EA Engineering, P.C.
EA Science and Technology

6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211-2158
Telephone: 315-431-4610
Fax: 315-431-4280
www.eaest.com

05 March 2009

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 Report (September - December 2008)
1 Adams Boulevard, Farmingdale, New York
New York State Department of Environmental Conservation Site 1-52-140
EA Project No. 14474.29

Dear Mr. Dyber:

This letter 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 Manual (Shaw, 2003)[1].

In accordance with our approved Work Plan, monthly site visits were performed on the following dates by YEC personnel on behalf of EA.

Date	Purpose
09/25/08	Monthly Visit (September 2008)
10/31/08	Monthly Visit (October 2008)
11/24/08	Monthly Visit (November 2008)
12/22/08	Monthly Visit (December 2008)

1. SYSTEM OPERATION

Based on the run time meter, the system was operational for a total of 2,784 hours out of an available 2,784 hours (100 percent of the total available) during this reporting period (28 August 2008 to 22 December 2008). Operational data for this period have been based on the measurements and effluent sample data collected on the dates listed above. The dilution valve

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

has been positioned in the 75 percent open position. The extraction well (MW-F) valve remained at the 100 percent open position.

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)	PCE Conc.[1] (ppm)	VOC Conc.[2] (ppm)
09/25/08	110	33	245	0.0	10.8
10/31/08	102	32	250	0.0	7.3
11/24/08	112	32	243	0.0	4.8
12/22/08	72	19	235	0.0	7.6

[1]PCE concentration measured via Draeger tube.
[2]VOC concentration measured via photoionization detector (PID).

NOTE: cfm = Cubic feet per minute.
PCE = Tetrachloroethylene.
ppm = Parts per million.
VOC = Volatile organic compound.

No PCE concentrations (via Draeger Tube), were observed at the vapor-phase granular activated carbon (VGAC) mid-sampling port, or the effluent sampling port during the reporting period. VOC concentrations (via photoionization detector) from 0.0 to 0.5 ppm were observed at the VGAC mid-sampling port or the effluent sampling port during the reporting period. A complete set of operational data collected are presented in Table 1.

2. MONITORING PROBES

The following vacuum data (in. of water column) were observed at the listed vapor monitoring points during the monitoring period.

Vapor Monitoring Point	9/25/08	10/31/08	11/24/08	12/22/08
VP-1	1.80	1.60	1.60	1.50
VP-2	0.10	0.18	0.42	0.20
VP-3	0.11	0.25	0.30	0.15
VP-7	0.41	0.36	0.30	0.15
VP-8	0.25	0.20	0.32	0.10
VP-9	0.25	0.19	0.15	0.15
VP-10	0.30	0.30	0.25	0.20
VP-11	0.25	0.15	0.12	0.12
VP-12	0.10	0.07	0.04	0.04
VP-13	0.10	0.0	0.04	0.0
VP-14	0.0	0.0	0.0	0.0
VP-15	0.0	0.0	0.0	0.0

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

3. DEPTH-TO-WATER MEASUREMENTS

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

Date	MW-C	MW-E	MW-G
09/25/08	16.39	16.39	16.57
10/31/08	15.98	15.98	16.27
11/24/08	16.35	16.35	16.55
12/22/08	14.58	14.58	14.75

Based on the gauging data, the water table rose approximately 1.8 ft during the monitoring period. The wells will continue to be gauged during future site visits.

4. PCE REMOVAL

PCE removal was calculated for this reporting period using SVE influent PCE concentrations and flow rates measured at the SVE influent sampling point. The SVE system removed approximately 2 lbs of PCE from the extraction well during this reporting period, and has removed approximately 2,612 lb of PCE to date. A summary of the estimated PCE mass removal over time is presented in Table 2.

5. AIR DISCHARGE MONITORING

YEC personnel collected grab air samples from the system effluent using Tedlar bags and submitted the samples to Alpha Analytical. The samples were analyzed for VOCs using U.S. Environmental Protection Agency Method TO-14. PCE, trichloroethene (TCE), and *cis*-1,2-dichloroethene (*cis*-1,2-DCE) were detected at the following concentrations.

Date	*cis*-1,2-DCE	TCE	PCE
09/25/08	0.14	0.36	9.4
10/31/08	0.10	0.17	4.0
11/24/08	0.06	0.13	2.3
12/22/08	0.03	0.06	1.2
NOTE: ND = Not Detected J = Analyte detected below detection limits. Units = mg/m^3			

Analytical results are summarized in Table 3 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 4.

Based on the effluent sampling results, a total of 30.13 lbs of PCE has been discharged during the year 2008 toward the permitted annual discharge limit of 270 lb. A total of 2.17 lb of TCE has been discharged during the year 2008 toward the permitted annual discharge limit of 120 lb.

No *cis*-1,2-DCE was discharged during the reporting period, and none has been discharged during the year 2008 (permitted annual discharge limit is 5,510 lb).

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.

Donald F. Conan, P.E.
Project Manager

DFC/drs

Enclosures

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

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			
											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)
		Available	Actual																			
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.

-- = measurement not recorded or not applicable.

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

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.

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

												Influent SVE					Mid GAC				Effluent GAC			
Date	Run Time Meter Reading (hours)	Run Time Since Last Visit (hours) Available	Actual	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)	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
												* Blower discharge pressure in inches H2O											
	2784	2784																					

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.

-- = measurement not recorded or not applicable.

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

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.

TABLE 2
PCE
REMOVAL ESTIMATE
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	VOC Influent Concentration (ppmv)	PCE Influent Concentration (ppmv)	% PCE of Total VOCs	Extraction Well Flow Rate (cfm) [2]	Elapsed Time Since Last Visit (day)	PCE Removal Since Last Visit (lb)	Cumulative PCE Removal (lb)
9/18/2002	SVE PILOT TEST STARTUP						
9/30/2002	2000 [1]	500 [1]	25.0	34.5	12	126	126
10/14/2002	1,011	400	39.6	38	14	127	253
11/19/2002	0	0	--	49	36	113	367
12/16/2002	560	200	35.7	36.5	27	69	436
1/13/2003	485	400	82.5	28.5	28	154	589
1/21/2003	0	0	--	0	8	63	652
2/10/2003	639	400	62.6	38	20	64	715
3/5/2003	263	200	76.0	24.4	23	129	844
3/18/2003	125	100	80.0	92	13	76	920
4/29/2003	152	50	32.9	75	42	105	1,025
5/13/2003	127	50	39.4	78	14	65	1,090
6/30/2003	82.4	50	60.7	115	48	89	1,179
7/22/2003	406	400	98.5	99.5	12	187	1,367
8/26/2003	137	10	7.3	79	35	276	1,643
9/23/2003	141	15	10.6	218	14	14	1,657
10/21/2003	37.5	20	53.3	166	28	41	1,698
11/24/2003	141	125	88.7	130	34	179	1,877
1/6/2004	118	100	84.7	98.5	43	--	1,877
2/9/2004	23.1	10	43.3	121	34	91	1,968
3/30/2004	22	10	45.5	103	50	22	1,990
4/29/2004	2.4	0	0.0	131	30	8	1,999
5/24/2004	43.8	50	114.2	144	25	49	2,047
6/22/2004	57	10	17.5	127	29	54	2,102
7/28/2004	53.2	7	13.2	142	36	21	2,122
8/12/2004	48	0	0	157	15	8	2,130
9/29/2004	27.7	0	--	139	48	0	2,130
10/20/2004	19.1	10	--	140	21	14	2,144
11/17/2004	17.9	10	55.9	160	28	16	2,160
12/22/2004	15.8	5	31.6	143	35	9	2,169
1/20/2005	--	--	--	--	--	--	--
2/23/2005	174	50	28.7	87.5	34	--	--
Date	VOC Influent Concentration (ppmv)	PCE Influent Concentration (ppmv)	% PCE of Total VOCs	SVE Influent Flow Rate (cfm) [2]	Elapsed Time Since Last Visit (day)	PCE Removal Since Last Visit (lb)	Cumulative PCE Removal (lb)
3/29/2005	6.4	4.5	70.3	158	34	11	2,180
4/28/2005	8.9	5	56.2	227	30	10	2,190
5/31/2005	10.4	10	96.2	208	33	18	2,208
6/24/2005	8.3	7	84.3	266	24	16	2,224
8/4/2005	8.8	12	136.4	353	41	39	2,263

Notes:

[1] = VOC concentrations of 2,000 ppm and PCE concentrations of 500 ppm are greater than the limit of their respective monitoring device and are to be taken as estimations.

[2] SVE Influent (post-dilution) monitoring point data used for calculation of PCE Removal for dates including and subsequent to March 29, 2005; Removal updated on 1-3-06 to represent SVE Influent flow rate.

Removal Rate = [(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*24 hr/1 day*days of operation

[3] Run time meter reading not indictitive of SVE system run time; actual hours run is assumed equal to elapsed time.

