

Operation, Maintenance and Monitoring Report November 2011 – June 2012

**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

September 2012

September 7, 2012

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

**Re: NOW Corporation - Site #3-14-008
O&M Summary Report: November 2011 – June 2012**

Dear Mr. Hoffman:

This 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 235-day period (**October 21, 2011 – June 12, 2012**).

On October 22, 2011, the Carbtrol air stripper exceeded its operational life, forcing the system to be shutdown until repairs were complete. In December, a bid document detailing proposed system upgrades, including a new air stripper unit, was submitted to the NYSDEC. In response, NYSDEC proposed that AECOM install a used air stripper that NYSDEC would deliver to the site; the air stripper unit was brought to the site April 5, 2012. Between April and June, the stripper was refurbished, including installing new door and tray felt gaskets, minor changes to the plumbing scheme for proper influent and effluent conveyance, and rigorous cleaning.

Additionally, at your direction, quotes were obtained in regards to installing a variable frequency drive (VFD) on the air stripper blower and completing associated rewiring on May 3, 2012. Veith Electric, out of Staatsburg, New York, was secured for service upgrades. The new VFD was installed on June 6, 2012, and was upgraded to have auto-start capability on June 18. Between June 6 and 18, the system was experiencing frequent shutdown/restart cycles. On June 18, it was determined that a malfunctioning damper was causing unnecessary alarms resulting in the shutdowns. Repairs were made to the damper and the system has been operational since then.

Approximately 216,300 gallons of water were treated between June 6 and June 12, 2012. Discharge from the treatment system averaged approximately 36,050 gallons per day (gpd) of operation, compared to 12,068 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 86,975,900 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Tables 1A and 1B summarize influent and effluent, and recovery well analytical data for water samples collected on June 6 and June 12, 2012. **Effluent limitations were not exceeded for any analyte for either sampling event.** Table 2 presents selected operational data recorded on the June 12 sampling date. Table 3 summarizes groundwater elevation results from the monitoring well observation events conducted on December 28, 2011, March 27, 2012, and June 20, 2012.

Another purpose of the June 12 sampling event was to observe system performance with newly installed VFD online. The VFD was set at various frequencies, thereby altering blower speeds, and influent and effluent samples were collected after brief operational periods at each setting. No effluent exceedances were reported at the various VFD frequencies, however, as VFD frequency increased, effluent VOC concentrations generally decreased, suggesting greater removal performance when using a higher VFD

frequency setting. At 55 and 60 Hz, no VOC detections (beyond the laboratory reporting limits) were reported. Copies of the analytical laboratory reports are attached.

AECOM made 11 site visits during the period from October 21 2011 to June 20 2012 to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. The October 21, 2011 service visit was described in the previous report. Details for the current period follow:

December 28, 2011- AECOM collected monitoring well water levels. The measurements were completed under non-pumping conditions.

March 27, 2012- AECOM collected monitoring well water levels under non-pumping conditions. AECOM also took the building fire extinguisher for certification, and noted that site needed propane. NYSDEC was informed, and made arrangements to have propane delivered.

April 9- AECOM inspected the delivered air stripper, air blower, and other delivered equipment and to determine necessary materials and system modifications for proper system operation.

April 23-25- AECOM completed necessary air stripper maintenance, including cleaning, installing new felt gaskets for the door and trays, and other preparation activities.

May 8- AECOM performed annual groundwater monitoring event.

June 6- AECOM completed initial system preparation and took influent and effluent samples. Veith Electric was onsite to install the VFD and a 110V outlet, and to disconnect hot wires.

June 12- AECOM completed final system repairs and run system. AECOM technician also was onsite to collect monthly influent and effluent samples and instrumentation readings.

June 18- AECOM technician was onsite with Veith Electric. Veith re-wired the VFD to have auto-start capability and over-current protection. AECOM technician also noted that the damper which partially controls air blower function had slid down, causing frequent shut downs due to system pressure drops. AECOM adjusted the damper and observed normal system operation.

June- 20- AECOM collected quarterly water levels in site monitoring wells.

Historical groundwater analytical results from 17 monitoring wells and current results from eight wells are presented in Table 5. Monitoring well locations are shown on Figure 1. A copy of the analytical report is attached. 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 most of these wells is trichloroethene (TCE). No analytes were detected above standards in two of the wells sampled during this period (MW-4S and MW-12S).

The groundwater recovery and treatment system at the NOW Corporation Site had been off-line since October 2011, approximately 6 months prior to the May 2012 sampling event. The only significant changes noted in total VOC (tVOC) concentrations in the monitoring wells was at MW-7D, which showed an increase from 112.75 µg/L in April 2011 to 283 µg/L in May 2012. No other wells appeared to be impacted by the recovery system downtime.

During the last seven sampling events, tVOCs at **MW-1** have ranged between 97 µg/L and 128.1 µg/L. The highest tVOC concentration in this well was detected in 1994 at 446 µg/L. By a small margin, the May 2012 concentration of 128.1 µg/L was the highest since August 2004.

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 38.3 µg/L, not deviating much from the 39 µg/L in April 2011, but 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 µg/L, **MW-6D** has shown very stable results, varying between only 20 µg/L and 58 µg/L in 12 sampling events, with 32.7 µg/L for the current sampling event.

During the current sampling event, **MW-7S** exhibited a tVOC concentration of 95.7 µg/L, similar to the year earlier result, but considerably lower than 313 µg/L in May 2010, the highest since 1998.

MW-7D result from the current event was 283 µg/L of tVOCs, as compared to a reported high of 493 µg/L detected during the 2000 sampling event. This concentration has increased significantly from the 112.75 µg/L detected in the last sampling event (April 2011).

MW-12D reported tVOC concentrations ranging between 16 µg/L and 34 µg/L from 2008 to 2012, with consistent exceedances of only the 1,1-DCA standard. The May 2012 sampling event showed a concentration of 21.39 µg/L.

