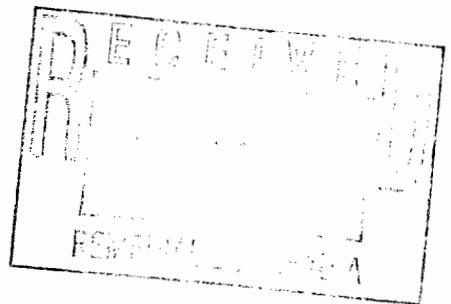




O'BRIEN & GERE

November 7, 2007



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
Operation & Maintenance Report-
May-June 2007
1 Adams Boulevard
Farmingdale, New York
NYSDEC Site 1-52-140

File: 10653/35518 #5

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). Site visits were performed by YEC, Inc. (YEC) personnel June 21, 2007 on behalf of O'Brien & Gere Engineers, Inc (OBG) in accordance with our approved Work Plan.

System Operation

Based on the run time meter, the system was operational for a total of 16 hours (approximately 2% of the total available) during this reporting period (May 24, 2007 to June 21, 2007). Upon arrival on June 21, YEC personnel noted the system was not running and the "High Float" light was illuminated indicating that shut down was caused by high water level in the knock out tank. It is believed the system was primarily out of operation during this reporting period. Operational data is summarized in Table 1 and on the site visit data collection form provided in Appendix A.

Prior to re-start YEC personnel drained 147 gallons from the knockout tank. Following restart, the system was allowed to re-equilibrate for approximately 30 minutes prior to sampling and measurements. A flow of 232 cfm and a vacuum of 40 inches of water column were observed at the extraction well. The SVE blower operated at a flow of 130.5 cubic feet per minute (cfm) as measured at the SVE influent. Field personnel recorded a tetrachloroethene (PCE) concentration of 35 ppm (by Draeger tube) and a concentration of volatile organic compounds (VOCs) of 1.8 ppm (by PID) from the extraction well (pre-dilution).

VOC concentrations of 61.1 ppm (by PID) and a PCE concentration of 38 ppm (by Draeger Tube) were observed at the SVE influent port during the site visit. A VOC concentration of 1.7 ppm (by PID) and a PCE concentration of 0.0 ppm (by Draeger Tube) were observed from the Vapor-phase Granular Activated Carbon (VGAC) mid sampling port and a VOC concentration of 0.1 ppm (by PID) and a PCE concentration of 0.0 ppm (by Draeger Tube) at the effluent sampling port. Refer to Table 1.

Mr. Jeff Dyber, P.E.
July 24, 2007
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Monitoring Probes

A vacuum of 2.2, 0.4, 0.36, 0.48, 0.48, 0.35, 0.40, 0.10, 0.0, 0.0 and 0.0 inches of water column were observed during the site visit at vapor monitoring points VP-1, VP-2, VP-3, VP-7, VP-8, VP-9, VP-10, VP-12, VP-13, VP-14 and VP-15 respectively. The vapor points will continue to be monitored during future site visits.

PCE Removal

PCE removal was calculated for this reporting period using SVE influent PCE concentrations and flow rate measured at the SVE influent sampling point. Due to the shutdown, the SVE system removed approximately 1 pound of PCE from the extraction well during this reporting period and has removed approximately 2,554 pounds of PCE to date. A summary of the estimated PCE mass removal over time is presented in Table 2.

Air Discharge Monitoring

YEC personnel collected an air sample from the system effluent and submitted the sample to Mitkem Corporation for analysis. The sample was analyzed for volatile organic compounds (VOCs) using USEPA method TO-14. Concentrations of PCE, TCE and Cis-1, 2-DCE were not detected above the method detection limit of 1.0 mg/m³. Analytical results are summarized in Table 3 and the laboratory data report is presented in Appendix B. A summary of the field monitoring and laboratory air discharge monitoring results is presented as Table 4.

