AECOM

Operation, Maintenance and Monitoring Report
August 2011

NOW Corporation
Site 3-14-008

Work Assignment No.
D004445-4.2

Prepared for:

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

Prepared by:

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

October 2011

AECOM

October 14, 2011

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: "August" 2011

Dear Mr. Hoffman:

This monthly summary report describes the operation, monitoring and maintenance (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York, for a 29-day period **(July 28 – August 26, 2011)**.

With the exceptions noted below, if any, the P&T system was online and operational throughout the reporting period. Approximately 268,300 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 9,250 gallons per day (gpd), compared to 21,100 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 85,861,300 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Table 1 summarizes influent and effluent analytical data for water samples collected on August 26, 2011. Four VOCs were detected in system effluent; the **effluent limitation for TCE was exceeded** by 0.3 ug/L. Table 2 summarizes operational data recorded on the sampling date. A copy of the analytical laboratory report is attached.

It has occasionally been noted that pump operation in recovery well TW-2A also creates substantial drawdown in recovery well TW-1, and vice versa. The wells are about 300 feet apart. These two wells may be connected via a fracture, and contaminated groundwater in TW-1, rather than being locally-derived, may be drawn from the vicinity of TW-2A. To evaluate this possibility, additional sampling was conducted during the reporting month.

The submersible pump in TW-1 had been off for nearly four days, and the groundwater level in the well had risen to 70.94 feet below top of the casing (equivalent to 61.29' above the in-well water-level sensor). A groundwater sample was collected from TW-1 using a bailer at 10:35 AM. The well was not purged prior to sample collection. The pump in TW-1 was turned on at 10:46 AM. Three additional samples were collected from TW-1 at the sample port inside the treatment building: at 11:02 AM, 11:13 AM, and 11:26 AM. The water-level drawdown (referenced to the pre-pumping "static" water level) at each of these times is listed in Table 3. [The pump in TW-2A was in its "on" cycle from 10:16 to 11:50, which encompassed the duration of the sampling at/from TW-1.]

The data in Table 3 show that as pumping time and drawdown increased, so too did the concentrations of VOCs in the influent samples. Forty minutes after the pump in TW-1 was turned on, the TCE concentrations had increased by 23% with respect to the initial (bailer) sample; cis-1,2-DCE increased by 27%, 1,1-DCA by 35%, and 1,1,1-TCA by 65%. However, the concentration of 1,1-DCE fell by 18%. The presence of contamination in the initial (bailer) sample suggests that contaminated groundwater is

indeed present in the vicinity of recovery well TW-1; progressively higher contaminant concentrations in later samples show that groundwater may be drawn from the area including recovery well TW-2A.

AECOM made three site visits during the period to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. The July 28 service visit was described in the previous report. Details for the current period follow:

August 16 – Site visit in response to auto-shutdown of system on 13 August. Tech noted that a seam on the Carbtrol stripper unit had failed. The released water flowed into the building sump, creating the alarm condition. Tech disassembled unit and began repair process. The system was left offline to allow the blown seams to dry.

August 18 – Returned to site to glue stripper seam using Devcon adhesive cartridge (plastic welder). Assembled Carbtrol unit; left system off to allow adhesive to cure.

Remotely started the three submersible pumps and the stripper blower on August 22. System shut down in a little more than an hour – the effluent pump couldn't keep up with the influent flow rate. Started system remotely on August 23, but allowed only TW-2A pump to provide influent to the stripper. Additionally started pump in TW-3 on August 25. TW-1 remained off in advance of the test sampling already described. There were 10 days of system downtime this period, with reduced duty from two of the three submersible pumps in the last three days of the reporting period.

August 26 – Performed monthly system inspection, noted system readings, and collected monthly influent and effluent samples, and the extra samples from TW-1 noted above. TW-1 was left in off-position upon leaving the site, pending receipt of analytical results.

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

Sincerely,
AECOM Technical Services Northeast, Inc.