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

FILE NAME: 94017-BASE.dwg

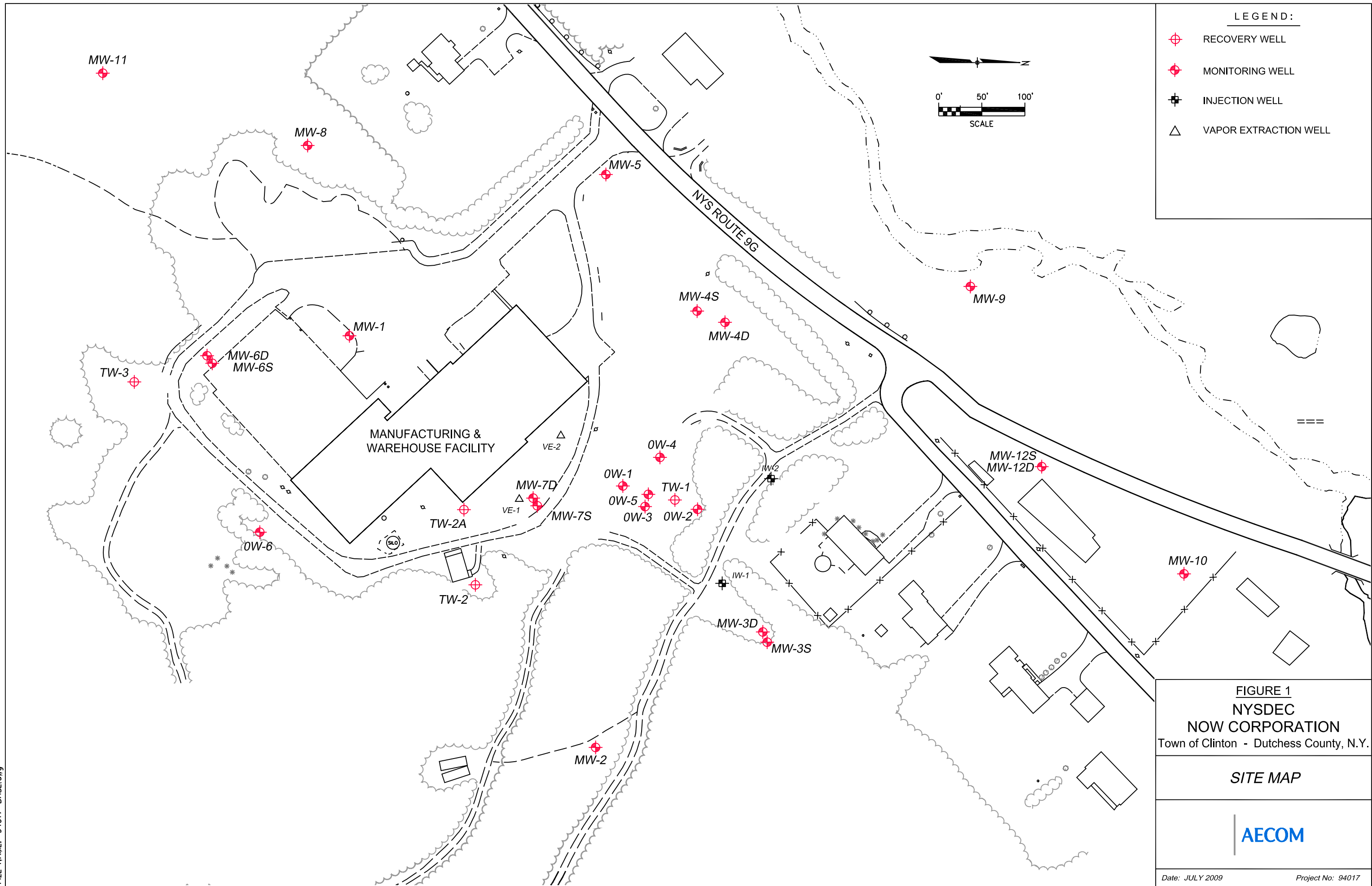


Table 1A
Summary of Influent and Effluent Data
Sampling Date: June 12, 2012
NOW Corporation Site
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	
			TW-1	TW-2A	TW-3		(units)
Quantity treated, per day		36,050				Monitor	gallons
pH	6.7	6.9				6.5 to 8.5	standard units
Oil and Grease	<5	<5	NA	NA	NA	15	mg/L
Total Cyanide	<10	<10	NA	NA	NA	10	ug/L
TDS	270	280	NA	NA	NA	1000	mg/L
TSS	<10	<10	NA	NA	NA	50	mg/L
Aluminum, Total	<200	<200	NA	NA	NA	Monitor	ug/L
Arsenic, Total	<20	<20	NA	NA	NA	100	ug/L
Barium, Total	75 J	82 J	NA	NA	NA	Monitor	ug/L
Chromium	<20	<20	NA	NA	NA	400	ug/L
Copper	<25	<25	NA	NA	NA	24	ug/L
Iron	<200	<200	NA	NA	NA	600	ug/L
Mercury	<0.2	<0.2	NA	NA	NA	0.8	ug/L
Manganese	82	91	NA	NA	NA	Monitor	ug/L
Nickel	1.4 J	1.3 J	NA	NA	NA	200	ug/L
Zinc	20 BJ	23 BJ	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	260	<0.5	30	350	5.3	10	ug/L
1,1,2-Trichloroethane	<4	<0.5	<2	<8	<0.5	1.2	ug/L
1,1-Dichloroethane	160	<0.5	110	200	20	10	ug/L
1,1-Dichloroethene	35	<0.5	20	52	2.2	0.5	ug/L
1,2-Dichloroethane	<4	<0.5	<2	<8	<0.5	1.6	ug/L
Benzene	<4	<0.5	<2	<8	<0.5	1.4	ug/L
Chlorobenzene	<4	<0.5	<2	<8	<0.5	10	ug/L
Chloroethane	<4	<0.5	<2	<8	<0.5	10	ug/L
cis -1,2-Dichloroethene	12	<0.5	7.8	15	0.84	5	ug/L
Ethylbenzene	<4	<0.5	<2	<8	<0.5	10	ug/L
o-Xylene	<4	<0.5	<2	<8	<0.5	5	ug/L
m,p-Xylene	<4	<0.5	<2	<8	<0.5	10	ug/L
Tetrachloroethene	<4	<0.5	<2	<8	<0.5	1.4	ug/L
Toluene	<4	<0.5	<2	<8	<0.5	10	ug/L
trans -1,2-Dichloroethene	<4	<0.5	<2	<8	<0.5	5	ug/L
Trichloroethene	280	<0.5	100	390	20	6	ug/L
Vinyl Chloride	<4	<0.5	<2	<8	<0.5	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 1B
Summary of Influent and Effluent Data
Sampling Date: June 6, 2012 "Initial Restart"
NOW Corporation Site
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	
			TW-1	TW-2A	TW-3		(units)
Quantity treated, per day		NA				Monitor	gallons
pH	NA	NA				6.5 to 8.5	standard units
Oil and Grease	NA	NA	NA	NA	NA	15	mg/L
Total Cyanide	NA	NA	NA	NA	NA	10	ug/L
TDS	NA	NA	NA	NA	NA	1000	mg/L
TSS	NA	NA	NA	NA	NA	50	mg/L
Aluminum, Total	NA	NA	NA	NA	NA	Monitor	ug/L
Arsenic, Total	NA	NA	NA	NA	NA	100	ug/L
Barium, Total	NA	NA	NA	NA	NA	Monitor	ug/L
Chromium	NA	NA	NA	NA	NA	400	ug/L
Copper	NA	NA	NA	NA	NA	24	ug/L
Iron	NA	NA	NA	NA	NA	600	ug/L
Mercury	NA	NA	NA	NA	NA	0.8	ug/L
Manganese	NA	NA	NA	NA	NA	Monitor	ug/L
Nickel	NA	NA	NA	NA	NA	200	ug/L
Zinc	NA	NA	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	240	<0.5	NA	NA	NA	10	ug/L
1,1,2-Trichloroethane	<4	<0.5	NA	NA	NA	1.2	ug/L
1,1-Dichloroethane	220	1.1	NA	NA	NA	10	ug/L
1,1-Dichloroethene	35	<0.5	NA	NA	NA	0.5	ug/L
1,2-Dichloroethane	<4	<0.5	NA	NA	NA	1.6	ug/L
Benzene	<4	<0.5	NA	NA	NA	1.4	ug/L
Chlorobenzene	<4	<0.5	NA	NA	NA	10	ug/L
Chloroethane	<4	<0.5	NA	NA	NA	10	ug/L
cis -1,2-Dichloroethene	10	<0.5	NA	NA	NA	5	ug/L
Ethylbenzene	<4	<0.5	NA	NA	NA	10	ug/L
o-Xylene	<4	<0.5	NA	NA	NA	5	ug/L
m,p-Xylene	<4	<0.5	NA	NA	NA	10	ug/L
Tetrachloroethene	<4	<0.5	NA	NA	NA	1.4	ug/L
Toluene	<4	<0.5	NA	NA	NA	10	ug/L
trans -1,2-Dichloroethene	<4	<0.5	NA	NA	NA	5	ug/L
Trichloroethene	260	0.86	NA	NA	NA	6	ug/L
Vinyl Chloride	<4	<0.5	NA	NA	NA	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 June 2012 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:		6/12/12	Units
<i>TW-1</i>			
	Pumping Rate	2	GPM
	Water Level Above Transducer	25.81	feet
	Flow Meter Reading	6,246,100	gallons
	Pump Pressure	60	psi
<i>TW-2A</i>			
	Pumping Rate	~14	GPM
	Water Level Above Transducer	31.75	feet
	Flow Meter Reading	23,340,800	gallons
	Pump Pressure	0	psi
<i>TW-3</i>			
	Pumping Rate	5	GPM
	Water Level Above Transducer	54.45	feet
	Flow Meter Reading	9,427,800	gallons
	Pump Pressure	80	psi
<i>Air Stripper</i>			
	Stripper Blower Pressure	19.5	inches H ₂ O
	Air Temperature in Stripper	60	°F
<i>Effluent Flow</i>			
	Effluent Flow this period (calculated)	216,300	gallons
	Total Effluent Flow (calculated)	86,975,900	gallons

Table 3
Groundwater Levels

NOW Corporation Site
Town of Clinton, New York

Well ID	MP Elevation	12/28/11		3/27/12		6/20/12	
		Depth to Water (Ft below MP)	GW Elevation	Depth to Water (Ft below MP)	GW Elevation	Depth to Water (Ft below MP)	GW Elevation
MW-1	289.50	8.71	280.79	10.38	279.12	11.83	277.67
MW-2	332.51	26.05	306.46	29.19	303.32	28.30	304.21
MW-3	312.83	23.84	288.99	28.78	284.05	21.09	291.74
MW-3S	312.51	NA	NA	26.70	285.81	24.80	287.71
MW-4	298.29	19.95	278.34	21.87	276.42	22.53	275.76
MW-4D	298.16	19.83	278.33	21.70	276.46	22.35	275.81
MW-5	285.48	17.17	268.31	18.72	266.76	19.08	266.40
MW-6S	287.90	3.25	284.65	4.56	283.34	6.25	281.65
MW-6D	287.25	5.00	282.25	7.19	280.06	8.91	278.34
MW-7S	292.12	5.36	286.76	8.17	283.95	18.19	273.93
MW-7D	292.54	6.20	286.34	9.08	283.46	47.28	245.26
OW-1	307.75	27.67	280.08	30.59	277.16	48.39	259.36
OW-2	305.96	21.45	284.51	25.54	280.42	71.07	234.89
OW-6	294.81	4.09	290.72	6.10	288.71	5.96	288.85
IW-1	312.46	25.74	286.72	30.70	281.76	30.95	281.51
IW-2	304.56	28.99	275.57	31.48	273.08	38.19	266.37

Note: N/A indicates data are not available.

MP denotes measuring point.

Table 4
VFD Frequency Sampling Results Summary

NOW Corporation Site
Town of Clinton, New York

Parameter	Effluent VOC Results at Various VFD Speed Settings (Hz)					TVOC Influent Results			ELMR
	60 Hz Reading 6/12/2012	55 Hz Reading 6/12/2012	50 Hz Reading 6/6/2012	45 Hz Reading 6/12/2012	40 Hz Reading 6/12/2012	60 Hz Reading 6/12/2012	50 Hz Reading 6/6/2012	45 Hz Reading 6/12/2012	
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1-Dichloroethene	ND	ND	ND	ND	ND	35	35	37	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,1-Dichloroethane	ND	ND	1.1	0.8	1.3	160	220	160	10
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	12	10	12	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	260	240	250	1.2
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	1.6
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Trichloroethene	ND	ND	0.86	0.79	1.3	280	260	280	6
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	1.2
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	10
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	10
m,p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	5

1) No influent sample was taken at a 55 Hz frequency.

2) All values are reported in µg/l.

Table 5
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	5/8/12	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	28/25 *	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	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	16/15 *	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	3.1/2.8 *	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/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	N/A	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	8	6	ND	ND	ND	1.3	ND	ND	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	9.0/8.9 *	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/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	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	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	ND	ND
Toluene/5	2	N/A	ND	ND	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	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	72/67 *	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	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	128.1/118.7 *	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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
Groundwater Analytical Data Summary
NOW Corporation
Site 3-14-008
Town of Clinton, New York

Analytes/Standards**	MW-3D										MW-3S									
	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	1	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	0.7	3	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
TOTAL VOCs	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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
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	5/8/12	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	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	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	2.0	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	ND	
1,2-Dichloroethane/0.6	N/A	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	
Benzene/1	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	
Chlorobenzene/5	N/A	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	
Chloroethane/5	ND	ND	ND	ND	ND	ND	0.8	0.6	2.5	ND	1.5/1.4*	1.4	1.5	1.2	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	ND	
Ethylbenzene/5	N/A	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	
m&p-Xylene/5	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	
o-Xylene/5	N/A	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	
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	ND	
Toluene/5	1	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	
trans-1,2-Dichloroethene/5	N/A	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	
Trichloroethene/5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J/ND*	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	ND	
TOTAL VOCs	1	4	5	0	0	2.2	2.4	1.6	4.8	2.5	4.05	3.4	3.7	3.2	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.
- 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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
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	5/8/12
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	8.5
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	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	3
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	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	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	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	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	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	1.8
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	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	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	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	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	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	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	25
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	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	38.3

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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
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	5/8/12	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	5/8/12				
1,1,1-Trichloroethane/5	160	13	ND	7	5.8	3	1.2	4.1	1.8	1.1	2.3	3.3	3.1	34	N/A	8.5/8.6*	13	12	5.4	2.9	ND	12	3	ND				
1,1,2-Trichloroethane/1	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	ND				
1,1-Dichloroethane/5	140	20	52	ND	16	26	26	17	18	11	13	15	19	11	N/A	3.2/3*	6.4	2.4	1.7	2.2	ND	7.3	ND	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	1.8	ND	N/A	ND/ND*	0.9	ND	ND	0.51	ND	0.95	ND	ND				
1,2-Dichloroethane/0.6	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	ND				
Benzene/1	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	ND				
Chlorobenzene/5	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	ND				
Chloroethane/5	ND	ND	ND	ND	ND	0.6	0.8	3.4	ND	0.94	ND	1.6	1.8	ND	N/A	ND/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	1.0	17	N/A	20/20*	16	9	5.9	9.7	5.6	31	5.4	4.7				
Ethylbenzene/5	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	ND				
m&p-Xylene/5	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	ND				
o-Xylene/5	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	ND				
Tetrachloroethene/5	ND	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	ND				
Toluene/5	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	ND				
trans-1,2-Dichloroethene/5	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	ND				
Trichloroethene/5	11	13	6	8	11	7.4	6.6	8.2	7.1	5.8	7.5	8.6	6	280	N/A	160/160*	190	160	91 D	230	82	260 D	82	91				
Vinyl Chloride/2	ND	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	ND				
TOTAL VOCs	312.7	48	58	45	35.4	40.3	37.4	35.6	29.6	20.43	25.2	31.3	32.7	342	0	191.7	226.3	183.4	104	245.57	87.6	312.65	90.4	95.7				

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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
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	5/8/12	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	ND		
1,1,2-Trichloroethane/1	ND	N/A	ND	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*	23	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	ND		
1,2-Dichloroethane/0.6	ND	N/A	ND	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	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*	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	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	ND		
Ethylbenzene/5	ND	N/A	ND	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*	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*	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	ND		
Toluene/5	ND	N/A	ND	ND	ND/ND*	ND	ND	ND/ND*	ND	ND/ND*	9.3/8*	ND	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*	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	110/92*	260	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*	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	283	0.8	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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
Groundwater Analytical Data Summary
NOW Corporation
Site 3-14-008
Town of Clinton, New York

Analytes/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:

- 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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Table 5
Groundwater Analytical Data Summary
NOW Corporation
Site 3-14-008
Town of Clinton, New York

Analytes/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	5/8/12	5/29/08	4/27/09	5/27/10	4/19/11	5/8/12
1,1,1-Trichloroethane/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	0.99
1,1,2-Trichloroethane/1	N/A	ND	ND	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	ND	25	11	13	14	15
1,1-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	2	1.5	1.8	1.4	1.6
1,2-Dichloroethane/0.6	N/A	ND	ND	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	ND	ND
Chlorobenzene/5	N/A	ND	ND	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	ND	4.6	2	4.5	2.9	2.0
cis-1,2-Dichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	0.25 J	0.25 J	0.30 J	ND	ND
Ethylbenzene/5	N/A	ND	ND	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	ND	ND
o-Xylene/5	N/A	ND	ND	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	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	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	ND	ND
Trichloroethene/5	ND	ND	ND	ND	ND	ND	ND/ND*	ND	ND	ND	ND	ND	ND	ND	1.6	1.7	1.5	1.4	1.8
Vinyl Chloride/2	ND	ND	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	0	33.69	16.45	21.1	19.7	21.39

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
- 10) May 2012 Sampling Event - groundwater recovery wells had been inactive since October 2011.

Report Date:
25-Jun-12 12:58



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

Laboratory Report

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

Work Order: L1249
Project : NOW Corp. Site
Project #:

Attn: Stephen Choiniere

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L1249-01	EFF-060612	Aqueous	06-Jun-12 15:10	07-Jun-12 09:07
L1249-02	INF-060612	Aqueous	06-Jun-12 15:15	07-Jun-12 09:07
L1249-03	TB-060612	Aqueous	06-Jun-12 00:00	07-Jun-12 09:07

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 sample(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAP or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L1249

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: V1
Instrument Type: GCMS-VOA
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

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.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

INF-060612 (L1249-02ADL) : Dilution Factor: 16

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 Spectrum, 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.

A handwritten signature in black ink, appearing to be 'J. H. P.' or similar, written in a cursive style.