Based on the effluent sampling results, no PCE, TCE or Cis-1, 2-DCE was discharged during the reporting period. A total of 0.00 lb of PCE has been discharged during the year 2007 toward the permitted annual discharge limit of 270 lb. A total of 0.00 lb of cis-1, 2-DCE has been discharged during the year 2007 toward the permitted annual discharge limit of 5,510 lbs. A total of 0.00 lb of TCE has been discharged during the year 2007 toward the permitted annual discharge limit of 120 lb.

Conclusions and Recommendations

Based on the data collected from the SVE system during this reporting period, OBG recommends continued operation of the SVE system. The dilution valve was moved to the 40% open position. The extraction well (MW-F) valve remained at the 100% open position.

Please do not hesitate to contact me at 315-437-6100 with any questions you might have regarding this report.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Marc J. Dent P.E.
Managing Engineer

cc. Trevor Staniec - O'Brien & Gere
Dan Simpson - YEC

TABLES

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

(1)

(2) 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)

PCPCE = parts per million (volume/volume basis)

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Influent SVE = Readings collected between the SVE Blower and the Carbon Units
 Mid GAC = Readings collected between the lead and tail carbon units

Mid GAC = Readings collected between the head and lag carbon unit
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 1
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM READINGS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

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 indicative of SVE system run time; actual hours run is assumed to be 100% of run time.

PID = Total VOC concentration measured with photionization detector

ppm = parts per million (volume/volume basis)
DCE = Tetrachloroethene (DCE) concentration measured with Densitometer

PCE = TetraChloroEthene (PCE) concentration
scfm = standard cubic feet per minute
cftm = 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
GAC = granular activated carbon unit
As of 4/28/05, the calculation of "Available"

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)
SVE PILOT TEST STARTUP							
9/18/2002							
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 indicative of SVE system run time; actual hours run is assumed equal to elapsed time.

Where: MW = molecular weight

Ib = pounds

Molecular weight (MW) of PCE is 165.85

ppmv = parts per million (volume/volume basis)

C = degrees centigrade, as measured

-- = 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

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 28, 2005; Removal updated on 1-3-06 to represent SVE Influent flow rate.

Removal Rate = [(flow(cfm)*influent conc.(ppm)*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 including CYC system run times actual hours run is assumed equal to plus additional time.

⁽³⁾ Run time meter reading not indicative of SVE system run time; actual hours run is assumed equal to elapsed time.

Where: MV = molecular weight lb = pounds

Molecular weight (MW) of PCE is 165.85
 C = degrees centigrade, as measured
 ppmv = parts per million (volume/volume)
 -- = information not available
 flow = average of the present and the previous months measured SVE influent rate in cubic feet per minute (cfm)
⁽⁴⁾ The actual flow is 1,223,574.8 to 1,274,574.8 cubic feet per minute. The flow is measured at the surface elevation indicated. The flow is measured at the surface elevation indicated.

meter indicates that the system

O'Brien & Gere Engineers, Inc.

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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			
Date	cis-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene
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			
Date	cis-1,2-Dichloroethene	Tetrachloroethene (PCE)	Trichloroethene
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 3
AIR SAMPLE ANALYTICAL RESULTS
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Notes:

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

— = sample not collected
| = Estimated Value

VGAC = vapor-phase granular activated carbon

mg/m^3 = milligrams per cubic meter

TABLE 4
AIR DISCHARGE MONITORING
NATIONAL HEATSET PRINTING
1 ADAMS BLVD., FARMINGDALE, NY

Date	Field Monitoring				Laboratory Results				Discharge based on Field Monitoring				Discharge based on Laboratory Results				
	System Effluent Flow Rate (cfm)	PCE System Effluent Concentration (ppmv)	Elapsed Time (day)	TCE (mg/cu m.)	PCE Discharge Since Last Visit (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	TCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	TCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit (lb)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	TCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit (lb)	cis-1,2-DCE Discharge Since Last Visit (lb/hr)	
9/18/2002	290	--	0	0	14	--	--	--	--	--	--	--	--	--	--	--	
10/14/2002	--	--	0	0	36	--	--	--	--	--	--	--	--	--	--	--	
11/19/2002	290	--	0	0	27	ND (5)	ND (5)	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
12/16/2002	340	--	0	0	--	28	--	0.0000	0.00	--	--	--	--	--	--	--	
1/13/2003	45	0	--	0	8	--	--	--	--	--	--	--	--	--	--	--	
1/21/2003	220	--	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	
2/10/2003	258	10	--	0	23	--	--	--	--	--	--	--	--	--	--	--	
3/5/2003	305	--	0	0	13	--	--	0.0000	0.00	--	--	--	--	--	--	--	
3/18/2003	282	0	--	0	42	--	--	0.0000	0.00	--	--	--	--	--	--	--	
4/29/2003	287	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	
5/13/2003	245	0	0.6	48	--	--	0.3043	350.56	--	--	--	--	--	--	--	--	
6/30/2003	240	100	29.8	--	0	12	ND (1)	ND (1)	--	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7/22/2003	222	--	0	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	
8/26/2003	232	10	0	28	ND (5)	ND (5)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.00	0.00	
9/23/2003	210	0	0	28	ND (5)	ND (5)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.00	0.00	
10/21/2003	225	0	0	34	--	--	0.0000	0.00	--	--	--	--	--	--	--	--	
11/24/2003	205	0	0	0	43	--	ND (5)	10	0.0000	0.00	--	--	--	--	--	--	
2003 Totals:				0	0	0	0	0	0	431.38	26.42	5.41	0.00				
1/6/2004	200	0	0	0	34	ND (5)	ND (5)	10	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0009	7.18	
2/9/2004	235	0	0	50	77	1J	2J	0.0203	24.34	0.046	55.38	0.001	0.72	0.001	1.44		
3/30/2004	160	5	24	30	10	ND (5)	ND (5)	0.0000	0.00	0.010	6.88	0.001	0.69	0.002	1.38		
4/29/2004	255	0	0	25	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00		
5/24/2004	198	0	0	29	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00		
6/22/2004	210	0	0	3.1	36	ND (5)	ND (5)	ND (5)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	
7/28/2004	181	0	0.1	15	--	--	0.0000	0.00	--	--	--	--	--	--	--		
8/12/2004	187	0	0	48	ND (1)	ND (1)	ND (1)	--	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00	
9/29/2004	205	0	0	21	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00		
10/20/2004	230	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		
11/17/2004	173	0	0	35	ND (1)	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	0.0000	0.00	0.0000	0.00		
12/22/2004	131	0	0	0	24.34					24.34	62.26	1.41	10.00				
2004 Totals:				0	0	0	0	0	0								

Notes: -- = Measurement not recorded

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

Where: C = degrees centigrade, assumed to be 25

J = Estimated Value

hr = hours

^a Calculated flows based on the average of flows measured on 3/29/03 and 4/28/03

Discharge Rate (Lab Res., 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

Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94

ppmv = parts per million (vol/vol)

lb = pounds

mg/cu. m = milligrams per cubic meter

O'Brien & Gere Engineers, Inc.

NY1106531851SVE monthly reports-OBGISVE Tables (OBG) xis

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					
System Effluent Flow Rate (cfm)	PCE System Effluent 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)	TCE Discharge Since Last Visit (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb)	PCE (lb/hr)	TCE (lb/hr)	cis-1,2-DCE Discharge Since Last Visit (lb)	PCE Discharge Since Last Visit (lb)	TCE Discharge Since Last Visit (lb)	cis-1,2-DCE Discharge Since Last Visit (lb)					
1/20/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
2/23/2005	245	0	0	0	34	ND (1)	ND (1)	2	0.0000	0.00	0.00	0.00	0.00	0.00	0.002	1.43			
3/29/2005	234 (1)	0	0	34	ND (1)	ND (1)	2	0.0000	0.00	0.00	0.00	0.00	0.00	0.001	0.60				
4/28/2005	222	0	0	30	0.5	ND (1)	1	0.0000	0.00	0.0004	0.30	0.00	0.00	0.001	0.66				
5/31/2005	223	0	0	33	5	2	1	0.0000	0.00	0.0042	3.31	0.0017	1.32	0.001	0.42				
6/24/2005	242	10.1	15	64	2	0.8J	0.0620	35.70	0.0580	33.42	0.0018	1.04	0.001	0.001	0.42				
8/4/2005	381	12	75	41	57	1J	0.7J	0.1159	114.09	0.0814	80.05	0.0014	1.40	0.001	0.98				
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				
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)	0.6J	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				
10/18/2006	236	0	0	27	--	--	--	0.0000	0.00	0.0007	0.69	--	--	--	--				
11/29/2006	202	0	0	42	0.9J	ND (1)	ND (1)	0.0000	0.00	0.0000	0.00	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	0.0000	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	0.0000	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	0.0000	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	0.0000	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	0.0000	0.00				

