

# **Operation, Maintenance and Monitoring Report April 2011**

**NOW Corporation  
Site 3-14-008**

**Work Assignment No.  
D004445-4.2**

Prepared for:

SUPERFUND STANDBY PROGRAM  
New York State  
Department of Environmental Conservation  
625 Broadway  
Albany, New York 12233

Prepared by:

AECOM Technical Services Northeast, Inc.  
40 British American Boulevard  
Latham, New York 12110

June 2011

June 23, 2011

Mr. Carl Hoffman, P.E.  
NYSDEC Division of Environmental Remediation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233-7013

**Re: NOW Corporation - Site #3-14-008  
O&M Summary Report: "April" 2011**

Dear Mr. Hoffman:

This monthly summary report describes the operation, monitoring and maintenance (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York, for a 22-day period (**March 29 – April 20, 2011**).

With the exceptions noted below, if any, the P&T system was online and operational throughout the reporting period. Approximately 373,300 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 17,000 gallons per day (gpd), compared to 26,150 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 83,688,400 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Table 1 summarizes influent and effluent analytical data for water samples collected on April 20, 2011. **Effluent limitations were not exceeded for any analyte.** Table 2 presents selected operational data recorded on the sampling date. Table 3 summarizes groundwater analytical results from the monitoring well sampling event conducted on April 19, 2011. A copy of each analytical laboratory report is attached. Monitoring well locations are shown on Figure 1.

AECOM made five site visits during the period to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. The March 29 service visit was described in the previous report. Details for the current period follow:

March 30 – Replaced TW-2A pump with a higher capacity pump (30 GPM). Reused motor.

March 31 – Cleaned TW-2A flowmeter. TW-2A pump would run for only 30 seconds before stopping for no apparent reason. Observed that current readings on legs were 21.7, 17.4 and 0.14 amp instead of 8 amp each. The pump was shut off until a new motor could be purchased and installed. Inspection of the sub-slab depressurization system (SSDS) at 2078 Route 9G, Staatsburg, NY was also conducted during this site visit. The system was operating normally. The basement is unoccupied, the heating/ventilation system had not been modified, piping and seals were in good condition, and cracks were not observed in floor or walls. An inspection form is attached to this letter report.

April 4 – Motor on the TW-2A pump was replaced. Pump is back online following four days downtime.

April 19 – Collected annual groundwater samples from the monitoring wells.

April 20 – Collected monthly water samples. Removed TW-3 pump from well because it throws the

thermal overload after running for only a brief period [pump had failed on April 12]. The motor of TW-3 pump was drawing 16-17 amps from each leg, twice what it should. Well remained offline as the reporting period closed.

Historical groundwater analytical results from 17 monitoring wells and current results from eight wells are presented in Table 3. Monitoring well locations are shown on Figure 1. Six wells discussed below exhibit VOC impacts at levels exceeding state groundwater standards (MW-1, 6S, 6D, 7S, 7D and 12D). The dominant contaminant in four of these wells is trichloroethene (TCE); 1,1-dichloroethane (1,1-DCA) dominates in MW-6D and MW-12D. No analytes were detected above standards in two of the wells sampled during this period (MW-4S and MW-12S).

During the last six sampling events, total VOCs (tVOCs) at **MW-1** have ranged between 97 µg/L and 114 µg/L. The highest tVOC concentration in this well was detected in 1994 at 446 µg/L.

Total concentrations of VOCs observed in **MW-6S** have decreased since 1993 when tVOCs were detected at 1,408 µg/L. Current sample results indicated a tVOC concentration of 39 µg/L, considerably less than the unexpectedly high concentration of 115 µg/L during the May 2010 sampling event. In August 1999, this well was ND for all reported analytes.

Since the 1994 event, when the tVOC concentration was 312.7 ug/L, **MW-6D** has shown very stable results, varying between only 20 ug/L and 58 ug/L in 11 sampling events, with 31 ug/L for the current sampling event.

During the current sampling event, **MW-7S** exhibited the tVOC concentration of 90 µg/L, considerably lower than 313 µg/L of the previous sampling event, which was highest since 1998.

**MW-7D** result from the current event was 112.75 µg/L of tVOCs, as compared to a reported high of 493 µg/L detected during the 2000 sampling event.

**MW-12D** reported a tVOC concentrations ranging between 16 µg/L and 34 µg/L from 2008 to 2011, with exceedances of only the 1,1-DCA standard.

Please feel free to contact me at (518) 951-2262 if you have any questions regarding this report or the operation of the treatment system.

Sincerely,  
AECOM Technical Services Northeast, Inc.



Stephen R. Choiniere  
Project Manager

**Table 1**  
**Summary of Influent and Effluent Data**  
**Sampling Date: April 20, 2011**  
**NOW Corporation Site**  
**Town of Clinton, New York**

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	
			TW-1	TW-2A	TW-3	Monitor 6.5 to 8.5	(units) gallons standard units
Quantity treated, per day		16,968					
pH	6.8	7.1					
Oil and Grease	<5.0	<b>14</b>	NA	NA	NA	15	mg/L
Total Cyanide	<10	<10	NA	NA	NA	10	ug/L
TDS	<b>260</b>	<b>250</b>	NA	NA	NA	1000	mg/L
TSS	<10	<10	NA	NA	NA	50	mg/L
Aluminum, Total	<b>290</b>	<200	NA	NA	NA	2000	ug/L
Arsenic, Total	<20	<20	NA	NA	NA	50	ug/L
Barium, Total	<b>79 J</b>	<b>66 J</b>	NA	NA	NA	2000	ug/L
Chromium	<b>14 J</b>	<20	NA	NA	NA	100	ug/L
Copper	<b>4.9 J</b>	<25	NA	NA	NA	24	ug/L
Iron	<b>1400</b>	<200	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	<b>890</b>	<b>30 J</b>	NA	NA	NA	600	ug/L
Nickel	<50	<b>1.4 J</b>	NA	NA	NA	200	ug/L
Zinc	<b>21 J</b>	<b>10 J</b>	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	<b>230</b>	<0.50	<2.5	<b>310</b>	<b>2.5</b>	5	ug/L
1,1,2-Trichloroethane	<8	<0.50	<2.5	<13	<0.50	1.2	ug/L
1,1-Dichloroethane	<b>100</b>	<0.50	<b>37</b>	<b>130</b>	<b>6.8</b>	5	ug/L
1,1-Dichloroethene	<b>13</b>	<0.50	<b>10</b>	<b>17</b>	<0.50	0.5	ug/L
1,2-Dichloroethane	<8	<0.50	<2.5	<13	<0.50	1.6	ug/L
Benzene	<8	<0.50	<2.5	<13	<0.50	0.8	ug/L
Chlorobenzene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Chloroethane	<8	<0.50	<2.5	<13	<0.50	5	ug/L
cis -1,2-Dichloroethene	<b>13</b>	<0.50	<b>3.1</b>	<b>14</b>	<0.50	5	ug/L
Ethylbenzene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Methyl tert-butyl ether	<8	<0.50	<2.5	<13	<0.50	5	ug/L
o-Xylene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
m,p-Xylene	<8	<0.50	<2.5	<13	<0.50	10	ug/L
Tetrachloroethene	<8	<0.50	<2.5	<13	<0.50	1.4	ug/L
Toluene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
trans -1,2-Dichloroethene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Trichloroethene	<b>280</b>	<0.50	<b>47</b>	<b>350</b>	<b>5.9</b>	5	ug/L
Vinyl Chloride	<8	<0.50	<2.5	<13	<0.50	0.6	ug/L

*Notes:*

- 1) Detected concentrations are presented in **bold** typeface, and are expressed in the units shown in far right column.
- 2) Effluent concentration boxed in **bold** denotes exceedance of effluent limitations.
- 3) NA indicates not analyzed.
- 4) "J" indicates an estimated concentration below the reporting limit (RL).
- 5) "B" denotes metal detected in method blank at concentration below the RL, but above the method detection limit.

**Table 2**  
**Summary of April 2011 O&M Data**

**NOW Corporation Site**  
**Town of Clinton, New York**

<b>Instrumentation/Readings:</b>		<b>4/20/11</b>	<b>Units</b>
<b><i>TW-1</i></b>			
	Pumping Rate	3	GPM
	Water Level Above Transducer	28.3	feet
	Flow Meter Reading	6,090,300	gallons
	Pump Pressure	80	psi
<b><i>TW-2A</i></b>			
	Pumping Rate	~14	GPM
	Water Level Above Transducer	22.00	feet
	Flow Meter Reading	20,783,900	gallons
	Pump Pressure	15	psi
<b><i>TW-3</i></b>			
	Pumping Rate	4	GPM
	Water Level Above Transducer	98.28	feet
	Flow Meter Reading	8,853,000	gallons
	Pump Pressure	72	psi
<b><i>Air Stripper</i></b>			
	Stripper Blower Pressure	22	inches H <sub>2</sub> O
	Air Temperature in Stripper	44	°F
	Pressure Gauge - Left Leg	1.4	inches H <sub>2</sub> O
	Pressure Gauge - Right Leg	3.8	inches H <sub>2</sub> O
<b><i>Effluent Flow</i></b>			
	Effluent Flow this period (calculated)	373,300	gallons
	Total Effluent Flow (calculated)	83,688,400	gallons

**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analytes/Standards**	MW-1													MW-2										
	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08	4/27/09	5/27/10	4/19/11	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08	
1,1,1-Trichloroethane/5	75	150	57	33	40	24	19	8.3	11	9	8.1	8.5	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane/1	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane/5	50	50	30	66	31	17	22	25	13	16	10	16	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene/5	6	6	5	ND	ND	3	4.5	6.1	2.9	2.8	1.4 J	2.9	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane/0.6	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene/1	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane/5	8	6	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene/5	27	32	20	ND	29	15	20	18	13	14	12	12	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
m&p-Xylene/5	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
o-Xylene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene/5	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene/5	88	200	100	130	120	80	79	56	56 D	67	68	74 D	68	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride/2	N/A	2	1	ND	ND	ND	1	1.1	1.4	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs	256	446	213	229	220	140.3	145.5	114.5	97.3	109.02	99.5	113.4	102.6	6	2	0	0	0	0	0	0	0	0	

Notes:

- 1) Detected concentrations are shown in **bold typeface**, in units of ug/L.
- 2) ND = Not Detected
- 3) N/A = Not Analyzed (either well was effectively dry on date shown, or indicated analyte was not reported)
- 4) \* = Duplicate sample result.
- 5) MW-6S, 7S & 7D were dry on 8/25/05. They were sampled on the date shown at the top of the columns.
- 6) D = denotes analytical result for a diluted sample.
- 7) J = denotes analytical result is an estimate.
- 8) \*\* = Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1), ug/L
- 9) Shaded cell indicates exceedance of Ambient Water Quality Standard

**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

<u><b>Analytes/Standards**</b></u>	<b>MW-3D</b>										<b>MW-3S</b>									
	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08	1/12/94	5/8/98	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane/1	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane/0.6	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene/1	ND	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene/5	ND	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene/5	<b>1</b>	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene/5	<b>0.7</b>	<b>3</b>	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride/2	N/A	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>TOTAL VOCs</b>	1.7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

- 1) Detected concentrations are shown in **bold typeface**, in units of ug/L.
- 2) ND = Not Detected
- 3) N/A = Not Analyzed (either well was effectively dry on date shown, or indicated analyte was not reported)
- 4) \* = Duplicate sample result.
- 5) MW-6S, 7S & 7D were dry on 8/25/05. They were sampled on the date shown at the top of the columns.
- 6) D = denotes analytical result for a diluted sample.
- 7) J = denotes analytical result is an estimate.
- 8) \*\* = Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1), ug/L
- 9) Shaded cell indicates exceedance of Ambient Water Quality Standard