Signed: _____

Date: _____ 6/25/2012 _____

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/21/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-060612

Lab ID: L1249-01

Project: NOW Corp. Site

Collection Date: 06/06/12 15:10

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	ug/L		1 06/11/2012 15:23	66652
Chloroethane	ND		0.50	ug/L		1 06/11/2012 15:23	66652
1,1-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/11/2012 15:23	66652
1,1-Dichloroethane	1.1		0.50	ug/L		1 06/11/2012 15:23	66652
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/11/2012 15:23	66652
1,2-Dichloroethane	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Benzene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Trichloroethene	0.86		0.50	ug/L		1 06/11/2012 15:23	66652
Toluene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Tetrachloroethene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Chlorobenzene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Ethylbenzene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
m,p-Xylene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
o-Xylene	ND		0.50	ug/L		1 06/11/2012 15:23	66652
Surrogate: Dibromofluoromethane	105		88-124	%REC		1 06/11/2012 15:23	66652
Surrogate: 1,2-Dichloroethane-d4	99.2		79-115	%REC		1 06/11/2012 15:23	66652
Surrogate: Toluene-d8	95.7		80-114	%REC		1 06/11/2012 15:23	66652
Surrogate: Bromofluorobenzene	95.3		60-123	%REC		1 06/11/2012 15:23	66652

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/21/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-060612

Lab ID: L1249-02

Project: NOW Corp. Site

Collection Date: 06/06/12 15:15

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		0.50	ug/L		1 06/11/2012 16:23	66652
Chloroethane	ND		0.50	ug/L		1 06/11/2012 16:23	66652
1,1-Dichloroethene	36		0.50	ug/L		1 06/11/2012 16:23	66652
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/11/2012 16:23	66652
1,1-Dichloroethane	130	E	0.50	ug/L		1 06/11/2012 16:23	66652
cis-1,2-Dichloroethene	11		0.50	ug/L		1 06/11/2012 16:23	66652
1,1,1-Trichloroethane	170	E	0.50	ug/L		1 06/11/2012 16:23	66652
1,2-Dichloroethane	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Benzene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Trichloroethene	170	E	0.50	ug/L		1 06/11/2012 16:23	66652
Toluene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Tetrachloroethene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Chlorobenzene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Ethylbenzene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
m,p-Xylene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
o-Xylene	ND		0.50	ug/L		1 06/11/2012 16:23	66652
Surrogate: Dibromofluoromethane	102		88-124	%REC		1 06/11/2012 16:23	66652
Surrogate: 1,2-Dichloroethane-d4	106		79-115	%REC		1 06/11/2012 16:23	66652
Surrogate: Toluene-d8	96.3		80-114	%REC		1 06/11/2012 16:23	66652
Surrogate: Bromofluorobenzene	98.1		60-123	%REC		1 06/11/2012 16:23	66652

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/21/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-060612

Lab ID: L1249-02

Project: NOW Corp. Site

Collection Date: 06/06/12 15:15

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	ug/L		16 06/11/2012 18:22	66652
Chloroethane	ND		8.0	ug/L		16 06/11/2012 18:22	66652
1,1-Dichloroethene	35		8.0	ug/L		16 06/11/2012 18:22	66652
trans-1,2-Dichloroethene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Methyl tert-butyl ether	ND		8.0	ug/L		16 06/11/2012 18:22	66652
1,1-Dichloroethane	220		8.0	ug/L		16 06/11/2012 18:22	66652
cis-1,2-Dichloroethene	10		8.0	ug/L		16 06/11/2012 18:22	66652
1,1,1-Trichloroethane	240		8.0	ug/L		16 06/11/2012 18:22	66652
1,2-Dichloroethane	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Benzene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Trichloroethene	260		8.0	ug/L		16 06/11/2012 18:22	66652
Toluene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
1,1,2-Trichloroethane	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Tetrachloroethene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Chlorobenzene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Ethylbenzene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
m,p-Xylene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
o-Xylene	ND		8.0	ug/L		16 06/11/2012 18:22	66652
Surrogate: Dibromofluoromethane	101		88-124	%REC		16 06/11/2012 18:22	66652
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		16 06/11/2012 18:22	66652
Surrogate: Toluene-d8	97.0		80-114	%REC		16 06/11/2012 18:22	66652
Surrogate: Bromofluorobenzene	96.7		60-123	%REC		16 06/11/2012 18:22	66652

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/21/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TB-060612

Lab ID: L1249-03

Project: NOW Corp. Site

Collection Date: 06/06/12 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	ug/L		1 06/11/2012 15:53	66652
Chloroethane	ND		0.50	ug/L		1 06/11/2012 15:53	66652
1,1-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/11/2012 15:53	66652
1,1-Dichloroethane	ND		0.50	ug/L		1 06/11/2012 15:53	66652
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/11/2012 15:53	66652
1,2-Dichloroethane	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Benzene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Trichloroethene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Toluene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Tetrachloroethene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Chlorobenzene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Ethylbenzene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
m,p-Xylene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
o-Xylene	ND		0.50	ug/L		1 06/11/2012 15:53	66652
Surrogate: Dibromofluoromethane	99.6		88-124	%REC		1 06/11/2012 15:53	66652
Surrogate: 1,2-Dichloroethane-d4	99.7		79-115	%REC		1 06/11/2012 15:53	66652
Surrogate: Toluene-d8	99.0		80-114	%REC		1 06/11/2012 15:53	66652
Surrogate: Bromofluorobenzene	95.8		60-123	%REC		1 06/11/2012 15:53	66652

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

CLIENT: AECOM Technical Services, Inc. ANALYTICAL QC SUMMARY REPORT

Work Order: L1249

SW8260_25_W

Project: NOW Corp. Site

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

Sample ID: MB-66652	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 06/11/12 8:33	Run ID: V1_120611A	
Client ID: MB-66652	Batch ID: 66652	Units: ug/L	Analysis Date: 06/11/12 14:53	SeqNo: 1751692	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val
Vinyl chloride	ND	0.15			
Chloroethane	ND	0.24			
1,1-Dichloroethene	ND	0.19			
trans-1,2-Dichloroethene	ND	0.14			
Methyl tert-butyl ether	ND	0.13			
1,1-Dichloroethane	ND	0.18			
cis-1,2-Dichloroethene	ND	0.19			
1,1,1-Trichloroethane	ND	0.11			
1,2-Dichloroethane	ND	0.16			
Benzene	ND	0.12			
Trichloroethene	ND	0.13			
Toluene	ND	0.14			
1,1,2-Trichloroethane	ND	0.20			
Tetrachloroethene	ND	0.17			
Chlorobenzene	ND	0.13			
Ethylbenzene	ND	0.13			
m,p-Xylene	ND	0.22			
o-Xylene	ND	0.17			
Surrogate:	10.34		10.00	0	0
Dibromofluoromethane					
Surrogate: 1,2-	9.931		10.00	0	0
Dichloroethane-d4					
Surrogate: Toluene-d8	9.654		10.00	0	0
Surrogate:	9.737		10.00	0	0
Bromofluorobenzene					
			103	88	124
			99.3	79	115
			96.5	80	114
			97.4	60	123

Qualifiers:	ND - Not Detected at the MDL	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
mm1.12.11.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

CLIENT: AECOM Technical Services, Inc.
Work Order: L1249
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT
SW8260_25_W
SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCS-66652	SampType: LCS	TestCode: SW8260_25_W		Prep Date: 06/11/12 8:33	Run ID: V1_120611A	
Client ID: LCS-66652	Batch ID: 66652	Units: ug/L		Analysis Date: 06/11/12 13:54	SeqNo: 1751691	
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Vinyl chloride	10.90	0.15	0.50	10.00	0	109 77 120 0
Chloroethane	11.33	0.24	0.50	10.00	0	113 75 135 0
1,1-Dichloroethene	10.46	0.19	0.50	10.00	0	105 81 125 0
trans-1,2-Dichloroethene	10.13	0.14	0.50	10.00	0	101 60 137 0
Methyl tert-butyl ether	10.19	0.13	0.50	10.00	0	102 61 134 0
1,1-Dichloroethane	9.747	0.18	0.50	10.00	0	97.5 82 120 0
cis-1,2-Dichloroethene	10.07	0.19	0.50	10.00	0	101 84 116 0
1,1,1-Trichloroethane	9.965	0.11	0.50	10.00	0	99.6 80 124 0
1,2-Dichloroethane	10.00	0.16	0.50	10.00	0	100 86 117 0
Benzene	10.23	0.12	0.50	10.00	0	102 81 121 0
Trichloroethene	10.22	0.13	0.50	10.00	0	102 74 123 0
Toluene	10.35	0.14	0.50	10.00	0	104 88 117 0
1,1,2-Trichloroethane	9.477	0.20	0.50	10.00	0	94.8 83 121 0
Tetrachloroethene	9.857	0.17	0.50	10.00	0	98.6 74 115 0
Chlorobenzene	10.06	0.13	0.50	10.00	0	101 83 112 0
Ethylbenzene	10.10	0.13	0.50	10.00	0	101 87 110 0
m,p-Xylene	20.43	0.22	0.50	20.00	0	102 87 114 0
o-Xylene	9.938	0.17	0.50	10.00	0	99.4 84 114 0
Surrogate:	10.10		0.50	10.00	0	101 88 124 0
Dibromofluoromethane						
Surrogate: 1,2-	9.524		0.50	10.00	0	95.2 79 115 0
Dichloroethane-d4						
Surrogate: Toluene-d8	9.628		0.50	10.00	0	96.3 80 114 0
Surrogate:	9.991		0.50	10.00	0	99.9 60 123 0
Bromofluorobenzene						

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1249

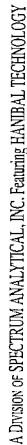
Client ID: EARTH_NY
Project: NOW Corp. Site
WO Name: NOW Corp. Site
Location: NOW_CORP,
Comments: N/A

Case: HC Due: 06/26/12 Report Level: LEVEL 2
SDG: Fax Due: 06/11/12 Special Program:
Fax Report: ☒ 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
L1249-01A	EFF-060612	06/06/2012 15:10	06/07/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1249-02A	INF-060612	06/06/2012 15:15	06/07/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1249-03A	TB-060612	06/06/2012 00:00	06/07/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold



Page _____ of _____

Invoice To: Same

Project No.: 60135676-02
Site Name: Now Corp
Location: Staatsburgh State: NY
Sampler(s): RG

Project Mgr.: Stephen Choiniere

P.O. No.: _____ RQN: _____

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= 10= 11=

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

Containers:

Analyses:

QA/QC Reporting Level

☐ Level I ☐ Level II

☐ Level III ☐ Level IV

☐ Other

Type	Matrix
------	--------

Lab Id: _____ Sample Id: _____ Date: _____ Time: _____

me:

Date:

Sample Id:

17-29

10

132

☐ E-mail to:

EDD Format

Condition upon receipt:

Iced ☐ Ambient

5

Relinquished by:

Received by:

Time:

17.15

7

9.77

9.77

11

Received By: <i>[Signature]</i>		Page 01 of 00	
Reviewed By: <i>[Signature]</i>		Log-in Date 06/07/2012	
Work Order: L1249		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: NOW Corp. Site			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
L1249-01						H	
L1249-02						H	
L1249-03						H	

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 8767 0996 1400
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed /
	Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	5.5 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	06/07/2012
12. Time Received	09:07

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID: MT-87	VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze
Coolant Condition: ICE	
Preservative Name/Lot No:	

See Sample Condition Notification/Corrective Action Form	Yes / No
Rad OK	Yes / No

Edward Lawler [Warwick]

From: Choiniere, Stephen R. [Stephen.Choiniere@aecom.com]**Sent:** Wednesday, June 06, 2012 5:22 PM**To:** Edward Lawler [Warwick]**Cc:** Gray, Steve**Subject:** RE: Bottleware needed: NOW Corp site

Ed – you'll receive 2 VOC samples tomorrow (Thursday). Chain requests results by COB on Monday the 11th. We'll be doing the 2nd event described below (for June 7th) on the 12th and we'll need results by then because they will guide some testing/sampling we'll be doing. Thanks.

From: Edward Lawler [Warwick] [mailto:elawler@spectrum-analytical.com]**Sent:** Wednesday, May 23, 2012 11:05 AM**To:** Choiniere, Stephen R.**Subject:** RE: Bottleware needed: NOW Corp site

If you say Results by June 6 that will be enough (we'll pick the correct TAT depending on when the samples arrive).

-_Ed

From: Choiniere, Stephen R. [mailto:Stephen.Choiniere@aecom.com]**Sent:** Wednesday, May 23, 2012 11:03 AM**To:** Edward Lawler [Warwick]**Subject:** RE: Bottleware needed: NOW Corp site

What TAT should be specified to meet the dates below? Or do we just request "results by June 6?"

From: Edward Lawler [Warwick] [mailto:elawler@spectrum-analytical.com]**Sent:** Wednesday, May 23, 2012 10:59 AM**To:** Choiniere, Stephen R.**Subject:** RE: Bottleware needed: NOW Corp site

Got it Steve. Thanks. We'll send two sets of bottles, one for the 5/30 samples and a second for the "monthly+" (6/7) samples.

