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26 April 2012

Mr. Jeff Dyber, P.E. - Environmental Engineer 2
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Eastern Remedial Action
625 Broadway
Albany, New York 12233

RE: National Heatset Printing Site / Soil Vapor Extraction System
Operation & Maintenance Annual Report (December 2010–January 2012)
1 Adams Boulevard, Farmingdale, New York
New York State Department of Environmental Conservation Site No. 1-52-140
EA Project No. 14474.29

Dear Mr. Dyber:

This letter report provides an overview of the ongoing operation of the soil vapor extraction (SVE) system at the National Heatset Printing site in Farmingdale, New York (Figure 1). EA Engineering, P.C. and its affiliate EA Science & Technology, Inc. (EA) assumed management of the on-site SVE system under Work Assignment No. D004441-29. The activities are being conducted under the New York State Department of Environmental Conservation (NYSDEC) State Superfund Standby Contract. SVE system details are presented in an Operation & Maintenance (O&M) Manual (Shaw, 2003)[(1)].

During the period, O&M visits were performed on the following dates by YEC and EA personnel.

Date	Purpose
1/26/11	Re-install Sensaphone Auto-dialer
3/03/11	Quarterly Visit (March 2011)
6/30/11	Quarterly Visit (June 2011)
9/9/11	System off upon arrival at site (electrical issue), therefore no data could be obtained
11/16/11	Troubleshoot system electrical issue
12/21/11	Replace motor starter and heater control, then restart system
1/31/12	Quarterly Visit (January 2012)

1. The Shaw Group. 2003. Soil Vapor Extraction Operation and Maintenance Manual. October.

1. SYSTEM OPERATION

Based on the motor's hour meter, the system operated 64 percent of the time (i.e., 6,106 hours out of an available 9,576 hours) during the reporting period of 28 December 2010–31 January 2012. The system operated from 28 December 2010 to 27 August 2011, and was off from 27 August 2011 to 21 December 2011 due to an electrical issue as discussed in more detail below. The system was restarted on 21 December 2011 and operated until 31 January 2012.

Operational data for this period have been based on the measurements and effluent sample data collected on 3 March 2011, 27 June 2011, and 31 January 2012. Operational data are summarized in Table 1 and on the site visit data collection forms provided in Attachment A. Key operating parameters for the SVE system are summarized below.

Date	Extraction Well Flow rate (cfm)	Extraction Well Vacuum (H_2O)	SVE Blower Flow rate (cfm)	DCE Conc.[(a)] (mg/m^3)	TCE Conc.[(a)] (mg/m^3)	PCE Conc.[(a)] (mg/m^3)
3/3/11	47	10	97	0.0734	0.162	3.22
6/27/11	125	44	187	0.0678	0.220	1.46
1/31/12	80	23	252	0.0892	0.091	4.28

(a) PCE, DCE, and TCE concentration measured via laboratory analysis.

NOTE: cfm = Cubic feet per minute.
PCE = Tetrachloroethylene.
TCE = Trichloroethene.
DCE = *cis*-1,2-Dichloroethene

A complete set of operational data collected are presented in Tables 1 through 3.

Auto-dialer Issue (January/March 2011 Visits)

The system shut down during the 4th quarter of 2010 due to an apparent power issue. YEC personnel found the system off on arrival during the quarterly O&M event on 28 December 2010. The Sensaphone auto-dialer did not call out and was not functioning on arrival. YEC personnel contacted Sensaphone technical support from the field for troubleshooting assistance. It was determined there was an electrical short in the unit and YEC removed the unit from the control panel to ship to Sensaphone for repairs. The SVE system did restart after resetting the fail-safes.

The auto-dialer was sent to Sensaphone on 30 December 2010 and was repaired under warranty. YEC returned to the site on 26 January2011 to reinstall the unit. The unit was reinstalled; however, it was unable to dial out or receive calls. An issue with the phone line was suspected; therefore, Verizon was contacted and met YEC at the site on 3 March 2011 during the routine O&M visit. The Verizon technician identified a severed section of phone line/cable which was repaired on 3 March 2011.

System Operation (June 2011 Visit)

No issues were identified and the system was operating properly during the visit.

System Electrical Issue (September/December 2011 Visits)

The system was found to be off during a site visit performed on 9 September 2011. Based on a review of run clock hours, it was determined that the system had shut down on 27 August 2011; however, no dial-out notification was received by EA ahead of the 9 September 2011 visit. At the time, it was believed that the system may have been off due to recent storms that occurred in the vicinity of the site, or because an electrical meter at the site may have been turned off by the Long Island Power Authority (LIPA). After various attempts to address the issue with LIPA between September and November 2011, it was eventually determined that the electrical meter turned off by LIPA was associated with a different remediation system located at the site (referred to as "DDC System #1") rather than the SVE system. Therefore, further troubleshooting was performed at the site on 16 November 2011 which revealed that the electrical issue for the SVE system was due to a faulty motor starter and heater control located in the primary system panel at the enclosure. Therefore, a new motor starter and heater control were ordered by EA and installed in the SVE system by Gray Electric on 21 December 2011; the system was restarted the same day. In addition, EA tested and reprogrammed the Sensaphone unit on 21 December 2011 to verify it was operating properly.

System Operation (January 2012 Visit)

No issues were identified and the system was operating properly during the visit.

2. MONITORING PROBES

The following vacuum data (i.e., inches of water column) were observed at the listed vapor monitoring points during the monitoring visits.

Vapor Monitoring Point	Vacuum Reading (Inches H_2O)		
	3 March 2011	27 June 2011	31 January 2012
VP-1	0.44	2.40	1.0
VP-2	0.15	0.80	0.0
VP-3	0.10	0.55	0.0
VP-7	0.06	0.46	0.15
VP-8	0.05	0.25	0.13
VP-9	0.06	0.25	0.0
VP-10	0.25	0.45	0.2
VP-11	0.14	0.25	--
VP-12	0.04	0.11	0.2
VP-13	--	--	--
VP-14	--	--	--
VP-15	--	--	--
NOTE: -- = Unable to access monitoring point due to being covered by business-related products.			

The vapor points will continue to be monitored during future site visits.

3. DEPTH-TO-WATER MEASUREMENTS

The following gauging data (feet below top-of-casing) were collected during the monitoring visits.

Date	MW-C	MW-E	MW-G
03/03/11	17.38	17.36	17.56
06/27/11	15.88	15.87	16.16
1/31/12	15.55	--	15.75
NOTE: -- = Unable to access monitoring well due to being covered by business-related products.			

4. AIR DISCHARGE MONITORING

YEC personnel collected grab air samples from the system effluent during the March 2011, June 2011, and January 2012 visits using Tedlar bags and submitted the samples to Alpha Analytical. The samples were analyzed for VOCs using U.S. Environmental Protection Agency Method TO-15. PCE, TCE, and DCE were detected at the following concentrations.

Date	DCE Conc. (mg/m^3)	TCE Conc. (mg/m^3)	PCE Conc. (mg/m^3)
03/03/11	0.0734	0.162	3.22
06/27/11	0.0678	0.220	1.46
1/31/12	0.0892	0.091	4.28
NOTE: ND = Not Detected J = Analyte detected below detection limits.			

Analytical results are summarized in Table 2 and the laboratory data reports are presented in Attachment B. A summary of the field monitoring and laboratory air discharge analytical results are presented as Table 3.

Based on the effluent sampling results, a total of 14.81 lbs of PCE were discharged during the December 2010–January 2012 period toward the permitted annual discharge limit of 270 lbs. A total of 0.73 lb of TCE was discharged during the December 2010–January 2012 period toward the permitted annual discharge limit of 120 lbs. No DCE was discharged during the reporting period (the annual discharge limit is 5,510 lbs).

6. CONCLUSIONS AND RECOMMENDATIONS

Based on the data collected from the SVE system during this reporting period, EA recommends continued operation of the SVE system.

Please do not hesitate to contact me at 315-431-4610 with any questions you might have regarding this report.

Sincerely,

EA SCIENCE AND
TECHNOLOGY, INC.

James C. Hayward P.E.
Project Manager

JCH/drs

Attachments

TABLE 1
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM READINGS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