Stephen R. Choiniere
Project Manager

Table 1
Summary of Influent and Effluent Data
Sampling Date: August 26, 2011
NOW Corporation Site
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	(units)
			TW-1	TW-2A	TW-3		
Quantity treated, per day		9,252				Monitor	gallons
pH	6.8	6.9				6.5 to 8.5	standard units
Oil and Grease	<5.0	<5.0	NA	NA	NA	15	mg/L
Total Cyanide	<10	<10	NA	NA	NA	10	ug/L
TDS	**210**	**320**	NA	NA	NA	1000	mg/L
TSS	<20	<10	NA	NA	NA	50	mg/L
Aluminum, Total	<200	<200	NA	NA	NA	2000	ug/L
Arsenic, Total	<20	<20	NA	NA	NA	50	ug/L
Barium, Total	**80 J**	**79 J**	NA	NA	NA	2000	ug/L
Chromium	**0.65 J**	<20	NA	NA	NA	100	ug/L
Copper	<25	<25	NA	NA	NA	24	ug/L
Iron	<200	<200	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	**71**	**44 J**	NA	NA	NA	600	ug/L
Nickel	<50	<50	NA	NA	NA	200	ug/L
Zinc	<50	**13 J**	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	**280**	**3**	**2.8**	**530**	**22.0**	5	ug/L
1,1,2-Trichloroethane	<10	<0.50	<1.3	<10	<0.50	1.2	ug/L
1,1-Dichloroethane	**130**	**3.4**	**70**	**210**	**27**	5	ug/L
1,1-Dichloroethene	**17**	<0.50	**14**	**23**	**2.6**	0.5	ug/L
1,2-Dichloroethane	<10	<0.50	<1.3	<10	<0.50	1.6	ug/L
Benzene	<10	<0.50	<1.3	<10	<0.50	0.8	ug/L
Chlorobenzene	<10	<0.50	<1.3	<10	<0.50	5	ug/L
Chloroethane	<10	<0.50	<1.3	<10	<0.50	5	ug/L
cis -1,2-Dichloroethene	**12.0**	**0.5**	**5.6**	**18**	**0.81**	5	ug/L
Ethylbenzene	<10	<0.50	<1.3	<10	<0.50	5	ug/L
Methyl tert-butyl ether	<10	<0.50	<1.3	<10	<0.50	5	ug/L
o-Xylene	<10	<0.50	<1.3	<10	<0.50	5	ug/L
m,p-Xylene	<10	<0.50	<1.3	<10	<0.50	10	ug/L
Tetrachloroethene	<10	<0.50	<1.3	<10	<0.50	1.4	ug/L
Toluene	<10	<0.50	<1.3	<10	<0.50	5	ug/L
trans -1,2-Dichloroethene	<10	<0.50	<1.3	<10	<0.50	5	ug/L
Trichloroethene	**300**	**5.3**	**70**	**480**	**27**	5	ug/L
Vinyl Chloride	<10	<0.50	<1.3	<10	<0.50	0.6	ug/L

Notes:

1) Detected concentrations are presented in ***bold*** *typeface, and are expressed in the units shown in far right column.*

2) Effluent concentration boxed in ***bold*** *denotes exceedance of effluent limitations.*

3) NA indicates not analyzed.

*4) "**J**" indicates an estimated concentration below the reporting limit (RL).*

*5) "**B**" denotes metal detected in method blank at concentration below the RL, but above the method detection limit.*

Table 2
Summary of August 2011 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:		8/26/11	Units
TW-1			
	Pumping Rate	5	GPM
	Water Level Above Transducer	24.70	feet
	Flow Meter Reading	6,213,400	gallons
	Pump Pressure	75	psi
TW-2A			
	Pumping Rate	~14	GPM
	Water Level Above Transducer	14.04	feet
	Flow Meter Reading	22,420,900	gallons
	Pump Pressure	12	psi
TW-3			
	Pumping Rate	4	GPM
	Water Level Above Transducer	40.61	feet
	Flow Meter Reading	9,265,800	gallons
	Pump Pressure	76	psi
Air Stripper			
	Stripper Blower Pressure	22	inches H_2O
	Air Temperature in Stripper	50	°F
	Pressure Gauge - Left Leg	3.02	inches H_2O
	Pressure Gauge - Right Leg	0.1	inches H_2O
Effluent Flow			
	Effluent Flow this period (calculated)	268,300	gallons
	Total Effluent Flow (calculated)	85,861,300	gallons

Table 3
Summary of TW-1 Test Data
Sampling Date: August 26, 2011
NOW Corporation Site
Town of Clinton, New York

	Recovery Well TW-1				(units)
Sample ID	**TW-1-0**	**TW-1-1**	**TW-1-2**	**TW-1-3**	
Time Sampled (EDT)	**10:35**	**11:02**	**11:13**	**11:26**	
Drawdown	0	17.05	29.84	46.08	feet
Analytes/Parameters					
1,1,1-Trichloroethane	**1.7**	**1.8**	**3**	**2.8**	ug/L
1,1,2-Trichloroethane	<1.3	<1.3	<1.3	<1.3	ug/L
1,1-Dichloroethane	**52**	**56**	**60**	**70**	ug/L
1,1-Dichloroethene	**17**	**17**	**18**	**14**	ug/L
1,2-Dichloroethane	<1.3	<1.3	<1.3	<1.3	ug/L
Benzene	<1.3	<1.3	<1.3	<1.3	ug/L
Chlorobenzene	<1.3	<1.3	<1.3	<1.3	ug/L
Chloroethane	<1.3	<1.3	<1.3	<1.3	ug/L
cis -1,2-Dichloroethene	**4.4**	**4.4**	**4.4**	**5.6**	ug/L
Ethylbenzene	<1.3	<1.3	<1.3	<1.3	ug/L
Methyl tert-butyl ether	<1.3	<1.3	<1.3	<1.3	ug/L
o-Xylene	<1.3	<1.3	<1.3	<1.3	ug/L
m,p-Xylene	<1.3	<1.3	<1.3	<1.3	ug/L
Tetrachloroethene	<1.3	<1.3	<1.3	<1.3	ug/L
Toluene	<1.3	<1.3	<1.3	<1.3	ug/L
trans -1,2-Dichloroethene	<1.3	<1.3	<1.3	<1.3	ug/L
Trichloroethene	**57**	**60**	**65**	**70**	ug/L
Vinyl Chloride	<1.3	<1.3	<1.3	<1.3	ug/L

Notes:

1) *Detected concentrations are presented in* ***bold*** *typeface, and are expressed in the units shown in far right column.*
2) *The TW-1 pump was shut down at 18:55 on August 22 to obtain steady state condition in the well.*
3) *TW-1-0 was collected with a bailer before the TW-1 pump was started at 10:46 AM.*
4) *TW-1-1 was collected 16 minutes after the PW-1 pump was started, TW-1-2 after 27 minutes, and TW-13 after 40 minutes.*
5) *TW-1-1, TW-1-2, and TW-1-3 were collected in building per standard operating procedure.*
6) *The results from TW-1-3 also appear on Table 1.*

Report Date:
15-Sep-11 16:23

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: K1577
Project : NOW Corp. Site, 8/2011
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K1577-01	EFF-082611	Aqueous	26-Aug-11 13:07	27-Aug-11 11:15
K1577-02	INF-082611	Aqueous	26-Aug-11 12:50	27-Aug-11 11:15
K1577-03	TW-1-1035082611	Aqueous	26-Aug-11 10:35	27-Aug-11 11:15
K1577-04	TW-1-110282611	Aqueous	26-Aug-11 11:02	27-Aug-11 11:15
K1577-05	TW-1-1113082611	Aqueous	26-Aug-11 11:13	27-Aug-11 11:15
K1577-06	TW-1-1126082611	Aqueous	26-Aug-11 11:26	27-Aug-11 11:15
K1577-07	TW-2A-082611	Aqueous	26-Aug-11 11:59	27-Aug-11 11:15
K1577-08	TW-3-082611	Aqueous	26-Aug-11 12:14	27-Aug-11 11:15
K1577-09	TB 082611	Aqueous	26-Aug-11 00:00	27-Aug-11 11:15

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

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

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

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

LABORATORY ACCREDITATION BUREAU ACCREDITED
DoD ELAP
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, 8/2011

Laboratory Workorder / SDG #: K1577

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

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

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

V. INSTRUMENTATION

The following instrumentation was used

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

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Laboratory Control Spikes (LCS):

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

LCS-61314 in batch 61314, Percent Recovery is outside QC Limits, recovery is above criteria for Tetrachloroethene at 116% with criteria of (74-115).

LCSD-61314 in batch 61314, Percent Recovery is outside QC Limits, recovery is above criteria for Tetrachloroethene at 123% with criteria of (74-115).

Please note that this potential high bias for Tetrachloroethene does not impact any sample results, as no sample in batch 61314 contained Tetrachloroethene.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

INF-082611 (K1577-02A) : Dilution Factor: 20
TW-1-1035082611 (K1577-03A) : Dilution Factor: 2.5
TW-1-110282611 (K1577-04A) : Dilution Factor: 2.5
TW-1-1113082611 (K1577-05A) : Dilution Factor: 2.5
TW-1-1126082611 (K1577-06A) : Dilution Factor: 2.5
TW-2A-082611 (K1577-07A) : Dilution Factor: 20

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:_____9/15/11_____

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site, 8/2011

Laboratory Workorder / SDG #: K1577

EPA 1664A, Oil & Grease, HEM

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered.

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. Laboratory Control Spikes (LCS):

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

D. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and 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:_____9/15/11_____

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site, 8/2011

Laboratory Workorder / SDG #: K1577

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered.

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

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Laboratory Control Spikes (LCS):

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

D. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and 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:_____9/15/11_____

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site, 8/2011

Laboratory Workorder / SDG #: K1577

SM 2540C, SM 2540D, SW846 9012B

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered.

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
Description:
Manufacturer:
Model:

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Laboratory Control Spikes (LCS):

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

D. Duplicate sample:

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

E. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and 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:_____9/15/11_____

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-01 **Collection Date:** 08/26/11 13:07