Where:
MW = molecular weight
Molecular weight (MW) of PCE is 165.85
C = degrees centigrade, as measured
lb = pounds
ppmv = parts per million (volume/volume basis)
-- = information not available
flow = average of the present and the previous months measured SVE influent rate in cubic feet per minute (cfm)

TABLE 2
PCE
REMOVAL ESTIMATE
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	VOC Influent Concentration (ppmv)	PCE Influent Concentration (ppmv)	% PCE of Total VOCs	SVE Influent Flow Rate (cfm) [2]	Elapsed Time Since Last Visit (day)	PCE Removal Since Last Visit (lb)	Cumulative PCE Removal (lb)
Spent Carbon Replaced 8/10/05							
9/13/2005	18.3	12	65.6	226	40	43	2,306
10/10/2005	21.7	10	46.1	222	27	22	2,328
11/11/2005	12.2	9	73.8	209	32	25	2,353
12/8/2005	7.2	2	27.8	235	27	12	2,365
1/6/2006	32.5	4	12.3	245	29	8	2,373
Spent Carbon Replaced 1/25/06							
2/6/2006	3.6	2	55.6	292	30	10	2,383
3/14/2006	5.5	5	90.9	212	36	13	2,396
4/12/2006	6.1	6	98.4	259	29	14	2,410
5/4/2006	7.8	5	64.1	199	22	9	2,419
6/12/2005	7.9	9	113.9	216	39	18	2,437
7/12/2006	8.3	8	96.4	191	30	17	2,454
8/7/2006	8.7	7.5	86.2	201	26	13	2,467
9/21/2006	7.7	9	116.9	227	45	27	2,494
Spent Carbon Replaced 10/11/06							
10/18/2006	6	8	133.3	231	27	17	2,511
11/29/2006	1.6	4	250.0	193.5	42	18	2,529
12/21/2006	4.6	3	65.2	178	22	5	2,534
1/26/2007	0.4	4	1000.0	142.5	36	7	2,541
3/19/2007	0.2	2	1000.0	135	20	3	2,544
4/27/2007	0	15	--	126	28	9	2,553
5/24/2007	15.2	1.8	11.8	127	0.2	0.00	2,553
6/21/2007	1.8	35.0	1944.4	130.5	0.7	1	2,554
7/24/2007	13.2	2	15.2	205	33.0	29	2,583
8/28/2007	16.3	2.0	12.3	206	35.0	5	2,588
9/18/2007	11.7	2.0	17.1	207	21.0	3	2,591
10/31/2007	9.9	2.0	20.2	208	43.0	6	2,597
11/28/2007	9.5	1	10.5	211	28.1	3	2,600
1/4/2008	7	0	0.0	268	37.0	1	2,601
1/23/2008	6.6	0	0.0	222	19.0	0	2,601
2/28/2008	--	--	--	--	4.1	0	2,601
4/29/2008	0	0	0.0	230	7.2	0	2,601
5/23/2008	10.4	1	9.6	223	23.9	1	2,602
6/26/2008	9.3	2	21.5	213	34.1	4	2,606
7/28/2008	10.8	0	0.0	237	32.0	2	2,608
8/28/2008	11.6	2	17.2	221	31.0	2	2,610
9/25/2008	10.8	0	0.0	245	27.9	2	2,612
10/31/2008	7.3	0	0.0	250	36.0	0	2,612
11/24/2008	4.8	0	0.0	243	24.0	0	2,612
12/22/2008	7.6	0	0.0	235	28.0	0	2,612

Notes:

[1] = VOC concentrations of 2,000 ppm and PCE concentrations of 500 ppm are greater than the limit of their respective monitoring device and are to be taken as estimations.

[2] SVE Influent (post-dilution) monitoring point data used for calculation of PCE Removal for dates including and subsequent to March 29, 2005; Removal updated on 1-3-06 to represent SVE Influent flow rate.

Removal Rate = [(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*24 hr/1 day*days of operation

[3] Run time meter reading not indictitive of SVE system run time; actual hours run is assumed equal to elapsed time.

Where:
MW = molecular weight
Molecular weight (MW) of PCE is 165.85
C = degrees centigrade, as measured
flow = average of the present and the previous months measured SVE influent rate in cubic feet per minute (cfm)
lb = pounds
ppmv = parts per million (volume/volume basis)
-- = information not available

[4] Elapsed time for the 1-26-07 to 3-19-07 time period is 52 days, however, the system was down for repair during that time. The run time meter indicates that the system was operated for 20 days of that time period.

TABLE 3
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 3
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
	J = Analyte detected below quantitation limits.		

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
SVE = Soil vapor extraction
VGAC = vapor-phase granular activated carbon
-- = sample not collected
J = Estimated Value
J = Analyte detected below quantitation limits.
mg/m3 = milligrams per cubic meter

TABLE 4
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 4
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 4
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/cu m.)	TCE (mg/cu m.)	cis-1,2-DCE (mg/cu m.)	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
2008 Totals:									**0.00**		**30.13**		**2.17**		**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

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Dan Simpson Time: 1000
Weather: Overcast 66F Date: 9/25/2008

System Status:

Arrival:	Running
Departure:	Running
Run Timer Reading:	2301520
Electric Meter Reading:	10553

System Data:

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

Pre-Bleed Air (Extraction Well):		**Post-Bleed Air (SVE Influent):**	
Flow:	110.0 CFM	Flow:	244.53 CFM
Vacuum:	33 "H2O	Pressure	18 "H2O via magnehelic
PID Reading:	10.8 PPM	PID Reading:	0.9 PPM
Draeger Tube:	0 PPM	Draeger:	0 PPM
Temperature:	80.6 °F	Temperature:	135.9 °F

Carbon Monitoring:

Mid:	0.0 PPM	344.1 CFM	138.2	Temp. (°F)	0 PPM (Drager)	10 "H2O	
Effluent:	0.0 PPM	215.3 CFM	119.1	Temp. (°F)	0 PPM (Drager)		

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained?	No
# Gallons:	N/A
Purge water drums on-site:	0

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):	16.39	16.39	16.57	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	1.8	0.10	0.11	0.41	0.25	0.25	0.30	0.25	0.10	0.1	0.0	0.0
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Comments:

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Dan Simpson Time: 1030
Weather: Sunny 58F Date: 10/31/2008

System Status:

Arrival:	Running
Departure:	Running
Run Timer Reading:	2388004
Electric Meter Reading:	10853, .36, 20.27, 0053

System Data:

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

Pre-Bleed Air (Extraction Well):		**Post-Bleed Air (SVE Influent):**	
Flow:	102.33 CFM	Flow:	250.09 CFM
Vacuum:	32 "H2O	Pressure	18 "H2O via magnehelic
PID Reading:	7.3 PPM	PID Reading:	0.2 PPM
Draeger Tube:	0 PPM	Draeger:	0 PPM
Temperature:	52.9 °F	Temperature:	124.7 °F

Carbon Monitoring:

Mid:	0.0 PPM	262.11 CFM	127.9	Temp. (°F)	0 PPM (Drager)	8 "H2O	
Effluent:	0.0 PPM	264.71 CFM	112.7	Temp. (°F)	0 PPM (Drager)		

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: 0

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):	15.98	15.98	16.27	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	1.6	0.18	0.25	0.36	0.2	0.19	0.30	0.15	0.07	0.0	0.0	0.0
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Comments:

Pre-Bleed draeger: Pumped from port into a 1L tedlar bag using an electric pump, then used the draeger pump to collect data from bag (n=5).

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Simpson, Peter La Time: 1042
Weather: Sunny 47F Date: 11/24/2008

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 2445616
Electric Meter Reading: 11058, .40, 20.63, 0054

System Data:

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

Pre-Bleed Air (Extraction Well):

Flow: 112.00 CFM
Vacuum: 32 "H2O
PID Reading: 4.8 PPM
Draeger Tube: 0 PPM
Temperature: 62.7 °F

Post-Bleed Air (SVE Influent):

Flow: 243.00 CFM
Pressure 20 "H2O via magnehelic
PID Reading: 0.0 PPM
Draeger: 0 PPM
Temperature: 115.8 °F

Carbon Monitoring:

Mid:	0.0 PPM	251.00 CFM	119.2	Temp. (°F)	0 PPM (Drager)	9 "H2O
Effluent:	0.0 PPM	254.00 CFM	104.3	Temp. (°F)	0 PPM (Drager)	

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: 0

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):	16.35	16.35	16.55	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	0.6	0.42	0.3	0.3	0.32	0.15	0.25	0.12	0.04	0.04	0.0	0.0
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Comments:

Pre-Bleed draeger: Pumped from port into a 1L tedlar bag using an electric pump, then used the draeger pump to collect data from bag (n=5).

Additional debris dumping has occurred outside of the southwest corner of the building.