**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analytes/Standards**	MW-4S													MW-4D									
	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08	4/27/09	5/27/10	4/19/11	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08	
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	27	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane/1	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane/5	ND	4	5	ND	ND	2.2	1.6	1	2.3	2.5	2.5/2.4*	2	2.2	ND	ND	68	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane/0.6	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene/1	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane/5	ND	ND	ND	ND	ND	ND	0.8	0.6	2.5	ND	1.5/1.4*	1.4	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
m&p-Xylene/5	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
o-Xylene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene/5	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J/ND*	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	
Vinyl Chloride/2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs	1	4	5	0	0	2.2	2.4	1.6	4.8	2.5	4.05	3.4	3.7	0	0	195	0	0	0	0	0	0	

Notes:

- 1) Detected concentrations are shown in **bold typeface**, in units of ug/L.
- 2) ND = Not Detected
- 3) N/A = Not Analyzed (either well was effectively dry on date shown, or indicated analyte was not reported)
- 4) \* = Duplicate sample result.
- 5) MW-6S, 7S & 7D were dry on 8/25/05. They were sampled on the date shown at the top of the columns.
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- 8) \*\* = Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1), ug/L.
- 9) Shaded cell indicates exceedance of Ambient Water Quality Standard



**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analytes/Standards**	MW-5										MW-6S												
	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	10/19/05	4/24/07	5/28/08	4/27/09	5/27/10	4/19/11
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	510	23	ND	45	2.5	7.6	12	4	3.7	2.3	11	3.8
1,1,2-Trichloroethane/1	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J	57	39	3	ND	14	ND	2.7	4.3	1.3	1.9	0.93	18	2.9
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	3	ND	ND	ND	ND	1.3	1.1	0.38 J	0.91	0.33 J	2.8	0.73
1,2-Dichloroethane/0.6	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene/1	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	12	2	ND	ND	ND	0.9	2.2	0.69	0.49 J	0.38 J	1.1	0.64
Ethylbenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene/5	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene/5	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene/5	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	610	460	43	ND	160	25	47	57	21	34	22	82 D	31
Vinyl Chloride/2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs	4	2	0	0	0	0	0	0	0	0.38	1408	1024	71	0	219	27.5	59.5	76.6	27.37	41	25.94	114.9	39.07

Notes:

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- 3) N/A = Not Analyzed (either well was effectively dry on date shown, or indicated analyte was not reported)
- 4) \* = Duplicate sample result.
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- 7) J = denotes analytical result is an estimate.
- 8) \*\* = Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1), ug/L
- 9) Shaded cell indicates exceedance of Ambient Water Quality Standard

**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analytes/Standards**	MW-6D												MW-7S											
	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08	4/27/09	5/27/10	4/19/11	5/8/98	8/1/99	8/27/03	8/24/04	10/19/05	4/24/07	5/29/08	4/27/09	5/27/10	4/19/11		
1,1,1-Trichloroethane/5	160	13	ND	7	5.8	3	1.2	4.1	1.8	1.1	2.3	3.3	34	N/A	8.5/8.6*	13	12	5.4	2.9	ND	12	3		
1,1,2-Trichloroethane/1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane/5	140	20	52	ND	16	26	26	17	18	11	13	15	11	N/A	3.2/3*	6.4	2.4	1.7	2.2	ND	7.3	ND		
1,1-Dichloroethene/5	1	ND	ND	30	1.1	1.9	1.6	1.7	1.6	0.64	1.4	1.6	ND	N/A	ND/ND*	0.9	ND	ND	0.51	ND	0.95	ND		
1,2-Dichloroethane/0.6	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
Benzene/1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
Chlorobenzene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
Chloroethane/5	ND	ND	ND	ND	ND	0.6	0.8	3.4	ND	0.94	ND	1.6	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
cis-1,2-Dichloroethene/5	0.7	2	ND	ND	1.5	1.4	1.2	1.2	1.1	0.95	1	1.2	17	N/A	20/20*	16	9	5.9	9.7	5.6	31	5.4		
Ethylbenzene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
m&p-Xylene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
o-Xylene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	0.26J	ND	ND	ND		
Toluene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
trans-1,2-Dichloroethene/5	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	ND	ND		
Trichloroethene/5	11	13	6	8	11	7.4	6.6	8.2	7.1	5.8	7.5	8.6	280	N/A	160/160*	190	160	91 D	230	82	260 D	82		
Vinyl Chloride/2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND/ND*	ND	ND	ND	ND	ND	1.4	ND		
TOTAL VOCs	312.7	48	58	45	35.4	40.3	37.4	35.6	29.6	20.43	25.2	31.3	342	0	191.7	226.3	183.4	104	245.57	87.6	312.65	90.4		

Notes:

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**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analytes/Standards**	MW-7D											MW-8										
	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	10/19/05	4/24/07	5/29/08	4/27/09	5/27/10	4/19/11	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08	
1,1,1-Trichloroethane/5	15	N/A	85	12	21/22*	5.6	2	22/22*	ND	5.4/5.3*	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane/1	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane/5	34	N/A	ND	17	21/21*	7.5	2.5	38/37*	ND	5.9/5.7*	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene/5	4	N/A	28	2.4	4.7/4.7*	1.3	0.73	4.6/5.2*	ND	0.93/1.2*	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane/0.6	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene/1	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene/5	8	N/A	ND	8.1	11/11*	6.3	3.5	10/9.7*	4.1 J	6.4/5.9*	3.5/2.7*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Ethylbenzene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
m&p-Xylene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	0.8	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
o-Xylene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	0.25J/0.22J	ND	ND/ND*	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	9.3/8*	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene/5	340	N/A	380	190	250/260*	150	110 D	220/220*	140	150/160 D <sup>‡</sup>	110/92*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride/2	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	ND/ND*	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs	401	0	493	229.5	312.7	170.7	118.73	294.49	144.1	173.37	112.75	0.8	0	0	0	0	0	0	0	0	0	

Notes:

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- 2) ND = Not Detected
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**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analvtes/Standards**	MW-9											MW-10										
	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08	4/27/93	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/29/08		
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	2	ND	ND	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane/1	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	9	ND	ND	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane/0.6	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
Benzene/1	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
Chlorobenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
Chloroethane/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Ethylbenzene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
m&p-Xylene/5	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
o-Xylene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Toluene/5	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
trans-1,2-Dichloroethene/5	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND		
Trichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vinyl Chloride/2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL VOCs	3	0	0	0	0	0	0	0	0	0	20	11	0	0	0	0	0	0	0	0		

Notes:

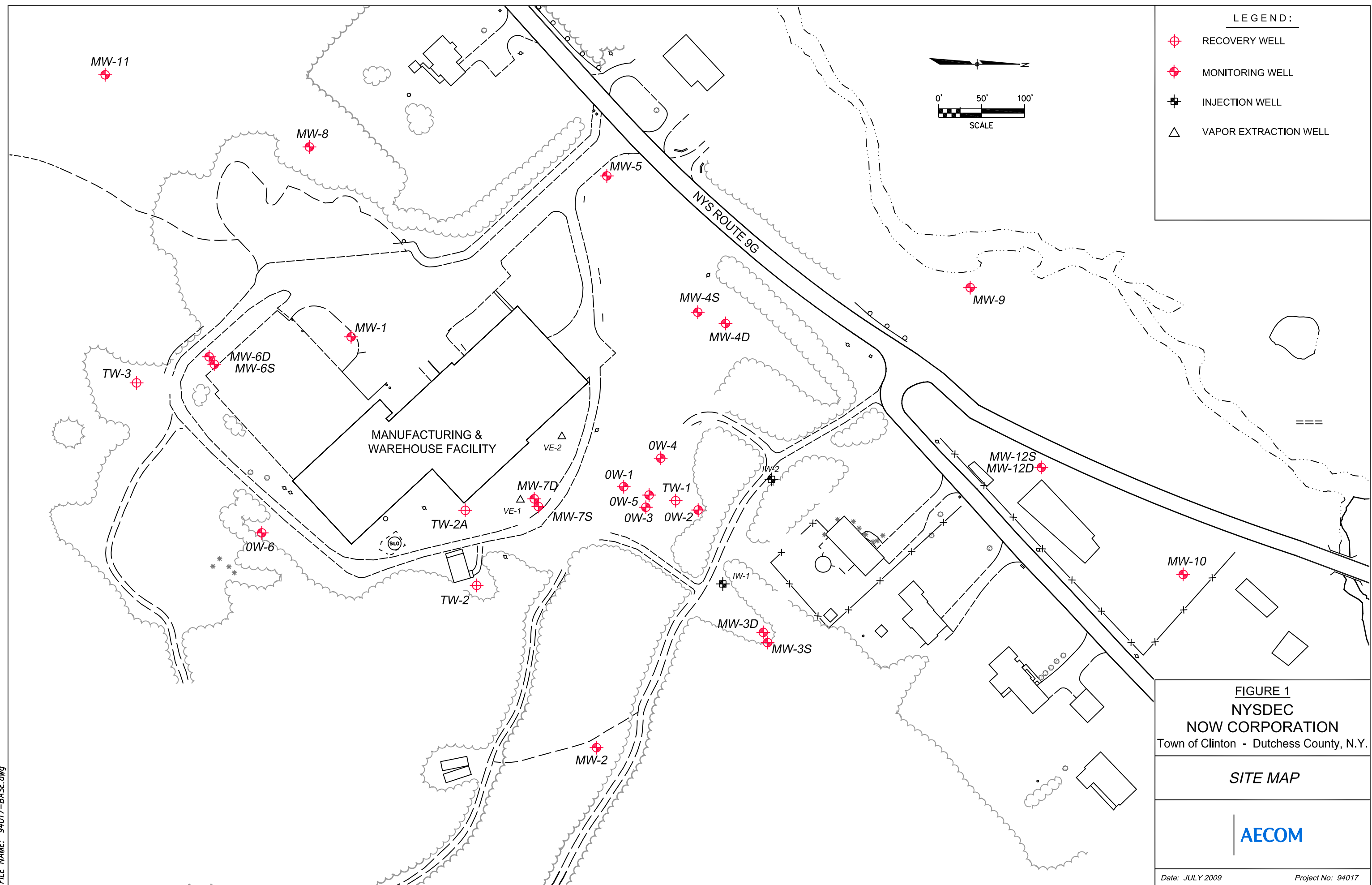
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**Table 3**  
**Groundwater Analytical Data Summary**  
**NOW Corporation**  
**Site 3-14-008**  
**Town of Clinton, New York**

Analvtes/Standards**	MW-11										MW-12S				MW-12D			
	1/12/94	5/8/98	8/1/99	8/18/00	8/27/03	8/24/04	8/25/05	4/24/07	5/28/08	5/29/08	4/27/09	5/27/10	4/19/11	5/29/08	4/27/09	5/27/10	4/19/11	
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	
1,1,2-Trichloroethane/1	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	25	11	13	14	
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	2	1.5	1.8	1.4	
1,2-Dichloroethane/0.6	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene/1	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chlorobenzene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	4.6	2	4.5	2.9	
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	0.25 J	0.25 J	0.30 J	ND	
Ethylbenzene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m&p-Xylene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
o-Xylene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	0.31 J	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene/5	N/A	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	1.6	1.7	1.5	1.4	
Vinyl Chloride/2	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TOTAL VOCs	0	0	0	0	0	0	0	0	0	0.31	0	0	0	33.69	16.45	21.1	19.7	