The sampler should be sure to mark the COC form for the quick TAT samples for faster turnaround.

Thanks.

--Ed

From: Choiniere, Stephen R. [mailto:Stephen.Choiniere@aecom.com]**Sent:** Wednesday, May 23, 2012 8:43 AM**To:** Jennifer Emerson [Warwick]**Cc:** Edward Lawler [Warwick]**Subject:** Bottleware needed: NOW Corp site

Jenn – The water treatment system at the NOW site has been down since October, but we're hopeful to be back in business next week.

6/7/2012

Last Page of Data Report

Report Date:
29-Jun-12 14:07



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

Laboratory Report

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

Work Order: L1304
Project : NOW Corp. Site
Project #:

Attn: Stephen Choiniere

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L1304-01	EFF60-061212	Aqueous	12-Jun-12 11:41	13-Jun-12 14:30
L1304-02	INF60-061212	Aqueous	12-Jun-12 11:46	13-Jun-12 14:30
L1304-03	TW-1-061212	Aqueous	12-Jun-12 12:18	13-Jun-12 14:30
L1304-04	TW-2A 061212	Aqueous	12-Jun-12 12:31	13-Jun-12 14:30
L1304-05	TW-3 061212	Aqueous	12-Jun-12 12:34	13-Jun-12 14:30
L1304-06	EFF55061212	Aqueous	12-Jun-12 12:16	13-Jun-12 14:30
L1304-07	EFF45061212	Aqueous	12-Jun-12 12:46	13-Jun-12 14:30
L1304-08	EFF40061212	Aqueous	12-Jun-12 13:17	13-Jun-12 14:30
L1304-09	INF45061212	Aqueous	12-Jun-12 12:47	13-Jun-12 14:30
L1304-10	TB 061212	Aqueous	12-Jun-12 00:00	13-Jun-12 14:30

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 Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Authorized by:

Yihai Ding
Laboratory Director

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L1304

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: V1
Instrument Type: GCMS-VOA
Description: HP5890 II / HP5972
Manufacturer: Hewlett-Packard
Model: 5890 / 5972

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 with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

TB 061212 (L1304-10A), recovery is below criteria for Toluene-d8 at 77% with criteria of (80-114).

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-66820 in batch 66820, Percent Recovery is outside QC Limits, recovery is below criteria for Tetrachloroethene at 71% with criteria of (74-115).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

INF60-061212 (L1304-02A) : Dilution Factor: 8
TW-1-061212 (L1304-03A) : Dilution Factor: 4
TW-2A 061212 (L1304-04A) : Dilution Factor: 16
INF45061212 (L1304-09A) : Dilution Factor: 8

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 Spectrum, 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.

A handwritten signature in black ink, appearing to be 'J. H. P.' or similar, written over a horizontal line.

Signed:_____

Date:_____6/29/2012_____

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L1304

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.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

D. Duplicate sample:

No client-requested duplicate analyses were included in this SDG.

E. 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 Spectrum, 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.

A handwritten signature in black ink, appearing to be 'J. H. P.' or similar, written in a cursive style.

Signed: _____

Date: _____ 6/25/2012 _____

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L1304

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: SW3005
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS2

Instrument Type: CVAA

Description: FIMS

Manufacturer: Perkin-Elmer

Model: FIMS100

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.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

G. 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 Spectrum RI, 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: 06/29/12

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L1304

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, SW846 9012B

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

Instrument Code: MANUAL
Instrument Type: WC

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.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

D. Duplicate sample:

No client-requested laboratory duplicate analyses were included in this SDG.

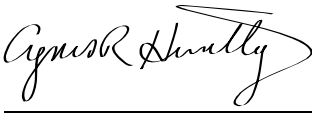
E. Dilutions:

No sample required dilution in this SDG.

F. 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 Spectrum RI, 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: 06/29/12

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF60-061212

Lab ID: L1304-01

Project: NOW Corp. Site

Collection Date: 06/12/12 11:41

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	ug/L		1 06/19/2012 15:06	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 15:06	66820
1,1-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 15:06	66820
1,1-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 15:06	66820
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 15:06	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Trichloroethene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 15:06	66820
Surrogate: Dibromofluoromethane	109		88-124	%REC		1 06/19/2012 15:06	66820
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC		1 06/19/2012 15:06	66820
Surrogate: Toluene-d8	87.4		80-114	%REC		1 06/19/2012 15:06	66820
Surrogate: Bromofluorobenzene	101		60-123	%REC		1 06/19/2012 15:06	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF60-061212

Lab ID: L1304-02

Project: NOW Corp. Site

Collection Date: 06/12/12 11:46

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		4.0	ug/L		8 06/19/2012 12:37	66820
Chloroethane	ND		4.0	ug/L		8 06/19/2012 12:37	66820
1,1-Dichloroethene	35		4.0	ug/L		8 06/19/2012 12:37	66820
trans-1,2-Dichloroethene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Methyl tert-butyl ether	ND		4.0	ug/L		8 06/19/2012 12:37	66820
1,1-Dichloroethane	160		4.0	ug/L		8 06/19/2012 12:37	66820
cis-1,2-Dichloroethene	12		4.0	ug/L		8 06/19/2012 12:37	66820
1,1,1-Trichloroethane	260		4.0	ug/L		8 06/19/2012 12:37	66820
1,2-Dichloroethane	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Benzene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Trichloroethene	280		4.0	ug/L		8 06/19/2012 12:37	66820
Toluene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
1,1,2-Trichloroethane	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Tetrachloroethene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Chlorobenzene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Ethylbenzene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
m,p-Xylene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
o-Xylene	ND		4.0	ug/L		8 06/19/2012 12:37	66820
Surrogate: Dibromofluoromethane	108		88-124	%REC		8 06/19/2012 12:37	66820
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		8 06/19/2012 12:37	66820
Surrogate: Toluene-d8	90.2		80-114	%REC		8 06/19/2012 12:37	66820
Surrogate: Bromofluorobenzene	98.0		60-123	%REC		8 06/19/2012 12:37	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-1-061212

Lab ID: L1304-03

Project: NOW Corp. Site

Collection Date: 06/12/12 12:18

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	ug/L	4	06/19/2012 13:07	66820
Chloroethane	ND		2.0	ug/L	4	06/19/2012 13:07	66820
1,1-Dichloroethene	20		2.0	ug/L	4	06/19/2012 13:07	66820
trans-1,2-Dichloroethene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Methyl tert-butyl ether	ND		2.0	ug/L	4	06/19/2012 13:07	66820
1,1-Dichloroethane	110		2.0	ug/L	4	06/19/2012 13:07	66820
cis-1,2-Dichloroethene	7.8		2.0	ug/L	4	06/19/2012 13:07	66820
1,1,1-Trichloroethane	30		2.0	ug/L	4	06/19/2012 13:07	66820
1,2-Dichloroethane	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Benzene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Trichloroethene	100		2.0	ug/L	4	06/19/2012 13:07	66820
Toluene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
1,1,2-Trichloroethane	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Tetrachloroethene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Chlorobenzene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Ethylbenzene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
m,p-Xylene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
o-Xylene	ND		2.0	ug/L	4	06/19/2012 13:07	66820
Surrogate: Dibromofluoromethane	106		88-124	%REC	4	06/19/2012 13:07	66820
Surrogate: 1,2-Dichloroethane-d4	103		79-115	%REC	4	06/19/2012 13:07	66820
Surrogate: Toluene-d8	89.2		80-114	%REC	4	06/19/2012 13:07	66820
Surrogate: Bromofluorobenzene	100		60-123	%REC	4	06/19/2012 13:07	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-2A 061212

Lab ID: L1304-04

Project: NOW Corp. Site

Collection Date: 06/12/12 12:31

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	ug/L		16 06/19/2012 13:37	66820
Chloroethane	ND		8.0	ug/L		16 06/19/2012 13:37	66820
1,1-Dichloroethene	52		8.0	ug/L		16 06/19/2012 13:37	66820
trans-1,2-Dichloroethene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Methyl tert-butyl ether	ND		8.0	ug/L		16 06/19/2012 13:37	66820
1,1-Dichloroethane	200		8.0	ug/L		16 06/19/2012 13:37	66820
cis-1,2-Dichloroethene	15		8.0	ug/L		16 06/19/2012 13:37	66820
1,1,1-Trichloroethane	350		8.0	ug/L		16 06/19/2012 13:37	66820
1,2-Dichloroethane	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Benzene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Trichloroethene	390		8.0	ug/L		16 06/19/2012 13:37	66820
Toluene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
1,1,2-Trichloroethane	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Tetrachloroethene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Chlorobenzene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Ethylbenzene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
m,p-Xylene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
o-Xylene	ND		8.0	ug/L		16 06/19/2012 13:37	66820
Surrogate: Dibromofluoromethane	107		88-124	%REC		16 06/19/2012 13:37	66820
Surrogate: 1,2-Dichloroethane-d4	95.5		79-115	%REC		16 06/19/2012 13:37	66820
Surrogate: Toluene-d8	88.3		80-114	%REC		16 06/19/2012 13:37	66820
Surrogate: Bromofluorobenzene	98.5		60-123	%REC		16 06/19/2012 13:37	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-3 061212

Lab ID: L1304-05

Project: NOW Corp. Site

Collection Date: 06/12/12 12:34

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	ug/L		1 06/19/2012 15:36	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 15:36	66820
1,1-Dichloroethene	2.2		0.50	ug/L		1 06/19/2012 15:36	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 15:36	66820
1,1-Dichloroethane	20		0.50	ug/L		1 06/19/2012 15:36	66820
cis-1,2-Dichloroethene	0.84		0.50	ug/L		1 06/19/2012 15:36	66820
1,1,1-Trichloroethane	5.3		0.50	ug/L		1 06/19/2012 15:36	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Trichloroethene	20		0.50	ug/L		1 06/19/2012 15:36	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 15:36	66820
Surrogate: Dibromofluoromethane	110		88-124	%REC		1 06/19/2012 15:36	66820
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		1 06/19/2012 15:36	66820
Surrogate: Toluene-d8	88.9		80-114	%REC		1 06/19/2012 15:36	66820
Surrogate: Bromofluorobenzene	101		60-123	%REC		1 06/19/2012 15:36	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF55061212

Lab ID: L1304-06

Project: NOW Corp. Site

Collection Date: 06/12/12 12:16

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	ug/L		1 06/19/2012 16:06	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 16:06	66820
1,1-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 16:06	66820
1,1-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 16:06	66820
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 16:06	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Trichloroethene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 16:06	66820
Surrogate: Dibromofluoromethane	109		88-124	%REC		1 06/19/2012 16:06	66820
Surrogate: 1,2-Dichloroethane-d4	102		79-115	%REC		1 06/19/2012 16:06	66820
Surrogate: Toluene-d8	87.5		80-114	%REC		1 06/19/2012 16:06	66820
Surrogate: Bromofluorobenzene	104		60-123	%REC		1 06/19/2012 16:06	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF45061212

Lab ID: L1304-07

Project: NOW Corp. Site

Collection Date: 06/12/12 12:46

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	ug/L		1 06/19/2012 16:36	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 16:36	66820
1,1-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 16:36	66820
1,1-Dichloroethane	0.80		0.50	ug/L		1 06/19/2012 16:36	66820
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 16:36	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Trichloroethene	0.79		0.50	ug/L		1 06/19/2012 16:36	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 16:36	66820
Surrogate: Dibromofluoromethane	108		88-124	%REC		1 06/19/2012 16:36	66820
Surrogate: 1,2-Dichloroethane-d4	100		79-115	%REC		1 06/19/2012 16:36	66820
Surrogate: Toluene-d8	86.0		80-114	%REC		1 06/19/2012 16:36	66820
Surrogate: Bromofluorobenzene	99.0		60-123	%REC		1 06/19/2012 16:36	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF40061212

Lab ID: L1304-08

Project: NOW Corp. Site

Collection Date: 06/12/12 13:17

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	ug/L		1 06/19/2012 17:05	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 17:05	66820
1,1-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 17:05	66820
1,1-Dichloroethane	1.3		0.50	ug/L		1 06/19/2012 17:05	66820
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 17:05	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Trichloroethene	1.3		0.50	ug/L		1 06/19/2012 17:05	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 17:05	66820
Surrogate: Dibromofluoromethane	112		88-124	%REC		1 06/19/2012 17:05	66820
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		1 06/19/2012 17:05	66820
Surrogate: Toluene-d8	86.6		80-114	%REC		1 06/19/2012 17:05	66820
Surrogate: Bromofluorobenzene	105		60-123	%REC		1 06/19/2012 17:05	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF45061212

