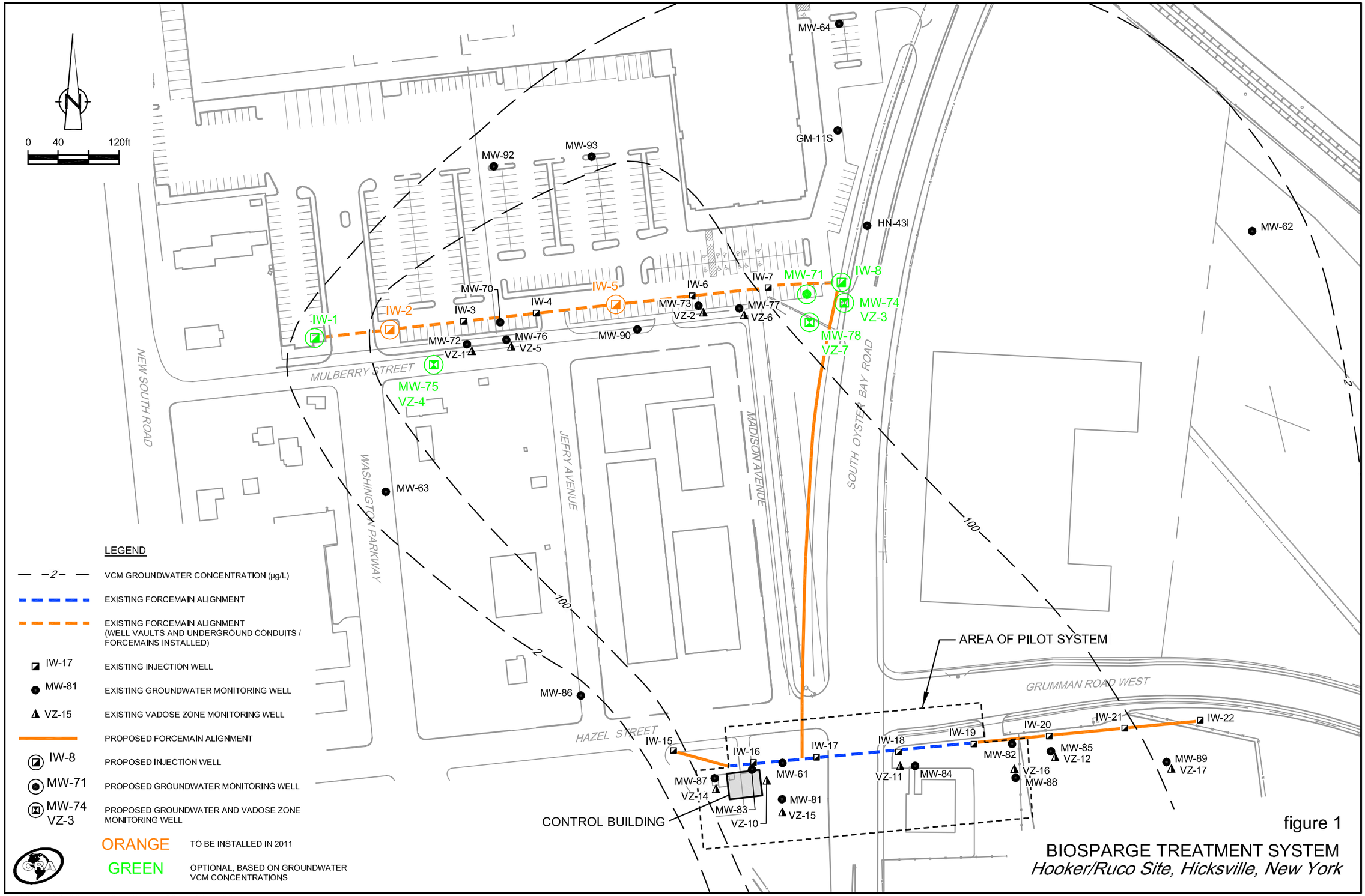

figure 1

BIOSPARGE TREATMENT SYSTEM

Hooker/Ruco Site, Hicksville, New York

06883-D22102(TACC016)GN-WA001 APR 11/2011

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [(1)] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
MW-52 S	4/7/2006	0.03	4.3	5.62	14.3	0.199	-7	0.00	0	1.60
	3/13/2007	0.20	6.1	6.34	14.8	0.652	5	1.64	58.4	1.66
MW-52 I	4/13/2006	0.04	4.5	4.56	15.0	0.121	303	9.77	12.4	0.05
	3/14/2007	0.05	4.9	5.42	14.6	0.192	259	5.85	44.8	0.04
MW-52D	3/14/2007	0.00	5.3	5.67	14.7	0.314	226	3.07	307	0.11
MW-58 D	10/26/2006	0.01	3.4	5.69	16.8	0.192	21	2.42	58.1	4.30
	5/18/2010	0.00	8..4	5.52	16.1	0.201	30	0.00	25	1.8
MW-58 D1	10/26/2006	0.14	3.2	6.34	16.9	0.222	-101	2.58	68.6	8.80
	5/19/2010	0.00	10.4	6.21	16.3	0.221	-50	0.00	198	2.2
MW-58 D2	10/25/2006	0.11	2.8	6.95	17.3	0.266	-198	0.00	15.1	5.16
MW-59 D1	10/25/2006	0.00	2.0	6.07	17.4	0.432	-20	0.58	261	3.24
MW-59 D2	10/25/2006	0.02	5.5	6.50	17.5	0.452	-99	0.47	240	2.00
MW-59 D	10/26/2006	0.07	4.5	10.29	17.1	0.364	-108	0.00	9.6	2.65
MW-61S	10/19/2009	0.00	2.9	5.12	14.8	0.184	372	>20	165	0.02
	5/10/2010	0.00	5.5	6.81	14.6	0.223	100	10.95	0	0.0
MW-61 I	4/28/2006	0.00	4.6	5.68	14.3	0.221	139	0.00	121	1.76
	5/8/2006	0.08	1.9	4.86	14.9	0.182	136	0.00	64.7	1.49
	5/18/2006	0.20	2.9	4.90	16.1	0.155	123	0.00	571	2.16
	5/30/2006	0.20	5.7	5.10	15.7	0.167	118	0.00	110	2.61
	10/24/2006	0.14	4.3	5.53	15.1	0.999	102	0.00	166	2.76
	10/25/2006	0.00	4.1	5.32	15.1	0.202	112	0.41	370	3.04
	10/26/2006	0.02	3.9	5.33	14.6	0.251	133	0.00	900	2.49
	11/29/2006	0.10	5.1	5.58	14.8	0.242	60	0.00	397	1.96
	11/29/2006	0.10	5.1	5.58	14.8	0.242	60	0.00	397	1.96
	12/21/2006	0.08	5.2	5.20	14.4	0.185	118	0.00	18.2	2.17
	1/24/2007	-0.05	4.5	5.54	14.9	0.275	101	1.93	46.4	1.84
	4/19/2007	0.00	6.1	5.88	14.7	0.320	124	3.21	254	0.03
	7/20/2007	0.16	9.3	5.29	15.7	0.189	90	0.37	2	5.19
	10/11/2007	0.22	10.7	5.61	15.6	0.193	50	3.56	33.6	3.12
	1/24/2008	-0.02	6.2	5.56	14.5	0.216	86	1.44	87.2	3.11
	4/23/2008	0.23	9.3	5.88	15.2	0.216	60	0.45	0	2.83
	7/16/2008	0.20	4.0	5.60	16.6	0.183	69	2.78	0	10.82
	10/28/2008	0.26	5.6	5.02	14.9	0.199	351	7.11	4.2	1.11
	4/8/2009	0.07	2.1	5.21	10.9	0.178	306	12.18	7.0	0.05
	10/15/2009	0.00	2.4	5.25	14.5	0.172	366	17.66	0	0.49
	5/10/2010	0.00	10.6	6.30	14.6	0.178	120	10.65	0	0.0
	1/20/2011	0.00	4.4	5.90	11.6	0.253	266	11.10	45	0.0
MW-61 D1	4/28/2006	0.00	4.7	6.07	14.5	0.210	122	0.00	356	1.78
	5/8/2006	0.05	5.7	5.07	15.0	0.210	101	0.00	172	2.77
	5/18/2006	0.16	2.9	5.18	16.2	0.170	91	0.00	>999	>3.30
	5/30/2006	0.25	4.5	5.27	15.9	0.196	93	0.00	138	4.66
	10/24/2006	0.01	4.4	5.49	15.2	0.999	110	0.00	72.4	2.30
	10/25/2006	0.08	4.1	5.33	15.1	0.201	107	0.65	129	3.74
	10/26/2006	0.03	3.9	5.41	14.9	0.273	109	0.00	86	2.99
	11/29/2006	0.00	3.6	5.72	14.9	0.246	54	0.00	310	1.92
	12/21/2006	0.08	5.8	5.29	14.6	0.192	90	0.00	80.7	2.59
	1/23/2007	0.00	8.1	5.73	14.3	0.389	54	1.21	137	1.84
	4/19/2007	0.14	8.1	6.19	14.6	0.304	79	6.66	95.9	0.26
	7/20/2007	0.23	11.7	5.31	16.4	0.163	83	0.44	20	3.30
	10/10/2007	0.00	4.9	5.84	15.5	0.198	26	3.39	27.2	4.20
	1/24/2008	0.18	5.4	5.58	14.4	0.244	78	1.33	38.7	3.21
	4/22/2008	0.08	13.1	5.90	15.5	0.220	60	0.41	321	2.91
	7/16/2008	0.36	6.2	5.42	16.1	0.158	87	2.35	0	2.13
	10/28/2008	0.06	1.8	4.88	15.1	0.182	335	3.75	215	0.21
	4/8/2009	0.15	8.8	5.23	14.5	0.183	267	12.77	9.2	0.08
	10/15/2009	0.00	3.4	5.32	14.2	0.179	336	10.11	0	0.96
	5/10/2010	0.00	7.7	6.18	14.5	0.223	140	10.15	0	0.0
	1/20/2011	0.00	3.1	6.16	10.1	0.346	231	18.80	42.5	0.0

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HOOKER RUCO SITE
HICKSVILLE, NEW YORK

