

9 November 2010

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

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RE: National Heatset Printing Site / Soil Vapor Extraction System  
Operation & Maintenance Report (July – September 2010)  
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 report provides an overview of the ongoing operation of the soil vapor extraction (SVE) system at the National Heatset Printing Site in Farmingdale, New York (Figure 1). EA Engineering, P.C. and its affiliate EA Science and Technology, Inc. (EA) assumed management of the on-site SVE system under Work Assignment No. D004441-29. The activities are being conducted under the New York State Department of Environmental Conservation (NYSDEC) State Superfund Standby Contract. SVE system details are presented in an Operation & Maintenance (O&M) Manual (Shaw, 2003)<sup>1</sup>.

In accordance with our approved Work Plan, monthly site visits were performed up to the June 2009 event. After the June 2009 visit, the frequency of the O&M visits was changed to quarterly. The decision was made in coordination with NYSDEC and was based on the reliability of system operation and the potential cost savings in system monitoring/maintenance. During the reporting period, O&M visits were performed on the following dates by YEC personnel on behalf of EA.

Date	Purpose
09/27/10	Quarterly Visit (September 2010)

## 1. SYSTEM OPERATION

Based on the motor's hour meter, the system was operational for a total of 2,183 hours out of an available 2,183 hours (100 percent of the total available) during this reporting period (28 June 2010 to 27 September 2010).

Operational data for this period have been based on the measurements and effluent sample data collected on 27 September 2010. Operational data are summarized in Table 1 and on the site

<sup>1</sup> The Shaw Group. 2003. Soil Vapor Extraction Operation and Maintenance Manual. October.



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 <sub>2</sub> O)	SVE Blower Flow rate (cfm)	DCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )	TCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )	PCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )
09/27/10	80	21	275	0.12	0.24	4.18

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

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

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

The dilution valve was adjusted from the 25 percent open position to 75 percent open during the 1<sup>st</sup> Quarter 2010 by YEC due to water generation that led to a system shutdown.

Gray Electric installed an autodialer for the system on 22 March 2010. The autodialer will dial out during future system shutdowns to notify O&M personnel, allowing for a timely response and restart.

## 2. MONITORING PROBES

The following vacuum data (in. of water column) were observed at the listed vapor monitoring points during the monitoring period (27 September 2010).

Vapor Monitoring Point	Vacuum Reading (Inches H <sub>2</sub> O)
VP-1	1.60
VP-2	0.55
VP-3	0.35
VP-7	0.35
VP-8	0.25
VP-9	0.25
VP-10	0.30
VP-11	0.15
VP-12	0.15
VP-13	--
VP-14	--
VP-15	0.0

NOTE: -- Unable to access monitoring point due to being covered by business products.

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
09/27/10	17.29	--	17.49
NOTE: -- Unable to access monitoring point due to closed business.			

Based on the gauging data, the water table dropped approximately 3 ft during the monitoring period. The wells will continue to be gauged during future site visits.

### 4. 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 volatile organic compounds using U.S. Environmental Protection Agency Method TO-15. PCE, TCE, and *cis*-1,2-DCE were detected at the concentrations listed in the table below.

Date	DCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )	TCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )	PCE Conc. <sup>(a)</sup> (mg/m <sup>3</sup> )
09/27/10	0.12	0.24	4.18
(a) PCE, DCE, and TCE concentration measured via laboratory analysis.			
NOTE: ND = Not Detected J = Analyte detected below detection limits. Units = mg/m <sup>3</sup>			

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

Based on the effluent sampling results, a total of 9.4 lbs of PCE has been discharged during Quarter No. 3 for a total of 43.1 lbs for the year 2010 toward the permitted annual discharge limit of 270 lbs. A total of 0.54 lb of TCE has been discharged during Quarter No. 3 for a total of 1.3 lbs for the year 2010 toward the permitted annual discharge limit of 120 lbs. No *cis*-1,2-DCE was discharged during the reporting period (the annual discharge limit is 5,510 lbs).

### 5. 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.

A handwritten signature in black ink that reads "Donald Conan". The signature is written in a cursive style with a horizontal line extending to the right from the end of the name.