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Chloroethane	ND		0.50	µg/L	1	09/01/2011 12:53	61314
1,1-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Methyl tert-butyl ether	ND		0.50	µg/L	1	09/01/2011 12:53	61314
1,1-Dichloroethane	3.4		0.50	µg/L	1	09/01/2011 12:53	61314
cis-1,2-Dichloroethene	0.50		0.50	µg/L	1	09/01/2011 12:53	61314
1,1,1-Trichloroethane	3.0		0.50	µg/L	1	09/01/2011 12:53	61314
1,2-Dichloroethane	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Benzene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Trichloroethene	5.3		0.50	µg/L	1	09/01/2011 12:53	61314
Toluene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
1,1,2-Trichloroethane	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Tetrachloroethene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Chlorobenzene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Ethylbenzene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
m,p-Xylene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
o-Xylene	ND		0.50	µg/L	1	09/01/2011 12:53	61314
Surrogate: Dibromofluoromethane	108		88-124	%REC	1	09/01/2011 12:53	61314
Surrogate: 1,2-Dichloroethane-d4	100		79-115	%REC	1	09/01/2011 12:53	61314
Surrogate: Toluene-d8	91.3		80-114	%REC	1	09/01/2011 12:53	61314
Surrogate: Bromofluorobenzene	95.8		60-123	%REC	1	09/01/2011 12:53	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: INF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-02 **Collection Date:** 08/26/11 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		10	µg/L	20	09/01/2011 15:46	61314
Chloroethane	ND		10	µg/L	20	09/01/2011 15:46	61314
1,1-Dichloroethene	17		10	µg/L	20	09/01/2011 15:46	61314
trans-1,2-Dichloroethene	ND		10	µg/L	20	09/01/2011 15:46	61314
Methyl tert-butyl ether	ND		10	µg/L	20	09/01/2011 15:46	61314
1,1-Dichloroethane	130		10	µg/L	20	09/01/2011 15:46	61314
cis-1,2-Dichloroethene	12		10	µg/L	20	09/01/2011 15:46	61314
1,1,1-Trichloroethane	280		10	µg/L	20	09/01/2011 15:46	61314
1,2-Dichloroethane	ND		10	µg/L	20	09/01/2011 15:46	61314
Benzene	ND		10	µg/L	20	09/01/2011 15:46	61314
Trichloroethene	300		10	µg/L	20	09/01/2011 15:46	61314
Toluene	ND		10	µg/L	20	09/01/2011 15:46	61314
1,1,2-Trichloroethane	ND		10	µg/L	20	09/01/2011 15:46	61314
Tetrachloroethene	ND		10	µg/L	20	09/01/2011 15:46	61314
Chlorobenzene	ND		10	µg/L	20	09/01/2011 15:46	61314
Ethylbenzene	ND		10	µg/L	20	09/01/2011 15:46	61314
m,p-Xylene	ND		10	µg/L	20	09/01/2011 15:46	61314
o-Xylene	ND		10	µg/L	20	09/01/2011 15:46	61314
Surrogate: Dibromofluoromethane	109		88-124	%REC	20	09/01/2011 15:46	61314
Surrogate: 1,2-Dichloroethane-d4	106		79-115	%REC	20	09/01/2011 15:46	61314
Surrogate: Toluene-d8	90.1		80-114	%REC	20	09/01/2011 15:46	61314
Surrogate: Bromofluorobenzene	94.3		60-123	%REC	20	09/01/2011 15:46	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: TW-1-1035082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-03 **Collection Date:** 08/26/11 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	µg/L	2.5	09/01/2011 16:15	61314
Chloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
1,1-Dichloroethene	17		1.3	µg/L	2.5	09/01/2011 16:15	61314
trans-1,2-Dichloroethene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Methyl tert-butyl ether	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
1,1-Dichloroethane	52		1.3	µg/L	2.5	09/01/2011 16:15	61314
cis-1,2-Dichloroethene	4.4		1.3	µg/L	2.5	09/01/2011 16:15	61314
1,1,1-Trichloroethane	1.7		1.3	µg/L	2.5	09/01/2011 16:15	61314
1,2-Dichloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Benzene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Trichloroethene	57		1.3	µg/L	2.5	09/01/2011 16:15	61314
Toluene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
1,1,2-Trichloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Tetrachloroethene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Chlorobenzene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Ethylbenzene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
m,p-Xylene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
o-Xylene	ND		1.3	µg/L	2.5	09/01/2011 16:15	61314
Surrogate: Dibromofluoromethane	111		88-124	%REC	2.5	09/01/2011 16:15	61314
Surrogate: 1,2-Dichloroethane-d4	102		79-115	%REC	2.5	09/01/2011 16:15	61314
Surrogate: Toluene-d8	87.3		80-114	%REC	2.5	09/01/2011 16:15	61314
Surrogate: Bromofluorobenzene	95.4		60-123	%REC	2.5	09/01/2011 16:15	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: TW-1-110282611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-04 **Collection Date:** 08/26/11 11:02

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	µg/L	2.5	09/01/2011 16:44	61314
Chloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
1,1-Dichloroethene	17		1.3	µg/L	2.5	09/01/2011 16:44	61314
trans-1,2-Dichloroethene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Methyl tert-butyl ether	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
1,1-Dichloroethane	56		1.3	µg/L	2.5	09/01/2011 16:44	61314
cis-1,2-Dichloroethene	4.4		1.3	µg/L	2.5	09/01/2011 16:44	61314
1,1,1-Trichloroethane	1.8		1.3	µg/L	2.5	09/01/2011 16:44	61314
1,2-Dichloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Benzene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Trichloroethene	60		1.3	µg/L	2.5	09/01/2011 16:44	61314
Toluene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
1,1,2-Trichloroethane	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Tetrachloroethene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Chlorobenzene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Ethylbenzene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
m,p-Xylene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
o-Xylene	ND		1.3	µg/L	2.5	09/01/2011 16:44	61314
Surrogate: Dibromofluoromethane	110		88-124	%REC	2.5	09/01/2011 16:44	61314
Surrogate: 1,2-Dichloroethane-d4	105		79-115	%REC	2.5	09/01/2011 16:44	61314
Surrogate: Toluene-d8	89.3		80-114	%REC	2.5	09/01/2011 16:44	61314
Surrogate: Bromofluorobenzene	96.2		60-123	%REC	2.5	09/01/2011 16:44	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: TW-1-1113082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-05 **Collection Date:** 08/26/11 11:13