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# Periodic Operations Visit Form

☐ Check box if new sys info
System ID: **314008-NOW-001**Date of Visit: **March 31, 2011**Owner Name: Joan PicardDate Installed: November 11, 2008System Address: 2078 Route 9GTelephone: 845-889-8787City: Staatsburg Zip: 12580

Alt. Telephone: \_\_\_\_\_

Performed By: Steve GraySite No: 314008Company: AECOM Technical Services NortheastSite Name: NOW Corporation

## Fan Operation Confirmation

EXTERIOR

	Fan #1	Fan #2	Fan #3
Fan Model No(s).	<u>RP145</u>		
Is Fan Operating (arrival)?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Confirmation Method	<u>Sound</u>		
Is Fan Operating (departure)?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Requested to inspect interior system components? ☐ Yes ☒ No

If yes, when and by whom? \_\_\_\_\_ Date: \_\_\_\_\_

INTERIOR

## Structural Review

Notes

Change in building footprint since last inspection? ☐ Yes ☒ NoBasement occupied (>4 hrs per day)? ☐ Yes ☒ NoHeating/ventilation system modifications? ☐ Yes ☒ NoCrawlspace inspected? ☐ Yes ☒ NoLarge cracks in floor or near sumps? ☐ Yes ☒ NoWall penetrations or cracks noted? ☐ Yes ☒ No

## Piping, Slab & Wall

Are system suction points sealed? ☒ Yes ☐ NoIs piping system in need of repair? ☐ Yes ☒ No

## Miscellaneous

Are manometer levels equal? ☐ Yes ☒ NoAre system labels accurate and applied correctly? ☒ Yes ☐ NoThe Gauge indicated pressure \_\_\_\_\_Maintenance completed (check all that apply): ☐ Replace fan ☐ Seal pipe ☐ Electrical ☐ Other

Describe repairs made and any proposed actions requiring a subsequent visit (if necessary):

Report Date:  
10-May-11 10:10



- ☒ Final Report  
☐ Re-Issued Report  
☐ Revised Report

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

## Laboratory Report

AECOM Technical Services, Inc.  
40 British American Boulevard  
Latham, NY 12110

Work Order: K0663  
Project : NOW Corp. Site, 4/2011  
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K0663-01	EFF 042011	Aqueous	20-Apr-11 09:40	21-Apr-11 09:04
K0663-02	INF 042011	Aqueous	20-Apr-11 10:15	21-Apr-11 09:04
K0663-03	TW-1 042011	Aqueous	20-Apr-11 10:25	21-Apr-11 09:04
K0663-04	TW-2A 042011	Aqueous	20-Apr-11 10:30	21-Apr-11 09:04
K0663-05	TW-3 042011	Aqueous	20-Apr-11 10:32	21-Apr-11 09:04
K0663-06	TRIP BLANK 042011	Aqueous	20-Apr-11 00:00	21-Apr-11 09:04

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at [www.mitkem.com](http://www.mitkem.com).

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030



Authorized by:

A handwritten signature in black ink, appearing to read 'Yihai Ding'.

Yihai Ding  
Laboratory Director



## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0663

SW846 8260C, VOC by GC-MS (25 mL Purge)

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. HOLDING TIMES

#### A. Sample Preparation:

All samples were prepared within the method-specified holding times.

#### B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8260C

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

### V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V5  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890 / 6890

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

### D. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-58908 in batch 58908, Percent Recovery is outside QC Limits, recovery is above criteria for Ethylbenzene at 114% with criteria of (87-110).

LCSD-58908 in batch 58908, Percent Recovery is outside QC Limits, recovery is above criteria for Ethylbenzene at 111% with criteria of (87-110).

Please note that this apparent high bias does not affect sample results, as Ethylbenzene was not detected in any sample.

### E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution (due to elevated concentration of Trichloroethene).

INF 042011 (K0663-02A) : Dilution Factor: 16

TW-1 042011 (K0663-03A) : Dilution Factor: 5

TW-2A 042011 (K0663-04A) : Dilution Factor: 25

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: \_\_\_\_\_



Date: \_\_\_\_\_

5/10/11

## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0663

EPA 1664A, Oil & Grease, HEM

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. HOLDING TIMES

#### A. Sample Preparation:

All samples were prepared within the method-specified holding times.

#### B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
EPA 1664A

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### V. INSTRUMENTATION

The following instrumentation was used to perform Oil and Grease analysis.

Instrument Type: Analytical Balance  
Manufacturer: Denver Instrument Company  
Model: A-250

## VI. ANALYSIS

### A. Calibration:

Analytical balance was calibrated based on SOP/Method criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

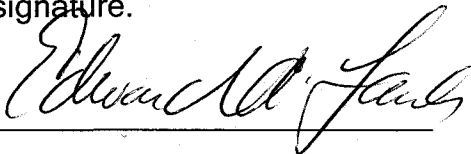
Percent recoveries for lab control samples were within the QC limits.

### D. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: \_\_\_\_\_



Date: \_\_\_\_\_



## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0663

SW846 6010C, SW846 7470A

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. HOLDING TIMES

#### A. Sample Preparation:

All samples were prepared within the method-specified holding times.

#### B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 6010C, SW846 7470A

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A  
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

### V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1  
Instrument Type: CVAA  
Description: FIMS  
Manufacturer: Perkin-Elmer  
Model: FIMS

Instrument Code: OPTIMA3  
Instrument Type: ICP  
Description: Optima ICP-OES  
Manufacturer: Perkin-Elmer  
Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

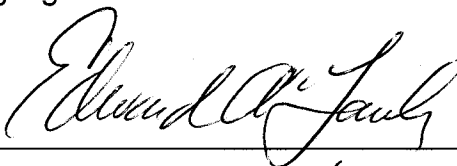
Percent recoveries for laboratory control samples were within the QC limits.

### D. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the

data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 5/10/11



## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0663

SM 2540C, SM 2540D, SW846 9012B

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. HOLDING TIMES

#### A. Sample Preparation:

All samples were prepared within the method-specified holding times.

#### B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

### III. METHODS

Samples were analyzed following procedures in laboratory test code: SM 2540C, SM 2540D, SW846 9012B

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SM 2540C, SM 2540D, SW9012B

### V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics  
Model: Quik-Chem 8000

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Spikes:

#### 1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

### D. Duplicate sample:

Relative percent differences were within the QC limits for duplicate analyses for Total Dissolved Solids and Total Suspended Solids.

### E. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

*Edward A. J. [Signature]*  
5/12/11

**Mitkem Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF 042011

Lab ID: K0663-01

Project: NOW Corp. Site

Collection Date: 04/20/11 9:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 2:30	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 2:30	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 2:30	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 2:30	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 2:30	58908
1,1-Dichloroethane	ND		0.50	µg/L		105/03/2011 2:30	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 2:30	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 2:30	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 2:30	58908
Benzene	ND		0.50	µg/L		105/03/2011 2:30	58908
Trichloroethene	ND		0.50	µg/L		105/03/2011 2:30	58908
Toluene	ND		0.50	µg/L		105/03/2011 2:30	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 2:30	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 2:30	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 2:30	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 2:30	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 2:30	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 2:30	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		105/03/2011 2:30	58908
Surrogate: 1,2-Dichloroethane-d4	97.7		79-115	%REC		105/03/2011 2:30	58908
Surrogate: Toluene-d8	93.3		80-114	%REC		105/03/2011 2:30	58908
Surrogate: Bromofluorobenzene	83.8		60-123	%REC		105/03/2011 2:30	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF 042011

Project: NOW Corp. Site

Lab ID: K0663-02

Collection Date: 04/20/11 10:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Chloroethane	ND		8.0	µg/L		16 05/03/2011 2:59	58908
1,1-Dichloroethene	13		8.0	µg/L		16 05/03/2011 2:59	58908
trans-1,2-Dichloroethene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Methyl tert-butyl ether	ND		8.0	µg/L		16 05/03/2011 2:59	58908
1,1-Dichloroethane	100		8.0	µg/L		16 05/03/2011 2:59	58908
cis-1,2-Dichloroethene	13		8.0	µg/L		16 05/03/2011 2:59	58908
1,1,1-Trichloroethane	230		8.0	µg/L		16 05/03/2011 2:59	58908
1,2-Dichloroethane	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Benzene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Trichloroethene	280		8.0	µg/L		16 05/03/2011 2:59	58908
Toluene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
1,1,2-Trichloroethane	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Tetrachloroethene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Chlorobenzene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Ethylbenzene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
m,p-Xylene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
o-Xylene	ND		8.0	µg/L		16 05/03/2011 2:59	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		16 05/03/2011 2:59	58908
Surrogate: 1,2-Dichloroethane-d4	99.1		79-115	%REC		16 05/03/2011 2:59	58908
Surrogate: Toluene-d8	96.4		80-114	%REC		16 05/03/2011 2:59	58908
Surrogate: Bromofluorobenzene	84.3		60-123	%REC		16 05/03/2011 2:59	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-1 042011

Lab ID: K0663-03

Project: NOW Corp. Site

Collection Date: 04/20/11 10:25

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Chloroethane	ND		2.5	µg/L		5 05/03/2011 3:28	58908
1,1-Dichloroethene	10		2.5	µg/L		5 05/03/2011 3:28	58908
trans-1,2-Dichloroethene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Methyl tert-butyl ether	ND		2.5	µg/L		5 05/03/2011 3:28	58908
1,1-Dichloroethane	37		2.5	µg/L		5 05/03/2011 3:28	58908
cis-1,2-Dichloroethene	3.1		2.5	µg/L		5 05/03/2011 3:28	58908
1,1,1-Trichloroethane	ND		2.5	µg/L		5 05/03/2011 3:28	58908
1,2-Dichloroethane	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Benzene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Trichloroethene	47		2.5	µg/L		5 05/03/2011 3:28	58908
Toluene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
1,1,2-Trichloroethane	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Tetrachloroethene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Chlorobenzene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Ethylbenzene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
m,p-Xylene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
o-Xylene	ND		2.5	µg/L		5 05/03/2011 3:28	58908
Surrogate: Dibromofluoromethane	99.8		88-124	%REC		5 05/03/2011 3:28	58908
Surrogate: 1,2-Dichloroethane-d4	88.7		79-115	%REC		5 05/03/2011 3:28	58908
Surrogate: Toluene-d8	99.9		80-114	%REC		5 05/03/2011 3:28	58908
Surrogate: Bromofluorobenzene	82.3		60-123	%REC		5 05/03/2011 3:28	58908

**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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-2A 042011

Lab ID: K0663-04

Project: NOW Corp. Site

Collection Date: 04/20/11 10:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		13	µg/L		25 05/03/2011 3:56	58908
Chloroethane	ND		13	µg/L		25 05/03/2011 3:56	58908
1,1-Dichloroethene	17		13	µg/L		25 05/03/2011 3:56	58908
trans-1,2-Dichloroethene	ND		13	µg/L		25 05/03/2011 3:56	58908
Methyl tert-butyl ether	ND		13	µg/L		25 05/03/2011 3:56	58908
1,1-Dichloroethane	130		13	µg/L		25 05/03/2011 3:56	58908
cis-1,2-Dichloroethene	14		13	µg/L		25 05/03/2011 3:56	58908
1,1,1-Trichloroethane	310		13	µg/L		25 05/03/2011 3:56	58908
1,2-Dichloroethane	ND		13	µg/L		25 05/03/2011 3:56	58908
Benzene	ND		13	µg/L		25 05/03/2011 3:56	58908
Trichloroethene	350		13	µg/L		25 05/03/2011 3:56	58908
Toluene	ND		13	µg/L		25 05/03/2011 3:56	58908
1,1,2-Trichloroethane	ND		13	µg/L		25 05/03/2011 3:56	58908
Tetrachloroethene	ND		13	µg/L		25 05/03/2011 3:56	58908
Chlorobenzene	ND		13	µg/L		25 05/03/2011 3:56	58908
Ethylbenzene	ND		13	µg/L		25 05/03/2011 3:56	58908
m,p-Xylene	ND		13	µg/L		25 05/03/2011 3:56	58908
o-Xylene	ND		13	µg/L		25 05/03/2011 3:56	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		25 05/03/2011 3:56	58908
Surrogate: 1,2-Dichloroethane-d4	83.2		79-115	%REC		25 05/03/2011 3:56	58908
Surrogate: Toluene-d8	99.0		80-114	%REC		25 05/03/2011 3:56	58908
Surrogate: Bromofluorobenzene	82.7		60-123	%REC		25 05/03/2011 3:56	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-3 042011