Donald F. Conan, P.E.  
Project Manager

Attachments  
DFC/drs





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

<sup>(1)</sup> Calculated flows based on the average of flows measured on 3-29-05 and 4-28-05

<sup>(2)</sup> Run time meter reading not indicative of SVE system run time; actual hours run is assumed 100% of available.

PID = Total VOC concentration measured with photoionization detector

ppm = parts per million (volume/volume basis)

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

scfm = standard cubic feet per minute

cfm = cubic feet per minute

– = measurement not recorded or not applicable.

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

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

Effluent GAC = Readings collected after the lag carbon unit

GAC = granular activated carbon unit

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

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

<b>SVE Influent Concentration (mg/m3)</b>			
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	--	--	--

<b>VGAC Effluent Concentration (mg/m3)</b>			
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
<b>Spent Carbon Replaced 8/10/05</b>			
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)
<b>Spent Carbon Replaced 1/25/06</b>			
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 = Concentration exceeded calibration range

-- = sample not collected

SVE = Soil vapor extraction

J = Estimated Value

VGAC = vapor-phase granular activated carbon

mg/m3 = milligrams per cubic meter





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

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 = Concentration exceeded calibration range

-- = sample not collected

SVE = Soil vapor extraction

J = Estimated Value

J = Analyte detected below quantitation limits.

VGAC = vapor-phase granular activated carbon

mg/m<sup>3</sup> = milligrams per cubic meter

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

Date	System Effluent Flow Rate (cfm)	Field Monitoring		Elapsed Time (day)	Laboratory Results			Discharge based on Field Monitoring		Discharge based on Laboratory Results						
		PCE System Effluent Concentration (ppmv)	System Effluent VOC Concentration (ppmv)		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)	
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	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	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	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	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	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	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	0.00
11/24/2003	205	0	0	34	--	--	--	0.0000	0.00	--	--	--	--	--	--	--
<b>2003 Totals:</b>									<b>431.38</b>		<b>26.42</b>		<b>5.41</b>			<b>0.00</b>
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	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	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	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	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	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	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	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	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	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	0.00
<b>2004 Totals:</b>									<b>24.34</b>		<b>62.26</b>		<b>1.41</b>			<b>10.00</b>

Notes: -- = Measurement not recorded <sup>(1)</sup> 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  
 J = Estimated Value  
 hr = hours

Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94  
 cfm = cubic feet per minute ppmv = parts per million (vol./vol.)  
 mg/cu. m. = milligrams per cubic meter lb = pounds

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

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

Date	System Effluent Flow Rate (cfm)	Field Monitoring		Elapsed Time (day)	Laboratory Results			Discharge based on Field Monitoring		Discharge based on Laboratory Results						
		PCE System Effluent Concentration (ppmv)	System Effluent VOC Concentration (ppmv)		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)	
1/20/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/23/2005	245	0	0	34	--	--	--	0.0000	0.00	--	--	--	--	--	--	--
3/29/2005	234 <sup>(1)</sup>	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	
<b>Spent Carbon Replaced 8/10/05</b>																
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	
<b>2005 Totals:</b>									<b>149.79</b>		<b>117.08</b>		<b>3.77</b>		<b>4.09</b>	
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	
<b>Spent Carbon Replaced 1/25/06</b>																
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	
<b>Spent Carbon Replaced 10/11/06</b>																
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	
<b>2006 Totals:</b>									<b>0.00</b>		<b>4.11</b>		<b>0.66</b>		<b>0.71</b>	
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 <sup>(1)</sup> 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  
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 hr = hours

Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94  
 cfm = cubic feet per minute ppmv = parts per million (vol./vol.)  
 mg/cu. m. = milligrams per cubic meter lb = pounds