Notes:

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/1hr

Where:
C = degrees centigrade, assumed to be 25

J = Estimated Value

hr = hours

(b) Calculated flows based on the average of flows measured on 3/29-30 and 4/28-05

Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94

ppmv = parts per million (vol/vol)

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
ADAMS BLVD, FARMINGDALE, NY

Notes: -- = Measurement not recorded

Discharge Rate (Field Mon., lb/hr) = [(flow(cfm)) * influent conc. (ppm)] / [MW(12.187) / (273.15 + C)] * 1 cu. ft/191,000 mg-1 lb/453.6 g * 60 min/1 hr

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

Discharge Rate (1/2b Pass) = flow (cfm) * effluent cone (inches) / $\pi \times 1/2 \times 1000 \text{ mm}^2$

Discharge Rate {Lab Res., IB/HF} = flow (cm³/min) / effluent conc. (mg/l)

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

Where: C = degrees centigrade assumed to be 25

Molecular weight: 23 degrees Celsius; assumed to be 23

$\text{cm} = \text{cubic centimeters}$

hr = hours

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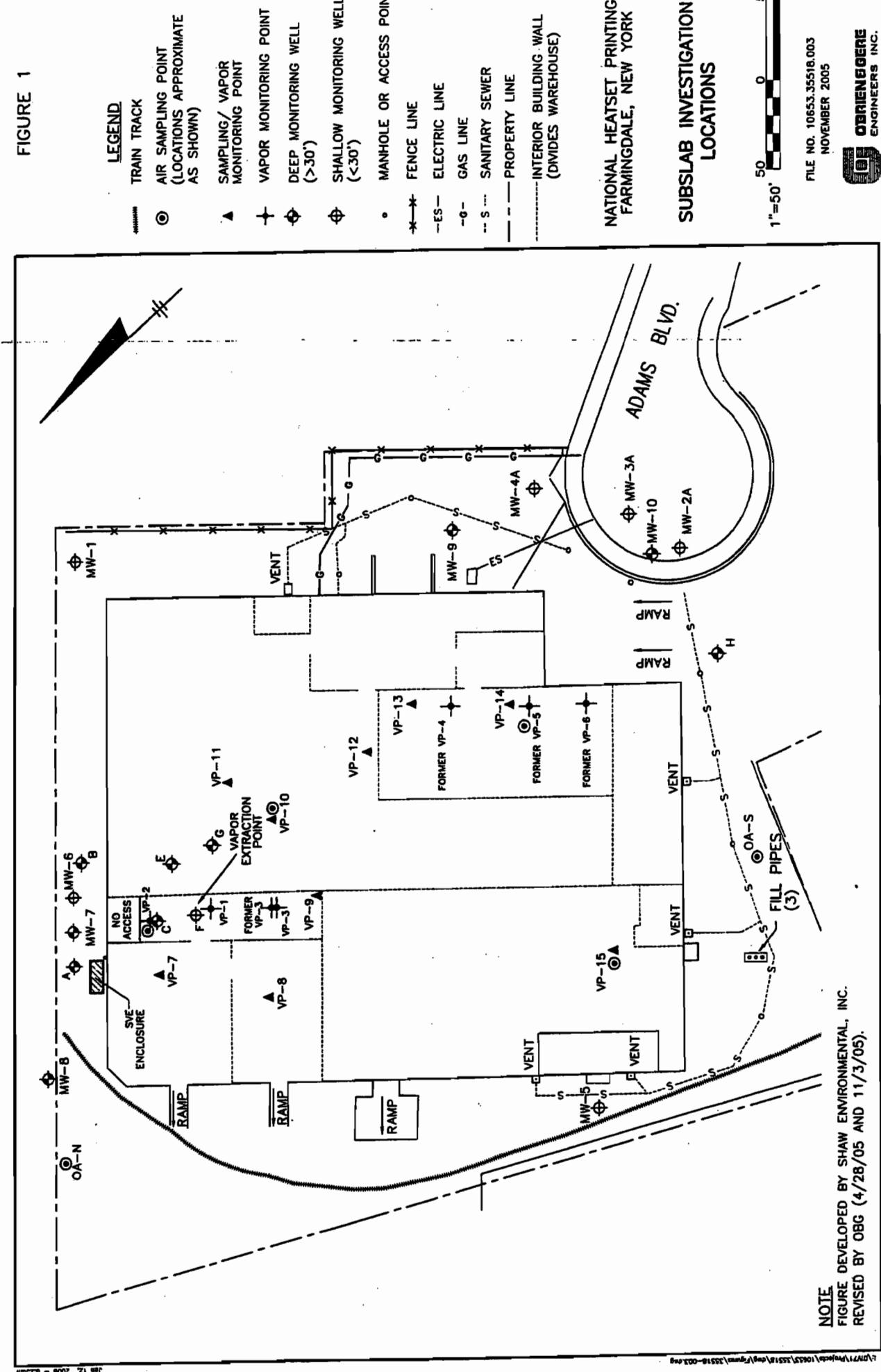
**Molecular weight (MW) of PCE=165.85; TCE=131.4; cis-1,2-DCE=96.94
ppmv = parts per million (vol./vol.)**