Lab ID: K0663-05

Project: NOW Corp. Site

Collection Date: 04/20/11 10:32

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 4:25	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 4:25	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:25	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:25	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 4:25	58908
1,1-Dichloroethane	6.8		0.50	µg/L		105/03/2011 4:25	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:25	58908
1,1,1-Trichloroethane	2.5		0.50	µg/L		105/03/2011 4:25	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 4:25	58908
Benzene	ND		0.50	µg/L		105/03/2011 4:25	58908
Trichloroethene	5.9		0.50	µg/L		105/03/2011 4:25	58908
Toluene	ND		0.50	µg/L		105/03/2011 4:25	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 4:25	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 4:25	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 4:25	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 4:25	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 4:25	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 4:25	58908
Surrogate: Dibromofluoromethane	105		88-124	%REC		105/03/2011 4:25	58908
Surrogate: 1,2-Dichloroethane-d4	90.1		79-115	%REC		105/03/2011 4:25	58908
Surrogate: Toluene-d8	97.3		80-114	%REC		105/03/2011 4:25	58908
Surrogate: Bromofluorobenzene	85.8		60-123	%REC		105/03/2011 4:25	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TRIP BLANK 042011

Lab ID: K0663-06

Project: NOW Corp. Site

Collection Date: 04/20/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 4:53	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 4:53	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:53	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:53	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 4:53	58908
1,1-Dichloroethane	ND		0.50	µg/L		105/03/2011 4:53	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 4:53	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 4:53	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 4:53	58908
Benzene	ND		0.50	µg/L		105/03/2011 4:53	58908
Trichloroethene	ND		0.50	µg/L		105/03/2011 4:53	58908
Toluene	ND		0.50	µg/L		105/03/2011 4:53	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 4:53	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 4:53	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 4:53	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 4:53	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 4:53	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 4:53	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		105/03/2011 4:53	58908
Surrogate: 1,2-Dichloroethane-d4	87.0		79-115	%REC		105/03/2011 4:53	58908
Surrogate: Toluene-d8	103		80-114	%REC		105/03/2011 4:53	58908
Surrogate: Bromofluorobenzene	80.8		60-123	%REC		105/03/2011 4:53	58908

**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



## ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: K0663

SW8260\_25\_W

Project: NOW Corp. Site

SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: MB-58908	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 05/02/11 11:33	Run ID: V5_110502B			
Client ID: MB-58908	Batch ID: 58908	Units: µg/L	Analysis Date: 05/03/11 2:01	SeqNo: 1520037			
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC LowLimit	HighLimit	RPD Ref Val %RPD RPDLimit Qual
Vinyl chloride	ND	0.15	0.50				
Chloroethane	ND	0.24	0.50				
1,1-Dichloroethene	ND	0.19	0.50				
trans-1,2-Dichloroethene	ND	0.14	0.50				
Methyl tert-butyl ether	ND	0.13	0.50				
1,1-Dichloroethane	ND	0.18	0.50				
cis-1,2-Dichloroethene	ND	0.19	0.50				
1,1,1-Trichloroethane	ND	0.11	0.50				
1,2-Dichloroethane	ND	0.16	0.50				
Benzene	ND	0.12	0.50				
Trichloroethene	ND	0.13	0.50				
Toluene	ND	0.14	0.50				
1,1,2-Trichloroethane	ND	0.20	0.50				
Tetrachloroethene	ND	0.17	0.50				
Chlorobenzene	ND	0.13	0.50				
Ethylbenzene	ND	0.13	0.50				
m,p-Xylene	ND	0.22	0.50				
o-Xylene	ND	0.17	0.50				
Surrogate:	10.10		10.00	0	101	88	124 0
Dibromofluoromethane							
Surrogate: 1,2-	10.41		10.00	0	104	79	115 0
Dichloroethane-d4							
Surrogate: Toluene-d8	9.435		10.00	0	94.3	80	114 0
Surrogate:	8.561		10.00	0	85.6	60	123 0
Bromofluorobenzene							

0017

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 m11 04.29 A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.

Work Order: K0663

Project: NOW Corp. Site

# ANALYTICAL QC SUMMARY REPORT

SW8260\_25\_W

SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCS-58908	SampType: LCS	TestCode: SW8260_25_W	Prep Date: 05/02/11 11:33	Run ID: V5_110502B								
Client ID: LCS-58908	Batch ID: 58908	Units: µg/L	Analysis Date: 05/03/11 1:03	SeqNo: 1520035								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.33	0.15	0.50	10.00	0	103	77	120	0			
Chloroethane	9.759	0.24	0.50	10.00	0	97.6	75	135	0			
1,1,1-Dichloroethene	10.89	0.19	0.50	10.00	0	109	81	125	0			
trans-1,2-Dichloroethene	10.80	0.14	0.50	10.00	0	108	60	137	0			
Methyl tert-butyl ether	11.23	0.13	0.50	10.00	0	112	61	134	0			
1,1-Dichloroethane	10.69	0.18	0.50	10.00	0	107	82	120	0			
cis-1,2-Dichloroethene	11.28	0.19	0.50	10.00	0	113	84	116	0			
1,1,1-Trichloroethane	10.59	0.11	0.50	10.00	0	106	80	124	0			
1,2-Dichloroethane	11.01	0.16	0.50	10.00	0	110	86	117	0			
Benzene	11.16	0.12	0.50	10.00	0	112	81	121	0			
Trichloroethene	11.36	0.13	0.50	10.00	0	114	74	123	0			
Toluene	10.99	0.14	0.50	10.00	0	110	88	117	0			
1,1,2-Trichloroethane	11.03	0.20	0.50	10.00	0	110	83	121	0			
Tetrachloroethene	11.00	0.17	0.50	10.00	0	110	74	115	0			
Chlorobenzene	10.93	0.13	0.50	10.00	0	109	83	112	0			
Ethylbenzene	11.44	0.13	0.50	10.00	0	114	87	110	0			
m,p-Xylene	21.92	0.22	0.50	20.00	0	110	87	114	0			
o-Xylene	10.97	0.17	0.50	10.00	0	110	84	114	0			
Surrogate:	9.954		0.50	10.00	0	99.5	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	10.59		0.50	10.00	0	106	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.833		0.50	10.00	0	98.3	80	114	0			
Surrogate:	9.312		0.50	10.00	0	93.1	60	123	0			
Bromofluorobenzene												

0018

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit

m1104 29 A

J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

B - Analyte detected in the associated Method Blank

CLIENT: AECOM Technical Services, Inc.  
 Work Order: K0663  
 Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT  
 SW8260\_25\_W  
 SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCSD-58908		SampType: LCSD		TestCode: SW8260_25_W		Prep Date: 05/02/11 11:33		Run ID: V5_110502B				
Client ID: LCSD-58908		Batch ID: 58908		Units: µg/L		Analysis Date: 05/03/11 1:32		SeqNo: 1520036				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.919	0.15	0.50	10.00	0	99.2	77	120	10.33	4.02	40	
Chloroethane	9.739	0.24	0.50	10.00	0	97.4	75	135	9.759	0.203	40	
1,1-Dichloroethene	10.01	0.19	0.50	10.00	0	100	81	125	10.89	8.4	40	
trans-1,2-Dichloroethene	10.83	0.14	0.50	10.00	0	108	60	137	10.80	0.28	40	
Methyl tert-butyl ether	10.73	0.13	0.50	10.00	0	107	61	134	11.23	4.48	40	
1,1-Dichloroethane	10.59	0.18	0.50	10.00	0	106	82	120	10.69	1.0	40	
cis-1,2-Dichloroethene	11.13	0.19	0.50	10.00	0	111	84	116	11.28	1.33	40	
1,1,1-Trichloroethane	10.28	0.11	0.50	10.00	0	103	80	124	10.59	2.96	40	
1,2-Dichloroethane	10.43	0.16	0.50	10.00	0	104	86	117	11.01	5.44	40	
Benzene	10.48	0.12	0.50	10.00	0	105	81	121	11.16	6.28	40	
Trichloroethene	10.84	0.13	0.50	10.00	0	108	74	123	11.36	4.7	40	
Toluene	10.33	0.14	0.50	10.00	0	103	88	117	10.99	6.17	40	
1,1,2-Trichloroethane	10.62	0.20	0.50	10.00	0	106	83	121	11.03	3.78	40	
Tetrachloroethene	11.09	0.17	0.50	10.00	0	111	74	115	11.00	0.769	40	
Chlorobenzene	11.04	0.13	0.50	10.00	0	110	83	112	10.93	0.96	40	
Ethylbenzene	11.13	0.13	0.50	10.00	0	111	87	110	11.44	2.76	40	S
m,p-Xylene	22.61	0.22	0.50	20.00	0	113	87	114	21.92	3.09	40	
o-Xylene	11.27	0.17	0.50	10.00	0	113	84	114	10.97	2.69	40	
Surrogate:	9.538		0.50	10.00	0	95.4	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	8.763		0.50	10.00	0	87.6	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	10.07		0.50	10.00	0	101	80	114	0			
Surrogate:	9.501		0.50	10.00	0	95.0	60	123	0			
Bromofluorobenzene												

0010

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

# Mitkem Laboratories

Date: 03-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF 042011

Lab ID: K0663-01

Project: NOW Corp. Site

Collection Date: 04/20/11 9:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM							E1664
Oil & Grease, Total Recoverable	14		5.0	mg/L		105/03/2011 0:00	58898

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 Laboratories

Date: 03-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF 042011

Lab ID: K0663-02

Project: NOW Corp. Site

Collection Date: 04/20/11 10:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM							E1664
Oil & Grease, Total Recoverable	ND		5.0	mg/L		1 05/03/2011 0:00	58898

**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

ANALYTICAL QC SUMMARY REPORT

**E1664**

**EPA 1664A -- Oil & Grease, HEM**

Sample ID: LCSD-58898	SampType: LCSD	TestCode: E1664	Prep Date: 04/30/11 15:43	Run ID: MANUAL_110503A
Client ID: LCSD-58898	Batch ID: 58898	Units: mg/L	Analysis Date: 05/03/11 0:00	SeqNo: 1519364
Analyte	Result	MDL	SPK value	SPK Ref Val
Oil & Grease, Total Recoverable	39.30	1.2	40.00	38.20
		5.0	98.3	114
			LowLimit	HighLimit
			%REC	%RPD
			RPD Limit	RPD Limit
			2.84	18

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit
ml1.04.29-A	J - Analyte detected below quantitation limits <th>R - RPD outside accepted recovery limits</th> <th>RL - Reporting Limit</th>	R - RPD outside accepted recovery limits	RL - Reporting Limit