Well	*Date Sampled*	*Drawdown from Initial Water Level* [1] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
MW-61 D2	4/28/2006	0.05	6.4	7.03	15.2	0.230	-186	0.00	413	2.00
	5/5/2006	0.00	10.5	6.65	15.1	0.370	-160	0.00	>999	10.08
	5/18/2006	0.30	4.9	6.63	16.1	0.294	-127	0.00	999	>3.30
	5/30/2006	0.00	4.4	6.32	15.8	0.249	-100	0.00	84.6	2.99
	10/24/2006	0.10	6.4	6.22	14.9	0.904	37	0.00	>999	0.15
	10/25/2006	0.20	4.4	5.77	15.1	0.236	27	1.42	316	5.46
	10/26/2006	0.25	4.2	5.63	14.9	0.233	62	1.94	550	4.04
	11/29/2006	0.00	4.4	6.25	14.8	0.253	110	11.12	>999	1.91
	12/21/2006	0.19	5.1	5.58	14.2	0.216	120	9.28	89.4	2.36
	1/23/2007	0.10	5.1	6.62	14.0	0.273	131	>20	>999	0.89
	4/23/2007	0.05	8.6	5.38	15.1	0.189	361	>20	231	0.21
	7/23/2007	0.04	5.1	5.19	17.6	0.219	71	13.45	>999	1.34
	10/11/2007	0.00	2.0	5.95	15.4	0.211	300	11.71	>999	0.21
	1/24/2008	-17.50	5.3	6.30	13.1	0.195	326	>20	228	0.78
	4/22/2008	7.38	6.0	6.73	14.1	0.239	248	14.49	>999	0.09
	7/15/2008	0.24	3.6	6.40	16.0	0.187	173	19.99	486	0.08
	10/27/2008	NM	6.7	5.92	15.6	0.222	381	>20	220	0.18
	4/9/2009	0.28	2.4	5.67	13.7	0.208	319	17.47	943	1.95
	10/14/2009	0.00	6.7	5.50	14.6	0.227	155	16.29	>999	2.80
	5/10/2010	0.00	4.9	5.70	14.8	0.153	224	19.51	60	0.0
	11/16/2010	0.00	3.1	7.42	14.5	0.210	55	8.75	*	(2)
MW-62I	5/16/2007	0.10	7.1	5.31	14.1	0.278	59	0.00	113	0.69
	5/25/2010	0.00	3.1	5.08	16.5	0.152	14.8	0.00	0	4.2
MW-62D	5/16/2007	0.15	5.4	10.56	14.9	0.119	-125	0.00	570	0.38
	5/25/2010	0.00	4.9	7.23	16.8	0.186	-200	0.00	200	6.2
MW-63 D1	5/23/2006	0.20	2.4	5.03	15.9	0.152	230	0.00	0.0	0.13
	5/24/2010	0.00	1.8	5.25	16.1	0.191	166	0.00	20	0.0
MW-63 D2	5/24/2006	-0.21	5.5	5.30	15.0	0.152	246	0.41	6.5	NM
	6/14/2006	0.05	5.1	5.01	16.3	0.171	222	0.92	3.5	NM
	5/24/2010	0.00	4.1	5.28	16.0	0.199	169	0.00	NM	0.00
MW-63 S	5/19/2006	0.12	2.4	5.20	14.8	0.150	238	0.16	411	0.18
	5/21/2010	0.00	5.8	5.82	16.2	0.172	-111	0.00	132	0.06
MW-63 I	5/23/2006	0.20	4.6	5.09	15.4	0.154	241	0.00	0.0	0.03
	5/21/2010	0.00	6.1	4.73	15.5	0.217	-102	0.00	130	0.0
MW-64 S	3/23/2006	0.10	2.9	5.83	14.3	0.188	-18	0.00	13.8	4.71
	4/26/2007	0.00	5.3	6.71	14.2	0.304	-114	0.00	53.6	2.37
	5/24/2010	0.00	2.5	6.46	15.3	0.201	-98	0.00	10	4.0
MW-64 I	3/24/2006	-0.01	3.6	5.87	14.1	0.203	-38	0.00	0.0	3.21
	4/26/2007	0.00	6.1	6.78	14.2	0.317	-121	0.00	17.5	1.87
	5/24/2010	0.00	3.3	6.62	15.3	0.218	-110	0.00	11	4.0
MW-64D	4/26/2007	0.00	2.7	6.72	14.6	0.324	-115	0.00	22.9	1.98
	5/24/2010	0.05	1.8	6.63	15.3	0.218	-107	0.00	16	2.30
MW-66 D2	4/3/2006	0.03	5.2	5.23	15.2	0.197	-16	0.00	24.3	4.50
MW-67 S	3/28/2006	0.35	5.2	5.88	15.7	0.206	-117	0.00	271	4.36
	5/20/2010	0.00	4.9	6.73	18.4	0.354	-170	0.00	NM	7.0
MW-67 D	3/29/2006	0.47	4.3	5.64	17.1	0.223	86	0.50	>999	4.22
	5/20/2010	0.00	7.4	6.60	18.3	0.234	-187	1.30	NM	0.2
MW-68 S	4/6/2006	-0.10	5.1	8.87	17.4	0.144	-281	0.00	27.8	0.60
MW-68 D	3/31/2006	0.10	5.1	5.67	17.6	0.165	-150	0.00	440	4.86
	5/19/2010	0.00	9.2	5.89	16.2	0.157	-29	0.00	79	2.40
MW-81 D1	4/12/2006	0.16	2.9	6.44	14.5	0.228	-65	0.00	132	1.47
	5/2/2006	0.05	2.9	5.44	15.1	0.303	-31	0.00	0.9	3.20
	5/17/2006	0.00	3.9	6.04	16.8	0.263	-75	0.00	86.4	2.81
	5/25/2006	0.07	2.5	5.62	15.6	0.268	-32	0.00	31.1	>3.3
	10/24/2006	0.08	4.0	5.72	14.5	0.420	15	2.26	14	3.23
	10/25/2006	0.21	0.7	5.77	15.3	0.349	-55	3.01	0.0	9.76
	10/26/2006	-0.08	1.3	6.02	14.7	0.321	-25	0.00	0.0	10.12
	1/29/2007	-0.07	6.1	6.19	13.1	0.429	-55	2.26	704	2.36
	4/19/2007	0.18	5.3	6.20	14.2	0.380	-128	0.00	629	2.06