Lab ID: L1304-09

Project: NOW Corp. Site

Collection Date: 06/12/12 12:47

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		4.0	ug/L		8 06/19/2012 14:06	66820
Chloroethane	ND		4.0	ug/L		8 06/19/2012 14:06	66820
1,1-Dichloroethene	37		4.0	ug/L		8 06/19/2012 14:06	66820
trans-1,2-Dichloroethene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Methyl tert-butyl ether	ND		4.0	ug/L		8 06/19/2012 14:06	66820
1,1-Dichloroethane	160		4.0	ug/L		8 06/19/2012 14:06	66820
cis-1,2-Dichloroethene	12		4.0	ug/L		8 06/19/2012 14:06	66820
1,1,1-Trichloroethane	250		4.0	ug/L		8 06/19/2012 14:06	66820
1,2-Dichloroethane	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Benzene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Trichloroethene	280		4.0	ug/L		8 06/19/2012 14:06	66820
Toluene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
1,1,2-Trichloroethane	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Tetrachloroethene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Chlorobenzene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Ethylbenzene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
m,p-Xylene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
o-Xylene	ND		4.0	ug/L		8 06/19/2012 14:06	66820
Surrogate: Dibromofluoromethane	107		88-124	%REC		8 06/19/2012 14:06	66820
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC		8 06/19/2012 14:06	66820
Surrogate: Toluene-d8	85.8		80-114	%REC		8 06/19/2012 14:06	66820
Surrogate: Bromofluorobenzene	97.0		60-123	%REC		8 06/19/2012 14:06	66820

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TB 061212

Lab ID: L1304-10

Project: NOW Corp. Site

Collection Date: 06/12/12 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	ug/L		1 06/19/2012 14:36	66820
Chloroethane	ND		0.50	ug/L		1 06/19/2012 14:36	66820
1,1-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Methyl tert-butyl ether	ND		0.50	ug/L		1 06/19/2012 14:36	66820
1,1-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 14:36	66820
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
1,1,1-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 14:36	66820
1,2-Dichloroethane	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Benzene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Trichloroethene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Toluene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
1,1,2-Trichloroethane	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Tetrachloroethene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Chlorobenzene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Ethylbenzene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
m,p-Xylene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
o-Xylene	ND		0.50	ug/L		1 06/19/2012 14:36	66820
Surrogate: Dibromofluoromethane	109		88-124	%REC		1 06/19/2012 14:36	66820
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC		1 06/19/2012 14:36	66820
Surrogate: Toluene-d8	77.1	S	80-114	%REC		1 06/19/2012 14:36	66820
Surrogate: Bromofluorobenzene	98.6		60-123	%REC		1 06/19/2012 14:36	66820

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

CLIENT: AECOM Technical Services, Inc. ANALYTICAL QC SUMMARY REPORT

Work Order: L1304 SW8260_25_W

Project: NOW Corp. Site SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: MB-66820	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 06/19/12 8:47	Run ID: V1_120619A								
Client ID: MB-66820	Batch ID: 66820	Units: ug/L	Analysis Date: 06/19/12 12:07	SeqNo: 1756781								
Analyte	Result	MDL	RL	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:	10.55		0.50	10.00	0	105	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	10.34		0.50	10.00	0	103	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	8.766		0.50	10.00	0	87.7	80	114	0			
Surrogate:	10.09		0.50	10.00	0	101	60	123	0			
Bromofluorobenzene												

CLIENT: AECOM Technical Services, Inc.
Work Order: L1304
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT
SW8260_25_W
SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCSD-66820	SampType: LCSD	TestCode: SW8260_25_W	Prep Date: 06/19/12 8:47	Run ID: V1_120619A								
Client ID: LCSD-66820	Batch ID: 66820	Units: ug/L	Analysis Date: 06/19/12 11:37	SeqNo: 1756780								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.19	0.15	0.50	10.00	0	112	77	120	11.83	5.55	40	
Chloroethane	10.01	0.24	0.50	10.00	0	100	75	135	10.06	0.483	40	
1,1-Dichloroethene	9.677	0.19	0.50	10.00	0	96.8	81	125	9.295	4.02	40	
trans-1,2-Dichloroethene	10.30	0.14	0.50	10.00	0	103	60	137	10.32	0.138	40	
Methyl tert-butyl ether	9.965	0.13	0.50	10.00	0	99.7	61	134	9.373	6.12	40	
1,1-Dichloroethane	10.52	0.18	0.50	10.00	0	105	82	120	10.48	0.411	40	
cis-1,2-Dichloroethene	10.11	0.19	0.50	10.00	0	101	84	116	10.07	0.42	40	
1,1,1-Trichloroethane	11.06	0.11	0.50	10.00	0	111	80	124	11.01	0.465	40	
1,2-Dichloroethane	9.755	0.16	0.50	10.00	0	97.5	86	117	10.69	9.13	40	
Benzene	10.73	0.12	0.50	10.00	0	107	81	121	10.66	0.642	40	
Trichloroethene	10.71	0.13	0.50	10.00	0	107	74	123	10.49	2.03	40	
Toluene	10.94	0.14	0.50	10.00	0	109	88	117	10.71	2.16	40	
1,1,2-Trichloroethane	9.916	0.20	0.50	10.00	0	99.2	83	121	9.347	5.91	40	
Tetrachloroethene	7.528	0.17	0.50	10.00	0	75.3	74	115	7.103	5.81	40	
Chlorobenzene	8.826	0.13	0.50	10.00	0	88.3	83	112	8.669	1.79	40	
Ethylbenzene	8.954	0.13	0.50	10.00	0	89.5	87	110	8.765	2.13	40	
m,p-Xylene	17.96	0.22	0.50	20.00	0	89.8	87	114	17.65	1.74	40	
o-Xylene	8.751	0.17	0.50	10.00	0	87.5	84	114	8.801	0.562	40	
Surrogate:	10.13		0.50	10.00	0	101	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	9.628		0.50	10.00	0	96.3	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.068		0.50	10.00	0	90.7	80	114	0			
Surrogate:	10.26		0.50	10.00	0	103	60	123	0			
Bromofluorobenzene												

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/25/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF60-061212

Lab ID: L1304-01

Project: NOW Corp. Site

Collection Date: 06/12/12 11:41

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	06/15/2012 0:00	66723

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/25/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF60-061212

Lab ID: L1304-02

Project: NOW Corp. Site

Collection Date: 06/12/12 11:46

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	06/15/2012 0:00	66723

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

CLIENT: AECOM Technical Services, Inc.

Work Order: L1304

Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

E1664

EPA 1664A -- Oil & Grease, HEM

Sample ID: MB-66723	SampType: MBLK	TestCode: E1664	Prep Date: 06/14/12 11:06	Run ID: MANUAL_120615A							
Client ID: MB-66723	Batch ID: 66723	Units: mg/L	Analysis Date: 06/15/12 0:00	SeqNo: 1754574							
Analyte	Result	MDL	SPK Ref Val	SPK value	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	ND	1.2					5.0				

Sample ID: LCS-66723	SampType: LCS	TestCode: E1664	Prep Date: 06/14/12 11:06	Run ID: MANUAL_120615A								
Client ID: LCS-66723	Batch ID: 66723	Units: mg/L	Analysis Date: 06/15/12 0:00	SeqNo: 1754572								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	38.20	1.2	5.0	40.00	0	95.5	78	114	0			

Sample ID: LCSD-66723	SampType: LCSD	TestCode: E1664	Prep Date: 06/14/12 11:06	Run ID: MANUAL_120615A								
Client ID: LCSD-66723	Batch ID: 66723	Units: mg/L	Analysis Date: 06/15/12 0:00	SeqNo: 1754573								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	38.80	1.2	5.0	40.00	0	97.0	78	114	38.20	1.56	18	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF60-061212

Lab ID: L1304-01

Project: NOW Corp. Site

Collection Date: 06/12/12 11:41

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							SW6010_W
Aluminum	ND		200	ug/L		1 06/21/2012 11:05	66856
Arsenic	ND		20	ug/L		1 06/21/2012 11:05	66856
Barium	82	J	200	ug/L		1 06/21/2012 11:05	66856
Chromium	ND		20	ug/L		1 06/21/2012 11:05	66856
Copper	ND		25	ug/L		1 06/21/2012 11:05	66856
Iron	ND		200	ug/L		1 06/21/2012 11:05	66856
Manganese	91		50	ug/L		1 06/21/2012 11:05	66856
Nickel	1.3	J	50	ug/L		1 06/21/2012 11:05	66856
Zinc	23	BJ	50	ug/L		1 06/21/2012 11:05	66856
SW846 7470A -- Mercury by FIA							SW7470
Mercury	ND		0.20	µg/L		1 06/22/2012 11:50	66882

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF60-061212

Lab ID: L1304-02

Project: NOW Corp. Site

Collection Date: 06/12/12 11:46

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							SW6010_W
Aluminum	ND		200	ug/L		1 06/21/2012 11:09	66856
Arsenic	ND		20	ug/L		1 06/21/2012 11:09	66856
Barium	75	J	200	ug/L		1 06/21/2012 11:09	66856
Chromium	ND		20	ug/L		1 06/21/2012 11:09	66856
Copper	ND		25	ug/L		1 06/21/2012 11:09	66856
Iron	ND		200	ug/L		1 06/21/2012 11:09	66856
Manganese	82		50	ug/L		1 06/21/2012 11:09	66856
Nickel	1.4	J	50	ug/L		1 06/21/2012 11:09	66856
Zinc	20	BJ	50	ug/L		1 06/21/2012 11:09	66856
SW846 7470A -- Mercury by FIA							SW7470
Mercury	ND		0.20	µg/L		1 06/22/2012 11:51	66882

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

CLIENT: AECOM Technical Services, Inc.

Work Order: L1304

Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW6010_W

SW846 6010C -- Metals by ICP

Sample ID: MB-66856	SampType: MBLK	TestCode: SW6010_W	Prep Date: 06/20/12 11:00	Run ID: OPTIMA3_120621A								
Client ID: MB-66856	Batch ID: 66856	Units: ug/L	Analysis Date: 06/21/12 9:06	SeqNo: 1757814								
Analyte	Result	MDL	RL	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	7.469	4.9	50									J

Sample ID: LCS-66856	SampType: LCS	TestCode: SW6010_W	Prep Date: 06/20/12 11:00	Run ID: OPTIMA3_120621A								
Client ID: LCS-66856	Batch ID: 66856	Units: ug/L	Analysis Date: 06/21/12 9:10	SeqNo: 1757815								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9732	66	200	9100	0	107	80	120	0			
Arsenic	498.1	4.3	20	455.0	0	109	80	120	0			
Barium	10020	1.1	200	9100	0	110	80	120	0			
Chromium	1000	0.64	20	910.0	0	110	80	120	0			
Copper	1219	3.6	30	1130	0	108	80	120	0			
Iron	4973	31	200	4550	0	109	80	120	0			
Manganese	2471	10	50	2270	0	109	80	120	0			
Nickel	2496	0.85	50	2270	0	110	80	120	0			
Zinc	2433	4.9	50	2270	0	107	80	120	0			B

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: L1304

SW7470

Project: NOW Corp. Site

SW846 7470A -- Mercury by FIA

Sample ID: MB-66882	SampType: MBLK	TestCode: SW7470	Prep Date: 06/21/12 15:00	Run ID: FIMS2_120622A
Client ID: MB-66882	Batch ID: 66882	Units: µg/L	Analysis Date: 06/22/12 11:05	SeqNo: 1758607
Analyte	Result	MDL	SPK value	SPK Ref Val
Mercury	ND	0.028	0.20	

Sample ID: LCS-66882	SampType: LCS	TestCode: SW7470	Prep Date: 06/21/12 15:00	Run ID: FIMS2_120622A							
Client ID: LCS-66882	Batch ID: 66882	Units: µg/L	Analysis Date: 06/22/12 11:06	SeqNo: 1758608							
Analyte	Result	MDL	SPK Ref Val	SPK value	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.691	0.028	0	4.550	103	80	120	0			

Qualifiers:	ND - Not Detected at the MDL	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
mm11.12.11.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF60-061212

Lab ID: L1304-01

Project: NOW Corp. Site

Collection Date: 06/12/12 11:41

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							SM2540_TDS
Total Dissolved Solids	280		10	mg/L	1	06/19/2012 1:02	66812
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	ND		10	mg/L	1	06/18/2012 18:57	66813
SW846 9012B -- Total Cyanide							SW9012_W
Cyanide	ND		10	ug/L	1	06/21/2012 14:52	66864

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/26/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: INF60-061212

Lab ID: L1304-02

Project: NOW Corp. Site

Collection Date: 06/12/12 11:46

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							SM2540_TDS
Total Dissolved Solids	270		10	mg/L	1	06/19/2012 1:42	66812
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	10		10	mg/L	1	06/18/2012 20:11	66813
SW846 9012B -- Total Cyanide							SW9012_W
Cyanide	ND		10	ug/L	1	06/21/2012 14:55	66864

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

CLIENT: AECOM Technical Services, Inc.