											Influent SVE					Mid GAC				Effluent GAC			
	Run Time Meter Reading	Run Time Since Last Visit (hours)		Operation Time Since Last Visit	Dilution Valve Position	Extraction Well MW-F Valve Position (% Open)	Air Flow at Well	Vacuum at Well (inches H2O)	Pre-Dilution PID	Pre-Dilution PCE	Blower Flow	Vacuum (inches H2O)	Temp.	PID	PCE	Flow	Temp.	PID	PCE	Flow	Temp.	PID	PCE
Date	(hours)	Available	Actual	(%)	(% Open)	(% Open)	(scfm)		(ppm)	(ppm)	(cfm)		(°F)	(ppm)	(ppm)	(cfm)	(°F)	(ppm)	(ppm)	(cfm)	(°F)	(ppm)	(ppm)
9/18/2002	--	--	--	SVE PILOT TEST STARTUP																			
9/30/2002	304	294	294	100%	100	50	34.5	5	2,000	500	256	25	107.2	1,015	--	317	102.3	0	--	290	89.5	0	--
10/14/2002	642	343	338	99%	100	50	38	7	1,011	400	258	27	--	75.3	50	--	--	0	--	--	--	0	--
11/19/2002	1508	882	866	98%	100	50	49	12	0	0	120	28	106	0	0	209	92	0	--	290	80.3	0	--
12/4/2002	--	368	--	--	--	--	--	--	77	200	--	--	--	14.3	10	--	--	15.5	10	--	--	0	0
12/16/2002	2153	294	645	98%	100	50	36.5	10	560	200	253	28	92	46.4	50	302	60	3.4	--	340	53.9	0	--
1/21/2003	3016	882	863	98%	100	50	--	--	--	--	70	52	98	0	0	220	--	0	--	220	--	0	--
2/10/2003	3496	490	480	98%	100	50	38	--	639	400	262	27	102	72	50	266	90	26	10	258	83	3.2	10
3/18/2003	4360	882	864	98%	100	50	92	12	125	100	266	25	123	15	10	278	124	0	0	282	117	0	0
4/29/2003	5359	1029	999	97%	75	50	75	50	152	50	132	16	118.5	48.2	25	302	96	18.6	10	287	86	0.6	0
5/13/2003	5700	343	341	99%	75	50	78	--	127	50	239	48	130	41.8	50	246	108	46	25	245	97	0.6	0
6/30/2003	6850	1176	1150	98%	50	50	115	32	82.4	50	140	66	173	36.8	50	198	157	25.1	25	240	150	29.8	100
7/10/2003	6851	245	1	0%	50	50	99.5	25	406	400	151	68	156	221	215	260	76	0	0	222	81.9	0	0
7/22/2003	7144	294	294	100	50	50	--	--	127	--	--	--	168	65	--	--	107	0	--	--	106	0	--
8/26/2003	7957	858	813	95	50	50	79	13.5	137	10	186	65	170	51.4	5	291	--	55.4	10	232	--	35.6	10
9/23/2003	8274	686	317	46	50	50	218	33	141	15	194	64	160	55	30	254	124	0	0	210	110	0	0
10/21/2003	8945	686	671	98	50	50	166	45	--	20	158	68	166	37.5	25	214	130	30.7	15	225	112	0	0
11/24/2003	9749	833	805	97	50	50	130	46	141	125	178	72	138	261	200	225	52	0	0	205	51.4	0	0
1/6/2004	9750	1054	1	0	50	50	98.5	74	118	100	164	12	140	247	250	224	48.6	0	0	200	48.4	0	0
2/9/2004	10336	833	586	70	50	50	121	44	23.1	10	172	70	155.8	29.8	25	233	137	41.4	25	235	117	0	0
3/30/2004	11289	1225	953	78	50	50	103	>50	34	<10	198	70	160	22	<10	240	128	22	<10	160	115	24	<5
4/8/2004	11441	221	152	69	50	75	127	--	23.7	<10	--	--	--	--	--	180	83	30	--	206	83	0.9	--
4/29/2004	11768	515	327	64	50	75	131	>60	2.4	0	--	76	170	2.2	0	209	128	0	0	255	116	0	0
5/24/2004	12264	613	496	81	50	75	144	75	43.8	50	172	75	178	33.1	<50	250	121	4.4	0	198	111	0	0
6/22/2004	12817	711	553	78	50	75	127	74	57	10	140	76	180	52	30	181	123	25.8	15	210	113	0	0
7/28/2004	13630	882	813	92	50	75	142	76.5	53.2	7	161	76.5	159	41.1	25	216	137	35.3	20	181	109	3.1	0
8/31/2004	13989	833	359	43	25	90	157	58	48	0	104	74	137	202	200	180	98	2.2	0	187	91	0.1	0
9/29/2004	14256	711	267	38	50	75	139	60	--	--	140	76	153	27.7	--	194	126	0	--	205	102.1	0	--
10/20/2004	14729	515	473	92	50	75	155	58	--	--	120	76	160	19.1	10	202	122	0	0	230	101	0	0
11/17/2004	15229	686	499	73	75	50	160	80	17.9	<5	148	77	160	13.5	<10	152	112	7.2	<5	173	94	0	0
12/22/2004	15565	858	337	39	75	50	143	80	15.8	<5	125	85	160	18.3	10	127	116	16	5	131	93.4	0	0
1/20/2005	15933	711	368	52	25	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/23/2005	15933	833	0	0	75	50	87.5	36	174	50	188	58	110	93	50	265	56	0	0	245	38.5	0	0
3/29/2005	16217	833	284	34	75	50	87 [1]	40	--	--	158 [1]	--	121	6.4	4.5	255 [1]	97	3.4	3	234 [1]	81	0	<2
4/28/2005	--	720	720[2]	100	75	50	86	39	--	--	227	--	126	8.9	5	244	109	8	4	222	84.2	0	<2
5/31/2005	--	792	792[2]	100	50	50	98	39	7.4	9.5	208	--	124.2	10.4	10	227	118.6	17.6	10	223	112.3	0	<2
6/24/2005		576	576[2]	100	50	50	125	25	28.5	16	266	--	152	8.3	7	283	133	13.9	16	242	116	10.1	15
8/4/2005	17972	984	984[2]	100	75	65	216	26	38.1	19	353	--	153.4	8.8	12	423	135.7	10.5	12	381	120.7	7.5	12
Spent Carbon Replaced 8/10/05																							
9/13/2005	859	960	960[2]	100	75	50	89.5	25	59.6	14	226	--	164.5	18.3	12	265	143	0.5	0	248	124.6	0	0
10/10/2005	1502	643	643	100	75	35	86	27	59.2	19	222	--	101.3	21.7	10	225	110	15.1	0	211	99.3	0	0
11/11/2005	2271	769	769	100	50	50	79	31	--	5	209	--	110.9	12.2	9	242	99.4	2.6	2	239	83.1	0	0

Notes:

[1] Calculated flows based on the average of flows measured on 3-29-05 and 4-28-05

[2] Run time meter reading not indictitive of SVE system run time; actual hours run is assumed 100% of available.

PID = Total VOC concentration measured with photoionization detector

ppm = parts per million (volume/volume basis)

PCE = Tetrachloroethene (PCE) concentration measured with Drager tube of 10-500 ppm range

scfm = standard cubic feet per minute

cfm = cubic feet per minute

-- = measurement not recorded or not applicable.

Influent SVE = Readings collected between the SVE Blower and the Carbon Units

Mid GAC = Readings collected between the lead and lag carbon units

Effluent GAC = Readings collected after the lag carbon unit

GAC = granular activated carbon unit

As of 4/28/05, the calculation of "Available" run time hours is based on 24 hours, rather than 24.5 hours as prevously calculated.