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-81D1	7/23/2007	0.07	5.3	6.13	15.9	0.247	-22	0.74	9.2	5.19
	10/9/2007	0.00	7.9	6.02	15.8	0.228	-77	3.08	5.1	4.98
	4/21/2008	0.06	3.6	6.67	15.5	0.181	-99	0.92	0.0	2.69
	10/28/2008	0.00	4.0	5.13	15.3	0.215	292	17.31	336	2.04
	4/7/2009	0.07	4.7	5.75	13.1	0.274	158	0.04	0.0	5.52
	10/15/2009	0.00	1.3	5.30	13.8	0.210	216	8.90	30.7	0.71
	5/6/2010	0.00	2.7	6.03	16.5	0.159	72	0.00	54.3	2.2
	11/17/2010	-0.02	1.8	5.75	15.1	0.116	327	3.54	0.0	0.0
MW-81 D2	4/12/2006	0.05	2.4	5.79	15.2	0.357	-51	0.00	4.1	5.04
	5/4/2006	0.00	5.8	6.12	16.8	0.204	-6	1.10	119	1.37
	5/18/2006	0.12	3.4	8.18	15.1	0.220	-58	0.00	906	>3.30
	5/26/2006	0.21	3.2	8.58	15.8	0.225	-129	0.00	>999	>3.3
	10/24/2006	0.09	3.2	6.33	14.5	0.263	78	16.87	396	2.37
	10/25/2006	-0.04	1.9	6.49	15.7	0.251	73	17.96	170	0.40
	10/26/2006	0.21	1.9	7.64	15.1	0.229	93	15.00	>999	0.74
	1/24/2007	-0.05	5.9	7.21	13.1	0.234	-39	2.90	>999	0.98
	4/18/2007	0.00	1.3	9.84	12.5	0.301	-110	0.00	519	2.71
	7/19/2007	0.08	2.6	6.03	17.6	0.181	48	14.10	121	1.48
	10/10/2007	0.18	7.5	6.72	15.3	0.180	35	7.45	413	9.39
	4/18/2008	0.00	2.4	6.50	15.8	0.171	81	4.23	130	0.45
	10/22/2008	0.10	1.8	7.20	15.6	0.147	107	>20	0.0	0.09
	4/7/2009	0.07	1.3	6.12	12.4	0.161	326	10.58	31.8	0.45
	10/14/2009	0.03	3.4	6.13	15.1	0.162	227	18.39	14.9	0.50
	5/10/2010	-0.06	1.9	6.41	14.9	0.133	93	9.69	0.0	0.5
	11/16/2010	-0.24	4.3	6.32	14.5	0.137	254	13.28	297	1.0
MW-82 D1	4/17/2006	0.00	2.8	6.88	16.4	0.391	-126	0.00	10.8	1.28
	4/25/2006	0.12	4.9	6.23	17.2	0.351	-170	0.00	281	1.89
	5/11/2006	0.10	2.4	6.39	16.5	0.356	-190	0.00	150	4.32
	5/25/2006	0.00	6.6	6.27	17.8	0.341	-200	0.00	226	5.22
	5/31/2006	0.00	5.0	6.98	20.8	0.374	-214	0.00	297	5.28
	10/24/2006	0.23	0.9	6.44	14.5	0.411	-119	1.93	202	6.14
	10/25/2006	0.00	1.6	7.37	14.5	0.491	-154	0.00	9	9.36
	10/26/2006	0.02	1.0	6.63	16.0	0.317	-142	2.77	116	6.32
	11/30/2006	-0.30	2.6	7.39	15.8	0.463	-158	0.00	252	1.86
	12/20/2006	0.05	2.3	6.89	12.9	0.327	-149	0.00	146	1.98
	1/25/2007	0.05	5.7	7.25	12.9	0.440	-145	1.21	48.8	1.94
	4/20/2007	0.05	2.6	6.76	18.1	0.305	-153	0.76	357	2.79
	7/25/2007	0.05	3.0	5.39	23.0	0.186	95	15.15	73	2.58
	10/18/2007	0.04	3.6	6.04	18.1	0.219	125	0.73	339	5.25
	1/23/2008	0.00	4.2	6.13	13.3	0.239	-38	1.89	7.8	5.82
	4/25/2008	0.45	4.3	4.35	17.5	0.183	108	0.13	81.2	1.49
	7/18/2008	0.03	5.3	5.73	17.6	0.147	96	3.38	0	NM
	10/30/2008	0.00	3.7	4.79	15.9	0.168	309	<20	137	NM
	4/13/2009	0.04	3.5	5.81	14.3	0.184	328	5.35	145	0.21
	10/20/2009	0.03	2.7	5.50	16.4	0.176	231	8.08	0.0	0.26
	5/12/2010	-0.06	1.8	5.81	14.2	0.161	53	7.01	527	0.0
	11/17/2010	0.02	1.8	6.12	16.5	0.097	307	8.00	321	NM
MW-82 D2	4/17/2006	0.08	3.6	6.14	16.2	0.256	-152	0.00	636	5.12
	4/24/2006	0.00	4.3	7.34	15.7	0.295	-367	0.00	315	1.64
	5/25/2006	0.00	2.9	6.06	17.2	0.239	-140	0.00	95	3.02
	6/5/2006	0.05	3.0	6.52	17.7	0.251	-139	0.00	65.1	6.40
	5/31/2006	0.00	3.9	6.54	16.7	0.239	-125	0.00	27.9	6.58
	10/24/2006	0.07	4.1	6.91	16.3	0.231	-166	0.38	234	10.44
	10/25/2006	-0.08	1.0	6.07	15.4	0.282	-95	1.98	6.8	11.64
	10/26/2006	0.14	1.3	6.23	17.5	0.260	-110	3.37	59	8.60
	11/30/2006	0.00	2.7	7.48	16.6	0.313	-179	0.00	37.9	2.31
	12/20/2006	0.00	3.4	7.11	14.1	0.226	-178	0.00	14.1	0.34
	1/25/2007	0.00	3.2	7.23	13.5	0.284	-147	1.70	66.1	2.01
	4/20/2007	0.00	3.4	6.87	18.9	0.182	-183	0.61	182	1.91