National Heatset Printing

1 Adams Boulevard, Farmingdale, New York

EA Engineering

Personnel: Peter Lawler Time: 1145
Weather: sunny, 22 F Date: 12/22/2008

System Status:

Arrival: Running
Departure: Running
Run Timer Reading: 2512915
Electric Meter Reading: 11301, .47, 21.04, 0055

System Data:

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

Pre-Bleed Air (Extraction Well):		**Post-Bleed Air (SVE Influent):**		
Flow:	71.50 CFM	Flow:	235.00 CFM	
Vacuum:	19 "H2O	Pressure	10 "H2O	via magnehelic
PID Reading:	7.6 PPM	PID Reading:	1.9 PPM	
Draeger Tube:	0 PPM	Draeger Tube:	0 PPM	
Temperature:	66.4 °F	Temperature:	104.4 °F	

Carbon Monitoring:

Mid:	0.5 PPM	230.00 CFM	99.6 Temp. (°F)	0 PPM (Drager)	4 "H2O
Effluent:	0.3 PPM	176.00 CFM	82.2 Temp. (°F)	0 PPM (Drager)	

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? No
Gallons: N/A
Purge water drums on-site: 0

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):	14.58	14.58	14.75	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	0.5	0.2	0.15	0.15	0.1	0.15	0.2	0.12	0.04	0.0	0.0	0.0
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Comments:

Pre-bleed draeger: Pumped from port into a 1L tedlar bag using an electric pump, then used the draeger pump to collect data from bag.
Outlet installed on warehouse did not work.
(n=5)

ANALYTICAL REPORT

Lab Number:	L0814314
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Project Name:	NATIONAL HEATSET
Project Number:	5603
Report Date:	10/08/08

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: 5603

Lab Number: L0814314
Report Date: 10/08/08

Alpha Sample ID	Client ID	Sample Location
L0814314-01	SVE-EFFLUENT	FARMINGDALE, NY

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0814314
Project Number:	5603	**Report Date:**	10/08/08

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.

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.

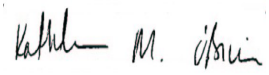
Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

TO-15

L0814314-01 Sample was transferred from the Tedlar bag into a fused silica lined canister upon receipt to extend the holding time for analysis.

L0814314-01 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: 

Title: Technical Director/Representative Date: 10/08/08

AIR

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0814314
Report Date: 10/08/08

SAMPLE RESULTS

Lab ID: L0814314-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 10/08/08 02:18
Analyst: AR

Date Collected: 09/25/08 11:00
Date Received: 09/26/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
1,1,1-Trichloroethane	ND	10.4	ND	56.5		51.83
1,1,2,2-Tetrachloroethane	ND	10.4	ND	71.1		51.83
1,1,2-Trichloroethane	ND	10.4	ND	56.5		51.83
1,1-Dichloroethane	ND	10.4	ND	41.9		51.83
1,1-Dichloroethene	ND	10.4	ND	41.1		51.83
1,2,4-Trichlorobenzene	ND	10.4	ND	76.9		51.83
1,2,4-Trimethylbenzene	ND	10.4	ND	50.9		51.83
1,2-Dibromoethane	ND	10.4	ND	79.6		51.83
1,2-Dichlorobenzene	ND	10.4	ND	62.3		51.83
1,2-Dichloroethane	ND	10.4	ND	41.9		51.83
1,2-Dichloropropane	ND	10.4	ND	47.9		51.83
1,3,5-Trimethybenzene	ND	10.4	ND	50.9		51.83
1,3-Dichlorobenzene	ND	10.4	ND	62.3		51.83
1,4-Dichlorobenzene	ND	10.4	ND	62.3		51.83
Benzene	ND	10.4	ND	33.1		51.83
Benzyl chloride	ND	10.4	ND	53.6		51.83
Bromomethane	ND	10.4	ND	40.2		51.83
Carbon tetrachloride	ND	10.4	ND	65.2		51.83
Chlorobenzene	ND	10.4	ND	47.7		51.83
Chloroethane	ND	10.4	ND	27.3		51.83
Chloroform	ND	10.4	ND	50.6		51.83
Chloromethane	ND	10.4	ND	21.4		51.83
cis-1,2-Dichloroethene	36.0	10.4	143	41.1		51.83
cis-1,3-Dichloropropene	ND	10.4	ND	47.0		51.83
Dichlorodifluoromethane	ND	10.4	ND	51.2		51.83

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0814314
Report Date: 10/08/08

SAMPLE RESULTS

Lab ID: L0814314-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 09/25/08 11:00
Date Received: 09/26/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
Ethylbenzene	ND	10.4	ND	45.0		51.83
Freon-113	ND	10.4	ND	79.4		51.83
Freon-114	ND	10.4	ND	72.4		51.83
Hexachlorobutadiene	ND	10.4	ND	110.		51.83
Methylene chloride	ND	25.9	ND	89.9		51.83
p/m-Xylene	ND	20.7	ND	90.0		51.83
o-Xylene	ND	10.4	ND	45.0		51.83
Styrene	ND	10.4	ND	44.1		51.83
Tetrachloroethene	1380	10.4	9380	70.2		51.83
Toluene	ND	10.4	ND	39.0		51.83
trans-1,2-Dichloroethene	ND	10.4	ND	41.1		51.83
trans-1,3-Dichloropropene	ND	10.4	ND	47.0		51.83
Trichloroethene	66.9	10.4	359	55.6		51.83
Trichlorofluoromethane	ND	10.4	ND	58.2		51.83
Vinyl chloride	ND	10.4	ND	26.5		51.83

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0814314
Report Date: 10/08/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/07/08 15:45

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG339152-3						
1,1,1-Trichloroethane	ND	0.200	ND	1.09		1
1,1,2,2-Tetrachloroethane	ND	0.200	ND	1.37		1
1,1,2-Trichloroethane	ND	0.200	ND	1.09		1
1,1-Dichloroethane	ND	0.200	ND	0.809		1
1,1-Dichloroethene	ND	0.200	ND	0.792		1
1,2,4-Trichlorobenzene	ND	0.200	ND	1.48		1
1,2,4-Trimethylbenzene	ND	0.200	ND	0.982		1
1,2-Dibromoethane	ND	0.200	ND	1.54		1
1,2-Dichlorobenzene	ND	0.200	ND	1.20		1
1,2-Dichloroethane	ND	0.200	ND	0.809		1
1,2-Dichloropropane	ND	0.200	ND	0.924		1
1,3,5-Trimethybenzene	ND	0.200	ND	0.982		1
1,3-Dichlorobenzene	ND	0.200	ND	1.20		1
1,4-Dichlorobenzene	ND	0.200	ND	1.20		1
Benzene	ND	0.200	ND	0.638		1
Benzyl chloride	ND	0.200	ND	1.03		1
Bromomethane	ND	0.200	ND	0.776		1
Carbon tetrachloride	ND	0.200	ND	1.26		1
Chlorobenzene	ND	0.200	ND	0.920		1
Chloroethane	ND	0.200	ND	0.527		1
Chloroform	ND	0.200	ND	0.976		1
Chloromethane	ND	0.200	ND	0.413		1
cis-1,2-Dichloroethene	ND	0.200	ND	0.792		1
cis-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Dichlorodifluoromethane	ND	0.200	ND	0.988		1

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0814314
Report Date: 10/08/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 10/07/08 15:45

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG339152-3						
Ethylbenzene	ND	0.200	ND	0.868		1
Freon-113	ND	0.200	ND	1.53		1
Freon-114	ND	0.200	ND	1.40		1
Hexachlorobutadiene	ND	0.200	ND	2.13		1
Methylene chloride	ND	0.500	ND	1.74		1
p/m-Xylene	ND	0.400	ND	1.74		1
o-Xylene	ND	0.200	ND	0.868		1
Styrene	ND	0.200	ND	0.851		1
Tetrachloroethene	ND	0.200	ND	1.36		1
Toluene	ND	0.200	ND	0.753		1
trans-1,2-Dichloroethene	ND	0.200	ND	0.792		1
trans-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Trichloroethene	ND	0.200	ND	1.07		1
Trichlorofluoromethane	ND	0.200	ND	1.12		1
Vinyl chloride	ND	0.200	ND	0.511		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0814314

Report Date: 10/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG339152-2			
1,1,1-Trichloroethane	117	-	70-130	-	
1,1,2,2-Tetrachloroethane	107	-	70-130	-	
1,1,2-Trichloroethane	106	-	70-130	-	
1,1-Dichloroethane	107	-	70-130	-	
1,1-Dichloroethene	100	-	70-130	-	
1,2,4-Trichlorobenzene	124	-	70-130	-	
1,2,4-Trimethylbenzene	106	-	70-130	-	
1,2-Dibromoethane	104	-	70-130	-	
1,2-Dichlorobenzene	106	-	70-130	-	
1,2-Dichloroethane	126	-	70-130	-	
1,2-Dichloropropane	105	-	70-130	-	
1,3,5-Trimethylbenzene	100	-	70-130	-	
1,3-Butadiene	95	-	70-130	-	
1,3-Dichlorobenzene	107	-	70-130	-	
1,4-Dichlorobenzene	106	-	70-130	-	
1,4-Dioxane	99	-	70-130	-	
2,2,4-Trimethylpentane	102	-	70-130	-	
2-Butanone	81	-	70-130	-	
2-Hexanone	103	-	70-130	-	
3-Chloropropene	96	-	70-130	-	
4-Ethyltoluene	105	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0814314