Work Order: L1304

Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TDS

SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-66812	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 06/18/12 16:30	Run ID: MANUAL_120618A							
Client ID: MB-66812	Batch ID: 66812	Units: mg/L	Analysis Date: 06/18/12 23:40	SeqNo: 1757499							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids	ND	10	10					
------------------------	----	----	----	--	--	--	--	--

Sample ID: LCS-66812	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 06/18/12 16:30	Run ID: MANUAL_120618A							
Client ID: LCS-66812	Batch ID: 66812	Units: mg/L	Analysis Date: 06/19/12 0:21	SeqNo: 1757500							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids	397.0	10	10	398.0	0	99.7	80	120	0		
------------------------	-------	----	----	-------	---	------	----	-----	---	--	--

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: L1304

SM2540 TSS

Project: NOW Corp. Site

SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-66813	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 06/18/12 16:30	Run ID: MANUAL_120618B
Client ID: MB-66813	Batch ID: 66813	Units: mg/L	Analysis Date: 06/18/12 16:30	SeqNo: 1757512
Analyte	Result	MDL	SPK Ref Val	SPK value
Total Suspended Solids	ND	10	%REC LowLimit HighLimit	RPD Ref Val %RPD RPDLimit Qual

Sample ID : LCS-66813	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 06/18/12 16:30	Run ID: MANUAL_120618B
Client ID: LCS-66813	Batch ID: 66813	Units: mg/L	Analysis Date: 06/18/12 17:43	SeqNo: 1757513
Analyte	Result	MDL	SPK value	SPK Ref Val
	82.00	10	85.40	0
Total Suspended Solids			%REC	LowLimit HighLimit
			96.0	80 120
			RPD Ref Val	%RPD RPDLimit
			0	0 0

Galifiers:
mm11.12.11.A

ND - Not Detected at the MDL

ND - Not Detected at the MDL
J - Analyte detected below quantitation limits

S - Recovery outside accepted recovery limits

S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

MDL - Method Detection Limit

MDL - Method Detection Limit
RL - Reporting Limit

B - Analyte detected in the associated Method Blank

CLIENT: AECOM Technical Services, Inc.		ANALYTICAL QC SUMMARY REPORT										
Work Order: L1304		SW9012_W										
Project: NOW Corp. Site		SW846 9012B -- Total Cyanide										
Sample ID: MB-66864		SampType: MBLK		TestCode: SW9012_W		Prep Date: 06/20/12 9:45		Run ID: LACHAT1_120621A				
Client ID: MB-66864		Batch ID: 66864		Units: ug/L		Analysis Date: 06/21/12 12:43		SeqNo: 1757917				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	ND	7.5	20									
Cyanide												
Sample ID: LCS-66864		SampType: LCS		TestCode: SW9012_W		Prep Date: 06/20/12 9:45		Run ID: LACHAT1_120621A				
Client ID: LCS-66864		Batch ID: 66864		Units: ug/L		Analysis Date: 06/21/12 12:46		SeqNo: 1757918				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	96.22	7.5	20	100.0	0	96.2	80	120	0			
Cyanide												

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1304

Client ID: EARTH_NY

Project: NOW Corp. Site

WO Name: NOW Corp. Site

Location: NOW_CORP,

Comments: N/A

Case:

SDG:

PO: 94017.02

HC Due: 07/02/12

Fax Due:

Fax Report: ☐

Report Level: LEVEL 2

Special Program:

EDD:

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1304-01A	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-01B	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	E1664	/					P1
L1304-01C	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SM2540_TDS	/					P1
L1304-01C	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SM2540_TSS	/					P1
L1304-01D	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SW9012_W	/				Y	P1
L1304-01E	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SW6010_W	/ See SEL list				Y	M6
L1304-01E	EFF60-061212	06/12/2012 11:41	06/13/2012	Aqueous	SW7470	/ See SEL list					M6
L1304-02A	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-02B	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	E1664	/					P1
L1304-02C	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SM2540_TDS	/					P1
L1304-02C	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SM2540_TSS	/					P1
L1304-02D	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SW9012_W	/				Y	P1
L1304-02E	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SW6010_W	/ See SEL list				Y	M6
L1304-02E	INF60-061212	06/12/2012 11:46	06/13/2012	Aqueous	SW7470	/ See SEL list					M6
L1304-03A	TW-1-061212	06/12/2012 12:18	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-04A	TW-2A 061212	06/12/2012 12:31	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-05A	TW-3 061212	06/12/2012 12:34	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-06A	EFF55061212	06/12/2012 12:16	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-07A	EFF45061212	06/12/2012 12:46	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1304

Client ID: EARTH_NY
Project: NOW Corp. Site
WO Name: NOW Corp. Site
Location: NOW_CORP,
Comments: N/A

Case:
SDG:

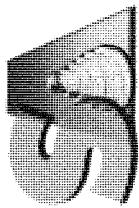
PO: 94017.02

HC Due: 07/02/12
Fax Due:
Fax Report: ☐
Report Level: LEVEL 2
Special Program:
EDD:

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1304-08A	EFF40061212	06/12/2012 13:17	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-09A	INF45061212	06/12/2012 12:47	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L1304-10A	TB 061212	06/12/2012 00:00	06/13/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold



SPECTRUM ANALYTICAL, INC.
Featuring
HARBOR TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling: Standard
TAT - Indicate Date Needed: Standard
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

Invoice To: Same

Project No.: 60135676 02
Site Name: Now Corp
Location: Stattsburg State: NY
Sampler(s): SPG

Project Mgr.: Stephen Choyniere

P.O. No.: _____ RQN: _____

1=Na₂SO₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=None 10= _____ 11= _____

List preservative code below:
2 4 9 2 5

Notes:

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

Containers:

of VOA Vials
of Amber Glass
of Clear Glass
of Plastic

Analyses:

Metals
TSS/TDS
O+G
Cyanide

QA/QC Reporting Level

☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

Matrix

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:
01	EFF60-061212	6/12/12	11:41
02	INF60-061212		11:46
03	TW-1 061212		12:18
04	TW-2A 061212		12:31
05	TW-3 061212		12:34
06	EFF55 061212		12:16
07	EFF45 061212		12:46
08	EFF40 061212		13:17
	EFF35 061212		
	INF35 061212		

☐ E-mail to _____

EDD Format _____

Condition upon receipt: ☒ Ice ☐ Ambient 3°

Relinquished by: Steve Jay

Received by: FedEx

Time:

Date:

6/12/12 16:36

6/13/12 14:30



SPECTRUM ANALYTICAL, INC.
Featuring
HAMBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

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

Invoice To: Same

Project Mgr.: _____

P.O. No.: _____ RQN: _____

Project No.: 60135676 02
Site Name: Now Corp
Location: Stattsberg State: NY
Sampler(s): SRG

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= _____ 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

Notes:

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Matrix

Type

Time:

Date:

Sample Id:

G=Grab C=Composite

QA/QC Reporting Level

☐ Level I

☐ Level II

☐ Level III

☐ Level IV

☐ Other _____

State specific reporting standards:

☐ E-mail to _____

EDD Format _____

Condition upon receipt: ☒ Iced ☐ Ambient ☐ _____

Relinquished by:

Received by:

Time:

Date:

Steve Dwyer

FedEx

6/12/12 16:36

FedEx

Vernon

6/13/12 14:30

Received By: <i>[Signature]</i>		Page 01 of 00	
Reviewed By: <i>[Signature]</i>		Log-in Date 06/13/2012	
Work Order: L1304		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: NOW Corp. Site			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

	Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
		HNO3	H2SO4	HCl	NaOH	H3PO4		
1. Custody Seal(s) Present / Absent	L1304-01	<2		<2	>12		H	
Intact / Broken	L1304-02	<2		<2	>12		H	
2. Custody Seal Nos. N/A	L1304-03						H	
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists Present / Absent	L1304-04						H	
	L1304-05						H	
	L1304-06						H	
	L1304-07						H	
4. Airbill AirBill / Sticker Present / Absent	L1304-08						H	
	L1304-09						H	
5. Airbill No. FedEx 8996 2349 6241	L1304-10						H	
6. Sample Tags Present / Absent Sample Tag Numbers Listed / Not Listed on Chain-of-Custody								
7. Sample Condition Intact / Broken / Leaking								
8. Cooler Temperature Indicator Bottle Present / Absent								
9. Cooler Temperature		3 °C						
10. Does information on TR/COCs and sample tags agree?		Yes / No						
11. Date Received at Laboratory		06/13/2012						
12. Time Received		14:30						
Sample Transfer								
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO						
Area #		Area #						
By		By						
On		On						
IR Temp Gun ID: MT-1								
Coolant Condition: ICE								
Preservative Name/Lot No:								

VOA Matrix Key:

US = Unpreserved Soil A = Air

UA = Unpreserved Aqueous H = HCl

M = MeOH E = Encore

N = NaHSO4 F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

Last Page of Data Report

Report Date:
25-May-12 15:43



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

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

Laboratory Report

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

Work Order: L0961
Project : NOW Corp. Site
Project #:

Attn: Stephen Choiniere

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L0961-01	MW-1 050812	Aqueous	08-May-12 10:35	09-May-12 08:45
L0961-02	MW-4S 050812	Aqueous	08-May-12 12:08	09-May-12 08:45
L0961-03	MW-6S 050812	Aqueous	08-May-12 09:30	09-May-12 08:45
L0961-04	MW-6D 050812	Aqueous	08-May-12 09:40	09-May-12 08:45
L0961-05	MW-7S 050812	Aqueous	08-May-12 11:17	09-May-12 08:45
L0961-06	MW-7D 050812	Aqueous	08-May-12 11:25	09-May-12 08:45
L0961-07	MW-12S 050812	Aqueous	08-May-12 14:04	09-May-12 08:45
L0961-08	MW-12D 050812	Aqueous	08-May-12 13:35	09-May-12 08:45
L0961-09	MW-DUP 050812	Aqueous	08-May-12 00:00	09-May-12 08:45
L0961-10	TB 050812	Aqueous	08-May-12 00:00	09-May-12 08:45

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 Spectrum Analytical.

All applicable NELAP or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: L0961

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: V6

Instrument Type: GCMS-VOA

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

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-66099 in batch 66099, Percent Recovery is outside QC Limits, recovery is above criteria for Tetrachloroethene at 139% with criteria of (74-115).

LCSD-66071 in batch 66071, Percent Recovery is outside QC Limits, recovery is above criteria for Tetrachloroethene at 118% with criteria of (74-115).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

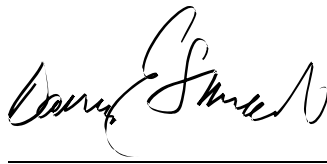
The following samples were analyzed at dilution:

MW-1 050812 (L0961-01A) : Dilution Factor: 2.5
MW-6S 050812 (L0961-03A) : Dilution Factor: 2.5
MW-7S 050812 (L0961-05A) : Dilution Factor: 8
MW-7D 050812 (L0961-06A) : Dilution Factor: 20
MW-DUP 050812 (L0961-09A) : Dilution Factor: 2.5

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 Spectrum, 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: 06/05/12

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/05/2012

Client: AECOM Technical Services, Inc.**Client Sample ID:** MW-1 050812**Lab ID:** L0961-01**Project:** NOW Corp. Site**Collection Date:** 05/08/12 10:35

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		1.3	ug/L	2.5	05/11/2012 5:13	66099
Chloroethane	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
1,1-Dichloroethene	3.1		1.3	ug/L	2.5	05/11/2012 5:13	66099
trans-1,2-Dichloroethene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Methyl tert-butyl ether	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
1,1-Dichloroethane	16		1.3	ug/L	2.5	05/11/2012 5:13	66099
cis-1,2-Dichloroethene	9.0		1.3	ug/L	2.5	05/11/2012 5:13	66099
1,1,1-Trichloroethane	28		1.3	ug/L	2.5	05/11/2012 5:13	66099
1,2-Dichloroethane	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Benzene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Trichloroethene	72		1.3	ug/L	2.5	05/11/2012 5:13	66099
Toluene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
1,1,2-Trichloroethane	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Tetrachloroethene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Chlorobenzene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Ethylbenzene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
m,p-Xylene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
o-Xylene	ND		1.3	ug/L	2.5	05/11/2012 5:13	66099
Surrogate: Dibromofluoromethane	99.4		88-124	%REC	2.5	05/11/2012 5:13	66099
Surrogate: 1,2-Dichloroethane-d4	95.6		79-115	%REC	2.5	05/11/2012 5:13	66099
Surrogate: Toluene-d8	99.2		80-114	%REC	2.5	05/11/2012 5:13	66099
Surrogate: Bromofluorobenzene	101		60-123	%REC	2.5	05/11/2012 5:13	66099