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

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

Date	System Effluent Flow Rate (cfm)	Field Monitoring		Elapsed Time (day)	Laboratory Results			Discharge based on Field Monitoring		Discharge based on Laboratory Results							
		PCE System Effluent Concentration (ppmv)	System Effluent VOC Concentration (ppmv)		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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	0.00
<b>2007 Totals:</b>									<b>0.00</b>		<b>0.27</b>		<b>0.00</b>				<b>0.12</b>
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	0.0000	0.00	0.0000	0.00
2/28/2008	-	-	-	36	-	-	-	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	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	0.0000	0.00	0.0000	0.00
<b>2008 Totals:</b>											<b>30.13</b>		<b>2.17</b>				<b>0.00</b>
1/26/2009	278	0	0.6	35	2.3	0.14	0.07	0.0000	0.00	0.0024	2.01	0.0001	0.12	0.0000	0.00	0.0000	0.00
2/26/2009	290	0	0	31	0.1	0.01	0.005	0.0000	0.00	0.0001	0.08	0.0000	0.01	0.0000	0.00	0.0000	0.00
3/26/2009	268	0	1.3	28	2.9	0.25	0.11	0.0000	0.00	0.0029	1.96	0.0003	0.17	0.0000	0.00	0.0000	0.00
4/28/2009	286	0	1.1	33	3.3	0.21	0.08	0.0000	0.00	0.0035	2.80	0.0002	0.18	0.0000	0.00	0.0000	0.00
5/18/2009	271	0	2	20	6.1	0.35	0.1	0.0000	0.00	0.0062	2.97	0.0004	0.17	0.0000	0.00	0.0000	0.00
6/23/2009	272	0	1.8	36	18.2	0.44	0.19	0.0000	0.00	0.0186	16.04	0.0004	0.39	0.0000	0.00	0.0000	0.00
9/22/2009	200	0	4	91	5.36	0.13	0.11	0.0000	0.00	0.0040	8.78	0.0001	0.21	0.0000	0.00	0.0000	0.00
12/21/2009	126	0	0	90	4.82	0.38	0.09	0.0000	0.00	0.0023	4.92	0.0002	0.39	0.0000	0.00	0.0000	0.00
3/31/2010	285	0	0	100	0.69	0.04	0.02	0.0000	0.00	0.0007	1.77	0.0000	0.10	0.0000	0.00	0.0000	0.00
6/28/2010	283	0	4.4	89	14.1	0.306	0.197	0.0000	0.00	0.0150	31.95	0.0003	0.69	0.0000	0.00	0.0000	0.00
9/27/2010	275	0	8.8	91	4.18	0.24	0.122	0.0000	0.00	0.0043	9.41	0.0002	0.54	0.0000	0.00	0.0000	0.00

2010 TOTALS = 43.14 1.34

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

## Attachment A

**National Heatset Printing**  
**1 Adams Boulevard, Farmingdale, New York**  
**EA Engineering**

Personnel: Peter Lawler Time: 1200  
 Weather: Overcast, 70F, Humid Date: 9/27/2010

**System Status:**

Arrival: running  
 Departure: running  
 Run Timer Reading: 3948636  
 Electric Meter Reading: 16439, 00.36, 29.20, 0076

**System Data:**

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

**Pre-Bleed Air (Extraction Well):**

Flow: 80 CFM  
 Vacuum: 21 "H2O  
 PID Reading: 145 PPM  
 Draeger Tube: N/A PPM  
 Temperature: 80.6 °F

**Post-Bleed Air (SVE Influent):**

Flow: 275 CFM  
 Pressure: 21 "H2O via magnehelic  
 PID Reading: 42.4 PPM  
 Draeger Tube: 0 PPM  
 Temperature: 141.3 °F

**Carbon Monitoring:**

Mid: 19.3 PPM 280.0 CFM 141.9 Temp. (°F) 0 PPM (Drager) 9 "H2O  
 Effluent: 8.8 PPM 275.0 CFM 125.9 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: None

**Monitoring Well Gauging / Vapor Point Monitoring:**

Well/V.P. ID:	MW-C	MW-E	MW-G	VP-1	VP-2	VP-3	VP-7	VP-8	VP-9	VP-10	VP-11	VP-12	VP-13	VP-14	VP-15
DTW (ft):	17.29	N/A	17.49	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	1.6	0.55	0.35	0.35	0.25	0.25	0.3	0.15	0.15	N/A	N/A	0.0
PID (PPM):	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	0.0

**Comments:**

Drager tubes n=5  
SVE Effluent sampled at 1305  
Access not granted for VP-13, and VP-14, could not gain access to MW-E  
Dilution valve not changed since last visit.