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [(1)] *(feet)*	*Well Screen Volumes Purged*	*pH (S.U.)*	*Temperature (Celsius)*	*Conductivity (mS/cm)*	*ORP (mV)*	*DO (mg/L)*	*Turbidity (NTU)*	*Fe^{+2} (mg/L)*
MW-82 D2	7/25/2007	0.05	3.7	6.49	18.9	0.211	-192	0.50	47	6.56
	10/18/2007	0.05	5.2	9.88	20.6	0.499	-359	2.93	760	1.22
	1/23/2008	0.00	4.2	6.59	13.9	0.183	-147	1.51	61.5	4.74
	4/24/2008	0.28	2.9	7.80	19.0	0.217	-352	0.00	0	2.43
	7/18/2008	0.00	4.7	7.66	25.0	0.153	-472	0.00	0	16.32
	10/30/2008	0.00	1.9	5.62	15.4	0.169	-3	0.84	138	3.01
	4/13/2009	0.03	3.6	6.49	16.5	0.249	282	>20	113	0.05
	10/20/2009	0.09	4.4	6.98	16.5	0.197	-260	0.07	4.5	1.13
	5/12/2010	0.00	3.1	7.38	15.1	0.165	-137	0.00	42	1.0
	11/18/2010	0.17	1.5	6.75	14.8	0.109	276	0.83	21	1.2
MW-83 D1	4/11/2006	0.08	4.3	10.04	15.3	0.472	-195	0.00	648	0.20
	5/1/2006	0.07	4.5	10.35	17.1	0.518	-125	0.00	178	0.44
	5/16/2006	0.01	5.7	11.56	13.5	0.978	-235	0.00	>999	1.20
	5/24/2006	0.05	6.3	10.89	16.0	0.375	-211	0.00	350	1.36
	10/24/2006	0.20	1.0	11.70	13.1	1.190	70	0.00	108	1.94
	10/25/2006	0.11	2.0	12.80	14.4	0.990	-146	0.00	102	0.23
	10/26/2006	0.24	3.1	10.30	14.1	0.561	-64	2.06	9.9	0.06
	1/30/2007	0.03	5.3	11.07	13.4	0.342	6	1.74	79.4	0.01
	4/18/2007	0.00	4.9	10.70	12.7	0.256	-70	0.00	690	0.00
	7/17/2007	0.00	2.4	10.70	16.3	0.271	-14	0.41	12	0.04
	10/12/2007	0.00	12.4	10.10	15.3	0.226	64	3.00	127	0.13
	1/22/2008	0.03	4.4	10.52	13.5	0.283	174	8.34	0.0	0.12
	4/17/2008	0.00	8.4	10.08	14.6	0.275	151	2.32	163	0.03
	7/15/2008	0.03	8.0	9.26	14.9	0.103	216	1.91	0	NM
	10/24/2008	0.03	4.1	8.65	15.6	0.264	291	8.31	35.1	0.04
	4/8/2009	0.10	6.2	7.71	13.7	0.276	274	1.44	61.1	0.09
	10/14/2009	0.01	4.0	7.01	14.9	0.285	361	13.17	141	0.41
	5/5/2010	0.02	6.1	5.50	15.3	0.254	284	3.50	9.1	NM
	11/15/2010	0.05	2.5	8.36	15.2	0.216	271	9.14	317	0.00
MW-83 D2	5/2/2006	-0.25	3.6	6.00	15.0	0.235	50	1.70	0.0	0.49
	5/16/2006	0.08	4.5	6.88	15.0	0.224	42	2.02	0.0	0.02
	5/25/2006	0.13	2.4	6.61	15.5	0.216	73	2.91	0.0	0.00
	10/24/2006	0.09	4.9	6.56	13.7	0.226	241	>19.99	17.5	9.88
	10/25/2006	0.10	1.2	6.18	14.3	0.297	179	>20	92	0.00
	10/26/2006	0.10	1.5	6.46	13.1	0.216	171	>20	0.0	0.06
	1/29/2007	0.00	2.9	6.55	10.3	0.197	249	13.20	69.3	0.00
	4/18/2007	0.21	3.4	8.16	13.0	0.233	97	0.00	103	0.00
	7/17/2007	0.04	3.0	6.42	17.3	0.147	289	>19.99	25	0.08
	10/15/2007	0.15	13.0	5.92	15.6	0.140	279	11.44	0.0	0.23
	1/22/2008	0.11	5.3	6.76	13.3	0.174	328	>20	0.0	0.14
	4/17/2008	0.10	11.1	6.35	15.2	0.169	295	>20	0.0	0.04
	7/15/2008	0.34	4.1	7.00	*	0.140	270	8.50	0.0	0.04
	10/21/2008	0.12	2.6	6.26	14.9	0.120	297	0.92	2.9	0.00
	4/8/2009	0.09	2.3	6.04	13.0	0.162	370	20.00	7.1	0.01
	10/13/2009	0.10	2.4	5.70	15.2	0.146	380	19.81	0.0	0.01
	5/6/2010	0.17	2.5	4.38	15.5	0.060	190	11.32	46	NM
	11/16/2010	0.00	2.5	6.85	14.7	0.127	370	16.45	632	0.00
MW-84 D1	5/23/2006	0.09	1.7	6.25	16.1	0.301	-71	0.00	18.5	3.19
	5/26/2006	0.00	3.4	6.45	16.8	0.305	-118	0.00	91.9	4.50
	6/6/2006	0.15	4.1	6.55	16.6	0.280	-139	0.00	10.3	5.50
	6/8/2006	0.00	5.1	6.58	16.3	0.263	-163	0.00	10.4	2.35
	10/24/2006	0.00	4.7	5.46	15.7	0.197	50	7.89	54.7	1.44
	10/25/2006	0.06	1.3	6.32	15.4	0.296	86	8.03	0.0	1.37
	10/26/2006	0.04	2.9	6.19	15.8	0.300	78	6.51	77	1.19
	1/30/2007	0.00	3.6	6.16	13.1	0.254	160	7.53	188	1.24