Report Date: 10/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG339152-2			
Acetone	97	-	70-130	-	
Benzene	108	-	70-130	-	
Benzyl chloride	99	-	70-130	-	
Bromodichloromethane	106	-	70-130	-	
Bromoform	105	-	70-130	-	
Bromomethane	84	-	70-130	-	
Carbon disulfide	101	-	70-130	-	
Carbon tetrachloride	110	-	70-130	-	
Chlorobenzene	105	-	70-130	-	
Chloroethane	95	-	70-130	-	
Chloroform	112	-	70-130	-	
Chloromethane	93	-	70-130	-	
cis-1,2-Dichloroethene	106	-	70-130	-	
cis-1,3-Dichloropropene	91	-	70-130	-	
Cyclohexane	96	-	70-130	-	
Dibromochloromethane	109	-	70-130	-	
Dichlorodifluoromethane	100	-	70-130	-	
Ethyl Alcohol	93	-	70-130	-	
Ethyl Acetate	104	-	70-130	-	
Ethylbenzene	108	-	70-130	-	
1,1,2-Trichloro-1,2,2-Trifluoroethane	100	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0814314

Report Date: 10/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG339152-2			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	97	-	70-130	-	
Hexachlorobutadiene	111	-	70-130	-	
iso-Propyl Alcohol	108	-	70-130	-	
Methylene chloride	89	-	70-130	-	
4-Methyl-2-pentanone	96	-	70-130	-	
Methyl tert butyl ether	102	-	70-130	-	
p/m-Xylene	102	-	70-130	-	
o-Xylene	107	-	70-130	-	
Heptane	96	-	70-130	-	
n-Hexane	95	-	70-130	-	
Propylene	80	-	70-130	-	
Styrene	106	-	70-130	-	
Tetrachloroethene	108	-	70-130	-	
Tetrahydrofuran	101	-	70-130	-	
Toluene	118	-	70-130	-	
trans-1,2-Dichloroethene	104	-	70-130	-	
trans-1,3-Dichloropropene	85	-	70-130	-	
Trichloroethene	102	-	70-130	-	
Trichlorofluoromethane	109	-	70-130	-	
Vinyl acetate	105	-	70-130	-	
Vinyl bromide	100	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0814314

Report Date: 10/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01 Batch: WG339152-2				
Vinyl chloride	93	-	70-130	-	

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0814314
Report Date: 10/08/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG339152-4 QC Sample: L0814763-03 Client ID: DUP Sample					
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	5.44	4.74	ppbV	14	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	1.58	1.34	ppbV	16	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
Benzene	13.8	14.4	ppbV	4	25
Benzyl chloride	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0814314
Report Date: 10/08/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG339152-4 QC Sample: L0814763-03 Client ID: DUP Sample					
Chloroethane	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Chloromethane	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Dichlorodifluoromethane	ND	ND	ppbV	NC	25
Ethylbenzene	5.58	5.45	ppbV	2	25
Freon-113	ND	ND	ppbV	NC	25
Freon-114	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
p/m-Xylene	16.6	15.7	ppbV	6	25
o-Xylene	5.65	5.36	ppbV	5	25
Styrene	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Toluene	59.4	57.7	ppbV	3	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0814314
Report Date: 10/08/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG339152-4 QC Sample: L0814763-03 Client ID: DUP Sample					
Trichlorofluoromethane	9.70	10.6	ppbV	9	25
Vinyl chloride	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0814314
Report Date: 10/08/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0814314-01A	Tedlar Bag 5 liter-Polypropylene	NA	NA		NA	Absent	TO15-LL(30)

*Hold days indicated by values in parentheses

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0814314
Project Number:	5603	**Report Date:**	10/08/08

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.

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.

NI - Not Ignitable.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

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

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

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

Report Format: Data Usability Report

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0814314
Project Number:	5603	**Report Date:**	10/08/08

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 Woods Hole Labs 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 Woods Hole Labs.

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.

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

10080815:36

Date Rec'd in Lab:

ALPHA Job #: L0814314

Client Information

Client: EA Engineering
Address: 6712 Brooklawn Pkwy
Syracuse, NY 13211
Phone: (315) 431-6649
Fax: (315) 431-4280
Email: dconan@eaest.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: National Heatset
Project Location: Farmingdale, NY
Project #: 5603
Project Manager: Don Conan
ALPHA Quote #:

Turn-Around Time

☐ Standard 10 DAYS ☐ 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)
14314.1	SVE - Effluent	9/25/08	1100	—	0	—	SV	DS	5L			X							PID = 0.0

*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:
[signature] FED EX	9/25/08 1300	Fed Ex 8599 3711 2995	9/25/08 1300
	9/26/08 1010	[signature]	9/26/08 1010

Form No: 101-02 (rev.1-Feb-08)

ANALYTICAL REPORT

Lab Number:	L0816231
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Project Name:	NATIONAL HEATSET
Project Number:	5603
Report Date:	11/12/08

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: 5603

Lab Number: L0816231
Report Date: 11/12/08

Alpha Sample ID	Client ID	Sample Location
L0816231-01	SVE-EFFLUENT	FARMINGDALE, NY

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0816231
Report Date: 11/12/08

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.

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.

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.

Login Narrative

The analysis of TO-15 was received with the method required holding time exceeded and was performed at the client's request.

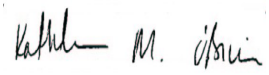
L0816231-01: Sample was transferred from a Tedlar bag into a fused silica lined canister upon receipt in order to extend the holding time for analysis.

L0816231-01 has elevated detection limits due to the 25x dilution required by the elevated concentrations of target compounds in the sample.

The WG343319-2 LCS recovery for trans-1,3-Dichloropropene is outside the 70%-130% acceptance limit.

The LCS was within overall method allowances, therefore the analysis proceeded.

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: 

Title: Technical Director/Representative Date: 11/12/08

AIR

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0816231
Report Date: 11/12/08

SAMPLE RESULTS

Lab ID: L0816231-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 11/09/08 03:57
Analyst: AR

Date Collected: 10/31/08 12:00
Date Received: 11/03/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
1,1,1-Trichloroethane	ND	5.00	ND	27.2		25
1,1,2,2-Tetrachloroethane	ND	5.00	ND	34.3		25
1,1,2-Trichloroethane	ND	5.00	ND	27.2		25
1,1-Dichloroethane	ND	5.00	ND	20.2		25
1,1-Dichloroethene	ND	5.00	ND	19.8		25
1,2,4-Trichlorobenzene	ND	5.00	ND	37.1		25
1,2,4-Trimethylbenzene	ND	5.00	ND	24.6		25
1,2-Dibromoethane	ND	5.00	ND	38.4		25
1,2-Dichlorobenzene	ND	5.00	ND	30.0		25
1,2-Dichloroethane	ND	5.00	ND	20.2		25
1,2-Dichloropropane	ND	5.00	ND	23.1		25
1,3,5-Trimethybenzene	ND	5.00	ND	24.6		25
1,3-Dichlorobenzene	ND	5.00	ND	30.0		25
1,4-Dichlorobenzene	ND	5.00	ND	30.0		25
Benzene	ND	5.00	ND	16.0		25
Benzyl chloride	ND	5.00	ND	25.9		25
Bromomethane	ND	5.00	ND	19.4		25
Carbon tetrachloride	ND	5.00	ND	31.4		25
Chlorobenzene	ND	5.00	ND	23.0		25
Chloroethane	ND	5.00	ND	13.2		25
Chloroform	ND	5.00	ND	24.4		25
Chloromethane	ND	5.00	ND	10.3		25
cis-1,2-Dichloroethene	24.3	5.00	96.3	19.8		25
cis-1,3-Dichloropropene	ND	5.00	ND	22.7		25
Dichlorodifluoromethane	ND	5.00	ND	24.7		25

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0816231
Report Date: 11/12/08

SAMPLE RESULTS

Lab ID: L0816231-01
Client ID: SVE-EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 10/31/08 12:00
Date Received: 11/03/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
Ethylbenzene	ND	5.00	ND	21.7		25
Freon-113	ND	5.00	ND	38.3		25
Freon-114	ND	5.00	ND	34.9		25
Hexachlorobutadiene	ND	5.00	ND	53.3		25
Methylene chloride	ND	12.5	ND	43.4		25
p/m-Xylene	ND	10.0	ND	43.4		25
o-Xylene	ND	5.00	ND	21.7		25
Styrene	ND	5.00	ND	21.3		25
Tetrachloroethene	588	5.00	3980	33.9		25
Toluene	ND	5.00	ND	18.8		25
trans-1,2-Dichloroethene	ND	5.00	ND	19.8		25
trans-1,3-Dichloropropene	ND	5.00	ND	22.7		25
Trichloroethene	31.7	5.00	170	26.8		25
Trichlorofluoromethane	ND	5.00	ND	28.1		25
Vinyl chloride	ND	5.00	ND	12.8		25