nc. (mg/cu. m)*1g/1000mg/1lb/453.6g*1cu. m/35.31cu. ft*60min/1 hr
days*24hours/day cfm = cubic feet per minute

Permit Limit	lb/hr	lb/yr
PCE	0.031	270
TCE	0.014	120
cis-1,2-DCE	0.63	5510

FIGURES

FIGURE 1



FILE NO. 10653.35518.003

NOVEMBER 2005

O'BRIEN & GEGEORGE
ENGINEERS INC.
2004 © O'Brien and Gage Engineers, Inc.

APPENDIX A
SITE VISIT DOCUMENTATION

National Heatset Printing
1 Adams Boulevard, Farmingdale, New York
O'Brien & Gere Eng. - Job # 35518.005

Personnel: Dan Simpson Time: 0830
 Weather: 80F, Sun Date: 6/21/2007

System Status:

Arrival: Not running
 Departure: Running
 Run Timer Reading: 1398417
 Electric Meter Reading: 07375, .45, 14.24, 0036

System Data:

Extraction Well F Gate Valve: 100 % Open
 Dilution Valve: 25 % Open

Pre-Bleed Air (Extraction Well):

Flow: 232.0 CFM
 Vacuum: 40.00 "H2O
 PID Reading: 1.8 PPM
 Draeger Tube: 35.0 PPM
 Temperature: 29.8 °F

Post-Bleed Air (SVE Influent):

Flow: 130.5 CFM
 Vacuum: -- "H2O
 PID Reading: 61.1 PPM
 Draeger Tube: 38.0 PPM
 Temperature: 41.5 °E (107 °F)

Carbon Monitoring:

Mid: 1.7 PPM 228 CFM 41.4 Temp. (°E) 0.0 PPM (Drager)
 Effluent: 0.1 PPM 199 CFM 31.8 Temp. (°E) 0.0 PPM (Drager)
 (e.g. °F)

Carbon effluent sample collected & shipped to lab? Yes

Knockout Tank Drained? Yes

Gallons: 145

Purge water drums on-site: 7

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):	14.53	14.51	14.7	--	--	--	--	--	--	--	--	--	--	--	--
Vac. (" H2O):	--	--	--	2.2	0.40	0.36	0.48	0.48	0.35	0.40	N/A	0.10	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:

System high float shut off tripped, water had to be knocked out before resetting.