**Mitkem Laboratories**

Date: 05-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF 042011

Lab ID: K0663-01

Project: NOW Corp. Site

Collection Date: 04/20/11 9:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 6010C -- Metals by ICP</b>							<b>SW6010_W</b>
Aluminum	ND		200	µg/L	1	04/26/2011 9:23	58785
Arsenic	ND		20	µg/L	1	04/26/2011 9:23	58785
Barium	66	J	200	µg/L	1	04/26/2011 9:23	58785
Chromium	ND		20	µg/L	1	04/26/2011 9:23	58785
Copper	ND		25	µg/L	1	04/26/2011 9:23	58785
Iron	ND		200	µg/L	1	04/26/2011 9:23	58785
Manganese	30	J	50	µg/L	1	04/26/2011 9:23	58785
Nickel	1.4	J	50	µg/L	1	04/26/2011 9:23	58785
Zinc	10	J	50	µg/L	1	04/26/2011 9:23	58785
<b>SW846 7470A -- Mercury by FIA</b>							<b>SW7470</b>
Mercury	ND		0.20	µg/L	1	05/04/2011 16:40	58967

**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 Laboratories**

Date: 05-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF 042011

Lab ID: K0663-02

Project: NOW Corp. Site

Collection Date: 04/20/11 10:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 6010C -- Metals by ICP</b>							<b>SW6010_W</b>
Aluminum	290		200	µg/L	1	04/26/2011 9:33	58785
Arsenic	ND		20	µg/L	1	04/26/2011 9:33	58785
Barium	79	J	200	µg/L	1	04/26/2011 9:33	58785
Chromium	14	J	20	µg/L	1	04/26/2011 9:33	58785
Copper	4.9	J	25	µg/L	1	04/26/2011 9:33	58785
Iron	1400		200	µg/L	1	04/26/2011 9:33	58785
Manganese	890		50	µg/L	1	04/26/2011 9:33	58785
Nickel	13	J	50	µg/L	1	04/26/2011 9:33	58785
Zinc	21	J	50	µg/L	1	04/26/2011 9:33	58785
<b>SW846 7470A -- Mercury by FIA</b>							<b>SW7470</b>
Mercury	ND		0.20	µg/L	1	05/04/2011 16:41	58967

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



## ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: K0663

SW6010\_W

Project: NOW Corp. Site

SW846 6010C -- Metals by ICP

Sample ID: MB-58785	SampType: MBLK	TestCode: SW6010_W	Prep Date: 04/25/11 11:30	Run ID: OPTIMA3_110426B							
Client ID: MB-58785	Batch ID: 58785	Units: µg/L	Analysis Date: 04/26/11 9:00	SeqNo: 1515392							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	66					200				
Arsenic	ND	4.3					20				
Barium	ND	1.1					200				
Chromium	ND	0.64					20				
Copper	ND	3.6					30				
Iron	ND	31					200				
Manganese	ND	10					50				
Nickel	ND	0.85					50				
Zinc	ND	4.9					50				

Sample ID: LCS-58785	SampType: LCS	TestCode: SW6010_W	Prep Date: 04/25/11 11:30	Run ID: OPTIMA3_110426B								
Client ID: LCS-58785	Batch ID: 58785	Units: µg/L	Analysis Date: 04/26/11 9:04	SeqNo: 1515393								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8463	66	200	9100	0	93.0	80	120	0			
Arsenic	440.5	4.3	20	455.0	0	96.8	80	120	0			
Barium	8706	1.1	200	9100	0	95.7	80	120	0			
Chromium	864.9	0.64	20	910.0	0	95.0	80	120	0			
Copper	1051	3.6	30	1130	0	93.0	80	120	0			
Iron	4380	31	200	4550	0	96.3	80	120	0			
Manganese	2131	10	50	2270	0	93.9	80	120	0			
Nickel	2212	0.85	50	2270	0	97.5	80	120	0			
Zinc	2128	4.9	50	2270	0	93.7	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Recovery outside accepted recovery limits

MDL - Method Detection Limit

B - Analyte detected in the associated Method Blank

m11.04.29.A

J - Analyte detected below quantitation limits

RL - Reporting Limit

# ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: K0663

SW6010\_W

Project: NOW Corp. Site

SW846 6010C -- Metals by ICP

Sample ID: LCSD-58785		SampType: LCSD		TestCode: SW6010_W		Prep Date: 04/25/11 11:30		Run ID: OPTIMA3_110426B				
Client ID: LCSD-58785		Batch ID: 58785		Units: µg/L		Analysis Date: 04/26/11 9:08		SeqNo: 1515394				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8523	66	200	9100	0	93.7	80	120	8463	0.709	20	
Arsenic	448.7	4.3	20	455.0	0	98.6	80	120	440.5	1.83	20	
Barium	8810	1.1	200	9100	0	96.8	80	120	8706	1.19	20	
Chromium	867.0	0.64	20	910.0	0	95.3	80	120	864.9	0.243	20	
Copper	1054	3.6	30	1130	0	93.3	80	120	1051	0.283	20	
Iron	4407	31	200	4550	0	96.9	80	120	4380	0.622	20	
Manganese	2156	10	50	2270	0	95.0	80	120	2131	1.14	20	
Nickel	2226	0.85	50	2270	0	98.0	80	120	2212	0.598	20	
Zinc	2141	4.9	50	2270	0	94.3	80	120	2128	0.615	20	

0026

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

AECOM Technical Services, Inc.

**Work Order:** K0663

SW7470

**Project:** NOW Corp. Site

SW846 7470A -- Mercury by FIA

Sample ID: <b>MB-58967</b>	SampType: <b>MBLK</b>	TestCode: <b>SW7470</b>	Prep Date: <b>05/04/11 12:00</b>	Run ID: <b>FIMS1_110504B</b>
Client ID: <b>MB-58967</b>	Batch ID: <b>58967</b>	Units: <b>µg/L</b>	Analysis Date: <b>05/04/11 16:30</b>	SeqNo: <b>1520604</b>
Analyte	Result	MDL	SPK value	SPK Ref Val
Mercury	ND	0.028	0.20	

Sample ID: LCS-58967	SampType: LCS	TestCode: SW7470	Prep Date: 05/04/11 12:00	Run ID: FIMS1_110504B
Client ID: LCS-58967	Batch ID: 58967	Units: µg/L	Analysis Date: 05/04/11 16:31	SeqNo: 1520605
Analyte	Result	MDL	SPK Ref Val	SPK value
Mercury	4.235	0.028	0	4.550
		RL	%REC	LowLimit
			93.1	80
			HighLimit	120
			RPD Ref Val	%RPD RPDLimit
			0	0

032

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	
11.04.29 A				

**Mitkem Laboratories****Date:** 29-Apr-11**Client:** AECOM Technical Services, Inc.**Client Sample ID:** EFF 042011**Lab ID:** K0663-01**Project:** NOW Corp. Site**Collection Date:** 04/20/11 9:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b>							<b>SM2540_TDS</b>
Total Dissolved Solids	250		10	mg/L	1	04/22/2011 16:35	58745
<b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b>							<b>SM2540_TSS</b>
Total Suspended Solids	ND		10	mg/L	1	04/22/2011 16:34	58746
<b>SW846 9012B -- Total Cyanide</b>							<b>SW9012_W</b>
Cyanide	ND		10	ug/L	1	04/29/2011 10:16	58874

**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

0028

**Mitkem Laboratories**

Date: 29-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF 042011

Lab ID: K0663-02

Project: NOW Corp. Site

Collection Date: 04/20/11 10:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b>							<b>SM2540_TDS</b>
Total Dissolved Solids	260		10	mg/L		1 04/22/2011 16:37	58745
<b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b>							<b>SM2540_TSS</b>
Total Suspended Solids	ND		10	mg/L		1 04/22/2011 16:36	58746
<b>SW846 9012B -- Total Cyanide</b>							<b>SW9012_W</b>
Cyanide	ND		10	ug/L		1 04/29/2011 10:18	58874

**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

# ANALYTICAL QC SUMMARY REPORT

## SM2540\_TDS

### SM 2540C -- TOTAL DISSOLVED SOLIDS

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
m11.04.15.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.  
Work Order: K0663  
Project: NOW Corp. Site

SM2540\_TSS  
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-58746	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 04/22/11 16:30	Run ID: MANUAL_110422B	
Client ID: MB-58746	Batch ID: 58746	Units: mg/L	Analysis Date: 04/22/11 16:30	SeqNo: 1516080	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val
	ND	10			
Total Suspended Solids		10			
Sample ID: LCS-58746	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 04/22/11 16:30	Run ID: MANUAL_110422B	
Client ID: LCS-58746	Batch ID: 58746	Units: mg/L	Analysis Date: 04/22/11 16:32	SeqNo: 1516081	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val
	64.00	10	68.60	0	0
Total Suspended Solids		10	93.3	80	120
Sample ID: K0663-02BDUP	SampType: DUP	TestCode: SM2540_TSS	Prep Date: 04/22/11 16:30	Run ID: MANUAL_110422B	
Client ID: INF 042011	Batch ID: 58746	Units: mg/L	Analysis Date: 04/22/11 16:38	SeqNo: 1516084	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val
	ND	10	0	0	0
Total Suspended Solids		10	0	0	5.0

0031

CLIENT: AECOM Technical Services, Inc.  
Work Order: K0663  
Project: NOW Corp. Site

# ANALYTICAL QC SUMMARY REPORT

SW9012\_W  
SW846 9012B -- Total Cyanide

Sample ID: MB-58874	SampType: MBLK	TestCode: SW9012_W	Prep Date: 04/28/11 14:15	Run ID: LACHAT1_110429A			
Client ID: MB-58874	Batch ID: 58874	Units: ug/L	Analysis Date: 04/29/11 10:03	SeqNo: 1517298			
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Cyanide	ND	7.5					

Sample ID: LCS-58874	SampType: LCS	TestCode: SW9012_W	Prep Date: 04/28/11 14:15	Run ID: LACHAT1_110429A			
Client ID: LCS-58874	Batch ID: 58874	Units: ug/L	Analysis Date: 04/29/11 10:05	SeqNo: 1517299			
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Cyanide	100.3	7.5	0	100	80	120	0

Sample ID: LCSD-58874	SampType: LCSD	TestCode: SW9012_W	Prep Date: 04/28/11 14:15	Run ID: LACHAT1_110429A			
Client ID: LCSD-58874	Batch ID: 58874	Units: ug/L	Analysis Date: 04/29/11 10:08	SeqNo: 1517300			
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Cyanide	100.1	7.5	0	100	80	120	0.138

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
m11.04.15 A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit



**WorkOrder: K0663****04/21/2011 10:20****Mitkem Laboratories****Client ID:** EARTH\_NY**Project:** NOW Corp. Site**WO Name:** NOW Corp. Site**Location:** NOW\_CORP,**Comments:** N/A**Case:****SDG:****HC Due:** 05/09/11**Fax Due:****Fax Report:** ☐**Report Level:** LEVEL 2**Special Program:****EDD:****PO:** 94017.02

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0663-01A	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0663-01B	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SM2540_TDS	/					F2
K0663-01B	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SM2540_TSS	/					F2
K0663-01C	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SW6010_W	/ See SEL list				Y	M3
K0663-01C	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SW7470	/ See SEL list					M3
K0663-01D	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	SW9012_W	/				Y	F2
K0663-01E	EFF 042011	04/20/2011 09:40	04/21/2011	Aqueous	E1664	/					F2
K0663-02A	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0663-02B	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SM2540_TDS	/					F2
K0663-02B	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SM2540_TSS	/					F2
K0663-02C	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SW6010_W	/ See SEL list				Y	M3
K0663-02C	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SW7470	/ See SEL list					M3
K0663-02D	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	SW9012_W	/				Y	F2
K0663-02E	INF 042011	04/20/2011 10:15	04/21/2011	Aqueous	E1664	/					F2
K0663-03A	TW-1 042011	04/20/2011 10:25	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0663-04A	TW-2A 042011	04/20/2011 10:30	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0663-05A	TW-3 042011	04/20/2011 10:32	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0663-06A	TRIP BLANK 042011	04/20/2011 00:00	04/21/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

066333  
HTF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold



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# CHAIN OF CUSTODY RECORD

Page 1 of 1

## Special Handling:

- TAT- Indicate Date Needed: \_\_\_\_\_
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 30 days unless otherwise instructed.