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0816231
Report Date: 11/12/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/08/08 16:32

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG343319-3						
1,1,1-Trichloroethane	ND	0.200	ND	1.09		1
1,1,2,2-Tetrachloroethane	ND	0.200	ND	1.37		1
1,1,2-Trichloroethane	ND	0.200	ND	1.09		1
1,1-Dichloroethane	ND	0.200	ND	0.809		1
1,1-Dichloroethene	ND	0.200	ND	0.792		1
1,2,4-Trichlorobenzene	ND	0.200	ND	1.48		1
1,2,4-Trimethylbenzene	ND	0.200	ND	0.982		1
1,2-Dibromoethane	ND	0.200	ND	1.54		1
1,2-Dichlorobenzene	ND	0.200	ND	1.20		1
1,2-Dichloroethane	ND	0.200	ND	0.809		1
1,2-Dichloropropane	ND	0.200	ND	0.924		1
1,3,5-Trimethybenzene	ND	0.200	ND	0.982		1
1,3-Dichlorobenzene	ND	0.200	ND	1.20		1
1,4-Dichlorobenzene	ND	0.200	ND	1.20		1
Benzene	ND	0.200	ND	0.638		1
Benzyl chloride	ND	0.200	ND	1.03		1
Bromomethane	ND	0.200	ND	0.776		1
Carbon tetrachloride	ND	0.200	ND	1.26		1
Chlorobenzene	ND	0.200	ND	0.920		1
Chloroethane	ND	0.200	ND	0.527		1
Chloroform	ND	0.200	ND	0.976		1
Chloromethane	ND	0.200	ND	0.413		1
cis-1,2-Dichloroethene	ND	0.200	ND	0.792		1
cis-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Dichlorodifluoromethane	ND	0.200	ND	0.988		1

Project Name: NATIONAL HEATSET
Project Number: 5603
Lab Number: L0816231
Report Date: 11/12/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/08/08 16:32

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG343319-3						
Ethylbenzene	ND	0.200	ND	0.868		1
Freon-113	ND	0.200	ND	1.53		1
Freon-114	ND	0.200	ND	1.40		1
Hexachlorobutadiene	ND	0.200	ND	2.13		1
Methylene chloride	ND	0.500	ND	1.74		1
p/m-Xylene	ND	0.400	ND	1.74		1
o-Xylene	ND	0.200	ND	0.868		1
Styrene	ND	0.200	ND	0.851		1
Tetrachloroethene	ND	0.200	ND	1.36		1
Toluene	ND	0.200	ND	0.753		1
trans-1,2-Dichloroethene	ND	0.200	ND	0.792		1
trans-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Trichloroethene	ND	0.200	ND	1.07		1
Trichlorofluoromethane	ND	0.200	ND	1.12		1
Vinyl chloride	ND	0.200	ND	0.511		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0816231

Report Date: 11/12/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG343319-2			
1,1,1-Trichloroethane	102	-	70-130	-	
1,1,2,2-Tetrachloroethane	98	-	70-130	-	
1,1,2-Trichloroethane	88	-	70-130	-	
1,1-Dichloroethane	98	-	70-130	-	
1,1-Dichloroethene	99	-	70-130	-	
1,2,4-Trichlorobenzene	123	-	70-130	-	
1,2,4-Trimethylbenzene	96	-	70-130	-	
1,2-Dibromoethane	88	-	70-130	-	
1,2-Dichlorobenzene	94	-	70-130	-	
1,2-Dichloroethane	98	-	70-130	-	
1,2-Dichloropropane	90	-	70-130	-	
1,3,5-Trimethylbenzene	95	-	70-130	-	
1,3-Butadiene	99	-	70-130	-	
1,3-Dichlorobenzene	93	-	70-130	-	
1,4-Dichlorobenzene	93	-	70-130	-	
1,4-Dioxane	107	-	70-130	-	
2,2,4-Trimethylpentane	98	-	70-130	-	
2-Butanone	96	-	70-130	-	
2-Hexanone	107	-	70-130	-	
3-Chloropropene	96	-	70-130	-	
4-Ethyltoluene	99	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0816231

Report Date: 11/12/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG343319-2			
Acetone	96	-	70-130	-	
Benzene	91	-	70-130	-	
Benzyl chloride	96	-	70-130	-	
Bromodichloromethane	93	-	70-130	-	
Bromoform	88	-	70-130	-	
Bromomethane	88	-	70-130	-	
Carbon disulfide	100	-	70-130	-	
Carbon tetrachloride	97	-	70-130	-	
Chlorobenzene	93	-	70-130	-	
Chloroethane	98	-	70-130	-	
Chloroform	99	-	70-130	-	
Chloromethane	98	-	70-130	-	
cis-1,2-Dichloroethene	99	-	70-130	-	
cis-1,3-Dichloropropene	80	-	70-130	-	
Cyclohexane	94	-	70-130	-	
Dibromochloromethane	98	-	70-130	-	
Dichlorodifluoromethane	100	-	70-130	-	
Ethyl Alcohol	99	-	70-130	-	
Ethyl Acetate	105	-	70-130	-	
Ethylbenzene	91	-	70-130	-	
1,1,2-Trichloro-1,2,2-Trifluoroethane	99	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0816231

Report Date: 11/12/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG343319-2			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	100	-	70-130	-	
Hexachlorobutadiene	128	-	70-130	-	
iso-Propyl Alcohol	98	-	70-130	-	
Methylene chloride	106	-	70-130	-	
4-Methyl-2-pentanone	107	-	70-130	-	
Methyl tert butyl ether	98	-	70-130	-	
p/m-Xylene	84	-	70-130	-	
o-Xylene	93	-	70-130	-	
Heptane	96	-	70-130	-	
n-Hexane	91	-	70-130	-	
Propylene	92	-	70-130	-	
Styrene	88	-	70-130	-	
Tetrachloroethene	103	-	70-130	-	
Tetrahydrofuran	104	-	70-130	-	
Toluene	95	-	70-130	-	
trans-1,2-Dichloroethene	101	-	70-130	-	
trans-1,3-Dichloropropene	**69**	-	70-130	-	
Trichloroethene	96	-	70-130	-	
Trichlorofluoromethane	102	-	70-130	-	
Vinyl acetate	94	-	70-130	-	
Vinyl bromide	101	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: 5603

Lab Number: L0816231

Report Date: 11/12/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01 Batch: WG343319-2				
Vinyl chloride	98	-	70-130	-	
2,4,4-Trimethyl-2-Pentene	86	-	70-130	-	
2,4,4-Trimethyl-1-Pentene	84	-	70-130	-	

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0816231
Report Date: 11/12/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG343319-4 QC Sample: L0816045-02 Client ID: DUP Sample					
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0816231
Report Date: 11/12/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG343319-4 QC Sample: L0816045-02 Client ID: DUP Sample					
Chloroethane	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Chloromethane	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Dichlorodifluoromethane	0.325	0.340	ppbV	5	25
Ethylbenzene	ND	ND	ppbV	NC	25
Freon-113	ND	ND	ppbV	NC	25
Freon-114	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Toluene	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0816231
Report Date: 11/12/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG343319-4 QC Sample: L0816045-02 Client ID: DUP Sample					
Trichlorofluoromethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: 5603

Lab Number: L0816231
Report Date: 11/12/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0816231-01A	Tedlar Bag 5 liter-Polypropylene	A	NA	NA	NA	Present/Intact	TO15-LL(30)

*Hold days indicated by values in parentheses

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0816231
Project Number:	5603	**Report Date:**	11/12/08

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.

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.

NI - Not Ignitable.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

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

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

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

Report Format: Data Usability Report

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0816231
Project Number:	5603	**Report Date:**	11/12/08

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 Woods Hole Labs 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 Woods Hole Labs.

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.

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

11120814:57

Date Rec'd in Lab:

ALPHA Job #: L0816231

Client Information

Client: EA Engineering
Address: 6712 Brooklawn Pkwy
Phone: 315 491 6649
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 (10 DAYS) ☐ 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)
16231-01	SVE - Effluent	10/31/08	1200	1200	6	-	SV	DS	5L			X							0.0 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:
[signature]	10/31/08 1500	FedEx 866300869627	10/31/08 1500
		[signature]	11/3/08 10:00

Form No: 101-02 (rev.1-Feb-08)

ANALYTICAL REPORT

Lab Number:	L0817428
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Project Name:	NATIONAL HEATSET
Project Number:	NATIONAL HEATSET
Report Date:	11/26/08

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: L0817428
Report Date: 11/26/08

Alpha Sample ID	Client ID	Sample Location
L0817428-01	SVE EFFLUENT	FARMINGDALE, NY

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0817428
Project Number:	NATIONAL HEATSET	**Report Date:**	11/26/08

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.

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.

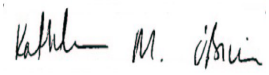
Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

TO-15

L0817428-01 has elevated detection limits due to the 10x dilution required by the elevated concentrations of target compounds in the sample.