Allowed 30 mins. Run time before data collection

Dilution valve moved to 40%

APPENDIX B
LABORATORY REPORT OF ANALYSES



"Environmental Testing For The New Millennium"

July 17, 2007

O'Brien & Gere
5000 Brittonfield Parkway
Syracuse, NY 13221-4873
Attn: Mr. Marc Dent

RE: Client Project: NYSDEC – National Heatset
Lab Project #: F0877

Dear Mr. Dent:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

A handwritten signature in black ink, appearing to read "Agnes R. Ng".
Agnes R. Ng
CLP Project Manager



Report of Laboratory Analyses for O'Brien & Gere

Client Project: National Heatset, 06/21/07

Mitkem Work Order ID: F0877

July 17, 2007

Prepared For: O'Brien & Gere
 5000 Brittonfield Parkway
 P. O. Box 4873
 Syracuse, NY 13221-4873
 Attn: Mr. Marc Dent

Prepared By: Mitkem Corporation
 175 Metro Center Boulevard
 Warwick, RI 02886
 (401) 732-3400



Client: O'Brien & Gere

Client Project: National Heatset, 06/21/07

Lab Project: F0701

Date samples received: 06/26/07

Project Narrative

This data report includes the analysis results for one (1) air sample in a Tedlar bag that was received from O'Brien & Gere on June 26, 2007. Analyses were performed per specification in the Chain of Custody form, following discussions with the client. For reference, a copy of the Mitkem Work Order form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications, as modified by Mitkem. No unusual occurrences were noted during sample analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

This data report has been reviewed and is authorized for release as evidenced by the signature below.

A handwritten signature in black ink, appearing to read "Agnes Ng".
Agnes Ng
CLP Project Manager

Mitkem Corporation

Date: 16-Jul-07

Client: The O'Brien & Gere Companies

Client Sample ID: SVE-EFFLUENT

Lab ID: F0877-01

Project: National Heatset

Collection Date: 06/21/07 11:00

Analyses	Result Qual	RL Units	DF	Date Analyzed	Batch ID
TO-14 (Modified) VOA by GC-MS					
Bromochloromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Dichlorodifluoromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Chloromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Vinyl chloride	ND	1.0 mg/m³		107/04/2007 12:44	30983
Bromomethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Chloroethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Trichlorofluoromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,1-Dichloroethene	ND	1.0 mg/m³		107/04/2007 12:44	30983
Acetone	ND	1.0 mg/m³		107/04/2007 12:44	30983
Iodomethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Carbon disulfide	ND	1.0 mg/m³		107/04/2007 12:44	30983
Methylene chloride	ND	1.0 mg/m³		107/04/2007 12:44	30983
trans-1,2-Dichloroethene	ND	1.0 mg/m³		107/04/2007 12:44	30983
Methyl tert-butyl ether	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,1-Dichloroethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Vinyl acetate	ND	1.0 mg/m³		107/04/2007 12:44	30983
2-Butanone	ND	1.0 mg/m³		107/04/2007 12:44	30983
cis-1,2-Dichloroethene	ND	1.0 mg/m³		107/04/2007 12:44	30983
2,2-Dichloropropane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Chloroform	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,1,1-Trichloroethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,1-Dichloropropene	ND	1.0 mg/m³		107/04/2007 12:44	30983
Carbon tetrachloride	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,2-Dichloroethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Benzene	ND	1.0 mg/m³		107/04/2007 12:44	30983
Trichloroethene	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,2-Dichloropropane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Dibromomethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Bromodichloromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
cis-1,3-Dichloropropene	ND	1.0 mg/m³		107/04/2007 12:44	30983
4-Methyl-2-pentanone	ND	1.0 mg/m³		107/04/2007 12:44	30983
Toluene	ND	1.0 mg/m³		107/04/2007 12:44	30983
trans-1,3-Dichloropropene	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,1,2-Trichloroethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,3-Dichloropropane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Tetrachloroethene	ND	1.0 mg/m³		107/04/2007 12:44	30983
2-Hexanone	ND	1.0 mg/m³		107/04/2007 12:44	30983
Dibromochloromethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
1,2-Dibromoethane	ND	1.0 mg/m³		107/04/2007 12:44	30983
Chlorobenzene	ND	1.0 mg/m³		107/04/2007 12:44	30983