Report To: AECOM  
40 British American Blvd  
Latham, N.Y. 12110  
518-951-2200  
Project Mgr.: Steve Choiniere

InVOICE To: AECOM  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
P.O. No.: \_\_\_\_\_ RQN: \_\_\_\_\_

Project No.: ~~60135676-02~~  
Site Name: NOW Corp State: NY  
Location: Stattsburg  
Sampler(s): SRG, GLW

1=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 2=HCl 3=H<sub>2</sub>SO<sub>4</sub> 4=HNO<sub>3</sub> 5=NaOH 6=Ascorbic Acid 7=CH<sub>3</sub>OH  
8=NaHSO<sub>4</sub> 9=None 10= \_\_\_\_\_ 11= \_\_\_\_\_

DW=Drinking Water GW=Groundwater WW=Wastewater  
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air  
X1= \_\_\_\_\_ X2= \_\_\_\_\_ X3= \_\_\_\_\_

List preservative code below:

2 4 9 2 5

Notes:

Containers:

# of VOA Vials

# of Amber Glass

# of Clear Glass

# of Plastic

Analyses:

QA/QC Reporting Level

☐ Level I

☐ Level II

☐ Level III

☐ Level IV

☐ Other \_\_\_\_\_

Matrix

Type

Time:

Date:

Sample Id:

Lab Id:

G=Grab C=Composite

K0663

1 EW 042011 4/20/11 0940 G GW 2 3 3 3

2 TW 042011 10/15 1025 1030 1032

3 TW-1 042011 1030 1032

4 TW-2A 042011 1030 1032

5 TW-3 042011 1030 1032

6 Trip Blank 042011 1030 1032

8260 Metals \* O+G Cyanide

\* Al, As, BA, Cr, Cu, Fe, Mn, Hg, Zn, N

State specific reporting standards:

☐ E-mail to \_\_\_\_\_

EDD Format \_\_\_\_\_

Relinquished by:

Received by:

Date:

Time:

Steve Dwyer

gdy

7/29/11

15:00

4/21/11

9:04

Condition upon receipt: ☐ Iced ☐ Ambient ☐ °C 6

## MITKEM LABORATORIES

## Sample Condition Form

Page 1 of 1

Received By: <u>sn</u>		Reviewed By: <u>GA</u>		Date: <u>4/21/11</u>		Mitkem Work Order #: <u>K 0 6 6 3</u>	
Client Project: <u>Now</u>		<u>Env Corp</u>		Client: <u>Earth NIS</u>		Soil Headspace or Air Bubble ≥ 1/4"	
				Preservation (pH)		VOA Matrix	
		Lab Sample ID		HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	HCl	NaOH
				H <sub>3</sub> PO <sub>4</sub>			
1) Cooler Sealed <u>Yes</u> / No		<u>E 0 6 6 3</u> 01		<u>&lt;2</u>		<u>&lt;2</u>	
		02		<u>&lt;2</u>		<u>&lt;2</u>	
2) Custody Seal(s) <u>Present</u> / Absent		03					
<u>Coolers</u> / Bottles		04					
<u>Intact</u> / Broken		05					
		<u>E 0 6 6 3</u> 06					
3) Custody Seal Number(s) <u>NA</u>							
4) Chain-of-Custody <u>Present</u> / Absent							
5) Cooler Temperature <u>6°C</u>							
IR Temp Gun ID <u>M7-1</u>							
Coolant Condition <u>Ice</u>							
6) Airbill(s) <u>Present</u> / Absent							
Airbill Number(s) <u>FedEx</u>							
<u>8747 5541 7175</u>							
7) Samples Bottles <u>Intact</u> / Broken / Leaking							
8) Date Received <u>4/21/11</u>							
9) Time Received <u>9:04</u>							
Preservative Name/Lot No.:							

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO <sub>4</sub>	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no

Y:\Controlled Forms\QAF.0006 sample condition form.xls

0035

**Last Page of Data Report**

Report Date:  
10-May-11 10:20



- ☒ Final Report  
☐ Re-Issued Report  
☐ Revised Report

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

## Laboratory Report

AECOM Technical Services, Inc.  
40 British American Boulevard  
Latham, NY 12110

Work Order: K0639  
Project : NOW Corp. Site  
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K0639-01	MW-1 041911	Aqueous	19-Apr-11 12:00	20-Apr-11 10:07
K0639-02	MW-4S 041911	Aqueous	19-Apr-11 09:36	20-Apr-11 10:07
K0639-03	MW-6S 041911	Aqueous	19-Apr-11 10:55	20-Apr-11 10:07
K0639-04	MW-6D 041911	Aqueous	19-Apr-11 11:56	20-Apr-11 10:07
K0639-05	MW-7S 041911	Aqueous	19-Apr-11 09:55	20-Apr-11 10:07
K0639-06	MW-7D 041911	Aqueous	19-Apr-11 09:50	20-Apr-11 10:07
K0639-07	MW-12S 041911	Aqueous	19-Apr-11 13:30	20-Apr-11 10:07
K0639-08	MW12D 041911	Aqueous	19-Apr-11 13:43	20-Apr-11 10:07
K0639-09	MWDUP 041911	Aqueous	19-Apr-11 00:00	20-Apr-11 10:07
K0639-10	TRIPBLANK041911	Aqueous	19-Apr-11 00:00	20-Apr-11 10:07

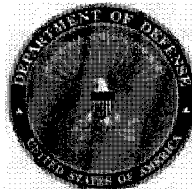
I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at [www.mitkem.com](http://www.mitkem.com).

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030



Authorized by:

Yihai Ding  
Laboratory Director

## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0639

SW846 8260C, VOC by GC-MS (25 mL Purge)

### I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

### II. HOLDING TIMES

#### A. Sample Preparation:

All samples were prepared within the method-specified holding times.

#### B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
SW846 8260C

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

### V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V5  
Instrument Type: GCMS-VOA  
Description: HP6890 / HP6890  
Manufacturer: Hewlett-Packard  
Model: 6890 / 6890

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

### D. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-58908 in batch 58908, Percent Recovery is outside QC Limits, recovery is above criteria for Ethylbenzene at 114% with criteria of (87-110).

LCSD-58908 in batch 58908, Percent Recovery is outside QC Limits, recovery is above criteria for Ethylbenzene at 111% with criteria of (87-110).

Please note that this apparent high bias does not affect sample results as Ethylbenzene was not detected in any associated sample.

### E. Internal Standards:

Internal standard peak areas were within the QC limits.

**F. Dilutions:**

The following samples were analyzed at dilution (due to elevated concentration of Trichloroethene):

MW-1 041911 (K0639-01A) : Dilution Factor: 4

MW-7S 041911 (K0639-05A) : Dilution Factor: 4

MW-7D 041911 (K0639-06A) : Dilution Factor: 5

MWDUP 041911 (K0639-09A) : Dilution Factor: 5

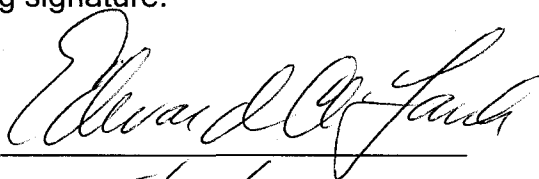
**G. Samples:**

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

  
5/10/11



**Mitkem Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-1 041911

Project: NOW Corp. Site

Lab ID: K0639-01

Collection Date: 04/19/11 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Chloroethane	ND		2.0	µg/L	4	05/03/2011 9:40	58908
1,1-Dichloroethene	2.4		2.0	µg/L	4	05/03/2011 9:40	58908
trans-1,2-Dichloroethene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Methyl tert-butyl ether	ND		2.0	µg/L	4	05/03/2011 9:40	58908
1,1-Dichloroethane	13		2.0	µg/L	4	05/03/2011 9:40	58908
cis-1,2-Dichloroethene	11		2.0	µg/L	4	05/03/2011 9:40	58908
1,1,1-Trichloroethane	8.2		2.0	µg/L	4	05/03/2011 9:40	58908
1,2-Dichloroethane	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Benzene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Trichloroethene	68		2.0	µg/L	4	05/03/2011 9:40	58908
Toluene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
1,1,2-Trichloroethane	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Tetrachloroethene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Chlorobenzene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Ethylbenzene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
m,p-Xylene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
o-Xylene	ND		2.0	µg/L	4	05/03/2011 9:40	58908
Surrogate: Dibromofluoromethane	106		88-124	%REC	4	05/03/2011 9:40	58908
Surrogate: 1,2-Dichloroethane-d4	90.2		79-115	%REC	4	05/03/2011 9:40	58908
Surrogate: Toluene-d8	101		80-114	%REC	4	05/03/2011 9:40	58908
Surrogate: Bromofluorobenzene	87.3		60-123	%REC	4	05/03/2011 9:40	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-4S 041911

Project: NOW Corp. Site

Lab ID: K0639-02

Collection Date: 04/19/11 9:36

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 6:20	58908
Chloroethane	1.5		0.50	µg/L		105/03/2011 6:20	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 6:20	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 6:20	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 6:20	58908
1,1-Dichloroethane	2.2		0.50	µg/L		105/03/2011 6:20	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 6:20	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 6:20	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 6:20	58908
Benzene	ND		0.50	µg/L		105/03/2011 6:20	58908
Trichloroethene	ND		0.50	µg/L		105/03/2011 6:20	58908
Toluene	ND		0.50	µg/L		105/03/2011 6:20	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 6:20	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 6:20	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 6:20	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 6:20	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 6:20	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 6:20	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		105/03/2011 6:20	58908
Surrogate: 1,2-Dichloroethane-d4	91.1		79-115	%REC		105/03/2011 6:20	58908
Surrogate: Toluene-d8	104		80-114	%REC		105/03/2011 6:20	58908
Surrogate: Bromofluorobenzene	83.9		60-123	%REC		105/03/2011 6:20	58908

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 Laboratories

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-6S 041911

Lab ID: K0639-03

Project: NOW Corp. Site

Collection Date: 04/19/11 10:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 6:48	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 6:48	58908
1,1-Dichloroethene	0.73		0.50	µg/L		105/03/2011 6:48	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 6:48	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 6:48	58908
1,1-Dichloroethane	2.9		0.50	µg/L		105/03/2011 6:48	58908
cis-1,2-Dichloroethene	0.64		0.50	µg/L		105/03/2011 6:48	58908
1,1,1-Trichloroethane	3.8		0.50	µg/L		105/03/2011 6:48	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 6:48	58908
Benzene	ND		0.50	µg/L		105/03/2011 6:48	58908
Trichloroethene	31		0.50	µg/L		105/03/2011 6:48	58908
Toluene	ND		0.50	µg/L		105/03/2011 6:48	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 6:48	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 6:48	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 6:48	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 6:48	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 6:48	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 6:48	58908
Surrogate: Dibromofluoromethane	100		88-124	%REC		105/03/2011 6:48	58908
Surrogate: 1,2-Dichloroethane-d4	81.9		79-115	%REC		105/03/2011 6:48	58908
Surrogate: Toluene-d8	104		80-114	%REC		105/03/2011 6:48	58908
Surrogate: Bromofluorobenzene	79.7		60-123	%REC		105/03/2011 6:48	58908