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-4S 050812

Lab ID: L0961-02

Project: NOW Corp. Site

Collection Date: 05/08/12 12:08

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	ug/L		1 05/14/2012 14:14	66148
Chloroethane	1.2		0.50	ug/L		1 05/14/2012 14:14	66148
1,1-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/14/2012 14:14	66148
1,1-Dichloroethane	2.0		0.50	ug/L		1 05/14/2012 14:14	66148
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
1,1,1-Trichloroethane	ND		0.50	ug/L		1 05/14/2012 14:14	66148
1,2-Dichloroethane	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Benzene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Trichloroethene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Toluene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Tetrachloroethene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Chlorobenzene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Ethylbenzene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
m,p-Xylene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
o-Xylene	ND		0.50	ug/L		1 05/14/2012 14:14	66148
Surrogate: Dibromofluoromethane	102		88-124	%REC		1 05/14/2012 14:14	66148
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		1 05/14/2012 14:14	66148
Surrogate: Toluene-d8	94.8		80-114	%REC		1 05/14/2012 14:14	66148
Surrogate: Bromofluorobenzene	103		60-123	%REC		1 05/14/2012 14:14	66148

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-6S 050812

Lab ID: L0961-03

Project: NOW Corp. Site

Collection Date: 05/08/12 9:30

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		1.3	ug/L	2.5	05/11/2012 8:34	66099
Chloroethane	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
1,1-Dichloroethene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
trans-1,2-Dichloroethene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Methyl tert-butyl ether	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
1,1-Dichloroethane	3.0		1.3	ug/L	2.5	05/11/2012 8:34	66099
cis-1,2-Dichloroethene	1.8		1.3	ug/L	2.5	05/11/2012 8:34	66099
1,1,1-Trichloroethane	8.5		1.3	ug/L	2.5	05/11/2012 8:34	66099
1,2-Dichloroethane	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Benzene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Trichloroethene	25		1.3	ug/L	2.5	05/11/2012 8:34	66099
Toluene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
1,1,2-Trichloroethane	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Tetrachloroethene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Chlorobenzene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Ethylbenzene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
m,p-Xylene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
o-Xylene	ND		1.3	ug/L	2.5	05/11/2012 8:34	66099
Surrogate: Dibromofluoromethane	100		88-124	%REC	2.5	05/11/2012 8:34	66099
Surrogate: 1,2-Dichloroethane-d4	97.8		79-115	%REC	2.5	05/11/2012 8:34	66099
Surrogate: Toluene-d8	98.6		80-114	%REC	2.5	05/11/2012 8:34	66099
Surrogate: Bromofluorobenzene	100		60-123	%REC	2.5	05/11/2012 8:34	66099

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-6D 050812

Lab ID: L0961-04

Project: NOW Corp. Site

Collection Date: 05/08/12 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	ug/L		1 05/10/2012 8:15	66071
Chloroethane	1.8		0.50	ug/L		1 05/10/2012 8:15	66071
1,1-Dichloroethene	1.8		0.50	ug/L		1 05/10/2012 8:15	66071
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/10/2012 8:15	66071
1,1-Dichloroethane	19		0.50	ug/L		1 05/10/2012 8:15	66071
cis-1,2-Dichloroethene	1.0		0.50	ug/L		1 05/10/2012 8:15	66071
1,1,1-Trichloroethane	3.1		0.50	ug/L		1 05/10/2012 8:15	66071
1,2-Dichloroethane	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Benzene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Trichloroethene	6.0		0.50	ug/L		1 05/10/2012 8:15	66071
Toluene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Tetrachloroethene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Chlorobenzene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Ethylbenzene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
m,p-Xylene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
o-Xylene	ND		0.50	ug/L		1 05/10/2012 8:15	66071
Surrogate: Dibromofluoromethane	101		88-124	%REC		1 05/10/2012 8:15	66071
Surrogate: 1,2-Dichloroethane-d4	98.9		79-115	%REC		1 05/10/2012 8:15	66071
Surrogate: Toluene-d8	99.6		80-114	%REC		1 05/10/2012 8:15	66071
Surrogate: Bromofluorobenzene	100		60-123	%REC		1 05/10/2012 8:15	66071

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-7S 050812

Lab ID: L0961-05

Project: NOW Corp. Site

Collection Date: 05/08/12 11:17

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		4.0	ug/L		8 05/11/2012 9:27	66099
Chloroethane	ND		4.0	ug/L		8 05/11/2012 9:27	66099
1,1-Dichloroethene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
trans-1,2-Dichloroethene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Methyl tert-butyl ether	ND		4.0	ug/L		8 05/11/2012 9:27	66099
1,1-Dichloroethane	ND		4.0	ug/L		8 05/11/2012 9:27	66099
cis-1,2-Dichloroethene	4.7		4.0	ug/L		8 05/11/2012 9:27	66099
1,1,1-Trichloroethane	ND		4.0	ug/L		8 05/11/2012 9:27	66099
1,2-Dichloroethane	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Benzene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Trichloroethene	91		4.0	ug/L		8 05/11/2012 9:27	66099
Toluene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
1,1,2-Trichloroethane	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Tetrachloroethene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Chlorobenzene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Ethylbenzene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
m,p-Xylene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
o-Xylene	ND		4.0	ug/L		8 05/11/2012 9:27	66099
Surrogate: Dibromofluoromethane	99.7		88-124	%REC		8 05/11/2012 9:27	66099
Surrogate: 1,2-Dichloroethane-d4	97.2		79-115	%REC		8 05/11/2012 9:27	66099
Surrogate: Toluene-d8	98.6		80-114	%REC		8 05/11/2012 9:27	66099
Surrogate: Bromofluorobenzene	99.3		60-123	%REC		8 05/11/2012 9:27	66099

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-7D 050812

Lab ID: L0961-06

Project: NOW Corp. Site

Collection Date: 05/08/12 11:25

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		10	ug/L		20 05/11/2012 10:21	66099
Chloroethane	ND		10	ug/L		20 05/11/2012 10:21	66099
1,1-Dichloroethene	ND		10	ug/L		20 05/11/2012 10:21	66099
trans-1,2-Dichloroethene	ND		10	ug/L		20 05/11/2012 10:21	66099
Methyl tert-butyl ether	ND		10	ug/L		20 05/11/2012 10:21	66099
1,1-Dichloroethane	23		10	ug/L		20 05/11/2012 10:21	66099
cis-1,2-Dichloroethene	ND		10	ug/L		20 05/11/2012 10:21	66099
1,1,1-Trichloroethane	ND		10	ug/L		20 05/11/2012 10:21	66099
1,2-Dichloroethane	ND		10	ug/L		20 05/11/2012 10:21	66099
Benzene	ND		10	ug/L		20 05/11/2012 10:21	66099
Trichloroethene	260		10	ug/L		20 05/11/2012 10:21	66099
Toluene	ND		10	ug/L		20 05/11/2012 10:21	66099
1,1,2-Trichloroethane	ND		10	ug/L		20 05/11/2012 10:21	66099
Tetrachloroethene	ND		10	ug/L		20 05/11/2012 10:21	66099
Chlorobenzene	ND		10	ug/L		20 05/11/2012 10:21	66099
Ethylbenzene	ND		10	ug/L		20 05/11/2012 10:21	66099
m,p-Xylene	ND		10	ug/L		20 05/11/2012 10:21	66099
o-Xylene	ND		10	ug/L		20 05/11/2012 10:21	66099
Surrogate: Dibromofluoromethane	99.7		88-124	%REC		20 05/11/2012 10:21	66099
Surrogate: 1,2-Dichloroethane-d4	91.9		79-115	%REC		20 05/11/2012 10:21	66099
Surrogate: Toluene-d8	97.6		80-114	%REC		20 05/11/2012 10:21	66099
Surrogate: Bromofluorobenzene	99.6		60-123	%REC		20 05/11/2012 10:21	66099

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-12S 050812

Lab ID: L0961-07

Project: NOW Corp. Site

Collection Date: 05/08/12 14:04

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	ug/L		1 05/14/2012 14:41	66148
Chloroethane	ND		0.50	ug/L		1 05/14/2012 14:41	66148
1,1-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/14/2012 14:41	66148
1,1-Dichloroethane	ND		0.50	ug/L		1 05/14/2012 14:41	66148
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
1,1,1-Trichloroethane	ND		0.50	ug/L		1 05/14/2012 14:41	66148
1,2-Dichloroethane	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Benzene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Trichloroethene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Toluene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Tetrachloroethene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Chlorobenzene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Ethylbenzene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
m,p-Xylene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
o-Xylene	ND		0.50	ug/L		1 05/14/2012 14:41	66148
Surrogate: Dibromofluoromethane	102		88-124	%REC		1 05/14/2012 14:41	66148
Surrogate: 1,2-Dichloroethane-d4	103		79-115	%REC		1 05/14/2012 14:41	66148
Surrogate: Toluene-d8	96.0		80-114	%REC		1 05/14/2012 14:41	66148
Surrogate: Bromofluorobenzene	103		60-123	%REC		1 05/14/2012 14:41	66148

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-12D 050812

Lab ID: L0961-08

Project: NOW Corp. Site

Collection Date: 05/08/12 13:35

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	ug/L		1 05/10/2012 8:42	66071
Chloroethane	2.0		0.50	ug/L		1 05/10/2012 8:42	66071
1,1-Dichloroethene	1.6		0.50	ug/L		1 05/10/2012 8:42	66071
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/10/2012 8:42	66071
1,1-Dichloroethane	15		0.50	ug/L		1 05/10/2012 8:42	66071
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
1,1,1-Trichloroethane	0.99		0.50	ug/L		1 05/10/2012 8:42	66071
1,2-Dichloroethane	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Benzene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Trichloroethene	1.8		0.50	ug/L		1 05/10/2012 8:42	66071
Toluene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Tetrachloroethene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Chlorobenzene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Ethylbenzene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
m,p-Xylene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
o-Xylene	ND		0.50	ug/L		1 05/10/2012 8:42	66071
Surrogate: Dibromofluoromethane	100		88-124	%REC		1 05/10/2012 8:42	66071
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		1 05/10/2012 8:42	66071
Surrogate: Toluene-d8	99.1		80-114	%REC		1 05/10/2012 8:42	66071
Surrogate: Bromofluorobenzene	100		60-123	%REC		1 05/10/2012 8:42	66071

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: MW-DUP 050812

Lab ID: L0961-09

Project: NOW Corp. Site

Collection Date: 05/08/12 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		1.3	ug/L	2.5	05/14/2012 15:08	66148
Chloroethane	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
1,1-Dichloroethene	2.8		1.3	ug/L	2.5	05/14/2012 15:08	66148
trans-1,2-Dichloroethene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Methyl tert-butyl ether	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
1,1-Dichloroethane	15		1.3	ug/L	2.5	05/14/2012 15:08	66148
cis-1,2-Dichloroethene	8.9		1.3	ug/L	2.5	05/14/2012 15:08	66148
1,1,1-Trichloroethane	25		1.3	ug/L	2.5	05/14/2012 15:08	66148
1,2-Dichloroethane	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Benzene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Trichloroethene	67		1.3	ug/L	2.5	05/14/2012 15:08	66148
Toluene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
1,1,2-Trichloroethane	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Tetrachloroethene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Chlorobenzene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Ethylbenzene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
m,p-Xylene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
o-Xylene	ND		1.3	ug/L	2.5	05/14/2012 15:08	66148
Surrogate: Dibromofluoromethane	105		88-124	%REC	2.5	05/14/2012 15:08	66148
Surrogate: 1,2-Dichloroethane-d4	99.6		79-115	%REC	2.5	05/14/2012 15:08	66148
Surrogate: Toluene-d8	94.4		80-114	%REC	2.5	05/14/2012 15:08	66148
Surrogate: Bromofluorobenzene	101		60-123	%REC	2.5	05/14/2012 15:08	66148

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

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

05/24/2012

Client: AECOM Technical Services, Inc.