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

RL - Reporting Limit

Mitkem Corporation

Date: 16-Jul-07

Client: The O'Brien & Gere Companies

Client Sample ID: SVE-EFFLUENT

Lab ID: F0877-01

Project: National Heatset

Collection Date: 06/21/07 11:00

Analyses	Result	Qual	RL Units	DF	Date Analyzed	Batch ID
TO-14 (Modified) VOA by GC-MS						
1,1,1,2-Tetrachloroethane	ND		TO14 1.0 mg/m³		1 07/04/2007 12:44	30983
Ethylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
m,p-Xylene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
o-Xylene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Xylene (Total)	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Styrene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Bromoform	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Isopropylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,1,2,2-Tetrachloroethane	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Bromobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2,3-Trichloropropane	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
n-Propylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
2-Chlorotoluene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,3,5-Trimethylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
4-Chlorotoluene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
tert-Butylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2,4-Trimethylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
sec-Butylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
4-Isopropyltoluene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,3-Dichlorobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,4-Dichlorobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
n-Butylbenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2-Dichlorobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2-Dibromo-3-chloropropane	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2,4-Trichlorobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Hexachlorobutadiene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
1,2,3-Trichlorobenzene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Naphthalene	ND		1.0 mg/m³		1 07/04/2007 12:44	30983
Surr: Dibromofluoromethane	94.0		70-130 %REC		1 07/04/2007 12:44	30983
Surr: 1,2-Dichloroethane-d4	81.4		70-130 %REC		1 07/04/2007 12:44	30983
Surr: Toluene-d8	101		70-130 %REC		1 07/04/2007 12:44	30983
Surr: Bromofluorobenzene	89.0		70-130 %REC		1 07/04/2007 12:44	30983

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

RL - Reporting Limit

Mitkem Corporation

27/Jun/07 19:25

WorkOrder: F0877

Client ID: OBG
Project: National Heatset
Location:
Comments: Level 2 for air samples

Case:
SDG:
PO: HEATSET

Report Level: ASP-B
EDD: CLF
HC Due: 07/17/07
Fax Due: 07/10/07

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL Storage
F0877-01A	SVE-EFFLUENT	06/21/2007 11:00	06/26/2007	Air	TO14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> VOA

Client Rep: Agnes R Ng

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Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REPORT TO		INVOICE TO		LAB PROJECT #:	
COMPANY O'Brien & Gere	PHONE (315)437 6100	COMPANY Zamex	PHONE		
NAME Mark Dent	FAX	NAME John	FAX		
ADDRESS 5000 Brutton Field Pkwy	CITY/ST/ZIP E. Syracuse NY 13057	ADDRESS		TURNAROUND TIME: 5-7 D	
CLIENT PROJECT NAME:		CLIENT PROJECT #:	CLIENT PO #:	REQUESTED ANALYSES	
SAMPLE IDENTIFICATION SVE-Effluent	DATE/TIME SAMPLED 6/21/07 10:00	COMPOSITE X	LAB ID Air	# OF CONTAINERS 1	COMMENTS 14-10-A
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
TSF# 0000	RELINQUISHED BY John Dipe	DATE/TIME 6/25/07 1300	ACCEPTED BY John Dipe	DATE/TIME 6/25/07 1300	ADDITIONAL REMARKS: 07/3/07 8:30
		/	/	/	COOLER TEMP: 40.5

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WHITE: LABORATORY COPY

PINK: CLIENT'S COPY

MITKEM CORPORATION

Sample Condition Form

Page 1 of 1

VOA Matrix Key:

US = Unpreserved Soil **A** = Air

UA = Unpreserved Aqu. **H** = HCl

M= MeOH **E = Encore**

N = NaHSO₄

E = Encore

F = Free

See Sample Condition Notification/Corrective Action Form yes / no

Rad OK yes/ no

Last Page of Data Report