	4/24/2007	0.00	3.6	6.49	16.5	0.249	282	>20	113	0.05
	7/24/2007	0.10	5.1	6.26	19.2	0.137	301	>20	6.9	0.05
	10/17/2007	0.21	4.9	6.45	15.8	0.143	304	8.81	85	0.62
	1/28/2008	0.07	4.5	6.46	13.9	0.157	303	>20	70.4	0.00

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-84 D1	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
	11/18/2010	0.00	0.6	6.66	15.4	0.137	207	7.94	6.7	NM
MW-84 D2	5/23/2006	0.15	3.9	6.74	17.4	0.246	-131	0.00	780	12.68
	5/30/2006	0.20	2.4	6.59	18.8	0.241	-152	2.70	595	3.18
	6/6/2006	0.00	5.7	7.17	16.8	0.219	-221	0.00	228	2.70
	6/8/2006	0.00	3.0	6.78	16.5	0.220	-162	0.00	230	3.78
	10/24/2006	0.00	6.8	8.47	14.9	0.295	-90	4.69	131	1.53
	10/25/2006	-0.02	1.0	8.68	15.1	0.395	-47	2.84	127	0.27
	10/26/2006	-0.01	5.0	8.00	15.5	0.393	-77	2.67	>999	0.64
	1/29/2007	0.00	1.9	9.97	12.2	0.322	7	3.91	199	0.18
	4/24/2007	0.10	6.7	10.22	16.5	0.339	138	16.31	470	0.30
	7/24/2007	0.10	8.9	10.33	20.6	0.313	139	>20	200	0.21
	10/17/2007	0.09	4.7	10.88	17.1	0.396	34	4.68	817	0.23
	1/28/2008	0.00	6.5	11.01	13.8	0.789	97	9.91	187	0.79
	4/23/2008	0.20	12.9	10.97	16.8	0.575	6	3.96	603	0.09
	7/17/2008	0.16	4.1	10.05	18.1	0.287	13	14.05	>999	0.27
	10/29/2008	0.00	2.4	10.12	15.6	0.351	160	8.33	320	0.25
	4/9/2009	0.00	4.9	10.45	15.7	0.316	70	10.15	367	0.08
	10/16/2009	0.00	5.8	10.19	14.6	0.257	135	14.65	>999	1.45
	5/25/2010	0.00	3.1	10.63	21.9	0.233	-20	11.75	430	0.0
	11/18/2010	0.00	2.5	10.67	15.3	0.235	-21	0.79	>999	0.0
MW-87 D1	4/5/2006	-0.04	2.9	5.04	12.8	0.197	142	0.00	64	0.99
	4/20/2006	0.02	3.9	4.94	17.5	0.184	218	0.00	43.8	0.30
	5/4/2006	0.02	2.6	5.03	16.2	0.187	231	0.00	0.0	0.34
	5/15/2006	0.02	2.0	5.28	15.1	0.165	207	0.00	66.2	0.27
	10/24/2006	0.25	4.5	5.45	14.9	0.229	234	0.70	5.4	0.17
	10/25/2006	-0.01	2.8	5.23	15.9	0.224	221	0.00	0.0	0.35
	10/26/2006	0.03	2.1	5.26	15.0	0.192	226	2.63	22.2	0.05
	1/24/2007	0.10	2.1	5.31	14.7	0.200	248	0.78	11.0	0.10
	4/17/2007	0.10	5.3	5.47	14.5	0.999	169	0.00	62	0.14
	7/17/2007	0.00	4.0	5.30	17.2	0.186	223	0.44	54	0.09
	10/8/2007	0.00	5.7	5.30	19.1	0.229	203	4.39	17.3	0.40
	4/16/2008	0.07	9.0	5.04	15.7	0.193	322	8.35	220	0.05
	10/21/2008	0.00	3.4	4.34	15.0	0.193	463	>20	16.2	0.00
	4/7/2009	0.00	3.6	5.12	14.0	0.148	289	8.62	0.0	0.00
	10/13/2009	0.03	2.4	4.60	16.1	0.205	379	16.18	0.0	0.17
	5/3/2010	0.00	4.9	3.23	16.2	0.170	282	5.74	2.0	0.0
	11/29/2010	0.00	3.4	5.88	16.2	0.133	192	2.75	5.8	0.0
MW-87 D2	4/5/2006	0.00	2.8	5.21	14.1	0.172	121	1.81	129	1.14
	4/25/2006	-0.05	5.1	5.40	15.5	0.163	149	2.62	42.8	0.20
	5/15/2006	0.32	4.3	5.80	15.4	0.152	104	1.59	54.8	NM
	5/24/2006	0.10	4.9	5.45	16.2	0.155	163	1.62	0.0	1.36
	10/24/2006	0.13	3.9	5.69	15.5	0.183	212	4.00	131	0.08
	10/25/2006	0.06	1.5	5.34	15.5	0.173	137	6.68	25.5	0.09
	10/26/2006	-0.03	2.1	5.37	15.2	0.160	226	4.53	0.0	0.02
	1/24/2007	0.00	4.7	5.61	13.3	0.186	131	3.64	160	0.25
	4/17/2007	0.00	5.3	5.83	14.5	0.228	106	3.89	0.9	0.09
	7/16/2007	0.00	2.0	5.65	17.8	0.168	145	3.31	5.1	0.07
	10/9/2007	0.18	2.9	5.57	16.2	0.172	287	7.45	60.1	0.12
	4/16/2008	0.00	6.9	5.37	15.9	0.174	288	5.39	0.0	0.01
	10/21/2008	0.08	1.6	4.65	16.9	0.158	440	9.66	27	0.00
	4/7/2009	0.03	4.4	4.60	13.0	0.175	346	9.90	7.0	0.06
	10/13/2009	0.00	2.1	5.05	16.0	0.176	341	5.30	49.7	0.26
	5/5/2010	0.05	0.2	4.34	15.3	0.138	222	4.15	17.1	NM