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	µg/L	2.5	09/01/2011 17:13	61314
Chloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
1,1-Dichloroethene	18		1.3	µg/L	2.5	09/01/2011 17:13	61314
trans-1,2-Dichloroethene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Methyl tert-butyl ether	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
1,1-Dichloroethane	60		1.3	µg/L	2.5	09/01/2011 17:13	61314
cis-1,2-Dichloroethene	4.4		1.3	µg/L	2.5	09/01/2011 17:13	61314
1,1,1-Trichloroethane	3.0		1.3	µg/L	2.5	09/01/2011 17:13	61314
1,2-Dichloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Benzene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Trichloroethene	65		1.3	µg/L	2.5	09/01/2011 17:13	61314
Toluene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
1,1,2-Trichloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Tetrachloroethene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Chlorobenzene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Ethylbenzene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
m,p-Xylene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
o-Xylene	ND		1.3	µg/L	2.5	09/01/2011 17:13	61314
Surrogate: Dibromofluoromethane	107		88-124	%REC	2.5	09/01/2011 17:13	61314
Surrogate: 1,2-Dichloroethane-d4	94.1		79-115	%REC	2.5	09/01/2011 17:13	61314
Surrogate: Toluene-d8	88.7		80-114	%REC	2.5	09/01/2011 17:13	61314
Surrogate: Bromofluorobenzene	95.1		60-123	%REC	2.5	09/01/2011 17:13	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: TW-1-1126082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-06 **Collection Date:** 08/26/11 11:26

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	µg/L	2.5	09/01/2011 17:42	61314
Chloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
1,1-Dichloroethene	14		1.3	µg/L	2.5	09/01/2011 17:42	61314
trans-1,2-Dichloroethene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Methyl tert-butyl ether	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
1,1-Dichloroethane	70		1.3	µg/L	2.5	09/01/2011 17:42	61314
cis-1,2-Dichloroethene	5.6		1.3	µg/L	2.5	09/01/2011 17:42	61314
1,1,1-Trichloroethane	2.8		1.3	µg/L	2.5	09/01/2011 17:42	61314
1,2-Dichloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Benzene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Trichloroethene	70		1.3	µg/L	2.5	09/01/2011 17:42	61314
Toluene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
1,1,2-Trichloroethane	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Tetrachloroethene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Chlorobenzene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Ethylbenzene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
m,p-Xylene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
o-Xylene	ND		1.3	µg/L	2.5	09/01/2011 17:42	61314
Surrogate: Dibromofluoromethane	110		88-124	%REC	2.5	09/01/2011 17:42	61314
Surrogate: 1,2-Dichloroethane-d4	104		79-115	%REC	2.5	09/01/2011 17:42	61314
Surrogate: Toluene-d8	91.0		80-114	%REC	2.5	09/01/2011 17:42	61314
Surrogate: Bromofluorobenzene	98.6		60-123	%REC	2.5	09/01/2011 17:42	61314

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-2A-082611 **Project:** NOW Corp. Site, 8/2011

Lab ID: K1577-07 **Collection Date:** 08/26/11 11:59

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	µg/L	20	09/01/2011 13:22	61314
Chloroethane	ND		10	µg/L	20	09/01/2011 13:22	61314
1,1-Dichloroethene	23		10	µg/L	20	09/01/2011 13:22	61314
trans-1,2-Dichloroethene	ND		10	µg/L	20	09/01/2011 13:22	61314
Methyl tert-butyl ether	ND		10	µg/L	20	09/01/2011 13:22	61314
1,1-Dichloroethane	210		10	µg/L	20	09/01/2011 13:22	61314
cis-1,2-Dichloroethene	18		10	µg/L	20	09/01/2011 13:22	61314
1,1,1-Trichloroethane	530		10	µg/L	20	09/01/2011 13:22	61314
1,2-Dichloroethane	ND		10	µg/L	20	09/01/2011 13:22	61314
Benzene	ND		10	µg/L	20	09/01/2011 13:22	61314
Trichloroethene	480		10	µg/L	20	09/01/2011 13:22	61314
Toluene	ND		10	µg/L	20	09/01/2011 13:22	61314
1,1,2-Trichloroethane	ND		10	µg/L	20	09/01/2011 13:22	61314
Tetrachloroethene	ND		10	µg/L	20	09/01/2011 13:22	61314
Chlorobenzene	ND		10	µg/L	20	09/01/2011 13:22	61314
Ethylbenzene	ND		10	µg/L	20	09/01/2011 13:22	61314
m,p-Xylene	ND		10	µg/L	20	09/01/2011 13:22	61314
o-Xylene	ND		10	µg/L	20	09/01/2011 13:22	61314
Surrogate: Dibromofluoromethane	110		88-124	%REC	20	09/01/2011 13:22	61314
Surrogate: 1,2-Dichloroethane-d4	98.5		79-115	%REC	20	09/01/2011 13:22	61314
Surrogate: Toluene-d8	89.7		80-114	%REC	20	09/01/2011 13:22	61314
Surrogate: Bromofluorobenzene	95.6		60-123	%REC	20	09/01/2011 13:22	61314

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation 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.