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Date	Run Time Meter Reading (hours)	Run Time Since Last Visit (hours)		Operation Time Since Last Visit (%)	Dilution Valve Position (% Open)	Extraction Well MW-F Valve Position (% Open)	Air Flow at Well (scfm)	Vacuum at Well (inches H2O)	Pre-Dilution PID (ppm)	Pre-Dilution PCE (ppm)	Influent SVE					Mid GAC				Effluent GAC			
		Available	Actual								Blower Flow (cfm)	Vacuum (inches H2O)	Temp. (°F)	PID (ppm)	PCE (ppm)	Flow (cfm)	Temp. (°F)	PID (ppm)	PCE (ppm)	Flow (cfm)	Temp. (°F)	PID (ppm)	PCE (ppm)
12/8/2005	2918	647	647	100%	50	50	79	29	22.2	5.0	235	--	113.5	7.2	2.0	227	96.7	6.8	2	212	79.8	0.1	0.0
1/6/2006	3614	696	696	100%	50	75	120	42	2.7	2.0	245	--	82	32.5	4.0	280	83.9	19.0	2.0	265	77.5	5.8	0.0
Spent Carbon Replaced 1/25/06																							
2/6/2006	4332	744	718	100%	75	75	80	25	16.3	3.0	292	--	78	3.6	2.0	333	90.9	0.0	0.0	322	77	0.0	0.0
3/14/2006	5200	868	868	100%	75	75	188	49	12.9	2.0	212	--	132.8	5.5	5.0	287	135.6	0.0	0.0	232	115.1	0.0	0.0
4/12/2006	5895	695	695	100%	75	75	115	47	14.1	2.0	259	--	152.1	6.1	6.0	249	153.2	0.0	0.0	271	135.1	0.0	0.0
5/4/2006	6420	525	525	100%	50	75	189	51	17.9	2.0	199	--	145.2	7.8	5.0	186	136.1	0.1	0.0	214	117.8	0.0	0.0
6/12/2006	7354	934	934	100%	50	100	156	53	5.5	4.0	216	--	141	7.9	9.0	270	134	4.1	3.0	253	116	0.0	0.0
7/12/2006	8074	720	720	100%	50	100	163	54	8.1	2.0	191	--	146	8.3	8.0	210	145	8.8	10.0	196	134	0.0	0.0
8/7/2006	8696	622	622	100%	50	100	136	54	11.3	4.0	201	--	148.7	8.7	7.5	239	135.6	2.0	0.0	210	118.3	0.0	0.0
9/21/2006	9781	1085	1085	100%	50	100	124.5	53	8.9	4.0	227	--	127	7.7	9.0	143	106.9	9.7	7.0	203	99.2	2.1	0.0
Spent Carbon Replaced 10/11/06																							
10/18/2006	10417	636	636	100%	50	100	130	54	1.0	4.0	231	--	154.8	6.0	8.0	154	130.3	0.0	0.0	236	131.1	0.0	0.0
11/29/2006	11425	1008	1008	100%	50	100	130	52	0.6	1.0	193.5	--	138.8	1.6	4.0	226	137.8	0.0	0.0	202	118.0	0.0	0.0
12/21/2006	11953	528	528	100%	50	100	132	54	0.1	1.0	178	--	107.8	4.6	3.0	254	107.4	0.0	0.0	210	93.3	0.0	0.0
1/26/2007	12820	867	867	100%	25	100	156	80	0.0	0.0	142.5	--	135.0	0.4	4.0	123	124.0	0.0	0.0	142	102.3	0.0	0.0
3/19/2007	13296	1248	476	38%	25	100	162.5	80	0.2	2.0	135	--	140.7	7.3	5.0	215	110.1	2.4	0.0	172	120.0	0.0	0.0
4/27/2007	13964	936	668	71%	25	100	218.0	88	0.0	15.0	126	--	180.2	51.7	20.0	149	69.1	0.0	0.0	125	66.8	0.0	0.0
5/24/2007	13968	648	4	1%	25	75	135	84	15.2	1.8	100	--	127	108.0	35.0	181	123	0.7	0.0	170	106	0.0	0.0
6/21/2007	13984	672	16	2%	25	100	232	40	1.8	35.0	130.5	--	107	61.1	38.0	228	107	1.7	0.0	199	89	0.1	0.0
7/24/2007	14775	792	792	100%	50	100	75	29	13.2	2.0	205	--	132.6	3.5	3.0	202	140.5	1.9	0.0	194	138.4	0.0	0.0
8/28/2007	15615	840	840	100%	50	100	85.5	20	16.3	2.0	232	--	139.2	2.7	0.0	190	144.5	3.5	0.0	184	129.1	0.0	0.0
9/18/2007	16120	504	504	100%	50	100	99.2	28	11.7	2.0	214.5	--	138.5	5.2	0.0	184	16.8	1.4	2.0	164	129.8	0.0	0.0
10/31/2007	17151	1032	1032	100%	50	100	80	25	9.9	2.0	216	--	111.9	1.1	0.0	206	118.4	0.0	0.0	231	104.7	0.0	0.0
11/28/2007	17825	672	674	100%	50	100	79	27	9.5	1.0	211	--	117	0.4	0.0	247	116	0.0	0.0	213	110	0.0	0.0
1/4/2008	18714	888	889	100%	50	100	102.4	28	7.0	0.0	268	--	110	0.0	0.0	318	116	0.0	0.0	243	96	0.0	0.0
1/23/2008	19171	456	457	100%	50	100	114	36	6.6	0.0	222	--	112	0.6	0.0	266	126	0.0	0.0	192	108	0.0	0.0
2/28/2008	19269	864	98	11%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/29/2008	19441	1464	172	12%	50	100	129	41	0.0	0.0	230	*	121	3.7	0.0	246	112	0.0	0.0	206	99	0.0	0.0
5/23/2008	20014	576	573	99%	75	100	90	33	10.4	1.0	223	17	126	0.5	1.0	312	138	3.5	0.0	259	115	0.0	0.0
6/26/2008	20832	816	818	100%	75	100	98	34	9.3	2.0	213	18	143	2.1	0.0	304	155	4.4	0.0	202	138	2.4	0.0
7/28/2008	21601	768	769	100%	75	100	91	30	10.8	0.0	237	18	148	1.8	0.0	280	154	0.8	0.0	202	138	2.8	0.0
8/28/2008	22345	744	744	100%	75	100	89	31	11.6	2.0	221	17	153	2.4	0.0	238	157	1.3	0.0	191	135	1.9	0.0
9/25/2008	23015	672	670	100%	75	100	110	33	10.8	0.0	245	18	136	0.9	0.0	244	138	0.0	0.0	215	119	0.0	0.0
10/31/2008	23880	864	865	100%	75	100	102	32	7.3	0.0	250	18	125	0.2	0.0	262	128	0.0	0.0	264	113	0.0	0.0
11/24/2008	24456	576	576	100%	75	100	112	32	4.8	0.0	243	20	116	0.0	0.0	251	119	0.0	0.0	254	104	0.0	0.0
12/22/2008	25129	672	673	100%	75	100	72	19	7.6	0.0	235	10	104	1.9	0.0	230	100	0.5	0.0	176	82	0.3	0.0
1/26/2009	25970	840	841	100%	75	100	111	31	5.7	0.0	243	18	113	1.6	0.0	270	114	1.1	0.0	278	104	0.6	0.0
2/26/2009	26374	744	404	54%	75	100	108	23	44.8	0.0	235	18	111	13.1	0.0	268	114	0.0	0.0	290	82	0.0	0.0
3/26/2009	27046	672	672	100%	75	100	100	31	6.2	0.0	248	18	128	4.8	0.0	265	129	2.9	0.0	268	114	1.3	0.0
4/28/2009	27838	792	792	100%	75	100	89	31	6.0	0.0	257	18	142	1.6	0.0	256	135	2.7	0.0	286	118	1.1	0.0
5/18/2009	28317	480	479	100%	75	100	100	32	8.3	0.0	252	18	142	2.4	0.0	280	129	3.8	0.0	271	125	2.0	0.0
6/23/2009	29181	864	864	100%	75	100	91	30	0.0	0.0	241	19	131	0.0	0.0	240	152	1.0	0.0	272	135	1.8	0.0
9/22/2009	31365	2184	2184	100%	75	100	93	31	10.0	0.0	232	20	129	5.3	0.0	264	154	4.3	0.0	200	135	4.0	0.0
12/21/2009	33527	2160	2162	100%	25	100	157	70	6.1	0.0	184	9	149.5	4.0	0.0	145	151	6.3	0.0	126	123	0.0	0.0
3/31/2010	35169	2400	1642	68%	25 / 75	100	100	82	55.8	0.0	255	18	103	20.5	15.0	250	85.2	4.4	0.0	285	78.7	0.0	0.0
6/28/2010	37303	2136	2134	100%	75	100	170	24	7.9	NA	215	20	98.2	1.6	0.0	236	173	2.9	0.0	283	154	4.4	0.0
9/27/2010	39486	2184	2183	100%	75	100	80	21	145.0	NA	275	21	141.4	42.4	0.0	280	142	19.3	0.0	275	126	8.8	0.0
12/28/2010	40702	2208	1216	55%	75	100	90	25	51.0	NA	275	18	103	13.7	NA	285	73.7	0.9	NA	300	45.5	0.1	NA
3/3/2011	42257	1560	1555	100%	75	100	47	10	9.7	NA	97	8	142	1.1	NA	140	103	0.4	NA	124	80	0.2	NA
6/27/2011	44346	2784	2089	75%	75	100	125	44	0.1	NA	186.5	17	158.6	1.8	NA	129	147.5	1.6	NA	175	118	0.1	NA
12/21/2011	45824	4248	1478	35%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/31/2012	46808	984	984	100%	75	100	80	23	62.0	NA	252	17	92.3	12.5	NA	--	--	0.0	NA	--	--	0.5	NA

* Blower discharge pressure in inches H2O

TABLE 2
AIR SAMPLE ANALYTICAL RESULTS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

SVE Influent Concentration (mg/m3)			
Date	**cis-1,2-Dichloroethene**	**Tetrachloroethene (PCE)**	**Trichloroethene**
9/18/2002	5	600E	31
9/30/2002	ND (5)	360E	23
10/14/2002	--	--	--
11/19/2002	--	--	--

VGAC Effluent Concentration (mg/m3)			
Date	**cis-1,2-Dichloroethene**	**Tetrachloroethene (PCE)**	**Trichloroethene**
9/18/2002	--	--	--
9/30/2002	--	--	--
10/14/2002	--	--	--
11/19/2002	--	--	--
12/16/2002	ND (5)	ND (5)	ND (5)
1/21/2003	--	--	--
2/10/2003	ND (5)	8	6
3/18/2003	--	--	--
4/29/2003	--	--	--
5/13/2003	ND (1)	5	ND (1)
6/30/2003	--	--	--
7/22/2003	ND (1)	ND (1)	ND (1)
8/26/2003	ND (5)	29	3.6
9/23/2003	ND (5)	ND (5)	ND (5)
10/21/2003	ND (5)	ND (5)	ND (5)
11/24/2003	--	--	--
1/6/2004	--	--	--
2/9/2004	10	ND (5)	ND (5)
3/30/2004	2J	77	1J
4/29/2004	ND (5)	10	ND (5)
5/24/2004	ND (1)	ND (1)	ND (1)
6/22/2004	ND (1)	ND (1)	ND (1)
7/28/2004	ND (5)	ND (5)	ND (5)
8/12/2004	--	--	--
9/29/2004	ND (1)	ND (1)	ND (1)
10/20/2004	ND (1)	ND (1)	ND (1)
11/17/2004	ND (1)	ND (1)	ND (1)
12/22/2004	ND (1)	ND (1)	ND (1)
1/20/2005	--	--	--
3/29/2005	2	ND (1)	ND (1)
4/28/2005	1	0.5J	ND (1)
5/31/2005	1	5	2
6/24/2005	0.8J	64	2
8/4/2005	0.7J	57	1J
Spent Carbon Replaced 8/10/05			
9/13/2005	ND (1)	ND (1)	ND (1)
10/10/2005	ND (1)	ND (1)	ND (1)
11/11/2005	ND (1)	ND (1)	ND (1)
12/8/2005	ND (1)	ND (1)	ND (1)
1/6/2006	ND (1)	ND (1)	ND (1)
Spent Carbon Replaced 1/25/06			
2/6/2006	ND (1)	1	ND (1)

Notes:
Only compounds that were detected above the method reporting limit were presented above
ND (5) = Not detected above method reporting limit in parenthesis
E = Concentation exceeded calibration range -- = sample not collected
SVE = Soil vapor extraction J = Estimated Value
VGAC = vapor-phase granular activated carbon mg/m3 = milligrams per cubic meter

TABLE 2
AIR SAMPLE ANALYTICAL RESULTS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

VGAC Effluent Concentration (mg/m3)			
Date	**cis-1,2-Dichloroethene**	**Tetrachloroethene (PCE)**	**Trichloroethene**
3/14/2006	ND (1)	ND (1)	ND (1)
4/12/2006	ND (1)	0.6J	ND (1)
5/4/2006	ND (1)	ND (1)	ND (1)
6/12/2006	ND (1)	ND (1)	ND (1)
7/12/2005	0.6 J	ND (1)	ND (1)
8/7/2006	ND (1)	1	ND (1)
9/21/2006	0.4 J	2	0.8 J
Spent Carbon Replaced 10/11/06			
10/18/2006	No sample collected		
11/29/2006	ND (1)	0.9J	ND (1)
12/28/2006	ND (1)	ND (1)	ND (1)
(sample collected 12/21/06 lost due to tedlar bag leak; replacement sample collected 12/28/06)			
1/26/2007	ND (1)	ND (1)	ND (1)
3/19/2007	ND (1)	ND (1)	ND (1)
(sample collected 3/12/07 following SVE system repair)			
4/27/2007	ND (1)	ND (1)	ND (1)
5/24/2007	ND (1)	ND (1)	ND (1)
6/21/2007	ND (1)	ND (1)	ND (1)
7/24/2007	ND (1)	0.22 J	ND (1)
8/28/2007	0.29 J	0.35 J	ND (1)
9/18/2007	ND (1)	ND (1)	ND (1)
10/31/2007	ND (1)	ND (1)	ND (1)
11/28/2007	ND (1)	ND (1)	ND (1)
1/4/2008	ND (1)	ND (1)	ND (1)
1/23/2008	ND (1)	ND (1)	ND (1)
2/28/2008	--	--	--
4/29/2008	ND (1)	ND (1)	ND (1)
5/23/2008	0.22 J	ND (1)	1.2
6/26/2008	0.24 J	10	1.3
7/28/2008	0.25 J	11	0.49 J
8/28/2008	0.22	13.6	0.48
9/25/2008	0.14	9.4	0.36
10/31/2008	0.1	4	0.17
11/24/2008	0.06	2.3	0.13
12/22/2008	0.03	1.2	0.06
1/26/2009	0.07	2.3	0.14
2/26/2009	0.005	0.1	0.01
3/26/2009	0.11	2.9	0.25
4/28/2009	0.08	3.3	0.21
5/18/2009	0.1	6.1	0.35
6/23/2009	0.19	18.2	0.44
9/22/2009	0.11	5.36	0.13
12/21/2009	0.09	4.82	0.38
12/21/2009	0.09	4.82	0.38
3/31/2010	0.02	0.69	0.04
6/28/2010	0.197	14.1	0.306
9/27/2010	0.122	4.18	0.240
12/28/2010	0.015	0.318	0.041
3/3/2011	0.0734	3.22	0.162
6/27/2011	0.0678	1.46	0.220
1/31/2012	0.0892	4.28	0.091
	J = Analyte detected below quantitation limits.		