TABLE 2

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

Well	*Date Sampled*	*Drawdown from Initial Water Level* [1]	*Well Screen Volumes Purged*	*pH*	*Temperature*	*Conductivity*	*ORP*	*DO*	*Turbidity*	*Fe* $^{+2}$
		(feet)		*(S.U.)*	*(Celsius)*	*(mS/cm)*	*(mV)*	*(mg/L)*	*(NTU)*	*(mg/L)*
MW-87 D2	11/15/2010	0.01	2.5	5.21	15.4	0.148	397	12.41	7.7	0.00
MW-88 D1	4/19/2006	0.08	2.9	6.09	17.9	0.273	-90	0.00	>999	9.64
	4/26/2006	0.32	6.7	5.99	16.7	0.204	-53	0.00	589	4.96
	5/10/2006	0.25	4.2	5.68	15.4	0.200	-2	0.00	393	2.75
	5/30/2006	0.00	3.6	5.90	17.1	0.188	-65	3.13	408	3.62
	6/1/2006	0.10	5.0	6.13	19.9	0.188	-73	0.00	367	5.12
	10/24/2006	0.06	1.8	6.06	15.6	0.252	-43	0.00	88.6	11.04
	10/25/2006	0.09	1.4	5.86	15.3	0.233	-13	0.00	4.7	10.20
	10/26/2006	0.00	3.4	5.59	15.6	0.317	33	3.36	415	6.56
	1/30/2007	0.10	2.9	6.12	11.8	0.193	-45	1.16	257	2.01
	4/19/2007	0.03	4.9	5.84	15.4	0.187	172	11.88	334	1.84
	7/26/2007	0.22	2.0	5.75	22.4	0.249	232	9.48	284	0.74
	10/16/2007	0.00	2.5	6.35	17.7	0.226	3	0.02	92	5.47
	4/25/2008	0.11	2.8	6.11	17.8	0.226	225	5.95	967	0.52
	10/30/2008	NM	3.8	5.06	15.8	0.200	339	>20	14.1	0.00
	4/13/2009	0.01	5.5	5.46	16.0	0.174	205	16.71	>999	0.31
	10/21/2009	0.02	2.1	5.66	16.0	0.235	253	>20	268	0.47
	5/11/2010	0.02	5.7	5.94	15.5	0.191	177	19.00	177	0.50
	11/17/2010	0.03	2.5	6.12	17.0	0.121	366	13.04	39.7	0.00
MW-88 D2	4/20/2006	0.00	3.7	6.25	17.4	0.244	-152	0.00	951	6.16
	5/10/2006	0.03	3.5	8.05	16.6	0.330	-331	0.00	>999	9.44
	6/1/2006	0.00	4.9	7.24	18.5	0.287	-210	0.00	>999	12.95
	6/7/2006	0.10	4.3	8.44	15.9	0.320	-380	0.00	>999	12.52
	10/24/2006	0.00	5.8	9.10	15.8	0.387	-282	1.44	>999	18.96
	10/25/2006	0.17	1.0	9.44	15.0	0.426	-253	1.97	>999	11.40
	10/26/2006	0.00	1.5	7.33	17.7	0.286	-212	0.00	>999	NM
	1/25/2007	0.00	8.5	9.17	11.3	0.323	-315	0.82	993	0.16
	4/19/2007	0.10	4.0	7.13	16.8	0.278	-219	0.37	>999	2.17
	7/26/2007	0.31	2.5	9.18	31.2	0.427	-333	0.44	>999	1.21
	10/16/2007	0.03	5.7	7.48	18.2	0.192	-291	3.04	145	9.39
	4/25/2008	1.60	4.3	6.28	17.0	0.164	40	8.02	>999	2.65
	10/31/2008	0.00	5.3	6.64	17.5	0.191	45	8.94	435	2.70
	4/14/2009	0.08	11.9	5.99	13.9	0.206	41	9.94	>999	0.98
	10/20/2009	0.03	9.2	6.94	16.2	0.265	-3	4.67	325	4.49
	5/11/2010	-0.13	4.7	7.30	15.5	0.230	-5	5.70	697	0.50
	1/20/2011	0.00	1.9	9.99	11.3	0.450	232	5.58	2.06	0.00
MW-90 D1	6/13/2006	0.10	7.8	6.25	17.0	0.230	-112	0.00	76.8	4.10
	4/25/2007	0.00	4.9	6.07	16.1	0.231	-100	0.93	542	2.30
MW-90 D2	6/13/2006	0.05	7.8	5.91	18.4	0.191	-9	0.20	95.3	3.06
	4/25/2007	0.05	4.7	5.95	15.3	0.209	-47	1.38	102	1.76
	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