The WG345149-3 LCS recoveries for cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, and Hexachlorobutadiene are outside the 70%-130% acceptance limit. The LCS was within overall method allowances, therefore the analysis proceeded.

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: 

Title: Technical Director/Representative Date: 11/26/08

AIR

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0817428
Report Date: 11/26/08

SAMPLE RESULTS

Lab ID: L0817428-01
Client ID: SVE EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 11/25/08 17:45
Analyst: AJ

Date Collected: 11/24/08 11:35
Date Received: 11/25/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
1,1,1-Trichloroethane	ND	2.00	ND	10.9		10
1,1,2,2-Tetrachloroethane	ND	2.00	ND	13.7		10
1,1,2-Trichloroethane	ND	2.00	ND	10.9		10
1,1-Dichloroethane	ND	2.00	ND	8.09		10
1,1-Dichloroethene	ND	2.00	ND	7.92		10
1,2,4-Trichlorobenzene	ND	2.00	ND	14.8		10
1,2,4-Trimethylbenzene	ND	2.00	ND	9.82		10
1,2-Dibromoethane	ND	2.00	ND	15.4		10
1,2-Dichlorobenzene	ND	2.00	ND	12.0		10
1,2-Dichloroethane	ND	2.00	ND	8.09		10
1,2-Dichloropropane	ND	2.00	ND	9.24		10
1,3,5-Trimethybenzene	ND	2.00	ND	9.82		10
1,3-Dichlorobenzene	ND	2.00	ND	12.0		10
1,4-Dichlorobenzene	ND	2.00	ND	12.0		10
Benzene	ND	2.00	ND	6.38		10
Benzyl chloride	ND	2.00	ND	10.3		10
Bromomethane	ND	2.00	ND	7.76		10
Carbon tetrachloride	ND	2.00	ND	12.6		10
Chlorobenzene	ND	2.00	ND	9.20		10
Chloroethane	ND	2.00	ND	5.27		10
Chloroform	ND	2.00	ND	9.76		10
Chloromethane	ND	2.00	ND	4.13		10
cis-1,2-Dichloroethene	15.4	2.00	61.1	7.92		10
cis-1,3-Dichloropropene	ND	2.00	ND	9.07		10
Dichlorodifluoromethane	ND	2.00	ND	9.88		10

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0817428
Report Date: 11/26/08

SAMPLE RESULTS

Lab ID: L0817428-01
Client ID: SVE EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 11/24/08 11:35
Date Received: 11/25/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
Ethylbenzene	ND	2.00	ND	8.68		10
Freon-113	ND	2.00	ND	15.3		10
Freon-114	ND	2.00	ND	14.0		10
Hexachlorobutadiene	ND	2.00	ND	21.3		10
Methylene chloride	ND	5.00	ND	17.4		10
p/m-Xylene	ND	4.00	ND	17.4		10
o-Xylene	ND	2.00	ND	8.68		10
Styrene	ND	2.00	ND	8.51		10
Tetrachloroethene	335	2.00	2270	13.6		10
Toluene	ND	2.00	ND	7.53		10
trans-1,2-Dichloroethene	ND	2.00	ND	7.92		10
trans-1,3-Dichloropropene	ND	2.00	ND	9.07		10
Trichloroethene	24.8	2.00	133	10.7		10
Trichlorofluoromethane	ND	2.00	ND	11.2		10
Vinyl chloride	ND	2.00	ND	5.11		10

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0817428
Report Date: 11/26/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/25/08 17:10

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG345149-2						
1,1,1-Trichloroethane	ND	0.200	ND	1.09		1
1,1,2,2-Tetrachloroethane	ND	0.200	ND	1.37		1
1,1,2-Trichloroethane	ND	0.200	ND	1.09		1
1,1-Dichloroethane	ND	0.200	ND	0.809		1
1,1-Dichloroethene	ND	0.200	ND	0.792		1
1,2,4-Trichlorobenzene	ND	0.200	ND	1.48		1
1,2,4-Trimethylbenzene	ND	0.200	ND	0.982		1
1,2-Dibromoethane	ND	0.200	ND	1.54		1
1,2-Dichlorobenzene	ND	0.200	ND	1.20		1
1,2-Dichloroethane	ND	0.200	ND	0.809		1
1,2-Dichloropropane	ND	0.200	ND	0.924		1
1,3,5-Trimethybenzene	ND	0.200	ND	0.982		1
1,3-Dichlorobenzene	ND	0.200	ND	1.20		1
1,4-Dichlorobenzene	ND	0.200	ND	1.20		1
Benzene	ND	0.200	ND	0.638		1
Benzyl chloride	ND	0.200	ND	1.03		1
Bromomethane	ND	0.200	ND	0.776		1
Carbon tetrachloride	ND	0.200	ND	1.26		1
Chlorobenzene	ND	0.200	ND	0.920		1
Chloroethane	ND	0.200	ND	0.527		1
Chloroform	ND	0.200	ND	0.976		1
Chloromethane	ND	0.200	ND	0.413		1
cis-1,2-Dichloroethene	ND	0.200	ND	0.792		1
cis-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Dichlorodifluoromethane	ND	0.200	ND	0.988		1

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0817428
Report Date: 11/26/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/25/08 17:10

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG345149-2						
Ethylbenzene	ND	0.200	ND	0.868		1
Freon-113	ND	0.200	ND	1.53		1
Freon-114	ND	0.200	ND	1.40		1
Hexachlorobutadiene	ND	0.200	ND	2.13		1
Methylene chloride	ND	0.500	ND	1.74		1
p/m-Xylene	ND	0.400	ND	1.74		1
o-Xylene	ND	0.200	ND	0.868		1
Styrene	ND	0.200	ND	0.851		1
Tetrachloroethene	ND	0.200	ND	1.36		1
Toluene	ND	0.200	ND	0.753		1
trans-1,2-Dichloroethene	ND	0.200	ND	0.792		1
trans-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Trichloroethene	ND	0.200	ND	1.07		1
Trichlorofluoromethane	ND	0.200	ND	1.12		1
Vinyl chloride	ND	0.200	ND	0.511		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L0817428

Report Date: 11/26/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG345149-3			
1,1,1-Trichloroethane	89	-	70-130	-	
1,1,2,2-Tetrachloroethane	98	-	70-130	-	
1,1,2-Trichloroethane	81	-	70-130	-	
1,1-Dichloroethane	77	-	70-130	-	
1,1-Dichloroethene	78	-	70-130	-	
1,2,4-Trichlorobenzene	130	-	70-130	-	
1,2,4-Trimethylbenzene	95	-	70-130	-	
1,2-Dibromoethane	80	-	70-130	-	
1,2-Dichlorobenzene	96	-	70-130	-	
1,2-Dichloroethane	78	-	70-130	-	
1,2-Dichloropropane	75	-	70-130	-	
1,3,5-Trimethylbenzene	93	-	70-130	-	
1,3-Butadiene	79	-	70-130	-	
1,3-Dichlorobenzene	93	-	70-130	-	
1,4-Dichlorobenzene	95	-	70-130	-	
1,4-Dioxane	107	-	70-130	-	
2,2,4-Trimethylpentane	86	-	70-130	-	
2-Butanone	87	-	70-130	-	
2-Hexanone	101	-	70-130	-	
3-Chloropropene	74	-	70-130	-	
4-Ethyltoluene	93	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L0817428
Report Date: 11/26/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG345149-3			
Acetone	91	-	70-130	-	
Benzene	75	-	70-130	-	
Benzyl chloride	94	-	70-130	-	
Bromodichloromethane	83	-	70-130	-	
Bromoform	85	-	70-130	-	
Bromomethane	71	-	70-130	-	
Carbon disulfide	81	-	70-130	-	
Carbon tetrachloride	88	-	70-130	-	
Chlorobenzene	87	-	70-130	-	
Chloroethane	78	-	70-130	-	
Chloroform	88	-	70-130	-	
Chloromethane	76	-	70-130	-	
cis-1,2-Dichloroethene	83	-	70-130	-	
cis-1,3-Dichloropropene	**69**	-	70-130	-	
Cyclohexane	80	-	70-130	-	
Dibromochloromethane	88	-	70-130	-	
Dichlorodifluoromethane	84	-	70-130	-	
Ethyl Alcohol	85	-	70-130	-	
Ethyl Acetate	117	-	70-130	-	
Ethylbenzene	91	-	70-130	-	
1,1,2-Trichloro-1,2,2-Trifluoroethane	81	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L0817428

Report Date: 11/26/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG345149-3			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	82	-	70-130	-	
Hexachlorobutadiene	**140**	-	70-130	-	
iso-Propyl Alcohol	85	-	70-130	-	
Methylene chloride	76	-	70-130	-	
4-Methyl-2-pentanone	97	-	70-130	-	
Methyl tert butyl ether	92	-	70-130	-	
p/m-Xylene	86	-	70-130	-	
o-Xylene	94	-	70-130	-	
Heptane	80	-	70-130	-	
n-Hexane	86	-	70-130	-	
Propylene	73	-	70-130	-	
Styrene	90	-	70-130	-	
Tetrachloroethene	92	-	70-130	-	
Tetrahydrofuran	103	-	70-130	-	
Toluene	85	-	70-130	-	
trans-1,2-Dichloroethene	79	-	70-130	-	
trans-1,3-Dichloropropene	**63**	-	70-130	-	
Trichloroethene	87	-	70-130	-	
Trichlorofluoromethane	86	-	70-130	-	
Vinyl acetate	87	-	70-130	-	
Vinyl bromide	82	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L0817428