TABLE 3
AIR DISCHARGE MONITORING
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	System Effluent Flow Rate (cfm)	Field Monitoring: PCE System Effluent Concentration (ppmv)	Field Monitoring: System Effluent VOC Concentration (ppmv)	Elapsed Time (day)	Laboratory Results: PCE (mg/cu m.)	Laboratory Results: TCE (mg/cu m.)	Laboratory Results: cis-1,2-DCE (mg/cu m.)	Discharge based on Field Monitoring: PCE Discharge Since Last Visit (lb/hr)	Discharge based on Field Monitoring: PCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: PCE Discharge Since Last Visit: lb/hr	Discharge based on Laboratory Results: PCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: TCE Discharge Since Last Visit (lb/hr)	Discharge based on Laboratory Results: TCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: cis-1,2-DCE Discharge Since Last Visit (lb/hr)	Discharge based on Laboratory Results: cis-1,2-DCE Discharge Since Last Visit (lb)
9/18/2002	SVE PILOT TEST STARTUP														
9/30/2002	290	--	0	12	--	--	--	--	--	--	--	--	--	--	--
10/14/2002	--	--	0	14	--	--	--	--	--	--	--	--	--	--	--
11/19/2002	290	--	0	36	--	--	--	--	--	--	--	--	--	--	--
12/16/2002	340	--	0	27	ND (5)	ND (5)	ND (5)	--	--	0.00	0.00	0.00	0.00	0.00	0.00
1/13/2003	45	0	--	28	--	--	--	0.0000	0.00	--	--	--	--	--	--
1/21/2003	220	--	0	8	--	--	--	--	--	--	--	--	--	--	--
2/10/2003	258	10	3.2	20	8.0	6.0	ND (5)	0.0654	31.40	0.008	3.71	0.006	2.78	0.00	0.00
3/5/2003	305	--	0	23	--	--	--	--	--	--	--	--	--	--	--
3/18/2003	282	0	0	13	--	--	--	0.0000	0.00	--	--	--	--	--	--
4/29/2003	287	0	0.6	42	--	--	--	0.0000	0.00	--	--	--	--	--	--
5/13/2003	245	0	0.6	14	5.0	ND (1)	ND (1)	0.0000	0.00	0.005	1.54	0.00	0.00	0.00	0.00
6/30/2003	240	100	29.8	48	--	--	--	0.3043	350.56	--	--	--	--	--	--
7/22/2003	222	--	0	12	ND (1)	ND (1)	ND (1)	--	--	0.00	0.00	0.00	0.00	0.00	0.00
8/26/2003	232	10	35.6	35	29.0	3.6	ND (5)	0.0588	49.42	0.025	21.17	0.003	2.63	0.00	0.00
9/23/2003	210	0	0	28	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.00	0.00
10/21/2003	225	0	0	28	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.00	0.00
11/24/2003	205	0	0	34	--	--	--	0.0000	0.00	--	--	--	--	--	--
2003 Totals:									**431.38**		**26.42**		**5.41**		**0.00**
1/6/2004	200	0	0	43	--	--	--	0.0000	0.00	--	--	--	--	--	--
2/9/2004	235	0	0	34	ND (5)	ND (5)	10	0.0000	0.00	0.000	0.00	0.000	0.00	0.009	7.18
3/30/2004	160	5	24	50	77	1J	2J	0.0203	24.34	0.046	55.38	0.001	0.72	0.001	1.44
4/29/2004	255	0	0	30	10	ND (5)	ND (5)	0.0000	0.00	0.010	6.88	0.001	0.69	0.002	1.38
5/24/2004	198	0	0	25	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
6/22/2004	210	0	0	29	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
7/28/2004	181	0	3.1	36	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
8/12/2004	187	0	0.1	15	--	--	--	0.0000	0.00	--	--	--	--	--	--
9/29/2004	205	--	0	48	ND (1)	ND (1)	ND (1)	--	--	0.000	0.00	0.000	0.00	0.000	0.00
10/20/2004	230	0	0	21	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
11/17/2004	173	0	0	28	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
12/22/2004	131	0	0	35	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.000	0.00	0.000	0.00	0.000	0.00
2004 Totals:									**24.34**		**62.26**		**1.41**		**10.00**

Notes: -- = Measurement not recorded [(1)] Calculated flows based on the average of flows measured on 3-29-05 and 4-28-05

Discharge Rate (Field Mon., lb/hr) = [(flow(cfm)*influent conc.(ppmv)*MW*12.187)/(273.15+C)]*1 cu. m./35.31 cu. ft*1g/1000 mg*1 lb/453.6 g*60 min/1 hr

Discharge (Field Mon., lb) = Discharge Rate (lb/hr) * # of days*24hours/day*60 minutes/hr

Discharge Rate (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr

Discharge (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day

Where: C = degrees centigrade, assumed to be 25
Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94
J = Estimated Value
cfm = cubic feet per minute
ppmv = parts per million (vol./vol.)
hr = hours
mg/cu. m = milligrams per cubic meter
lb = pounds

Permit Limit		
	lb/hr	lb/yr
PCE	0.031	270
TCE	0.014	120
cis-1,2-DCE	0.63	5,510

TABLE 3
AIR DISCHARGE MONITORING
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	System Effluent Flow Rate (cfm)	Field Monitoring: PCE System Effluent Concentration (ppmv)	Field Monitoring: System Effluent VOC Concentration (ppmv)	Elapsed Time (day)	Laboratory Results: PCE (mg/cu m.)	Laboratory Results: TCE (mg/cu m.)	Laboratory Results: cis-1,2-DCE (mg/cu m.)	Discharge based on Field Monitoring: PCE Discharge Since Last Visit (lb/hr)	Discharge based on Field Monitoring: PCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: PCE Discharge Since Last Visit: lb/hr	Discharge based on Laboratory Results: PCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: TCE Discharge Since Last Visit (lb/hr)	Discharge based on Laboratory Results: TCE Discharge Since Last Visit (lb)	Discharge based on Laboratory Results: cis-1,2-DCE Discharge Since Last Visit (lb/hr)	Discharge based on Laboratory Results: cis-1,2-DCE Discharge Since Last Visit (lb)
1/20/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/23/2005	245	0	0	34	--	--	--	0.0000	0.00	--	--	--	--	--	--
3/29/2005	234 [1]	0	0	34	ND (1)	ND (1)	2	0.0000	0.00	0.000	0.00	0.000	0.00	0.002	1.43
4/28/2005	222	0	0	30	0.5	ND (1)	1	0.0000	0.00	0.0004	0.30	0.000	0.00	0.001	0.60
5/31/2005	223	0	0	33	5	2	1	0.0000	0.00	0.0042	3.31	0.0017	1.32	0.001	0.66
6/24/2005	242	10.1	15	24	64	2	0.8J	0.0620	35.70	0.0580	33.42	0.0018	1.04	0.001	0.42
8/4/2005	381	12	7.5	41	57	1J	0.7J	0.1159	114.09	0.0814	80.05	0.0014	1.40	0.001	0.98
Spent Carbon Replaced 8/10/05															
9/13/2005	248	0	0	40	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
10/10/2005	211	0	0	27	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
11/11/2005	239	0	0	32	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
12/8/2005	212	0	0.1	27	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
2005 Totals:									**149.79**		**117.08**		**3.77**		**4.09**
1/6/2006	265	0	5.8	29	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
Spent Carbon Replaced 1/25/06															
2/6/2006	322	0	0	30	1	ND (1)	ND (1)	0.0000	0.00	0.0012	0.87	0.0000	0.00	0.000	0.00
3/14/2006	232	0	0	36	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
4/12/2006	271	0	0	29	0.6J	ND (1)	ND (1)	0.0000	0.00	0.0006	0.42	0.0000	0.00	0.000	0.00
5/4/2006	214	0	0	22	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
6/12/2006	253	0	0	39	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
7/12/2006	196	0	0	30	ND (1)	ND (1)	0.6 J	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.001	0.38
8/7/2006	210	0	0	26	1	ND (1)	ND (1)	0.0000	0.00	0.0008	0.49	0.0000	0.00	0.000	0.00
9/21/2006	203	0	2.1	45	2	0.8 J	0.4 J	0.0000	0.00	0.0015	1.64	0.0006	0.66	0.0003	0.33
Spent Carbon Replaced 10/11/06															
10/18/2006	236	0	0	27	--	--	--	0.0000	0.00	--	--	--	--	--	--
11/29/2006	202	0	0	42	0.9J	ND (1)	ND (1)	0.0000	0.00	0.0007	0.69	0.0000	0.00	0.0000	0.00
12/21/2006	210	0	0	22	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
2006 Totals:									**0.00**		**4.11**		**0.66**		**0.71**
1/26/2007	142	0	0	36	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
3/19/2007	172	0	0	20	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
4/27/2007	125	0	0	28	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
5/24/2007	170	0	0	27	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00

Notes: -- = Measurement not recorded [1] Calculated flows based on the average of flows measured on 3-29-05 and 4-28-05