## Attachment B





ANALYTICAL REPORT

Lab Number: L1015056

Client: EA Engineering, Science and Tech  
6712 Brooklawn Parkway  
Suite 104  
Syracuse, NY 13211

ATTN: Don Conan

Phone: (315) 491-6649

Project Name: NATIONAL HEATSET

Project Number: NATIONAL HEATSET

Report Date: 10/04/10

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](http://www.alphalab.com)



**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1015056-01	SVE-EFFLUENT	FARMINGDALE, NY	09/27/10 13:05

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

### Case Narrative

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

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

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

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

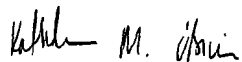
#### Volatile Organics in Air (Low Level)

L1015056-01 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

The WG434568-3 LCS recovery for Vinyl acetate (134%) 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:

 Kathleen O'Brien

Title: Technical Director/Representative

Date: 10/04/10

**AIR**

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

**SAMPLE RESULTS**

Lab ID: L1015056-01 D  
 Client ID: SVE-EFFLUENT  
 Sample Location: FARMINGDALE, NY  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 09/29/10 07:57  
 Analyst: AJ

Date Collected: 09/27/10 13:05  
 Date Received: 09/28/10  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air (Low Level) - Mansfield Lab</b>								
Dichlorodifluoromethane	0.410	0.400	--	2.02	1.98	--		2
Chloromethane	ND	0.400	--	ND	0.825	--		2
Freon-114	ND	0.400	--	ND	2.79	--		2
Vinyl chloride	ND	0.400	--	ND	1.02	--		2
Bromomethane	ND	0.400	--	ND	1.55	--		2
Chloroethane	ND	0.400	--	ND	1.05	--		2
Trichlorofluoromethane	ND	0.400	--	ND	2.24	--		2
1,1-Dichloroethene	ND	0.400	--	ND	1.58	--		2
Methylene chloride	3.02	2.00	--	10.5	6.94	--		2
Freon-113	ND	0.400	--	ND	3.06	--		2
trans-1,2-Dichloroethene	0.584	0.400	--	2.31	1.58	--		2
1,1-Dichloroethane	ND	0.400	--	ND	1.62	--		2
cis-1,2-Dichloroethene	30.9	0.400	--	122	1.58	--		2
Chloroform	0.472	0.400	--	2.30	1.95	--		2
1,2-Dichloroethane	ND	0.400	--	ND	1.62	--		2
1,1,1-Trichloroethane	5.11	0.400	--	27.9	2.18	--		2
Benzene	ND	0.400	--	ND	1.28	--		2
Carbon tetrachloride	ND	0.400	--	ND	2.51	--		2
1,2-Dichloropropane	ND	0.400	--	ND	1.85	--		2
Trichloroethene	44.7	0.400	--	240	2.15	--		2
cis-1,3-Dichloropropene	ND	0.400	--	ND	1.81	--		2
trans-1,3-Dichloropropene	ND	0.400	--	ND	1.81	--		2
1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--		2
Toluene	0.536	0.400	--	2.02	1.51	--		2
1,2-Dibromoethane	ND	0.400	--	ND	3.07	--		2



**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

**SAMPLE RESULTS**

Lab ID: L1015056-01 D  
 Client ID: SVE-EFFLUENT  
 Sample Location: FARMINGDALE, NY

Date Collected: 09/27/10 13:05  
 Date Received: 09/28/10  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air (Low Level) - Mansfield Lab</b>								
Tetrachloroethene	616	0.400	--	4180	2.71	--	E	2
Chlorobenzene	ND	0.400	--	ND	1.84	--		2
Ethylbenzene	ND	0.400	--	ND	1.74	--		2
p/m-Xylene	ND	0.800	--	ND	3.47	--		2
Styrene	ND	0.400	--	ND	1.70	--		2
1,1,2,2-Tetrachloroethane	ND	0.400	--	ND	2.74	--		2
o-Xylene	ND	0.400	--	ND	1.74	--		2
1,3,5-Trimethybenzene	ND	0.400	--	ND	1.96	--		2
1,2,4-Trimethylbenzene	ND	0.400	--	ND	1.96	--		2
Benzyl chloride	ND	0.400	--	ND	2.07	--		2
1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--		2
1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--		2
Hexachlorobutadiene	ND	0.400	--	ND	4.26	--		2