(2) Orange colored

NM - Not measured

* - Probe malfunctioned

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

January through March 2011

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• Work Plan	100	July 1993		September 23, 1993
• Borehole/Well Installation (MW-50, MW-53, MW-54 and MW-55)	100	September 30, 1994		June 19, 1995
• Well Development, Sampling and Analysis	100	July 10, 1995		August 9, 1995
• Water Level Measurements	100	August 15, 1995		April, 1996
• Interim Report	100	May 23, 1995		June 15, 1995
• Interim Report - Addendum No. 1	100	July 28, 1995		August 2, 1995
• Grumman Production Wells Sample Collection and Analysis	100	August 1, 1995		October 4, 1995
• Well Installation (MW-51, MW-52, MW-56 and MW-57)	100	August 30, 1995		January 26, 1996
• Regional Groundwater Level Monitoring Event	100	October 3, 1995		October 3, 1995
• Well Development, Sampling and Analysis	100	January 22, 1996		July 5, 1996
• Grumman Groundwater Model	100	July 27, 1995		November 20, 1997
• Phase I Report	100	February 21, 1996		April 26, 1996
• Supporting Documentation Regarding the Effectiveness of In Situ Remediation	100	June 10, 1996		August 9, 1996
• Phase II Report	100	February 21, 1996		August 12, 1996
• Comments on DEC Draft Supplemental Feasibility Study	100	September 23, 1996		October 17, 1996
• Responses to Northrop Comments on the Phase I Report	100	April 17, 1997		June 6, 1997
• Comments on DEC Supplemental Feasibility Study	100	June 1, 1997		June 20, 1997
• Comments on Navy Regional Groundwater Feasibility Study	100	July 28, 1997		October 8, 1997
• Revised Pages for Navy Regional Groundwater Feasibility Study	100	July 28, 1997		November 3, 1997
• Comments on Groundwater Flow Model Report	100	November 20, 1997		December 5, 1997
• Comments on Draft Final Regional Groundwater Feasibility Study	100	March 27, 1998		May 1, 1998
• Comments on Northrop Letter Report	100	May 20, 1998		June 4, 1998
• Evaluation of MW-52 Area Groundwater Extraction System	100	July 1, 1998		July 29, 1998
• Remedial Investigation Report	100	December 1, 1998		January 21, 1999
• Feasibility Study Report	100	December 1, 1998		March 16, 1999
• Groundwater Treatability Study (GTS)	100	December 16, 1998		July 19, 1999
• Responses to EPA Comments on RI Report	100	May 25, 1999		June 11, 1999
• Responses to EPA Comments on FS Report	100	June 21, 1999		July 7, 1999
• Scope of Predesign Investigative Activities				
- Initial	100	June 1, 1999		June 11, 1999
- Revised	100	February 16, 2001		May 28, 2001
• Revised RI Report	100	May 25, 1999		November 16, 1999
• Revised FS Report	100	July 7, 1999		December 22, 1999
• Responses to EPA Comments on GTS	100	October 14, 1999		November 3, 1999
• Responses to EPA Comments on FS Report Responses	100	October 14, 1999		November 3, 1999
• Obtain access agreements	100	June 1999		December 2001

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

January through March 2011

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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
• 100% Design Approved	100			July 7, 2005

TABLE 1

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

Groundwater Investigations Beyond the Ruco Property (OU-3)

January through March 2011

Task and Activity	*Percentage of Activity Completed*	*Start Date*	*Scheduled Completion Date*	*Completion Date*
• 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
• Contracted Well Driller	100			August 3, 2010
• Install Biosparge System Wells	90	September 20, 2010		

TABLE 3

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

	VZ-10S									
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/27/2008***	***4/9/2009***	***10/15/2009***	***5/14/2010***	***11/22/2010***
Acetone	12,000	51,000	4,500	14,200	1,390	13,800	1,430	6,500	1.8	0.53
Carbon Disulfide	ND	123J	101	69	105	107	85	885	ND	ND
Ethanol	ND	24	ND	54	57	43	ND	1.4	3.7	0.83
Methyl Ethyl Ketone	160,000	1,220,000	144,000	277,000	36,200	347,000	28,500	130,000	11	17
Methyl Chloride	ND	ND	114	106	154	139	42	ND	ND	ND
Tetrachloroethene	ND	1.9J	ND	ND	ND	3.5	ND	ND	3.4	9.3
Tetrahydrofuran	100,000	480,000	56,500	96,600	13,500	125,000	9,890	57,700	4.4	35
Toluene	960	21	13	5.6	11	13	ND	ND	ND	ND
Vinyl Chloride	ND	28	18	21	28	29	ND	ND	ND	ND

	VZ-10D									
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/27/2008***	***4/9/2009***	***10/15/2009***	***5/14/2010***	***11/22/2010***
Acetone	ND/ND	9.8	16	3.5/1.7	8.5	7.2	18	0.90	1750	1760
Carbon Disulfide	ND/ND	0.36J	ND	ND/ND	ND	ND	ND	ND	ND	ND
Ethanol	ND/ND	23	8.4	13/11	5.2	ND	20	1.4	ND	ND
Methyl Ethyl Ketone	22/22	104	629	88/41	42	374	122	23.5	32,100	53,100
Tetrachloroethene	1.1/0.92	2.6	9.2	14/9.4	8.8	8.4	7.5	18	ND	ND
Tetrahydrofuran	13/14	28	506	45/24	6.8	250	70	23	20,100	25,600
Toluene	ND/ND	ND	ND	0.38/ND	ND	ND	2.8	ND	ND	ND
Vinyl Chloride	0.68/ND	ND	ND	ND/ND	ND	ND	ND	ND	ND	ND