Discharge Rate (Field Mon., lb/hr) = [(flow(cfm)*influent conc.(ppmv)*MW*12.187)/(273.15+C)]*1 cu. m./35.31 cu. ft*1g/1000 mg*1 lb/453.6 g*60 min/1 hr

Discharge (Field Mon., lb) = Discharge Rate (lb/hr) * # of days*24hours/day*60 minutes/hr

Discharge Rate (Lab Res., lb/hr) = flow (cfm)*effluent conc. (mg/cu. m.)*1g/1000mg*1lb/453.6g*1cu. m./35.31cu. ft*60min/1 hr

Discharge (Lab Res., lb) = Discharge Rate (lb/hr) * # of days*24hours/day

Where: C = degrees centigrade, assumed to be 25; Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94

J = Estimated Value; cfm = cubic feet per minute; ppmv = parts per million (vol./vol.)

hr = hours; mg/cu. m = milligrams per cubic meter; lb = pounds

Permit Limit		
	lb/hr	lb/yr
PCE	0.031	270
TCE	0.014	120
cis-1,2-DCE	0.63	5,510

TABLE 3
AIR DISCHARGE MONITORING
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

		Field Monitoring			Laboratory Results			Discharge based on Field Monitoring		Discharge based on Laboratory Results					
Date	System Effluent Flow Rate (cfm)	PCE System Effluent Concentration (ppmv)	System Effluent VOC Concentration (ppmv)	Elapsed Time (day)	PCE (mg/cum.)	TCE (mg/cum.)	cis-1,2-DCE (mg/cum.)	PCE Discharge Since Last Visit (lb/hr)	PCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit: lb/hr	PCE Discharge Since Last Visit (lb)	TCE Discharge Since Last Visit (lb/hr)	TCE Discharge Since Last Visit (lb)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb)
6/21/2007	199	0	0.1	28	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
7/24/2007	194	0	0	33	0.22 J	ND (1)	ND (1)	0.0000	0.00	0.0002	0.13	0.0000	0.00	0.000	0.00
8/28/2007	129	0	0	35	0.35 J	ND (1)	0.29 J	0.0000	0.00	0.0002	0.14	0.0000	0.00	0.0001	0.12
9/18/2007	164	0	0	21	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0002	0.00	0.0000	0.00	0.000	0.00
10/31/2007	231	0	0	43	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
11/28/2007	213	0	0	28	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
1/4/2008	243	0	0	37	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
2007 Totals:									**0.00**		**0.27**		**0.00**		**0.12**
1/23/2008	192	0	0	19	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
2/28/2008	--	--	--	36	--	--	--	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
4/29/2008	206	0	0	61	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.000	0.00
5/23/2008	259	0	0	24	ND (1)	1.2	0.22 J	0.0000	0.00	0.0000	0.00	0.0012	0.67	0.000	0.00
6/26/2008	202	0	2.4	34	10	1.3	0.24 J	0.0000	0.00	0.0076	6.18	0.0010	0.80	0.000	0.00
7/28/2008	202	0	2.8	32	11	0.49 J	0.25 J	0.0000	0.00	0.0083	6.40	0.0000	0.00	0.000	0.00
8/28/2008	191	0	1.9	31	13.6	0.48	0.22	0.0000	0.00	0.0097	7.25	0.0003	0.26	0.000	0.00
9/25/2008	215	0	0	28	9.4	0.36	0.14	0.0000	0.00	0.0076	5.09	0.0003	0.19	0.000	0.00
10/31/2008	264	0	0	36	4	0.17	0.1	0.0000	0.00	0.0040	3.42	0.0002	0.15	0.000	0.00
11/24/2008	254	0	0	24	2.3	0.13	0.06	0.0000	0.00	0.0022	1.26	0.0001	0.07	0.000	0.00
12/22/2008	176	0	0.3	28	1.2	0.06	0.03	0.0000	0.00	0.0008	0.53	0.0000	0.03	0.000	0.00
2007 Totals:											30.13		2.17		0.00
1/26/2009	278	0	0.6	35	2.3	0.14	0.07	0.0000	0.00	0.0024	2.01	0.0001	0.12	0.000	0.00
2/26/2009	290	0	0	31	0.1	0.01	0.005	0.0000	0.00	0.0001	0.08	0.0000	0.01	0.000	0.00
3/26/2009	268	0	1.3	28	2.9	0.25	0.11	0.0000	0.00	0.0029	1.96	0.0003	0.17	0.000	0.00
4/28/2009	286	0	1.1	33	3.3	0.21	0.08	0.0000	0.00	0.0035	2.80	0.0002	0.18	0.000	0.00
5/18/2009	271	0	2	20	6.1	0.35	0.1	0.0000	0.00	0.0062	2.97	0.0004	0.17	0.000	0.00
6/23/2009	272	0	1.8	36	18.2	0.44	0.19	0.0000	0.00	0.0186	16.04	0.0004	0.39	0.000	0.00
9/22/2009	200	0	4	91	5.36	0.13	0.11	0.0000	0.00	0.0040	8.78	0.0001	0.21	0.000	0.00
12/21/2009	126	0	0	90	4.82	0.38	0.09	0.0000	0.00	0.0023	4.92	0.0002	0.39	0.000	0.00
3/31/2010	285	0	0	100	0.69	0.04	0.02	0.0000	0.00	0.0007	1.77	0.0000	0.10	0.000	0.00
6/28/2010	283	0	4.4	89	14.1	0.306	0.197	0.0000	0.00	0.0150	31.95	0.0003	0.69	0.000	0.00
9/27/2010	275	0	8.8	91	4.18	0.24	0.122	0.0000	0.00	0.0043	9.41	0.0002	0.54	0.000	0.00
12/28/2010	300	NA	0.1	92	0.318	0.041	0.015	NA	NA	0.0004	0.79	0.0000	0.10	0.000	0.00
3/3/2011	124	NA	0.2	65	3.22	0.162	0.0734	NA	NA	0.0015	2.34	0.0001	0.12	0.000	0.00
6/27/2011	175	NA	0.1	116	1.46	0.22	0.0678	NA	NA	0.0010	2.67	0.0001	0.40	0.000	0.00
1/31/2012	252	NA	0.1	101	4.28	0.091	0.0892	NA	NA	0.0040	9.80	0.0001	0.21	0.000	0.00

Attachment A

Field Forms

DAILY FIELD REPORT

DATE:	1/26/2011
PROJECT #:	A:0321
PROJECT:	National Heatset
CLIENT:	EA Engineering
PROJECT SITE:	Farmingdale, NY
PROJECT MANAGER:	Don Conan
PERSONNEL:	Pete Lawler (YEC), Robert Peterson (EA Eng.)

TIME	***Field ACTIVITIES***
0745	YEC personnel onsite, prepared Sensaphone for re-installation, will wait to begin installation until 0800 or Robert Peterson (EA Engineering) arrives.
0800	YEC began Sensaphone reinstallation, Robert appeared from DDC system to oversee install.
0910	Sensaphone installed to SVE System at National Heatset site. Robert left to check on other contractor (Preferred Environmental Services), YEC will call the system from car, and test to ensure system is operating correctly.
	Sensaphone does not answer phone calls, will trouble shoot at box
	YEC used Appendix C, problems 1 and 2 to trouble shoot problem. Sensaphone is responsive at unit, and appears to be programmed properly. SVE Blower was turned off to trigger alarm, and unit acknowledged, and attempted to call out. System began to recite message as if the call was made, however YEC phone was not contacted. The following is a list of additional steps taken to attempt to solve problem.
	1. Phone number 1 was changed to YEC office number – did not make contact
	2. Phone number was reprogrammed with different prefixes (ie 1-XXX-XXX-XXXX)
	3. System call delay was changed to 15 seconds after alarm
	4. Telephone Answering Device (TAD) was disabled
	5. Phone connection to Sensaphone was reconnected
	6. Phone connection box mounted to SVE system was inspected, and appeared to be ok
	No changes affected phone calls being made, each time the message would recite at the Sensaphone without the programmed number being contacted. YEC assumes there is a problem with the phone line, as the system appears to function correctly
1000	Robert (EA) was contacted to update on situation, he will contact Don Conan (EA)
1006	YEC called office to update on site situation, secured all site equipment, and left site.
	New keys were added to the SVE control box, Sensaphone box and power supply, key was supplied to Robert (EA).
	Sensaphone settings are as follows:
	Security Code set to 0321

YEC, Inc
612 Corporate Way
Valley Cottage, NY 10989
Phone: (845) 268-3203
Fax: (845) 268-5313

DAILY FIELD REPORT

	Voice Message created to state "1 Adams Blvd, National Heatset" ID number set to YEC project number of 0321 Phone number 1 set to Peter Lawler cell phone 1-(585)-975-9420 Phone number 2 set to YEC office 1 (845) 268-3203 Call delay is set at 15 seconds Intercall delay is set at 60 minutes Alarm Acknowledgement code remains 555 Rings until Answer, set to 1 Message repeat set at 3 times
1010	YEC offsite

Report prepared by: Peter Lawler Title: Geologist

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Peter Lawler (YEC) Time: 830
Weather: Sunny, 28F, breezy Date: 3/3/2011

System Status:

Arrival: running
Departure: running
Run Timer Reading: 4225702
Electric Meter Reading: 17499; 00.49; 31.08; 0081

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 75 % Open

Pre-Bleed Air (Extraction Well):		**Post-Bleed Air (SVE Influent):**		
Flow:	47 CFM	Flow:	97 CFM	
Vacuum:	10 "H2O	Pressure	8 "H2O	via magnehelic
PID Reading:	9.7 PPM	PID Reading:	1.1 PPM	
Draeger Tube:	- PPM	Draeger Tube:	- PPM	
Temperature:	42.3 °F	Temperature:	142.3 °F	

Carbon Monitoring:

Mid: 0.4 PPM 5.5 "H2O
Effluent: 0.2 PPM

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: N/A
Water trap drained? line frozen

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	**MW-C**	**MW-E**	**MW-G**	**VP-1**	**VP-2**	**VP-3**	**VP-7**	**VP-8**	**VP-9**	**VP-10**	**VP-11**	**VP-12**	**VP-13**	**VP-14**	**VP-15**
DTW (ft):	17.38	17.36	17.56	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	0.44	0.15	0.1	0.06	0.05	0.06	0.25	0.14	0.04	N/A	N/A	N/A
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A

Comments:

Don Conan onsite to provide oversight, final reading PID calibration (isobutylene) 97.1ppm, after low pre-bleed recalibrated to 99.6ppm
Sample collected at 1015-1025
Identified broken telephone wire, 1040 Verizon onsite to repair line break, SW of building over parking lot entrance
1435 Verizon called to inform line has been repaired. 3/4/11 Sensaphone called (631) 249-7946, busy signal, equipment not answering.