**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

0005

# Mitkem Laboratories

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-6D 041911

Lab ID: K0639-04

Project: NOW Corp. Site

Collection Date: 04/19/11 11:56

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Chloroethane	1.6		0.50	µg/L	1	05/03/2011 7:17	58908
1,1-Dichloroethene	1.6		0.50	µg/L	1	05/03/2011 7:17	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Methyl tert-butyl ether	ND		0.50	µg/L	1	05/03/2011 7:17	58908
1,1-Dichloroethane	15		0.50	µg/L	1	05/03/2011 7:17	58908
cis-1,2-Dichloroethene	1.2		0.50	µg/L	1	05/03/2011 7:17	58908
1,1,1-Trichloroethane	3.3		0.50	µg/L	1	05/03/2011 7:17	58908
1,2-Dichloroethane	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Benzene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Trichloroethene	8.6		0.50	µg/L	1	05/03/2011 7:17	58908
Toluene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
1,1,2-Trichloroethane	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Tetrachloroethene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Chlorobenzene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Ethylbenzene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
m,p-Xylene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
o-Xylene	ND		0.50	µg/L	1	05/03/2011 7:17	58908
Surrogate: Dibromofluoromethane	106		88-124	%REC	1	05/03/2011 7:17	58908
Surrogate: 1,2-Dichloroethane-d4	93.2		79-115	%REC	1	05/03/2011 7:17	58908
Surrogate: Toluene-d8	102		80-114	%REC	1	05/03/2011 7:17	58908
Surrogate: Bromofluorobenzene	84.3		60-123	%REC	1	05/03/2011 7:17	58908

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

0007

# Mitkem Laboratories

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-7S 041911

Lab ID: K0639-05

Project: NOW Corp. Site

Collection Date: 04/19/11 9:55

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Chloroethane	ND		2.0	µg/L		4 05/03/2011 10:08	58908
1,1-Dichloroethene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
trans-1,2-Dichloroethene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Methyl tert-butyl ether	ND		2.0	µg/L		4 05/03/2011 10:08	58908
1,1-Dichloroethane	ND		2.0	µg/L		4 05/03/2011 10:08	58908
cis-1,2-Dichloroethene	5.4		2.0	µg/L		4 05/03/2011 10:08	58908
1,1,1-Trichloroethane	3.0		2.0	µg/L		4 05/03/2011 10:08	58908
1,2-Dichloroethane	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Benzene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Trichloroethene	82		2.0	µg/L		4 05/03/2011 10:08	58908
Toluene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
1,1,2-Trichloroethane	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Tetrachloroethene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Chlorobenzene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Ethylbenzene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
m,p-Xylene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
o-Xylene	ND		2.0	µg/L		4 05/03/2011 10:08	58908
Surrogate: Dibromofluoromethane	109		88-124	%REC		4 05/03/2011 10:08	58908
Surrogate: 1,2-Dichloroethane-d4	87.8		79-115	%REC		4 05/03/2011 10:08	58908
Surrogate: Toluene-d8	102		80-114	%REC		4 05/03/2011 10:08	58908
Surrogate: Bromofluorobenzene	84.0		60-123	%REC		4 05/03/2011 10:08	58908

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

0000

**Mitkem Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-7D 041911

Project: NOW Corp. Site

Lab ID: K0639-06

Collection Date: 04/19/11 9:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Chloroethane	ND		2.5	µg/L	5	05/03/2011 10:37	58908
1,1-Dichloroethene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
trans-1,2-Dichloroethene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Methyl tert-butyl ether	ND		2.5	µg/L	5	05/03/2011 10:37	58908
1,1-Dichloroethane	ND		2.5	µg/L	5	05/03/2011 10:37	58908
cis-1,2-Dichloroethene	3.5		2.5	µg/L	5	05/03/2011 10:37	58908
1,1,1-Trichloroethane	ND		2.5	µg/L	5	05/03/2011 10:37	58908
1,2-Dichloroethane	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Benzene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Trichloroethene	110		2.5	µg/L	5	05/03/2011 10:37	58908
Toluene	9.3		2.5	µg/L	5	05/03/2011 10:37	58908
1,1,2-Trichloroethane	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Tetrachloroethene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Chlorobenzene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Ethylbenzene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
m,p-Xylene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
o-Xylene	ND		2.5	µg/L	5	05/03/2011 10:37	58908
Surrogate: Dibromofluoromethane	105		88-124	%REC	5	05/03/2011 10:37	58908
Surrogate: 1,2-Dichloroethane-d4	93.0		79-115	%REC	5	05/03/2011 10:37	58908
Surrogate: Toluene-d8	101		80-114	%REC	5	05/03/2011 10:37	58908
Surrogate: Bromofluorobenzene	87.7		60-123	%REC	5	05/03/2011 10:37	58908

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

0009

**Mitkem Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-12S 041911

Lab ID: K0639-07

Project: NOW Corp. Site

Collection Date: 04/19/11 13:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 8:43	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 8:43	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 8:43	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 8:43	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 8:43	58908
1,1-Dichloroethane	ND		0.50	µg/L		105/03/2011 8:43	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 8:43	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 8:43	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 8:43	58908
Benzene	ND		0.50	µg/L		105/03/2011 8:43	58908
Trichloroethene	ND		0.50	µg/L		105/03/2011 8:43	58908
Toluene	ND		0.50	µg/L		105/03/2011 8:43	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 8:43	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 8:43	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 8:43	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 8:43	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 8:43	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 8:43	58908
Surrogate: Dibromofluoromethane	109		88-124	%REC		105/03/2011 8:43	58908
Surrogate: 1,2-Dichloroethane-d4	97.0		79-115	%REC		105/03/2011 8:43	58908
Surrogate: Toluene-d8	96.9		80-114	%REC		105/03/2011 8:43	58908
Surrogate: Bromofluorobenzene	89.3		60-123	%REC		105/03/2011 8:43	58908

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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MW12D 041911

Lab ID: K0639-08

Project: NOW Corp. Site

Collection Date: 04/19/11 13:43

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		105/03/2011 9:12	58908
Chloroethane	2.9		0.50	µg/L		105/03/2011 9:12	58908
1,1-Dichloroethene	1.4		0.50	µg/L		105/03/2011 9:12	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 9:12	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 9:12	58908
1,1-Dichloroethane	14		0.50	µg/L		105/03/2011 9:12	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 9:12	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 9:12	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 9:12	58908
Benzene	ND		0.50	µg/L		105/03/2011 9:12	58908
Trichloroethene	1.4		0.50	µg/L		105/03/2011 9:12	58908
Toluene	ND		0.50	µg/L		105/03/2011 9:12	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 9:12	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 9:12	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 9:12	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 9:12	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 9:12	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 9:12	58908
Surrogate: Dibromofluoromethane	104		88-124	%REC		105/03/2011 9:12	58908
Surrogate: 1,2-Dichloroethane-d4	84.3		79-115	%REC		105/03/2011 9:12	58908
Surrogate: Toluene-d8	104		80-114	%REC		105/03/2011 9:12	58908
Surrogate: Bromofluorobenzene	85.1		60-123	%REC		105/03/2011 9:12	58908

**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 Laboratories**

Date: 09-May-11

Client: AECOM Technical Services, Inc.

Client Sample ID: MWDUP 041911

Lab ID: K0639-09

Project: NOW Corp. Site

Collection Date: 04/19/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Chloroethane	ND		2.5	µg/L		5 05/03/2011 12:03	58908
1,1-Dichloroethene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
trans-1,2-Dichloroethene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Methyl tert-butyl ether	ND		2.5	µg/L		5 05/03/2011 12:03	58908
1,1-Dichloroethane	ND		2.5	µg/L		5 05/03/2011 12:03	58908
cis-1,2-Dichloroethene	2.7		2.5	µg/L		5 05/03/2011 12:03	58908
1,1,1-Trichloroethane	ND		2.5	µg/L		5 05/03/2011 12:03	58908
1,2-Dichloroethane	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Benzene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Trichloroethene	92		2.5	µg/L		5 05/03/2011 12:03	58908
Toluene	8.0		2.5	µg/L		5 05/03/2011 12:03	58908
1,1,2-Trichloroethane	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Tetrachloroethene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Chlorobenzene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Ethylbenzene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
m,p-Xylene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
o-Xylene	ND		2.5	µg/L		5 05/03/2011 12:03	58908
Surrogate: Dibromofluoromethane	106		88-124	%REC		5 05/03/2011 12:03	58908
Surrogate: 1,2-Dichloroethane-d4	97.4		79-115	%REC		5 05/03/2011 12:03	58908
Surrogate: Toluene-d8	103		80-114	%REC		5 05/03/2011 12:03	58908
Surrogate: Bromofluorobenzene	84.5		60-123	%REC		5 05/03/2011 12:03	58908

**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 Laboratories****Date:** 09-May-11**Client:** AECOM Technical Services, Inc.**Client Sample ID:** TRIPBLANK041911**Lab ID:** K0639-10**Project:** NOW Corp. Site**Collection Date:** 04/19/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SW846 8260C -- VOC by GC-MS (25 mL Purge)</b>							<b>SW8260_25_W</b>
Vinyl chloride	ND		0.50	µg/L		105/03/2011 5:22	58908
Chloroethane	ND		0.50	µg/L		105/03/2011 5:22	58908
1,1-Dichloroethene	ND		0.50	µg/L		105/03/2011 5:22	58908
trans-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 5:22	58908
Methyl tert-butyl ether	ND		0.50	µg/L		105/03/2011 5:22	58908
1,1-Dichloroethane	ND		0.50	µg/L		105/03/2011 5:22	58908
cis-1,2-Dichloroethene	ND		0.50	µg/L		105/03/2011 5:22	58908
1,1,1-Trichloroethane	ND		0.50	µg/L		105/03/2011 5:22	58908
1,2-Dichloroethane	ND		0.50	µg/L		105/03/2011 5:22	58908
Benzene	ND		0.50	µg/L		105/03/2011 5:22	58908
Trichloroethene	ND		0.50	µg/L		105/03/2011 5:22	58908
Toluene	ND		0.50	µg/L		105/03/2011 5:22	58908
1,1,2-Trichloroethane	ND		0.50	µg/L		105/03/2011 5:22	58908
Tetrachloroethene	ND		0.50	µg/L		105/03/2011 5:22	58908
Chlorobenzene	ND		0.50	µg/L		105/03/2011 5:22	58908
Ethylbenzene	ND		0.50	µg/L		105/03/2011 5:22	58908
m,p-Xylene	ND		0.50	µg/L		105/03/2011 5:22	58908
o-Xylene	ND		0.50	µg/L		105/03/2011 5:22	58908
Surrogate: Dibromofluoromethane	102		88-124	%REC		105/03/2011 5:22	58908
Surrogate: 1,2-Dichloroethane-d4	84.3		79-115	%REC		105/03/2011 5:22	58908
Surrogate: Toluene-d8	102		80-114	%REC		105/03/2011 5:22	58908
Surrogate: Bromofluorobenzene	79.4		60-123	%REC		105/03/2011 5:22	58908

**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

## ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: K0639

Project: NOW Corp. Site

SW8260\_25\_W

SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: MB-58908	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 05/02/11 11:33	Run ID: V5_110502B			
Client ID: MB-58908	Batch ID: 58908	Units: µg/L	Analysis Date: 05/03/11 2:01	SeqNo: 1520037			
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC LowLimit	HighLimit	RPD Ref Val %RPD RPDLimit Qual
Vinyl chloride	ND	0.15	0.50				
Chloroethane	ND	0.24	0.50				
1,1-Dichloroethene	ND	0.19	0.50				
trans-1,2-Dichloroethene	ND	0.14	0.50				
Methyl tert-butyl ether	ND	0.13	0.50				
1,1-Dichloroethane	ND	0.18	0.50				
cis-1,2-Dichloroethene	ND	0.19	0.50				
1,1,1-Trichloroethane	ND	0.11	0.50				
1,2-Dichloroethane	ND	0.16	0.50				
Benzene	ND	0.12	0.50				
Trichloroethene	ND	0.13	0.50				
Toluene	ND	0.14	0.50				
1,1,2-Trichloroethane	ND	0.20	0.50				
Tetrachloroethene	ND	0.17	0.50				
Chlorobenzene	ND	0.13	0.50				
Ethylbenzene	ND	0.13	0.50				
m,p-Xylene	ND	0.22	0.50				
o-Xylene	ND	0.17	0.50				
Surrogate:	10.10		10.00	0	101	88	124 0
Dibromofluoromethane							
Surrogate: 1,2-Dichloroethane-d4	10.41		10.00	0	104	79	115 0
Surrogate: Toluene-d8	9.435		10.00	0	94.3	80	114 0
Surrogate: Bromofluorobenzene	8.561		10.00	0	85.6	60	123 0

0014

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 ml 1.04 29 A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.