Client Sample ID: TB 050812

Lab ID: L0961-10

Project: NOW Corp. Site

Collection Date: 05/08/12 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	ug/L		1 05/10/2012 7:47	66071
Chloroethane	ND		0.50	ug/L		1 05/10/2012 7:47	66071
1,1-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/10/2012 7:47	66071
1,1-Dichloroethane	ND		0.50	ug/L		1 05/10/2012 7:47	66071
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
1,1,1-Trichloroethane	ND		0.50	ug/L		1 05/10/2012 7:47	66071
1,2-Dichloroethane	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Benzene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Trichloroethene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Toluene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Tetrachloroethene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Chlorobenzene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Ethylbenzene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
m,p-Xylene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
o-Xylene	ND		0.50	ug/L		1 05/10/2012 7:47	66071
Surrogate: Dibromofluoromethane	95.8		88-124	%REC		1 05/10/2012 7:47	66071
Surrogate: 1,2-Dichloroethane-d4	87.6		79-115	%REC		1 05/10/2012 7:47	66071
Surrogate: Toluene-d8	100		80-114	%REC		1 05/10/2012 7:47	66071
Surrogate: Bromofluorobenzene	99.7		60-123	%REC		1 05/10/2012 7:47	66071

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

CLIENT: AECOM Technical Services, Inc. ANALYTICAL QC SUMMARY REPORT

Work Order: L0961

SW8260_25_W

Project: NOW Corp. Site

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

Sample ID: MB-66071	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 05/09/12 14:55	Run ID: V6_120509D	
Client ID: MB-66071	Batch ID: 66071	Units: ug/L	Analysis Date: 05/10/12 2:48	SeqNo: 1739675	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val
Vinyl chloride	ND	0.15			
Chloroethane	ND	0.24			
1,1-Dichloroethene	ND	0.19			
trans-1,2-Dichloroethene	ND	0.14			
Methyl tert-butyl ether	ND	0.13			
1,1-Dichloroethane	ND	0.18			
cis-1,2-Dichloroethene	ND	0.19			
1,1,1-Trichloroethane	ND	0.11			
1,2-Dichloroethane	ND	0.16			
Benzene	ND	0.12			
Trichloroethene	ND	0.13			
Toluene	ND	0.14			
1,1,2-Trichloroethane	ND	0.20			
Tetrachloroethene	ND	0.17			
Chlorobenzene	ND	0.13			
Ethylbenzene	ND	0.13			
m,p-Xylene	ND	0.22			
o-Xylene	ND	0.17			
Surrogate:	9.857		10.00	0	0
Dibromofluoromethane					
Surrogate: 1,2-	9.425		10.00	0	0
Dichloroethane-d4					
Surrogate: Toluene-d8	9.923		10.00	0	0
Surrogate:	9.866		10.00	0	0
Bromofluorobenzene					
			98.6	88	124
			94.2	79	115
			99.2	80	114
			98.7	60	123

Sample ID: MB-66099	SampType: MBLK	TestCode: SW8260_25_W	Prep Date: 05/10/12 16:00	Run ID: V6_120510B								
Client ID: MB-66099	Batch ID: 66099	Units: ug/L	Analysis Date: 05/11/12 2:05	SeqNo: 1734712								
Analyte	Result	MDL	RL	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:	10.04		0.50	10.00	0	100	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	9.808		0.50	10.00	0	98.1	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.910		0.50	10.00	0	99.1	80	114	0			
Surrogate:	9.924		0.50	10.00	0	99.2	60	123	0			
Bromofluorobenzene												

CLIENT: AECOM Technical Services, Inc.
Work Order: L0961
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT
SW8260_25_W
SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCS-66071		SampType: LCS		TestCode: SW8260_25_W			Prep Date: 05/09/12 14:55		Run ID: V6_120509D			
Client ID: LCS-66071		Batch ID: 66071		Units: ug/L			Analysis Date: 05/10/12 0:59		SeqNo: 1739673			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.965	0.15	0.50	10.00	0	99.6	77	120	0			
Chloroethane	9.898	0.24	0.50	10.00	0	99.0	75	135	0			
1,1-Dichloroethene	10.16	0.19	0.50	10.00	0	102	81	125	0			
trans-1,2-Dichloroethene	10.05	0.14	0.50	10.00	0	100	60	137	0			
Methyl tert-butyl ether	9.258	0.13	0.50	10.00	0	92.6	61	134	0			
1,1-Dichloroethane	9.581	0.18	0.50	10.00	0	95.8	82	120	0			
cis-1,2-Dichloroethene	9.033	0.19	0.50	10.00	0	90.3	84	116	0			
1,1,1-Trichloroethane	10.12	0.11	0.50	10.00	0	101	80	124	0			
1,2-Dichloroethane	9.397	0.16	0.50	10.00	0	94.0	86	117	0			
Benzene	9.832	0.12	0.50	10.00	0	98.3	81	121	0			
Trichloroethene	9.789	0.13	0.50	10.00	0	97.9	74	123	0			
Toluene	10.02	0.14	0.50	10.00	0	100	88	117	0			
1,1,2-Trichloroethane	9.303	0.20	0.50	10.00	0	93.0	83	121	0			
Tetrachloroethene	10.64	0.17	0.50	10.00	0	106	74	115	0			
Chlorobenzene	9.910	0.13	0.50	10.00	0	99.1	83	112	0			
Ethylbenzene	10.05	0.13	0.50	10.00	0	100	87	110	0			
m,p-Xylene	20.25	0.22	0.50	20.00	0	101	87	114	0			
o-Xylene	9.952	0.17	0.50	10.00	0	99.5	84	114	0			
Surrogate:	9.588		0.50	10.00	0	95.9	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	10.11		0.50	10.00	0	101	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	10.01		0.50	10.00	0	100	80	114	0			
Surrogate:	10.01		0.50	10.00	0	100	60	123	0			
Bromofluorobenzene												

CLIENT: AECOM Technical Services, Inc.
Work Order: L0961
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT
SW8260_25_W
SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCS-66148	SampType: LCS	TestCode: SW8260_25_W	Prep Date: 05/14/12 8:57	Run ID: V6_120514A								
Client ID: LCS-66148	Batch ID: 66148	Units: ug/L	Analysis Date: 05/14/12 12:24	SeqNo: 1739645								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.36	0.15	0.50	10.00	0	104	77	120	0			
Chloroethane	10.88	0.24	0.50	10.00	0	109	75	135	0			
1,1-Dichloroethene	10.87	0.19	0.50	10.00	0	109	81	125	0			
trans-1,2-Dichloroethene	10.70	0.14	0.50	10.00	0	107	60	137	0			
Methyl tert-butyl ether	10.78	0.13	0.50	10.00	0	108	61	134	0			
1,1-Dichloroethane	10.54	0.18	0.50	10.00	0	105	82	120	0			
cis-1,2-Dichloroethene	10.26	0.19	0.50	10.00	0	103	84	116	0			
1,1,1-Trichloroethane	10.95	0.11	0.50	10.00	0	109	80	124	0			
1,2-Dichloroethane	10.38	0.16	0.50	10.00	0	104	86	117	0			
Benzene	10.83	0.12	0.50	10.00	0	108	81	121	0			
Trichloroethene	10.90	0.13	0.50	10.00	0	109	74	123	0			
Toluene	11.03	0.14	0.50	10.00	0	110	88	117	0			
1,1,2-Trichloroethane	11.08	0.20	0.50	10.00	0	111	83	121	0			
Tetrachloroethene	9.886	0.17	0.50	10.00	0	98.9	74	115	0			
Chlorobenzene	10.35	0.13	0.50	10.00	0	103	83	112	0			
Ethylbenzene	10.42	0.13	0.50	10.00	0	104	87	110	0			
m,p-Xylene	20.79	0.22	0.50	20.00	0	104	87	114	0			
o-Xylene	10.55	0.17	0.50	10.00	0	106	84	114	0			
Surrogate:	10.06		0.50	10.00	0	101	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	9.662		0.50	10.00	0	96.6	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.642		0.50	10.00	0	96.4	80	114	0			
Surrogate:	10.19		0.50	10.00	0	102	60	123	0			
Bromofluorobenzene												

CLIENT: AECOM Technical Services, Inc.
Work Order: L0961
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT
SW8260_25_W
SW846 8260C -- VOC by GC-MS (25 mL Purge)

Sample ID: LCSD-66071	SampType: LCSD	TestCode: SW8260_25_W		Prep Date: 05/09/12 14:55	Run ID: V6_120509D	
Client ID: LCSD-66071	Batch ID: 66071	Units: ug/L		Analysis Date: 05/10/12 1:26	SeqNo: 1739674	
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Vinyl chloride	10.24	0.15	0.50	10.00	0	102 77 120 9.965 2.75 40
Chloroethane	10.13	0.24	0.50	10.00	0	101 75 135 9.898 2.32 40
1,1-Dichloroethene	10.23	0.19	0.50	10.00	0	102 81 125 10.16 0.648 40
trans-1,2-Dichloroethene	10.24	0.14	0.50	10.00	0	102 60 137 10.05 1.84 40
Methyl tert-butyl ether	9.604	0.13	0.50	10.00	0	96.0 61 134 9.258 3.68 40
1,1-Dichloroethane	9.896	0.18	0.50	10.00	0	99.0 82 120 9.581 3.24 40
cis-1,2-Dichloroethene	9.267	0.19	0.50	10.00	0	92.7 84 116 9.033 2.55 40
1,1,1-Trichloroethane	10.19	0.11	0.50	10.00	0	102 80 124 10.12 0.754 40
1,2-Dichloroethane	9.747	0.16	0.50	10.00	0	97.5 86 117 9.397 3.65 40
Benzene	10.04	0.12	0.50	10.00	0	100 81 121 9.832 2.06 40
Trichloroethene	10.24	0.13	0.50	10.00	0	102 74 123 9.789 4.48 40
Toluene	10.23	0.14	0.50	10.00	0	102 88 117 10.02 1.99 40
1,1,2-Trichloroethane	9.570	0.20	0.50	10.00	0	95.7 83 121 9.303 2.83 40
Tetrachloroethene	11.84	0.17	0.50	10.00	0	118 74 115 10.64 10.6 40
Chlorobenzene	10.01	0.13	0.50	10.00	0	100 83 112 9.910 0.985 40
Ethylbenzene	10.00	0.13	0.50	10.00	0	100 87 110 10.05 0.461 40
m,p-Xylene	20.38	0.22	0.50	20.00	0	102 87 114 20.25 0.641 40
o-Xylene	10.17	0.17	0.50	10.00	0	102 84 114 9.952 2.2 40
Surrogate:	9.796		0.50	10.00	0	98.0 88 124 0
Dibromofluoromethane						
Surrogate: 1,2-	9.507		0.50	10.00	0	95.1 79 115 0
Dichloroethane-d4						
Surrogate: Toluene-d8	9.974		0.50	10.00	0	99.7 80 114 0
Surrogate:	10.02		0.50	10.00	0	100 60 123 0
Bromofluorobenzene						

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0961

Client ID: EARTH_NY
Project: NOW Corp. Site
WO Name: NOW Corp. Site
Location: NOW_CORP,
Comments: N/A

Case:
SDG:

PO: 94017.02

HC Due: 05/25/12
Fax Due:
Fax Report: ☐
Report Level: LEVEL 2
Special Program:
EDD:

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0961-01A	MW-1 050812	05/08/2012 10:35	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-02A	MW-4S 050812	05/08/2012 12:08	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-03A	MW-6S 050812	05/08/2012 09:30	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-04A	MW-6D 050812	05/08/2012 09:40	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-05A	MW-7S 050812	05/08/2012 11:17	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-06A	MW-7D 050812	05/08/2012 11:25	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-07A	MW-12S 050812	05/08/2012 14:04	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-08A	MW-12D 050812	05/08/2012 13:35	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-09A	MW-DUP 050812	05/08/2012 00:00	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
L0961-10A	TB 050812	05/08/2012 00:00	05/09/2012	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold

Received By: <i>[Signature]</i>		Page 01 of 00	
Reviewed By: <i>[Signature]</i>		Log-in Date 05/09/2012	
Work Order: L0961		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: NOW Corp. Site			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
L0961-01						H	
L0961-02						H	
L0961-03						H	
L0961-04						H	
L0961-05						H	
L0961-06						H	
L0961-07						H	
L0961-08						H	
L0961-09						H	
L0961-10						H	

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 8996 2349 6491
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed /
	Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	3.0 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	05/09/2012
12. Time Received	08:45
Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On
IR Temp Gun ID: MT-1	
Coolant Condition: ICE	
Preservative Name/Lot No:	

VOA Matrix Key:

US = Unpreserved Soil A = Air

UA = Unpreserved Aqueous H = HCl

M = MeOH E = Encore

N = NaHSO4 F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

Last Page of Data Report