Client Sample ID: TW-3-082611 **Project:** NOW Corp. Site, 8/2011

Lab ID: K1577-08 **Collection Date:** 08/26/11 12:14

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Chloroethane	ND		0.50	µg/L	1	09/01/2011 13:50	61314
1,1-Dichloroethene	2.6		0.50	µg/L	1	09/01/2011 13:50	61314
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Methyl tert-butyl ether	ND		0.50	µg/L	1	09/01/2011 13:50	61314
1,1-Dichloroethane	27		0.50	µg/L	1	09/01/2011 13:50	61314
cis-1,2-Dichloroethene	0.81		0.50	µg/L	1	09/01/2011 13:50	61314
1,1,1-Trichloroethane	22		0.50	µg/L	1	09/01/2011 13:50	61314
1,2-Dichloroethane	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Benzene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Trichloroethene	27		0.50	µg/L	1	09/01/2011 13:50	61314
Toluene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
1,1,2-Trichloroethane	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Tetrachloroethene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Chlorobenzene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Ethylbenzene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
m,p-Xylene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
o-Xylene	ND		0.50	µg/L	1	09/01/2011 13:50	61314
Surrogate: Dibromofluoromethane	109		88-124	%REC	1	09/01/2011 13:50	61314
Surrogate: 1,2-Dichloroethane-d4	105		79-115	%REC	1	09/01/2011 13:50	61314
Surrogate: Toluene-d8	89.2		80-114	%REC	1	09/01/2011 13:50	61314
Surrogate: Bromofluorobenzene	96.3		60-123	%REC	1	09/01/2011 13:50	61314

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation 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.
Client Sample ID: TB 082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-09 **Collection Date:** 08/26/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Chloroethane	ND		0.50	µg/L	1	09/01/2011 15:17	61314
1,1-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Methyl tert-butyl ether	ND		0.50	µg/L	1	09/01/2011 15:17	61314
1,1-Dichloroethane	ND		0.50	µg/L	1	09/01/2011 15:17	61314
cis-1,2-Dichloroethene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
1,1,1-Trichloroethane	ND		0.50	µg/L	1	09/01/2011 15:17	61314
1,2-Dichloroethane	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Benzene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Trichloroethene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Toluene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
1,1,2-Trichloroethane	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Tetrachloroethene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Chlorobenzene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Ethylbenzene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
m,p-Xylene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
o-Xylene	ND		0.50	µg/L	1	09/01/2011 15:17	61314
Surrogate: Dibromofluoromethane	109		88-124	%REC	1	09/01/2011 15:17	61314
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC	1	09/01/2011 15:17	61314
Surrogate: Toluene-d8	87.7		80-114	%REC	1	09/01/2011 15:17	61314
Surrogate: Bromofluorobenzene	95.8		60-123	%REC	1	09/01/2011 15:17	61314

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **MB-61314** SampType: **MBLK** TestCode: **SW8260_25_W** Prep Date: **09/01/11 10:12** Run ID: **V5_110901A**
Client ID: **MB-61314** Batch ID: **61314** Units: **µg/L** Analysis Date: **09/01/11 12:25** SeqNo: **1593875**

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: Dibromofluoromethane	10.86		0.50	10.00	0	109	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	10.28		0.50	10.00	0	103	79	115	0			
Surrogate: Toluene-d8	8.993		0.50	10.00	0	89.9	80	114	0			
Surrogate: Bromofluorobenzene	9.707		0.50	10.00	0	97.1	60	123	0			

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCS-61314** SampType: **LCS** TestCode: **SW8260_25_W** Prep Date: **09/01/11 10:12** Run ID: **V5_110901A**
Client ID: **LCS-61314** Batch ID: **61314** Units: **µg/L** Analysis Date: **09/01/11 11:28** SeqNo: **1593868**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.64	0.15	0.50	10.00	0	116	77	120	0			
Chloroethane	12.42	0.24	0.50	10.00	0	124	75	135	0			
1,1-Dichloroethene	12.49	0.19	0.50	10.00	0	125	81	125	0			
trans-1,2-Dichloroethene	12.13	0.14	0.50	10.00	0	121	60	137	0			
Methyl tert-butyl ether	11.37	0.13	0.50	10.00	0	114	61	134	0			
1,1-Dichloroethane	11.83	0.18	0.50	10.00	0	118	82	120	0			
cis-1,2-Dichloroethene	11.01	0.19	0.50	10.00	0	110	84	116	0			
1,1,1-Trichloroethane	11.81	0.11	0.50	10.00	0	118	80	124	0			
1,2-Dichloroethane	11.27	0.16	0.50	10.00	0	113	86	117	0			
Benzene	11.67	0.12	0.50	10.00	0	117	81	121	0			
Trichloroethene	12.19	0.13	0.50	10.00	0	122	74	123	0			
Toluene	11.65	0.14	0.50	10.00	0	117	88	117	0			
1,1,2-Trichloroethane	11.18	0.20	0.50	10.00	0	112	83	121	0			
Tetrachloroethene	11.61	0.17	0.50	10.00	0	116	74	115	0			S
Chlorobenzene	10.22	0.13	0.50	10.00	0	102	83	112	0			
Ethylbenzene	10.20	0.13	0.50	10.00	0	102	87	110	0			
m,p-Xylene	20.67	0.22	0.50	20.00	0	103	87	114	0			
o-Xylene	10.09	0.17	0.50	10.00	0	101	84	114	0			
Surrogate: Dibromofluoromethane	10.49		0.50	10.00	0	105	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	11.05		0.50	10.00	0	111	79	115	0			
Surrogate: Toluene-d8	9.334		0.50	10.00	0	93.3	80	114	0			
Surrogate: Bromofluorobenzene	10.00		0.50	10.00	0	100	60	123	0			