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Peter Lawler (YEC) Time: 1000
Weather: Sunny, 80F, partly cloudy Date: 6/27/2011

System Status:

Arrival: running
Departure: running
Run Timer Reading: 4434678
Electric Meter Reading: 18309, 00.38, 32.76, 0085

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 75 % Open

Pre-Bleed Air (Extraction Well):

Flow: 125 CFM
Vacuum: 44 "H2O
PID Reading: 0.1 PPM
Draeger Tube: - PPM
Temperature: 94.3 °F

Post-Bleed Air (SVE Influent):

Flow: 186.5 CFM
Pressure 17 "H2O via magnehelic
PID Reading: 1.8 PPM
Draeger Tube: - PPM
Temperature: 158.6 °F

Carbon Monitoring:

Mid: 1.6 PPM 6 "H2O
Effluent: 0.1 PPM

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: N/A

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-C	MW-E	MW-G	VP-1	VP-2	VP-3	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
DTW (ft):	15.88	15.87	16.16	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	2.4	0.8	0.55	0.46	0.25	0.25	0.45	0.25	0.11	N/A	N/A	N/A
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A

Comments:

Don and Jim (EA) onsite with new contractor
System gauge read 55" water
Sample collected at 1148

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Robert Peterson Time: 10:00
Weather: 45F, Sunny, 5-8 mph W Date: 1/31/2012

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 46808.68
Electric Meter Reading: 19213; 00.41; 34.36; 0092

System Data:

Extraction Well F Gate Valve: 100 % Open
Dilution Valve: 75 % Open

Pre-Bleed Air (Extraction Well):

Flow: 80 CFM
Vacuum: 23 "H2O
PID Reading: 62 PPM
Draeger Tube: N/A PPM
Temperature: 51.1 °F

Post-Bleed Air (SVE Influent):

Flow: 252.85 CFM
Pressure 17 "H2O via magnehelic
PID Reading: 12.5 PPM
Draeger Tube: N/A PPM
Temperature: 92.3 °F

Carbon Monitoring:

Mid: 0.0 PPM 9 "H2O
Effluent: 0.5 PPM

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: N/A

Monitoring Well Gauging / Vapor Point Monitoring:

Well/V.P. ID:	MW-C	MW-E	MW-G	VP-1	VP-2	VP-3	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
DTW (ft):	15.55	--	15.75	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	1.0	0.0	0.0	0.15	0.13	0.0	0.2	--	0.2	--	--	--
PID (PPM):	1.0	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	--	--	--

Comments:

SVE-Effluent sample collected @ 10:23.
MW-E, VP-11, VP-13, VP-14, and VP-15 not accessable.

Attachment B

Analytical Results

ANALYTICAL REPORT

Lab Number:	L1102848
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Phone:	(315) 491-6649
Project Name:	NATIONAL HEATSET
Project Number:	NATIONAL HEATSET
Report Date:	03/11/11

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LAO00299), ME (MA0030), PA (Registration #68-02089), LA NELAC (03090), FL NELAC (E87814), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1102848
Report Date: 03/11/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1102848-01	SVE-EFFLUENT	FARMINGDALE, NY	03/03/11 10:25

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1102848
Project Number:	NATIONAL HEATSET	**Report Date:**	03/11/11

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Volatile Organics in Air

L1102848-01: Sample was transferred from a Tedlar bag into a fused silica lined canister upon receipt in order to extend the holding time for analysis.

L1102848-01 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

The WG457518-3 LCS recovery for Hexachlorobutadiene (138%) is outside the 70%-130% acceptance limit. The LCS was within overall method allowances, therefore the analysis proceeded.

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1102848
Project Number:	NATIONAL HEATSET	**Report Date:**	03/11/11

Case Narrative (continued)

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kathleen O'Brien

Title: Technical Director/Representative Date: 03/11/11

AIR

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1102848
Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: L1102848-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/05/11 20:33
Analyst: RY

Date Collected: 03/03/11 10:25
Date Received: 03/04/11
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
Dichlorodifluoromethane	0.434	0.200	--	2.14	0.988	--		1
Chloromethane	0.545	0.200	--	1.12	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Bromomethane	ND	0.200	--	ND	0.776	--		1
Chloroethane	ND	0.200	--	ND	0.527	--		1
Trichlorofluoromethane	0.238	0.200	--	1.34	1.12	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.792	--		1
Methylene chloride	2.59	1.00	--	8.99	3.47	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.234	0.200	--	0.927	0.792	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	18.5	0.200	--	73.4	0.792	--		1
Chloroform	0.329	0.200	--	1.60	0.976	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	1.54	0.200	--	8.39	1.09	--		1
Benzene	ND	0.200	--	ND	0.638	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Trichloroethene	30.1	0.200	--	162	1.07	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.425	0.200	--	1.60	0.753	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1102848
Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: L1102848-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 03/03/11 10:25
Date Received: 03/04/11
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
Tetrachloroethene	364	0.200	--	2460	1.36	--	E	1
Chlorobenzene	ND	0.200	--	ND	0.920	--		1
Ethylbenzene	ND	0.200	--	ND	0.868	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Styrene	ND	0.200	--	ND	0.851	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.868	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.982	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.982	--		1
Benzyl chloride	ND	0.200	--	ND	1.03	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	115		60-140

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1102848
Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: L1102848-01 D
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/06/11 07:45
Analyst: RY

Date Collected: 03/03/11 10:25
Date Received: 03/04/11
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
Tetrachloroethene	475	1.00	--	3220	6.78	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	101		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	109		60-140

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1102848
Report Date: 03/11/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/05/11 14:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG457518-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.988	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Bromomethane	ND	0.200	--	ND	0.776	--		1
Chloroethane	ND	0.200	--	ND	0.527	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.792	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.792	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.792	--		1
Chloroform	ND	0.200	--	ND	0.976	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.638	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.753	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1102848
Report Date: 03/11/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/05/11 14:29

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG457518-4								
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.920	--		1
Ethylbenzene	ND	0.200	--	ND	0.868	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Styrene	ND	0.200	--	ND	0.851	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.868	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.982	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.982	--		1
Benzyl chloride	ND	0.200	--	ND	1.03	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ppbV		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1102848

Report Date: 03/11/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG457518-3								
Propylene	78		-		70-130	-		
Propane	81		-		70-130	-		
Dichlorodifluoromethane	93		-		70-130	-		
Chloromethane	87		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	87		-		70-130	-		
Vinyl chloride	86		-		70-130	-		
1,3-Butadiene	83		-		70-130	-		
Butane	81		-		70-130	-		
Bromomethane	83		-		70-130	-		
Chloroethane	84		-		70-130	-		
Ethyl Alcohol	97		-		70-130	-		
Vinyl bromide	80		-		70-130	-		
Acetone	100		-		70-130	-		
Trichlorofluoromethane	89		-		70-130	-		
iso-Propyl Alcohol	83		-		70-130	-		
1,1-Dichloroethene	82		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	74		-		70-130	-		
Carbon disulfide	87		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	92		-		70-130	-		
trans-1,2-Dichloroethene	79		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1102848

Report Date: 03/11/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG457518-3								
1,1-Dichloroethane	88		-		70-130	-		
Methyl tert butyl ether	82		-		70-130	-		
Vinyl acetate	94		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	84		-		70-130	-		
Ethyl Acetate	104		-		70-130	-		
Chloroform	89		-		70-130	-		
Tetrahydrofuran	80		-		70-130	-		
1,2-Dichloroethane	83		-		70-130	-		
n-Hexane	82		-		70-130	-		
1,1,1-Trichloroethane	94		-		70-130	-		
Benzene	90		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	87		-		70-130	-		
1,2-Dichloropropane	94		-		70-130	-		
Bromodichloromethane	94		-		70-130	-		
1,4-Dioxane	100		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Heptane	88		-		70-130	-		
cis-1,3-Dichloropropene	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1102848
Report Date: 03/11/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG457518-3								
4-Methyl-2-pentanone	111		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	100		-		70-130	-		
Toluene	89		-		70-130	-		
2-Hexanone	113		-		70-130	-		
Dibromochloromethane	92		-		70-130	-		
1,2-Dibromoethane	96		-		70-130	-		
Tetrachloroethene	96		-		70-130	-		
Chlorobenzene	96		-		70-130	-		
Ethylbenzene	91		-		70-130	-		
p/m-Xylene	96		-		70-130	-		
Bromoform	98		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	116		-		70-130	-		
o-Xylene	97		-		70-130	-		
4-Ethyltoluene	106		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
1,2,4-Trimethylbenzene	116		-		70-130	-		
Benzyl chloride	112		-		70-130	-		
1,3-Dichlorobenzene	112		-		70-130	-		
1,4-Dichlorobenzene	111		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1102848

Report Date: 03/11/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG457518-3								
1,2-Dichlorobenzene	114		-		70-130	-		
1,2,4-Trichlorobenzene	124		-		70-130	-		
Naphthalene	127		-		70-130	-		
Hexachlorobutadiene	**138**	Q	-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1102848
Report Date: 03/11/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG457518-5 QC Sample: L1102864-01 Client ID: DUP Sample						
Dichlorodifluoromethane	0.445	0.432	ppbV	3		25
Chloromethane	0.471	0.470	ppbV	0		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Trichlorofluoromethane	0.321	0.326	ppbV	2		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.247	0.229	ppbV	8		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1102848
Report Date: 03/11/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG457518-5 QC Sample: L1102864-01 Client ID: DUP Sample					
Trichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	0.313	0.323	ppbV	3	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1102848
Report Date: 03/11/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG457518-5 QC Sample: L1102864-01 Client ID: DUP Sample					
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1102848
Report Date: 03/11/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler

N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1102848-01A	Tedlar Bag 1 liter-Polypropylene	N/A	NA		Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1102848
Project Number:	NATIONAL HEATSET	**Report Date:**	03/11/11

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1102848
Project Number:	NATIONAL HEATSET	**Report Date:**	03/11/11

Data Qualifiers

the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised March 3, 2011 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570B, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA, 245.1, 245.7, 1631E, 180.1, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081, 8082, 8260B, 8270C.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 3060A, 6020A, 7470A, 7471A, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580, 3630C, 3640A, 3660B, 3665A, 5035, 8260B, 8270C, 8015D, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, SM2320B, EPA 200.8, SM2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 7470A, 9040B, 6020, 9010B, 9014 Organic Parameters: SW-846 3510C, 3580A, 5030B, 5035L, 5035H, 3630C, 3640C, 3660B, 3665A, 8015B 8081A, 8082, 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9040B, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 9014, 9040B, 120.1, SM2510B, 4500CN-E, 4500H-B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8082, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020, 7196A, 3060A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 1312, 3050B, 3580, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via LA-DEQ.***

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 2510B, EPA 120.1, 180.1, 1631E, 245.7.)