Report Date: 11/26/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01 Batch: WG345149-3				
Vinyl chloride	78	-	70-130	-	

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0817428
Report Date: 11/26/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG345149-4 QC Sample: L0817428-01 Client ID: SVE EFFLUENT					
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0817428
Report Date: 11/26/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG345149-4 QC Sample: L0817428-01 Client ID: SVE EFFLUENT					
Chloroethane	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Chloromethane	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	15.4	13.0	ppbV	17	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Dichlorodifluoromethane	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
Freon-113	ND	ND	ppbV	NC	25
Freon-114	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
p/m-Xylene	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
Tetrachloroethene	335	323	ppbV	4	25
Toluene	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Trichloroethene	24.8	21.3	ppbV	15	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0817428
Report Date: 11/26/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG345149-4 QC Sample: L0817428-01 Client ID: SVE EFFLUENT					
Trichlorofluoromethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L0817428
Report Date: 11/26/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0817428-01A	Tedlar Bag 5 liter-Polypropylene	N/A	NA		NA	Absent	TO15-LL(30)

*Hold days indicated by values in parentheses

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0817428
Project Number:	NATIONAL HEATSET	**Report Date:**	11/26/08

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.

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.

NI - Not Ignitable.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

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

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

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

Report Format: Data Usability Report

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0817428
Project Number:	NATIONAL HEATSET	**Report Date:**	11/26/08

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 Woods Hole Labs 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 Woods Hole Labs.

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.

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

11260812:42

Date Rec'd in Lab:

ALPHA Job #: L0817428

Client Information

Client: EA Engineering
Address: 6712 Brooklawn PKwy (STE104)
Syracuse, NY 13211
Phone: (315) 481-2323
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 10 DAYS ☐ 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)
17428 -1	SVE Effluent	11-24-08	1135	1135	—	—	SV	P.L.	5L	—	—	1							0.0 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:
	11-24-08/1400	FedEx 8641 2007 9321	11-24-08/1400
FED EX	11/25/08 1000		11/25/08 1000

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 (rev.1-Feb-08)

ANALYTICAL REPORT

Lab Number:	L0818828
Client:	EA Engineering, Science and Tech 6712 Brooklawn Parkway Suite 104 Syracuse, NY 13211
ATTN:	Don Conan
Project Name:	NATIONAL HEATSET
Project Number:	NATIONAL HEATSET
Report Date:	01/06/09

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: L0818828
Report Date: 01/06/09

Alpha Sample ID	Client ID	Sample Location
L0818828-01	SVE EFFLUENT	FARMINGDALE, NY

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0818828
Project Number:	NATIONAL HEATSET	**Report Date:**	01/06/09

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.

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.

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.

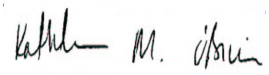
TO15-LL

L0818828-01: Samples were transferred from a Tedlar bag into a fused silica lined canister upon receipt in order to extend the holding time for analysis.

L0818828-01 has elevated detection limits due to the 2.5x dilution required by the elevated concentrations of target compounds in the sample.

The WG348692-2 LCS recovery for 1,1-dichloroethane is outside the 70%-130% acceptance limit. The LCS was within overall method allowances, therefore the analysis proceeded.

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: 

Title: Technical Director/Representative Date: 01/06/09

AIR

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0818828
Report Date: 01/06/09

SAMPLE RESULTS

Lab ID: L0818828-01
Client ID: SVE EFFLUENT
Sample Location: FARMINGDALE, NY
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 12/24/08 20:01
Analyst: AR

Date Collected: 12/22/08 12:45
Date Received: 12/23/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
1,1,1-Trichloroethane	0.650	0.500	3.55	2.72		2.5
1,1,2,2-Tetrachloroethane	ND	0.500	ND	3.43		2.5
1,1,2-Trichloroethane	ND	0.500	ND	2.72		2.5
1,1-Dichloroethane	ND	0.500	ND	2.02		2.5
1,1-Dichloroethene	ND	0.500	ND	1.98		2.5
1,2,4-Trichlorobenzene	ND	0.500	ND	3.71		2.5
1,2,4-Trimethylbenzene	ND	0.500	ND	2.46		2.5
1,2-Dibromoethane	ND	0.500	ND	3.84		2.5
1,2-Dichlorobenzene	ND	0.500	ND	3.00		2.5
1,2-Dichloroethane	ND	0.500	ND	2.02		2.5
1,2-Dichloropropane	ND	0.500	ND	2.31		2.5
1,3,5-Trimethybenzene	ND	0.500	ND	2.46		2.5
1,3-Dichlorobenzene	ND	0.500	ND	3.00		2.5
1,4-Dichlorobenzene	ND	0.500	ND	3.00		2.5
Benzene	ND	0.500	ND	1.60		2.5
Benzyl chloride	ND	0.500	ND	2.59		2.5
Bromomethane	ND	0.500	ND	1.94		2.5
Carbon tetrachloride	ND	0.500	ND	3.14		2.5
Chlorobenzene	ND	0.500	ND	2.30		2.5
Chloroethane	ND	0.500	ND	1.32		2.5
Chloroform	ND	0.500	ND	2.44		2.5
Chloromethane	ND	0.500	ND	1.03		2.5
cis-1,2-Dichloroethene	8.62	0.500	34.2	1.98		2.5
cis-1,3-Dichloropropene	ND	0.500	ND	2.27		2.5
Dichlorodifluoromethane	ND	0.500	ND	2.47		2.5

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0818828
Report Date: 01/06/09

SAMPLE RESULTS

Lab ID: L0818828-01
Client ID: SVE EFFLUENT
Sample Location: FARMINGDALE, NY
Date Collected: 12/22/08 12:45
Date Received: 12/23/08
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air						
Ethylbenzene	ND	0.500	ND	2.17		2.5
Freon-113	ND	0.500	ND	3.83		2.5
Freon-114	ND	0.500	ND	3.49		2.5
Hexachlorobutadiene	ND	0.500	ND	5.33		2.5
Methylene chloride	1.25	1.25	4.35	4.34		2.5
p/m-Xylene	1.26	1.00	5.45	4.34		2.5
o-Xylene	ND	0.500	ND	2.17		2.5
Styrene	ND	0.500	ND	2.13		2.5
Tetrachloroethene	181	0.500	1230	3.39		2.5
Toluene	0.783	0.500	2.95	1.88		2.5
trans-1,2-Dichloroethene	ND	0.500	ND	1.98		2.5
trans-1,3-Dichloropropene	ND	0.500	ND	2.27		2.5
Trichloroethene	10.5	0.500	56.4	2.68		2.5
Trichlorofluoromethane	ND	0.500	ND	2.81		2.5
Vinyl chloride	ND	0.500	ND	1.28		2.5

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0818828
Report Date: 01/06/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/24/08 13:58

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG348692-3						
1,1,1-Trichloroethane	ND	0.200	ND	1.09		1
1,1,2,2-Tetrachloroethane	ND	0.200	ND	1.37		1
1,1,2-Trichloroethane	ND	0.200	ND	1.09		1
1,1-Dichloroethane	ND	0.200	ND	0.809		1
1,1-Dichloroethene	ND	0.200	ND	0.792		1
1,2,4-Trichlorobenzene	ND	0.200	ND	1.48		1
1,2,4-Trimethylbenzene	ND	0.200	ND	0.982		1
1,2-Dibromoethane	ND	0.200	ND	1.54		1
1,2-Dichlorobenzene	ND	0.200	ND	1.20		1
1,2-Dichloroethane	ND	0.200	ND	0.809		1
1,2-Dichloropropane	ND	0.200	ND	0.924		1
1,3,5-Trimethybenzene	ND	0.200	ND	0.982		1
1,3-Dichlorobenzene	ND	0.200	ND	1.20		1
1,4-Dichlorobenzene	ND	0.200	ND	1.20		1
Benzene	ND	0.200	ND	0.638		1
Benzyl chloride	ND	0.200	ND	1.03		1
Bromomethane	ND	0.200	ND	0.776		1
Carbon tetrachloride	ND	0.200	ND	1.26		1
Chlorobenzene	ND	0.200	ND	0.920		1
Chloroethane	ND	0.200	ND	0.527		1
Chloroform	ND	0.200	ND	0.976		1
Chloromethane	ND	0.200	ND	0.413		1
cis-1,2-Dichloroethene	ND	0.200	ND	0.792		1
cis-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Dichlorodifluoromethane	ND	0.200	ND	0.988		1

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET
Lab Number: L0818828
Report Date: 01/06/09