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCSD-61314** SampType: **LCSD** TestCode: **SW8260_25_W** Prep Date: **09/01/11 10:12** Run ID: **V5_110901A**

Client ID: **LCSD-61314** Batch ID: **61314** Units: **µg/L** Analysis Date: **09/01/11 11:56** SeqNo: **1593871**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	11.00	0.15	0.50	10.00	0	110	77	120	11.64	5.57	40	
Chloroethane	12.21	0.24	0.50	10.00	0	122	75	135	12.42	1.72	40	
1,1-Dichloroethene	12.19	0.19	0.50	10.00	0	122	81	125	12.49	2.41	40	
trans-1,2-Dichloroethene	11.70	0.14	0.50	10.00	0	117	60	137	12.13	3.56	40	
Methyl tert-butyl ether	11.05	0.13	0.50	10.00	0	110	61	134	11.37	2.91	40	
1,1-Dichloroethane	11.51	0.18	0.50	10.00	0	115	82	120	11.83	2.74	40	
cis-1,2-Dichloroethene	11.41	0.19	0.50	10.00	0	114	84	116	11.01	3.56	40	
1,1,1-Trichloroethane	12.09	0.11	0.50	10.00	0	121	80	124	11.81	2.29	40	
1,2-Dichloroethane	10.76	0.16	0.50	10.00	0	108	86	117	11.27	4.6	40	
Benzene	11.20	0.12	0.50	10.00	0	112	81	121	11.67	4.1	40	
Trichloroethene	12.08	0.13	0.50	10.00	0	121	74	123	12.19	0.93	40	
Toluene	11.33	0.14	0.50	10.00	0	113	88	117	11.65	2.82	40	
1,1,2-Trichloroethane	10.58	0.20	0.50	10.00	0	106	83	121	11.18	5.51	40	
Tetrachloroethene	12.33	0.17	0.50	10.00	0	123	74	115	11.61	6.03	40	S
Chlorobenzene	9.643	0.13	0.50	10.00	0	96.4	83	112	10.22	5.77	40	
Ethylbenzene	9.776	0.13	0.50	10.00	0	97.8	87	110	10.20	4.22	40	
m,p-Xylene	19.99	0.22	0.50	20.00	0	100	87	114	20.67	3.36	40	
o-Xylene	9.955	0.17	0.50	10.00	0	99.5	84	114	10.09	1.36	40	
Surrogate: Dibromofluoromethane	10.67		0.50	10.00	0	107	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	9.794		0.50	10.00	0	97.9	79	115	0			
Surrogate: Toluene-d8	9.300		0.50	10.00	0	93.0	80	114	0			
Surrogate: Bromofluorobenzene	10.46		0.50	10.00	0	105	60	123	0			

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-01 **Collection Date:** 08/26/11 13:07

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	09/01/2011 0:00	61288

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: INF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-02 **Collection Date:** 08/26/11 12:50

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	09/01/2011 0:00	61288

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

E1664

EPA 1664A -- Oil & Grease, HEM

Sample ID: **MB-61288**	SampType: **MBLK**	TestCode: **E1664**	Prep Date: **08/31/11 10:58**	Run ID: **MANUAL_110901A**
Client ID: **MB-61288**	Batch ID: **61288**	Units: **mg/L**	Analysis Date: **09/01/11 0:00**	SeqNo: **1592686**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	ND	1.2	5.0									

Sample ID: **LCS-61288**	SampType: **LCS**	TestCode: **E1664**	Prep Date: **08/31/11 10:58**	Run ID: **MANUAL_110901A**
Client ID: **LCS-61288**	Batch ID: **61288**	Units: **mg/L**	Analysis Date: **09/01/11 0:00**	SeqNo: **1592684**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	37.50	1.2	5.0	40.00	0	93.8	78	114	0			

Sample ID: **LCSD-61288**	SampType: **LCSD**	TestCode: **E1664**	Prep Date: **08/31/11 10:58**	Run ID: **MANUAL_110901A**
Client ID: **LCSD-61288**	Batch ID: **61288**	Units: **mg/L**	Analysis Date: **09/01/11 0:00**	SeqNo: **1592685**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	38.40	1.2	5.0	40.00	0	96.0	78	114	37.50	2.37	18	

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

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-01 **Collection Date:** 08/26/11 13:07

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	µg/L	1	09/01/2011 8:44	61284
Arsenic	ND		20	µg/L	1	09/01/2011 8:44	61284
Barium	79	J	200	µg/L	1	09/01/2011 8:44	61284
Chromium	ND		20	µg/L	1	09/01/2011 8:44	61284
Copper	ND		25	µg/L	1	09/01/2011 8:44	61284
Iron	ND		200	µg/L	1	09/01/2011 8:44	61284
Manganese	44	J	50	µg/L	1	09/01/2011 8:44	61284
Nickel	ND		50	µg/L	1	09/01/2011 8:44	61284
Zinc	13	J	50	µg/L	1	09/01/2011 8:44	61284
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	08/30/2011 9:27	61253