Solid & Chemical Materials (Inorganic Parameters: EPA 9040, 9060, 6020, 7470, 7471, 7474. Organic Parameters: EPA 8081, 8082, 8015 Mod, 8270, 8260.)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 5030B, 8260B, 8270C, 8270C-ALK-PAH, 8082, 8081A, 8015D-SHC.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 5035A, 8260B, 8270C, 8270-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015-DRO.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP
Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl.

Serial_No:03111112:20

AIR ANALYSIS

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #: L1102848

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: EA Engineering
Address: 6712 Brooklawn Pkwy STE 104
Syracuse, NY 13211
Phone: 315-431-4610
Fax:
Email: dconan@eaest.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: National Heatset
Project Location: Farmingdale, NY
Project #:
Project Manager: DON CONAN
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
2848-01	SVE-Effluent	3-3-11	1025	1025	/	/	SV	PL	5L	/	/	1							

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	3-3-11 / 1300	Fed Ex 8723 7464 0104	3-3-11 / 1300
Fed Ex	3/4/11 9:40	[signature]	3/4/11 9:40

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.

Form No: 101-02 (19-Jun-09)

ANALYTICAL REPORT

Lab Number:	L1109486
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Phone:	(315) 491-6649
Project Name:	NATIONAL HEATSET
Project Number:	NATIONAL HEATSET
Report Date:	07/01/11

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LAO00299), ME (MA0030), PA (Registration #68-02089), LA NELAC (03090), FL NELAC (E87814), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1109486
Report Date: 07/01/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1109486-01	SVE-EFFLUENT	FARMINGDALE, NY	06/27/11 11:48

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1109486
Report Date: 07/01/11

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Volatile Organics in Air

L1109486-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kathleen O'Brien

Title: Technical Director/Representative Date: 07/01/11

AIR

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1109486
Report Date: 07/01/11

SAMPLE RESULTS

Lab ID: L1109486-01 D
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 06/29/11 09:39
Analyst: RY

Date Collected: 06/27/11 11:48
Date Received: 06/28/11
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.06	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Methylene chloride	19.4	5.00	--	67.4	17.4	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
cis-1,2-Dichloroethene	17.1	1.00	--	67.8	3.96	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
1,1,1-Trichloroethane	2.14	1.00	--	11.7	5.46	--		5
Benzene	ND	1.00	--	ND	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Trichloroethene	41.0	1.00	--	220	5.37	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	ND	1.00	--	ND	3.77	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.68	--		5

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1109486
Report Date: 07/01/11

SAMPLE RESULTS

Lab ID: L1109486-01 D
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 06/27/11 11:48
Date Received: 06/28/11
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
Tetrachloroethene	215	1.00	--	1460	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.60	--		5
Ethylbenzene	ND	1.00	--	ND	4.34	--		5
p/m-Xylene	ND	2.00	--	ND	8.69	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	ND	1.00	--	ND	4.34	--		5
1,3,5-Trimethybenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	91		60-140

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1109486
Report Date: 07/01/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/28/11 18:27

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG475883-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L1109486
Report Date: 07/01/11

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/28/11 18:27

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG475883-4								
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1109486

Report Date: 07/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG475883-3								
Propylene	111		-		70-130	-		
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	98		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	71		-		70-130	-		
Vinyl chloride	97		-		70-130	-		
1,3-Butadiene	98		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	100		-		70-130	-		
Ethyl Alcohol	89		-		70-130	-		
Vinyl bromide	98		-		70-130	-		
Acetone	79		-		70-130	-		
Trichlorofluoromethane	99		-		70-130	-		
iso-Propyl Alcohol	93		-		70-130	-		
1,1-Dichloroethene	96		-		70-130	-		
Methylene chloride	88		-		70-130	-		
3-Chloropropene	88		-		70-130	-		
Carbon disulfide	92		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	91		-		70-130	-		
Methyl tert butyl ether	77		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1109486

Report Date: 07/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG475883-3								
Vinyl acetate	82		-		70-130	-		
2-Butanone	85		-		70-130	-		
cis-1,2-Dichloroethene	94		-		70-130	-		
Ethyl Acetate	84		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	74		-		70-130	-		
1,2-Dichloroethane	88		-		70-130	-		
n-Hexane	91		-		70-130	-		
1,1,1-Trichloroethane	97		-		70-130	-		
Benzene	95		-		70-130	-		
Carbon tetrachloride	93		-		70-130	-		
Cyclohexane	93		-		70-130	-		
1,2-Dichloropropane	86		-		70-130	-		
Bromodichloromethane	85		-		70-130	-		
1,4-Dioxane	90		-		70-130	-		
Trichloroethene	92		-		70-130	-		
2,2,4-Trimethylpentane	92		-		70-130	-		
Heptane	90		-		70-130	-		
cis-1,3-Dichloropropene	86		-		70-130	-		
4-Methyl-2-pentanone	90		-		70-130	-		
trans-1,3-Dichloropropene	73		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1109486

Report Date: 07/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG475883-3								
1,1,2-Trichloroethane	86		-		70-130	-		
Toluene	88		-		70-130	-		
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	89		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Tetrachloroethene	96		-		70-130	-		
Chlorobenzene	92		-		70-130	-		
Ethylbenzene	87		-		70-130	-		
p/m-Xylene	86		-		70-130	-		
Bromoform	86		-		70-130	-		
Styrene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	95		-		70-130	-		
o-Xylene	88		-		70-130	-		
4-Ethyltoluene	89		-		70-130	-		
1,3,5-Trimethylbenzene	90		-		70-130	-		
1,2,4-Trimethylbenzene	100		-		70-130	-		
Benzyl chloride	85		-		70-130	-		
1,3-Dichlorobenzene	96		-		70-130	-		
1,4-Dichlorobenzene	96		-		70-130	-		
1,2-Dichlorobenzene	98		-		70-130	-		
1,2,4-Trichlorobenzene	122		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L1109486

Report Date: 07/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG475883-3								
Hexachlorobutadiene	100		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1109486
Report Date: 07/01/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG475883-5 QC Sample: L1109293-03 Client ID: DUP Sample						
Propylene	1.60	1.72	ppbV	7		25
Dichlorodifluoromethane	0.545	0.520	ppbV	5		25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	18.2	18.0	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	3.30	3.12	ppbV	6		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1109486
Report Date: 07/01/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG475883-5 QC Sample: L1109293-03 Client ID: DUP Sample					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	0.814	0.793	ppbV	3	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	0.622	0.716	ppbV	14	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Carbon tetrachloride	5.09	5.54	ppbV	8	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1109486
Report Date: 07/01/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG475883-5 QC Sample: L1109293-03 Client ID: DUP Sample					
Heptane	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	2.48	2.40	ppbV	3	25
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.831	0.787	ppbV	5	25
p/m-Xylene	2.26	2.16	ppbV	5	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	0.476	0.443	ppbV	7	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.854	0.810	ppbV	5	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L1109486
Report Date: 07/01/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG475883-5 QC Sample: L1109293-03 Client ID: DUP Sample					
1,2,4-Trimethylbenzene	1.44	1.40	ppbV	3	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L1109486
Report Date: 07/01/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1109486-01A	Tedlar Bag 5 liter-Polypropylene	A	NA		Y	Present/Intact	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1109486
Project Number:	NATIONAL HEATSET	**Report Date:**	07/01/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
P	- The RPD between the results for the two columns exceeds the method-specified criteria.
Q	- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less

Report Format: Data Usability Report

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1109486
Project Number:	NATIONAL HEATSET	**Report Date:**	07/01/11

Data Qualifiers

than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised March 23, 2011 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570B, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA, 245.1, 245.7, 1631E, 180.1, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081, 8082, 8260B, 8270C.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 3060A, 6020A, 7470A, 7471A, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580, 3630C, 3640A, 3660B, 3665A, 5035, 8260B, 8270C, 8015D, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, SM2320B, EPA 200.8, SM2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 7470A, 9040B, 6020, 9010B, 9014 Organic Parameters: SW-846 3510C, 3580A, 5030B, 5035L, 5035H, 3630C, 3640C, 3660B, 3665A, 8015B 8081A, 8082, 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9040B, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 9014, 9040B, 120.1, SM2510B, 4500CN-E, 4500H-B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8082, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020, 7196A, 3060A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 1312, 3050B, 3580, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via LA-DEQ.***

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 2510B, EPA 120.1, 180.1, 1631E, 245.7.)