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

	VZ-11S									
Parameter	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/29/2008***	***4/13/2009***	***10/20/2009***	***5/14/2010***	***11/22/2010***
Acetone	5.7	6.7	4.7	3.7	4.1	1.7	ND	0.83	3.4	1.2/2.1
Carbon Disulfide	ND	0.69J	ND	ND	0.20J	ND	ND	ND	ND	ND/ND
Ethanol	6.1	7.0	1.5	16	2.3	1.9	ND	1.5	4.0	ND/0.12
Methyl Ethyl Ketone	100	119	96	360	21	8.1	563	17	100	10.6/10.4
Methyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/0.54
Tetrachloroethene	2.3	3.3	6.6	3.2	20	23	ND	11	6.3	4.9/3.8
Tetrahydrofuran	96	30	35	183	4.9	29	445	18	97	25.5/25.9
Toluene	4.3	0.2	ND	ND	0.20	ND	ND	ND	1.3	ND/ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND

	VZ-11D									
Parameter	***10/26/2006***	***11/28/2006***	***7/25/2007***	***10/15/2007***	***1/24/2008***	***7/18/2008***	***10/30/2008***	***4/13/2009***	***10/20/2009***	***5/14/2010***	***11/22/2010***
Acetone	ND	ND/12	32	213	61	5.7	2.6	92	3.0	3.6	7.7
Carbon Disulfide	ND	2.4J/9.2J	6.0J	33	6.0J	0.91	ND	22	0.61	0.54	ND
Ethanol	ND	4.1/5.4	14	5.9	24	3.0	3.3	ND	27	5.8	24
Methyl Ethyl Ketone	7,600	780/700	5,540	49,800	4,880	26	77	3,990	90	100	120
Methyl Chloride	ND	ND	ND	58	4.4	ND	ND	39	ND	0.43	ND
Tetrachloroethene	ND	4.8/4.6	0.7	5.2	5.6	18	16	ND	0.87	23	16
Tetrahydrofuran	1,900	190/140	912	15,500	1,560	6.9	23	3,860	114	111	740
Toluene	ND	ND1.3	0.4	ND	ND	0.34	ND	ND	ND	0.38J	ND
Vinyl Chloride	ND	ND	ND	2.5	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-14S						
Parameter	***11/28/2006***	***10/15/2007***	***10/27/2008***	***4/9/2009***	***10/15/2009***	***5/14/2010***	***11/22/2010***
Acetone	3.5	4.4	8.2	8.1	1.4	9.0	1.3
Carbon Disulfide	0.79	ND	ND	ND	ND	ND	ND
Ethanol	ND	4.6	2.2	4.2	1.8	4.1	2.9
Methyl Ethyl Ketone	80	41	167	54	2.7	1.4	17
Tetrachloroethene	1.5	10	103	30	56	17	36
Tetrahydrofuran	39	53	113	35	5.8	15	49
Trichloroethene	ND	ND	15	2.7	1.5	0.38J	0.56
Vinyl Chloride	0.90	ND	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***	***11/22/2010***
Acetone	150	3,600	2,600	256	2,160	222	340
Carbon Disulfide	ND	110	63	39	697	39J	ND
Ethanol	ND	ND	6.1	ND	1,130	ND	ND
Methyl Ethyl Ketone	4,200	351,000	128,000	15,200	61,400	10,600	21,900
Methyl Chloride	ND	101	93	30	ND	ND	ND
Tetrachloroethene	ND	6.4	11	ND	ND	ND	ND
Tetrahydrofuran	2,800	306,000	118,000	13,900	67,600	9,750	25,800
Trichloroethene	ND	ND	ND	ND	252	ND	ND
Vinyl Chloride	17	6.7	6.1	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-15S						
Parameter	***11/28/2006***	***10/16/2007***	***10/29/2008***	***4/9/2009***	***10/15/2009***	***6/8/2010***	***11/22/2010***
Acetone	ND	30	2.8	13	0.65	55	140
Carbon Disulfide	ND	ND	ND	ND	ND	19J	31J
Ethanol	ND	ND	2.0J	5.3	1.2	41	89
Methyl Ethyl Ketone	15,000	7,370	224	552	19	ND	59
Methyl Chloride	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	9.2	19	5.2	ND	ND
Tetrahydrofuran	4,700	1,690	52	168	22	5,210	13,000
Vinyl Chloride	ND	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***	***11/22/2010***
Acetone	16	51	12	10	237	3.6	1.0
Carbon Disulfide	2.9	21	30	21	82	ND	ND
Ethanol	8.9	ND	4.3J	7.3	150	2.0	1.2
Methyl Ethyl Ketone	150	2,340	268	83	75	83	44
Methyl Chloride	19	91	88	25	ND	ND	ND
Tetrachloroethene	590	7	6.3	3.1	ND	23	26
Tetrahydrofuran	16	16,000	6,290	113	6,420	28	38
Vinyl Chloride	ND	7.8	16	12	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-16S					
Parameter	***10/17/2007***	***10/30/2008***	***4/13/2009***	***10/20/2009***	***5/14/2010***	***11/22/2010***
Acetone	2.9	2.5	2.6	3.9	9.3	7.8
Carbon Disulfide	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND
Ethanol	1.9	0.71	0.73	8.2	4.5	1.5
Methyl Ethyl Ketone	9.6	1.7	23	9.3	2.0	12
Methyl Chloride	ND	0.35	ND	0.29	0.33J	ND
Tetrachloroethene	12	2.4	7.2	18	27	21
Tetrahydrofuran	31	2.8	30	11	1.0	24
Toluene	2.6	1.1	ND	0.48	2.9	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND

	VZ-16D					
Parameter	***10/17/2007***	***10/30/2008***	***4/13/2009***	***10/20/2009***	***5/14/2010***	***11/22/2010***
Acetone	144,000	145,000	22,900	9,890	8,240	15,100
Carbon Disulfide	120,000	60,000	ND	774	ND	490
Chloroethane	120,000	152	ND	ND	ND	ND
Ethanol	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	3,240,000	2,580,000	308,000	156,000	182,000	310,000
Methyl Chloride	120,000	60,000	ND	ND	ND	ND
Tetrachloroethene	3.6	6.4	ND	ND	ND	ND
Tetrahydrofuran	1,500,000	1,530,000	230,000	88,500	104,000	182,000
Toluene	44	28	ND	ND	ND	ND
Vinyl Chloride	262	157	ND	ND	ND	ND

Notes:

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