Work Order: K0639

Project: NOW Corp. Site

# ANALYTICAL QC SUMMARY REPORT

SW8260\_25\_W

SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCS-58908		SampType: LCS		TestCode: SW8260_25_W		Prep Date: 05/02/11 11:33		Run ID: V5_110502B				
Client ID: LCS-58908		Batch ID: 58908		Units: µg/L		Analysis Date: 05/03/11 1:03		SeqNo: 1520035				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.33	0.15	0.50	10.00	0	103	77	120	0			
Chloroethane	9.759	0.24	0.50	10.00	0	97.6	75	135	0			
1,1-Dichloroethene	10.89	0.19	0.50	10.00	0	109	81	125	0			
trans-1,2-Dichloroethene	10.80	0.14	0.50	10.00	0	108	60	137	0			
Methyl tert-butyl ether	11.23	0.13	0.50	10.00	0	112	61	134	0			
1,1-Dichloroethane	10.69	0.18	0.50	10.00	0	107	82	120	0			
cis-1,2-Dichloroethene	11.28	0.19	0.50	10.00	0	113	84	116	0			
1,1,1-Trichloroethane	10.59	0.11	0.50	10.00	0	106	80	124	0			
1,2-Dichloroethane	11.01	0.16	0.50	10.00	0	110	86	117	0			
Benzene	11.16	0.12	0.50	10.00	0	112	81	121	0			
Trichloroethene	11.36	0.13	0.50	10.00	0	114	74	123	0			
Toluene	10.99	0.14	0.50	10.00	0	110	88	117	0			
1,1,2-Trichloroethane	11.03	0.20	0.50	10.00	0	110	83	121	0			
Tetrachloroethene	11.00	0.17	0.50	10.00	0	110	74	115	0			
Chlorobenzene	10.93	0.13	0.50	10.00	0	109	83	112	0			
Ethylbenzene	11.44	0.13	0.50	10.00	0	114	87	110	0			
m,p-Xylene	21.92	0.22	0.50	20.00	0	110	87	114	0			
o-Xylene	10.97	0.17	0.50	10.00	0	110	84	114	0			
Surrogate:	9.954		0.50	10.00	0	99.5	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	10.59		0.50	10.00	0	106	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.833		0.50	10.00	0	98.3	80	114	0			
Surrogate:	9.312		0.50	10.00	0	93.1	60	123	0			
Bromofluorobenzene												

0015

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank

m11.04.29.A

J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.

Work Order: K0639

Project: NOW Corp. Site

# ANALYTICAL QC SUMMARY REPORT

SW8260\_25\_W

SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCSD-58908	SampType: LCSD	TestCode: SW8260_25_W	Prep Date: 05/02/11 11:33	Run ID: V5_110502B								
Client ID: LCSD-58908	Batch ID: 58908	Units: µg/L	Analysis Date: 05/03/11 1:32	SeqNo: 1520036								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.919	0.15	0.50	10.00	0	99.2	77	120	10.33	4.02	40	
Chloroethane	9.739	0.24	0.50	10.00	0	97.4	75	135	9.759	0.203	40	
1,1-Dichloroethene	10.01	0.19	0.50	10.00	0	100	81	125	10.89	8.4	40	
trans-1,2-Dichloroethene	10.83	0.14	0.50	10.00	0	108	60	137	10.80	0.28	40	
Methyl tert-butyl ether	10.73	0.13	0.50	10.00	0	107	61	134	11.23	4.48	40	
1,1-Dichloroethane	10.59	0.18	0.50	10.00	0	106	82	120	10.69	1.0	40	
cis-1,2-Dichloroethene	11.13	0.19	0.50	10.00	0	111	84	116	11.28	1.33	40	
1,1,1-Trichloroethane	10.28	0.11	0.50	10.00	0	103	80	124	10.59	2.96	40	
1,2-Dichloroethane	10.43	0.16	0.50	10.00	0	104	86	117	11.01	5.44	40	
Benzene	10.48	0.12	0.50	10.00	0	105	81	121	11.16	6.28	40	
Trichloroethene	10.84	0.13	0.50	10.00	0	108	74	123	11.36	4.7	40	
Toluene	10.33	0.14	0.50	10.00	0	103	88	117	10.99	6.17	40	
1,1,2-Trichloroethane	10.62	0.20	0.50	10.00	0	106	83	121	11.03	3.78	40	
Tetrachloroethene	11.09	0.17	0.50	10.00	0	111	74	115	11.00	0.769	40	
Chlorobenzene	11.04	0.13	0.50	10.00	0	110	83	112	10.93	0.96	40	
Ethylbenzene	11.13	0.13	0.50	10.00	0	111	87	110	11.44	2.76	40	S
m,p-Xylene	22.61	0.22	0.50	20.00	0	113	87	114	21.92	3.09	40	
o-Xylene	11.27	0.17	0.50	10.00	0	113	84	114	10.97	2.69	40	
Surrogate:	9.538		0.50	10.00	0	95.4	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	8.763		0.50	10.00	0	87.6	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	10.07		0.50	10.00	0	101	80	114	0			
Surrogate:	9.501		0.50	10.00	0	95.0	60	123	0			
Bromofluorobenzene												

0016

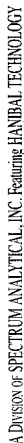
Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

**WorkOrder: K0639****04/20/2011 10:18****Mitkem Laboratories****Client ID:** EARTH\_NY**Project:** NOW Corp. Site**WO Name:** NOW Corp. Site**Location:** NOW\_CORP,**Comments:** N/A**Case:****SDG:****HC Due:** 05/06/11**Fax Due:****Fax Report:** ☐**Report Level:** LEVEL 2**Special Program:****EDD:****PO:** 94017.02

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0639-01A	MW-1 041911	04/19/2011 12:00	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-02A	MW-4S 041911	04/19/2011 09:36	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-03A	MW-6S 041911	04/19/2011 10:55	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-04A	MW-6D 041911	04/19/2011 11:56	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-05A	MW-7S 041911	04/19/2011 09:55	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-06A	MW-7D 041911	04/19/2011 09:50	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-07A	MW-12S 041911	04/19/2011 13:30	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-08A	MW12D 041911	04/19/2011 13:43	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-09A	MWDUP 041911	04/19/2011 00:00	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0639-10A	TRIPBLANK041911	04/19/2011 00:00	04/20/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

0017 HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold



## Page 1 of 1

Special Handling:

TAT- Indicate Date Needed:

• All TATs subject to laboratory approval.

Min. 24-hour notification needed for rushes.

· Samples disposed of after 30 days unless

otherwise instructed.

Report To: AECOM

40 British American Blvd.

Latham NY 12110

Project Mgr.: Stephen Choiniere

Invoice To:

Same

P.O. No.: \_\_\_\_\_

RQN: \_\_\_\_\_

1= $\text{Na}_2\text{S}_2\text{O}_3$  2= $\text{HCl}$  3= $\text{H}_2\text{SO}_4$  4= $\text{HNO}_3$  5= $\text{NaOH}$  6=Ascorbic Acid 7= $\text{CH}_3\text{OH}$   
8= $\text{NaHSO}_4$  9= $\text{H}_2\text{O}$  10= $\text{H}_2\text{O}$  11= $\text{H}_2\text{O}$

6=Ascorbic Acid      7=CH<sub>3</sub>OH

1111

DW=Drinking Water      GW=Groundwater      WW=Wastewater

O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air

X1=\_\_\_\_\_

X2=\_\_\_\_\_

X3=\_\_\_\_\_

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:
	MW-1 041911	4/19/11	12:00
	MW-45 041911		9:36
	MW-65 041911		10:55
	MW-6D 041911		11:56
	MW-75 041911		9:55
	MW-7D 041911		9:50
	MW-12S 041911		13:30
	MW-12D 041911		13:43
	MWDup 041911		—
	Trip Blank 041911		

□ E-mail to:

EDD Format

Condition upon receipt:

Relinquished by:

Received by:

Date:	Time:
-------	-------

Steve Day

4/19/11

5:43

Fed Ex

Daniel Miller

8:16

## MITKEM LABORATORIES

## Sample Condition Form

Page 1 of 1

Received By: <u>Daniel Mcken</u>		Reviewed By: <u>GN</u>		Date: <u>4/20/11</u>		Mitkem Work Order #: <u>K0639</u>	
Client Project: <u>Now cor p</u>				Client: <u>earth ny</u>			
		Lab Sample ID		Preservation (pH)			VOA Matrix
				HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	HCl	NaOH
				H <sub>3</sub> PO <sub>4</sub>			
							Soil Headspace or Air Bubble ≥ 1/4"
1) Cooler Sealed	<u>Yes</u> / No	<u>K0639</u>	<u>01</u>				<u>H</u>
			<u>02</u>				<u>UA</u>
2) Custody Seal(s)	<u>Present</u> / Absent		<u>03</u>				<u>H</u>
	Coolers / Bottles		<u>04</u>				
	<u>Intact</u> / Broken		<u>05</u>				
			<u>06</u>				
3) Custody Seal Number(s)	<u>NA</u>		<u>07</u>				
			<u>08</u>				
			<u>09</u>				
		<u>K0639</u>	<u>10</u>				<u>UA</u>
4) Chain-of-Custody	<u>Present</u> / Absent	<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>4-20-11</p> <p>DR</p> </div>					
5) Cooler Temperature	<u>6°C</u>						
IR Temp Gun ID	<u>M+-1</u>						
Coolant Condition	<u>Ice</u>						
6) Airbill(s)	<u>Present</u> / Absent						
Airbill Number(s)	<u>FD EX</u>						
	<u>8747 5541 7186</u>						
	<u>/</u>						
7) Samples Bottles	<u>Intact</u> / Broken / Leaking						
8) Date Received	<u>4-20-11</u>						
9) Time Received	<u>8:11</u>						
Preservative Name/Lot No.:							

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO <sub>4</sub>	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no

Y:\Controlled Forms\QAF.0006 sample condition form.xls

0019



**Last Page of Data Report**