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	69		60-140
Bromochloromethane	74		60-140
chlorobenzene-d5	77		60-140



**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

**SAMPLE RESULTS**

Lab ID: L1015056-01 D2  
 Client ID: SVE-EFFLUENT  
 Sample Location: FARMINGDALE, NY  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 09/29/10 09:11  
 Analyst: AJ

Date Collected: 09/27/10 13:05  
 Date Received: 09/28/10  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air (Low Level) - Mansfield Lab</b>								
Tetrachloroethene	401	2.00	--	2720	13.6	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	63		60-140
Bromochloromethane	66		60-140
chlorobenzene-d5	65		60-140



**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 48,TO-15  
 Analytical Date: 09/28/10 12:36

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG434568-4</b>								
Dichlorodifluoromethane	ND	0.200	--	ND	0.988	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
Bromomethane	ND	0.200	--	ND	0.776	--		1
Chloroethane	ND	0.200	--	ND	0.527	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.792	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.792	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.792	--		1
Chloroform	ND	0.200	--	ND	0.976	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.638	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.907	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.753	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1





Project Name: NATIONAL HEATSET

Lab Number: L1015056

Project Number: NATIONAL HEATSET

Report Date: 10/04/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 48,TO-15

Analytical Date: 09/28/10 12:36

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air (Low Level) - Mansfield Lab for sample(s): 01 Batch: WG434568-4</b>								
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.920	--		1
Ethylbenzene	ND	0.200	--	ND	0.868	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Styrene	ND	0.200	--	ND	0.851	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.868	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.982	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.982	--		1
Benzyl chloride	ND	0.200	--	ND	1.03	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

**Lab Control Sample Analysis**

Batch Quality Control

Project Name: NATIONAL HEATSET

Lab Number: L1015056

Project Number: NATIONAL HEATSET

Report Date: 10/04/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG434568-3								
Chlorodifluoromethane	88		-		70-130	-		
Propylene	91		-		70-130	-		
Propane	90		-		70-130	-		
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	95		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	95		-		70-130	-		
Methanol	102		-		70-130	-		
Vinyl chloride	95		-		70-130	-		
1,3-Butadiene	91		-		70-130	-		
Butane	94		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	96		-		70-130	-		
Ethyl Alcohol	109		-		70-130	-		
Dichlorofluoromethane	91		-		70-130	-		
Vinyl bromide	89		-		70-130	-		
Acrolein	100		-		70-130	-		
Acetone	117		-		70-130	-		
Acetonitrile	119		-		70-130	-		
Trichlorofluoromethane	102		-		70-130	-		
iso-Propyl Alcohol	96		-		70-130	-		
Acrylonitrile	112		-		70-130	-		

### Lab Control Sample Analysis

Batch Quality Control

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG434568-3								
Pentane	97		-		70-130	-		
Ethyl ether	125		-		70-130	-		
1,1-Dichloroethene	100		-		70-130	-		
tert-Butyl Alcohol	85		-		70-130	-		
Methylene chloride	104		-		70-130	-		
3-Chloropropene	100		-		70-130	-		
Carbon disulfide	86		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	108		-		70-130	-		
Vinyl acetate	134	Q	-		70-130	-		
2-Butanone	112		-		70-130	-		
cis-1,2-Dichloroethene	107		-		70-130	-		
Ethyl Acetate	109		-		70-130	-		
Chloroform	106		-		70-130	-		
Tetrahydrofuran	108		-		70-130	-		
2,2-Dichloropropane	98		-		70-130	-		
1,2-Dichloroethane	113		-		70-130	-		
n-Hexane	102		-		70-130	-		
Isopropyl Ether	115		-		70-130	-		