Solid & Chemical Materials (Inorganic Parameters: EPA 9040, 9060, 6020, 7470, 7471, 7474. Organic Parameters: EPA 8081, 8082, 8015 Mod, 8270, 8260.)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 5030B, 8260B, 8270C, 8270C-ALK-PAH, 8082, 8081A, 8015D-SHC.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 5035A, 8260B, 8270C, 8270-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015-DRO.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1109486

Serial No:07011114:26

Client Information

Client: EA Eng.
Address: 6712 Brooklawn PKwy Ste 104
Syracuse NY 13211
Phone: ~~315~~ 315-431-4610
Fax:
Email: dconan@eaest.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: National Heatset
Project Location: Farmingdale, NY
Project #:
Project Manager: Dan Conan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
9486.1	SVE Effluent	6/27/11	1148	1148	✓	✓	SV	PL	5L	✓	✓	1							0.1 ppm

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
FedEx	6/27/11 1400	FedEx 875723593 8207	6/27/11 6/28/11 1035

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Form No: 101-02 (19-Jun-09)

ANALYTICAL REPORT

Lab Number:	L1201698
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Jim Hayward
Phone:	(315) 431-4610
Project Name:	NATIONAL HEATSET
Project Number:	1447429.0003
Report Date:	02/07/12

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1201698-01	SVE-EFFLUENT	FARMINGDALE, NY	01/31/12 10:23

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

Volatile Organics in Air

L1201698-01 and WG516389-5 Duplicate have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 02/07/12

AIR

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003
Lab Number: L1201698
Report Date: 02/07/12

SAMPLE RESULTS

Lab ID: L1201698-01 D
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/02/12 00:16
Analyst: RY

Date Collected: 01/31/12 10:23
Date Received: 02/01/12
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air (Low Level) - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Methylene chloride	ND	10.0	--	ND	34.7	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
cis-1,2-Dichloroethene	22.5	2.00	--	89.2	7.93	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Trichloroethene	17.1	2.00	--	91.9	10.7	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	ND	2.00	--	ND	7.54	--		10

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003
Lab Number: L1201698
Report Date: 02/07/12

SAMPLE RESULTS

Lab ID: L1201698-01 D
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 01/31/12 10:23
Date Received: 02/01/12
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab								
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	632	2.00	--	4280	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	ND	4.00	--	ND	17.4	--		10
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
1,3,5-Trimethybenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	117		60-140
Bromochloromethane	104		60-140
chlorobenzene-d5	102		60-140

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003
Lab Number: L1201698
Report Date: 02/07/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/01/12 18:43

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG516389-4								
Propylene	ND	0.500	--	ND	0.860	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003
Lab Number: L1201698
Report Date: 02/07/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/01/12 18:43

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG516389-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003
Lab Number: L1201698
Report Date: 02/07/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/01/12 18:43

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG516389-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethybenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 1447429.0003

Lab Number: L1201698

Report Date: 02/07/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG516389-3								
Chlorodifluoromethane	90		-		70-130	-		
Propylene	97		-		70-130	-		
Propane	83		-		70-130	-		
Dichlorodifluoromethane	103		-		70-130	-		
Chloromethane	98		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	104		-		70-130	-		
Methanol	**68**	Q	-		70-130	-		
Vinyl chloride	99		-		70-130	-		
1,3-Butadiene	116		-		70-130	-		
Butane	79		-		70-130	-		
Bromomethane	104		-		70-130	-		
Chloroethane	100		-		70-130	-		
Ethyl Alcohol	95		-		70-130	-		
Dichlorofluoromethane	92		-		70-130	-		
Vinyl bromide	105		-		70-130	-		
Acrolein	73		-		70-130	-		
Acetone	98		-		70-130	-		
Acetonitrile	89		-		70-130	-		
Trichlorofluoromethane	110		-		70-130	-		
iso-Propyl Alcohol	121		-		70-130	-		
Acrylonitrile	88		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 1447429.0003

Lab Number: L1201698

Report Date: 02/07/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG516389-3								
Pentane	98		-		70-130	-		
Ethyl ether	88		-		70-130	-		
1,1-Dichloroethene	110		-		70-130	-		
tert-Butyl Alcohol	96		-		70-130	-		
Methylene chloride	111		-		70-130	-		
3-Chloropropene	103		-		70-130	-		
Carbon disulfide	110		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		-		70-130	-		
trans-1,2-Dichloroethene	97		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	97		-		70-130	-		
Vinyl acetate	100		-		70-130	-		
2-Butanone	98		-		70-130	-		
cis-1,2-Dichloroethene	111		-		70-130	-		
Ethyl Acetate	101		-		70-130	-		
Chloroform	103		-		70-130	-		
Tetrahydrofuran	91		-		70-130	-		
2,2-Dichloropropane	88		-		70-130	-		
1,2-Dichloroethane	95		-		70-130	-		
n-Hexane	103		-		70-130	-		
Isopropyl Ether	101		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 1447429.0003

Lab Number: L1201698

Report Date: 02/07/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG516389-3								
Ethyl-Tert-Butyl-Ether	90		-		70-130	-		
1,1,1-Trichloroethane	105		-		70-130	-		
1,1-Dichloropropene	105		-		70-130	-		
Benzene	105		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	105		-		70-130	-		
Tertiary-Amyl Methyl Ether	101		-		70-130	-		
Dibromomethane	101		-		70-130	-		
1,2-Dichloropropane	102		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	112		-		70-130	-		
Trichloroethene	110		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Heptane	96		-		70-130	-		
2,4,4-Trimethyl-1-Pentene	86		-		70-130	-		
cis-1,3-Dichloropropene	105		-		70-130	-		
4-Methyl-2-pentanone	106		-		70-130	-		
2,4,4-Trimethyl-2-Pentene	80		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	109		-		70-130	-		
Toluene	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 1447429.0003

Lab Number: L1201698

Report Date: 02/07/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG516389-3								
1,3-Dichloropropane	94		-		70-130	-		
2-Hexanone	103		-		70-130	-		
Dibromochloromethane	94		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		
Butyl Acetate	97		-		70-130	-		
Octane	94		-		70-130	-		
Tetrachloroethene	108		-		70-130	-		
1,1,1,2-Tetrachloroethane	90		-		70-130	-		
Chlorobenzene	105		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	99		-		70-130	-		
Bromoform	86		-		70-130	-		
Styrene	102		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		
o-Xylene	99		-		70-130	-		
1,2,3-Trichloropropane	97		-		70-130	-		
Nonane (C9)	91		-		70-130	-		
Isopropylbenzene	99		-		70-130	-		
Bromobenzene	98		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	100		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 1447429.0003

Lab Number: L1201698

Report Date: 02/07/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG516389-3								
p-Chlorotoluene	96		-		70-130	-		
4-Ethyltoluene	94		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
tert-Butylbenzene	101		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Decane (C10)	92		-		70-130	-		
Benzyl chloride	83		-		70-130	-		
1,3-Dichlorobenzene	107		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
sec-Butylbenzene	101		-		70-130	-		
p-Isopropyltoluene	94		-		70-130	-		
1,2-Dichlorobenzene	108		-		70-130	-		
n-Butylbenzene	104		-		70-130	-		
1,2-Dibromo-3-chloropropane	97		-		70-130	-		
Undecane	106		-		70-130	-		
Dodecane (C12)	107		-		70-130	-		
1,2,4-Trichlorobenzene	110		-		70-130	-		
Naphthalene	102		-		70-130	-		
1,2,3-Trichlorobenzene	107		-		70-130	-		
Hexachlorobutadiene	108		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG516389-5 QC Sample: L1201698-01 Client ID: SVE-EFFLUENT						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	22.5	22.2	ppbV	1		25
Chloroform	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG516389-5 QC Sample: L1201698-01 Client ID: SVE-EFFLUENT					
Trichloroethene	17.1	17.2	ppbV	1	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	632	607	ppbV	4	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG516389-5 QC Sample: L1201698-01 Client ID: SVE-EFFLUENT					
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: 1447429.0003

Lab Number: L1201698
Report Date: 02/07/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**
Cooler
N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1201698-01A	Tedlar Bag 1 liter-Polypropylene	N/A	NA		Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1201698
Project Number:	1447429.0003	**Report Date:**	02/07/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report

Project Name:	NATIONAL HEATSET	**Lab Number:**	L1201698
Project Number:	1447429.0003	**Report Date:**	02/07/12

Data Qualifiers

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised January 30, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570B, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: EPA 245.7, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081B, 8082A, 8260B, 8270C, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 3060A, 6020A, 7471A, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 5035, 8260B, 8270C, 8015D, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, SM2320B, SM2540D, 2540G, EPA 180.1, 1631E, SW-846 7470A, 9040B, 6020, 9050A. Organic Parameters: SW-846 3510C, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8015B 8081A, 8082, 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 7474, 9040B, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610C, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 245.7, 7470A, 9014, 9040B, 9050, 120.1, 4500CN-E, 4500H-B, EPA 376.2, 180.1, 3020A. Organic Parameters: EPA 8260B, 8270C, 8081A, 8082, 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020, 7196A, 3060A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 1312, 3050B, 3580, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Pennsylvania Certificate/Lab ID: 68-02089 ***NELAP Accredited***

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A,7471B, 7474. Organic Parameters: EPA3050B, 3540C, 3630C, 8270C, 8081B, 8082A.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. ***NELAP Accredited via LA-DEQ.***

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. ***NELAP Accredited.***

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

Washington State Department of Ecology Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015 Mod, 8270.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. ***NELAP Accredited.***

Non-Potable Water (Inorganic Parameters:EPA 3020A,6020A,245.7,9040B,SM4500H-B. Organic Parameters: EPA 3510C,3640A,3660B,3665A,8270C,8270D,8082A,8081B.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

U.S. Army Corps of Engineers

Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 5030B, 8260B, 8270C, 8270C-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 5035A, 8260B, 8270C, 8270-ALK-PAH, 8082, 8081A, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #: L1201698

Client Information

Client: EA Engineering
Address: 6712 Brooklawn Pkwy.
Syracuse, NY 13211
Phone: 315-431-4610
Fax: 315-431-4280
Email: rpeterson@eaest.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: National Heatset
Project Location: Farmingdale, NY
Project #: 1447429.0003
Project Manager: Jim Hayward
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*

Date Due: **Time:**

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)
jhayward@eaest.com
rpeterson@eaest.com

Billing Information

☒ Same as Client info PO #: 1447429.0003

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
01698-01	SVE-Effluent	1/31/12	1023	1023	—	—	SV	RP	5L	—	—	1							PID: 0.5 ppm

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
Robert Peterson FedEx	1/31/12 12:00 2/1/12 9:30	FedEx	2/1/12 9:30