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/24/08 13:58

Parameter	ppbV Results	ppbV RDL	ug/m3 Results	ug/m3 RDL	Qualifier	Dilution Factor
Low Level Volatile Organic Compounds in Air for sample(s): 01 Batch: WG348692-3						
Ethylbenzene	ND	0.200	ND	0.868		1
Freon-113	ND	0.200	ND	1.53		1
Freon-114	ND	0.200	ND	1.40		1
Hexachlorobutadiene	ND	0.200	ND	2.13		1
Methylene chloride	ND	0.500	ND	1.74		1
p/m-Xylene	ND	0.400	ND	1.74		1
o-Xylene	ND	0.200	ND	0.868		1
Styrene	ND	0.200	ND	0.851		1
Tetrachloroethene	ND	0.200	ND	1.36		1
Toluene	ND	0.200	ND	0.753		1
trans-1,2-Dichloroethene	ND	0.200	ND	0.792		1
trans-1,3-Dichloropropene	ND	0.200	ND	0.907		1
Trichloroethene	ND	0.200	ND	1.07		1
Trichlorofluoromethane	ND	0.200	ND	1.12		1
Vinyl chloride	ND	0.200	ND	0.511		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L0818828
Report Date: 01/06/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG348692-2			
1,1,1-Trichloroethane	113	-	70-130	-	
1,1,2,2-Tetrachloroethane	100	-	70-130	-	
1,1,2-Trichloroethane	111	-	70-130	-	
1,1-Dichloroethane	**131**	-	70-130	-	
1,1-Dichloroethene	120	-	70-130	-	
1,2,4-Trichlorobenzene	110	-	70-130	-	
1,2,4-Trimethylbenzene	97	-	70-130	-	
1,2-Dibromoethane	86	-	70-130	-	
1,2-Dichlorobenzene	90	-	70-130	-	
1,2-Dichloroethane	109	-	70-130	-	
1,2-Dichloropropane	118	-	70-130	-	
1,3,5-Trimethylbenzene	90	-	70-130	-	
1,3-Butadiene	109	-	70-130	-	
1,3-Dichlorobenzene	84	-	70-130	-	
1,4-Dichlorobenzene	83	-	70-130	-	
1,4-Dioxane	122	-	70-130	-	
2,2,4-Trimethylpentane	126	-	70-130	-	
2-Butanone	**136**	-	70-130	-	
2-Hexanone	108	-	70-130	-	
3-Chloropropene	121	-	70-130	-	
4-Ethyltoluene	91	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L0818828

Report Date: 01/06/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG348692-2			
Acetone	105	-	70-130	-	
Benzene	120	-	70-130	-	
Benzyl chloride	91	-	70-130	-	
Bromodichloromethane	118	-	70-130	-	
Bromoform	76	-	70-130	-	
Bromomethane	92	-	70-130	-	
Carbon disulfide	110	-	70-130	-	
Carbon tetrachloride	103	-	70-130	-	
Chlorobenzene	85	-	70-130	-	
Chloroethane	109	-	70-130	-	
Chloroform	106	-	70-130	-	
Chloromethane	110	-	70-130	-	
cis-1,2-Dichloroethene	109	-	70-130	-	
cis-1,3-Dichloropropene	105	-	70-130	-	
Cyclohexane	116	-	70-130	-	
Dibromochloromethane	84	-	70-130	-	
Dichlorodifluoromethane	105	-	70-130	-	
Ethyl Alcohol	112	-	70-130	-	
Ethyl Acetate	122	-	70-130	-	
Ethylbenzene	96	-	70-130	-	
1,1,2-Trichloro-1,2,2-Trifluoroethane	113	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L0818828
Report Date: 01/06/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01	Batch: WG348692-2			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109	-	70-130	-	
Hexachlorobutadiene	92	-	70-130	-	
iso-Propyl Alcohol	103	-	70-130	-	
Methylene chloride	119	-	70-130	-	
4-Methyl-2-pentanone	**134**	-	70-130	-	
Methyl tert butyl ether	113	-	70-130	-	
p/m-Xylene	89	-	70-130	-	
o-Xylene	92	-	70-130	-	
Heptane	128	-	70-130	-	
n-Hexane	116	-	70-130	-	
Propylene	96	-	70-130	-	
Styrene	84	-	70-130	-	
Tetrachloroethene	82	-	70-130	-	
Tetrahydrofuran	116	-	70-130	-	
Toluene	89	-	70-130	-	
trans-1,2-Dichloroethene	122	-	70-130	-	
trans-1,3-Dichloropropene	90	-	70-130	-	
Trichloroethene	105	-	70-130	-	
Trichlorofluoromethane	116	-	70-130	-	
Vinyl acetate	**131**	-	70-130	-	
Vinyl bromide	100	-	70-130	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Lab Number: L0818828

Report Date: 01/06/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air	Associated sample(s): 01 Batch: WG348692-2				
Vinyl chloride	110	-	70-130	-	

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0818828
Report Date: 01/06/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG348692-4 QC Sample: L0818828-01 Client ID: SVE EFFLUENT					
1,1,1-Trichloroethane	0.650	0.636	ppbV	2	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
1,3,5-Trimethybenzene	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Benzyl chloride	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0818828
Report Date: 01/06/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG348692-4 QC Sample: L0818828-01 Client ID: SVE EFFLUENT					
Chloroethane	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Chloromethane	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	8.62	8.33	ppbV	3	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Dichlorodifluoromethane	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
Freon-113	ND	ND	ppbV	NC	25
Freon-114	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25
Methylene chloride	1.25	1.55	ppbV	21	25
p/m-Xylene	1.26	1.19	ppbV	6	25
o-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
Tetrachloroethene	181	175	ppbV	3	25
Toluene	0.783	0.769	ppbV	2	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Trichloroethene	10.5	10.2	ppbV	3	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSE

Lab Number: L0818828
Report Date: 01/06/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Low Level Volatile Organic Compounds in Air Associated sample(s): 01 QC Batch ID: WG348692-4 QC Sample: L0818828-01 Client ID: SVE EFFLUENT					
Trichlorofluoromethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25

Project Name: NATIONAL HEATSET
Project Number: NATIONAL HEATSET

Lab Number: L0818828
Report Date: 01/06/09

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0818828-01A	Tedlar Bag 5 liter-Polypropylene	NA	NA		NA	Absent	TO15-LL(30)

*Hold days indicated by values in parentheses

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0818828
Project Number:	NATIONAL HEATSET	**Report Date:**	01/06/09

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.

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.

NI - Not Ignitable.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

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

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

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

Report Format: Not Specified

Project Name:	NATIONAL HEATSET	**Lab Number:**	L0818828
Project Number:	NATIONAL HEATSET	**Report Date:**	01/06/09

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 Woods Hole Labs 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 Woods Hole Labs.

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 December 9, 2008

The following list includes only those analytes/methods for which certification/approval is 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, Chloride, Fluoride, Sulfate, Sulfite, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, 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 Dissolved Solids, Total Suspended Solids (non-filterable), Total Cyanide, Bromide. 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, Ignitability, Corrosivity, TCLP 1311, Reactivity. 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.

Non-Potable Water (Inorganic Parameters: SM2320B, 4500NH3-F, EPA 120.1, SM2510B, 2340B, EPA 245.1, EPA 365.2, EPA 150.1, 160.1, SM2540C, EPA 160.2, SM2540D, EPA 335.2, 420.1, SM2540G, EPA 180.1. Organic Parameters: EPA 624, 625, 608.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 9050, 7470, 7471, 9045, EPA 7.3.3.2, EPA 7.3.4.2, 9014, 9065. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

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

Non-Potable Water (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B, Organic Parameters: EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270,)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

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

Maine Department of Human Services Certificate/Lab ID: MA0030.

Wastewater (Inorganic Parameters: EPA 120.1, 300.0, SM 2320, 2510B, 2540C, 2540D, EPA 245.1. Organic Parameters: 608, 624.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.

Non-Potable Water (Inorganic Parameters: SM4500H+B. Organic Parameters: EPA 624.)

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

Non-Potable Water (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. Organic Parameters: EPA 625, 608.)

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

Non-Potable Water (Inorganic Parameters: SW-846 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, SW-846 9040B, 6020, 9010B, 9014 Organic Parameters: EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

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

Non-Potable Water (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299.

Refer to MA-DEP Certificate for Non-Potable Water.

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

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

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7471. Organic Parameters: EPA 8015, 8270.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-02089. Registered Laboratory.

U.S. Army Corps of Engineers

Department of the Navy

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 #: L0818828

01060917:17

Client Information

Client: EA Engineering
Address: 6712 Brooklawn Pkwy Ste 104
Syracuse, NY 13211
Phone: (315) 481-2323
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 (10 DAYS) ☐ 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)
18828-01	SVE Effluent	12-22-08	1245	1245	—	—	SV	P.L.	5L	—	—	1							0.3 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:
	12-22-08 1530	FedEx 8641 1984 7368	12-22-08 1530
			12/23/08 16:00

Form No: 101-02 (rev.1-Feb-08)