### Lab Control Sample Analysis

Batch Quality Control

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
<b>Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG434568-3</b>								
Ethyl-Tert-Butyl-Ether	112		-		70-130	-		
1,1,1-Trichloroethane	115		-		70-130	-		
1,1-Dichloropropene	118		-		70-130	-		
Benzene	112		-		70-130	-		
Carbon tetrachloride	110		-		70-130	-		
Cyclohexane	102		-		70-130	-		
Tertiary-Amyl Methyl Ether	120		-		70-130	-		
Dibromomethane	112		-		70-130	-		
1,2-Dichloropropane	123		-		70-130	-		
Bromodichloromethane	115		-		70-130	-		
1,4-Dioxane	99		-		70-130	-		
Trichloroethene	109		-		70-130	-		
2,2,4-Trimethylpentane	108		-		70-130	-		
Heptane	106		-		70-130	-		
2,4,4-Trimethyl-1-Pentene	101		-		70-130	-		
cis-1,3-Dichloropropene	127		-		70-130	-		
4-Methyl-2-pentanone	113		-		70-130	-		
2,4,4-Trimethyl-2-Pentene	119		-		70-130	-		
trans-1,3-Dichloropropene	113		-		70-130	-		
1,1,2-Trichloroethane	124		-		70-130	-		
Toluene	104		-		70-130	-		

### Lab Control Sample Analysis

Batch Quality Control

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG434568-3								
1,3-Dichloropropane	104		-		70-130	-		
2-Hexanone	97		-		70-130	-		
Dibromochloromethane	96		-		70-130	-		
1,2-Dibromoethane	109		-		70-130	-		
Butyl Acetate	94		-		70-130	-		
Octane	93		-		70-130	-		
Tetrachloroethene	92		-		70-130	-		
1,1,1,2-Tetrachloroethane	98		-		70-130	-		
Chlorobenzene	105		-		70-130	-		
Ethylbenzene	114		-		70-130	-		
p/m-Xylene	115		-		70-130	-		
Bromoform	96		-		70-130	-		
Styrene	115		-		70-130	-		
1,1,1,2-Tetrachloroethane	119		-		70-130	-		
o-Xylene	119		-		70-130	-		
1,2,3-Trichloropropane	112		-		70-130	-		
Nonane (C9)	122		-		70-130	-		
Isopropylbenzene	113		-		70-130	-		
Bromobenzene	113		-		70-130	-		
o-Chlorotoluene	105		-		70-130	-		
n-Propylbenzene	108		-		70-130	-		

### Lab Control Sample Analysis

Batch Quality Control

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 Batch: WG434568-3								
p-Chlorotoluene	111		-		70-130	-		
4-Ethyltoluene	107		-		70-130	-		
1,3,5-Trimethylbenzene	115		-		70-130	-		
tert-Butylbenzene	109		-		70-130	-		
1,2,4-Trimethylbenzene	117		-		70-130	-		
Decane (C10)	102		-		70-130	-		
Benzyl chloride	92		-		70-130	-		
1,3-Dichlorobenzene	112		-		70-130	-		
1,4-Dichlorobenzene	110		-		70-130	-		
sec-Butylbenzene	111		-		70-130	-		
p-Isopropyltoluene	92		-		70-130	-		
1,2-Dichlorobenzene	109		-		70-130	-		
n-Butylbenzene	94		-		70-130	-		
1,2-Dibromo-3-chloropropane	95		-		70-130	-		
Undecane	81		-		70-130	-		
Dodecane (C12)	87		-		70-130	-		
1,2,4-Trichlorobenzene	81		-		70-130	-		
Naphthalene	87		-		70-130	-		
1,2,3-Trichlorobenzene	82		-		70-130	-		
Hexachlorobutadiene	81		-		70-130	-		

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSE

**Lab Number:** L1015056  
**Report Date:** 10/04/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
<b>Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG434568-5 QC Sample: L1014986-01 Client ID: DUP Sample</b>						
Dichlorodifluoromethane	0.451	0.419	ppbV	7		25
Chloromethane	0.489	0.488	ppbV	0		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Trichlorofluoromethane	0.369	0.355	ppbV	4		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
1,2-Dichloroethane	0.343	0.328	ppbV	4		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	0.497	0.490	ppbV	1		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: NATIONAL HEATSET  
Project Number: NATIONAL HEATSE

Lab Number: L1015056  
Report Date: 10/04/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
<b>Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG434568-5 QC Sample: L1014986-01 Client ID: DUP Sample</b>					
Trichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	0.939	0.904	ppbV	4	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	0.503	0.479	ppbV	5	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25



**Lab Duplicate Analysis**

Batch Quality Control

**Project Name:** NATIONAL HEATSET

**Lab Number:** L1015056

**Project Number:** NATIONAL HEATSE

**Report Date:** 10/04/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air (Low Level) - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG434568-5 QC Sample: L1014986-01 Client ID: DUP Sample					
Hexachlorobutadiene	ND	ND	ppbV	NC	25

**Project Name:** NATIONAL HEATSET

**Lab Number:** L1015056

**Project Number:** NATIONAL HEATSET

**Report Date:** 10/04/10

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

**Cooler Information Custody Seal**

**Cooler**

A Present/Intact

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1015056-01A	Tedlar Bag 5 liter-Polypropylene	A	NA		NA	Present/Intact	TO15-LL(30)

\*Values in parentheses indicate holding time in days

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

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

### Terms

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.

Report Format: Data Usability Report



**Project Name:** NATIONAL HEATSET

**Lab Number:** L1015056

**Project Number:** NATIONAL HEATSET

**Report Date:** 10/04/10

***Data Qualifiers***

**RE** - Analytical results are from sample re-extraction.

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

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

**Project Name:** NATIONAL HEATSET  
**Project Number:** NATIONAL HEATSET

**Lab Number:** L1015056  
**Report Date:** 10/04/10

### REFERENCES

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

### LIMITATION OF LIABILITIES

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

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



## Certificate/Approval Program Summary

Last revised July 19, 2010 – Mansfield Facility

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

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

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

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

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

*Non-Potable Water* (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. Organic Parameters: EPA 625, 608.)

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

*Air & Emissions* (EPA TO-15.)

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

*Non-Potable Water* (Inorganic Parameters: EPA 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.)

### 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. NELAP Accredited.

*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. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, 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, 1312, 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)

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

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

*Non-Potable Water* (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, 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, 3570, 3051, 5035, 5030B.)

*Air & Emissions* (EPA TO-15.)

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

Refer to 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. *NELAP Accredited.***

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

*Air* (Organic Parameters: EPA TO-15)

**U.S. Army Corps of Engineers**

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

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 3051, 6020, 747A, 7474, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

*Air & Emissions* (EPA TO-15.)

**Analytes Not Accredited by NELAP**

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

Serial\_No:10041006:03



**CHAIN OF CUSTODY**

**AIR ANALYSIS**

PAGE 1 OF 1

Date Rec'd in Lab: \_\_\_\_\_

ALPHA Job #: 61015056

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

**Project Information**

Project Name: National Heartset

Project Location: Farmingdale, NY

Project #:

Project Manager: Don Conran

ALPHA Quote #:

**Turn-Around Time**

Standard  RUSH (only confirmed if pre-approved)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

**Report Information - Data Deliverables**

- FAX
- ADEX
- Criteria Checker: \_\_\_\_\_
- (Default based on Regulatory Criteria Indicated)
- Other Formats: \_\_\_\_\_
- EMAIL (standard pdf report)
- Additional Deliverables: \_\_\_\_\_

Report to: (if different than Project Manager)

**Billing Information**

Same as Client info PO #: \_\_\_\_\_

**Regulatory Requirements/Report Limits**

State/Fed	Program	Criteria

**Client Information**

Client: EA Engineering  
 Address: 6712 Brooklawn Pkwy  
Syracuse, NY 13211  
 Phone: (315) 481-2323

Fax: \_\_\_\_\_

Email: dconran@east.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS						Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum						TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	
<u>15056</u>	<u>SVE-Effluent</u>	<u>9-27-10</u>	<u>1305</u>	<u>1305</u>	<u>-</u>	<u>-</u>	<u>SV PL</u>	<u>5L</u>	<u>-</u>	<u>-</u>	<u>1</u>						<u>PID = 8.8 ppm</u>	

**\*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]

9-27-10/1600

Fed Ex 870523547601

9-27-10/1600

[Signature]

9/28/10 1030