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: INF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-02 **Collection Date:** 08/26/11 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	µg/L	1	09/01/2011 8:47	61284
Arsenic	ND		20	µg/L	1	09/01/2011 8:47	61284
Barium	80	J	200	µg/L	1	09/01/2011 8:47	61284
Chromium	0.65	J	20	µg/L	1	09/01/2011 8:47	61284
Copper	ND		25	µg/L	1	09/01/2011 8:47	61284
Iron	ND		200	µg/L	1	09/01/2011 8:47	61284
Manganese	71		50	µg/L	1	09/01/2011 8:47	61284
Nickel	ND		50	µg/L	1	09/01/2011 8:47	61284
Zinc	ND		50	µg/L	1	09/01/2011 8:47	61284
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	08/30/2011 9:28	61253

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SW6010_W

SW846 6010C -- Metals by ICP

Sample ID: **MB-61284** SampType: **MBLK** TestCode: **SW6010_W** Prep Date: **08/31/11 11:10** Run ID: **OPTIMA3_110901A**
Client ID: **MB-61284** Batch ID: **61284** Units: **µg/L** Analysis Date: **09/01/11 8:33** SeqNo: **1592591**

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	37.68	31	200									J
Manganese	ND	10	50									
Nickel	ND	0.85	50									
Zinc	ND	4.9	50									

Sample ID: **LCS-61284** SampType: **LCS** TestCode: **SW6010_W** Prep Date: **08/31/11 11:10** Run ID: **OPTIMA3_110901A**
Client ID: **LCS-61284** Batch ID: **61284** Units: **µg/L** Analysis Date: **09/01/11 8:37** SeqNo: **1592592**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9221	66	200	9100	0	101	80	120	0			
Arsenic	519.9	4.3	20	455.0	0	114	80	120	0			
Barium	9441	1.1	200	9100	0	104	80	120	0			
Chromium	926.8	0.64	20	910.0	0	102	80	120	0			
Copper	1152	3.6	30	1130	0	102	80	120	0			
Iron	4745	31	200	4550	0	104	80	120	0			B
Manganese	2323	10	50	2270	0	102	80	120	0			
Nickel	2335	0.85	50	2270	0	103	80	120	0			
Zinc	2325	4.9	50	2270	0	102	80	120	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SW6010_W

SW846 6010C -- Metals by ICP

Sample ID: **LCSD-61284** SampType: **LCSD** TestCode: **SW6010_W** Prep Date: **08/31/11 11:10** Run ID: **OPTIMA3_110901A**

Client ID: **LCSD-61284** Batch ID: **61284** Units: **µg/L** Analysis Date: **09/01/11 8:40** SeqNo: **1592593**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9270	66	200	9100	0	102	80	120	9221	0.522	20	
Arsenic	523.5	4.3	20	455.0	0	115	80	120	519.9	0.687	20	
Barium	9481	1.1	200	9100	0	104	80	120	9441	0.428	20	
Chromium	927.8	0.64	20	910.0	0	102	80	120	926.8	0.108	20	
Copper	1158	3.6	30	1130	0	102	80	120	1152	0.532	20	
Iron	4771	31	200	4550	0	105	80	120	4745	0.54	20	B
Manganese	2330	10	50	2270	0	103	80	120	2323	0.279	20	
Nickel	2344	0.85	50	2270	0	103	80	120	2335	0.384	20	
Zinc	2322	4.9	50	2270	0	102	80	120	2325	0.14	20	

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SW7470

SW846 7470A -- Mercury by FIA

Sample ID: **MB-61253**	SampType: **MBLK**	TestCode: **SW7470**			Prep Date: **08/29/11 15:00**			Run ID: **FIMS2_110830B**			
Client ID: **MB-61253**	Batch ID: **61253**	Units: **µg/L**			Analysis Date: **08/30/11 8:57**			SeqNo: **1590857**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.028	0.20									

Sample ID: **LCS-61253**	SampType: **LCS**	TestCode: **SW7470**			Prep Date: **08/29/11 15:00**			Run ID: **FIMS2_110830B**			
Client ID: **LCS-61253**	Batch ID: **61253**	Units: **µg/L**			Analysis Date: **08/30/11 8:58**			SeqNo: **1590858**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.768	0.028	0.20	4.550	0	105	80	120	0			

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

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-01 **Collection Date:** 08/26/11 13:07

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	320		10	mg/L	1	08/31/2011 6:01	61274
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		10	mg/L	1	08/30/2011 16:12	61275
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	09/01/2011 14:01	61292

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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.
Client Sample ID: INF-082611 **Project:** NOW Corp. Site, 8/2011
Lab ID: K1577-02 **Collection Date:** 08/26/11 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	210		10	mg/L	1	08/31/2011 6:51	61274
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		20	mg/L	1	08/30/2011 16:13	61275
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	09/01/2011 14:04	61292

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation 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: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SM2540_TDS
SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: **MB-61274** SampType: **MBLK** TestCode: **SM2540_TDS** Prep Date: **08/30/11 16:00** Run ID: **MANUAL_110830C**
Client ID: **MB-61274** Batch ID: **61274** Units: **mg/L** Analysis Date: **08/30/11 16:00** SeqNo: **1593172**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	10	10									

Sample ID: **LCS-61274** SampType: **LCS** TestCode: **SM2540_TDS** Prep Date: **08/30/11 16:00** Run ID: **MANUAL_110830C**
Client ID: **LCS-61274** Batch ID: **61274** Units: **mg/L** Analysis Date: **08/30/11 16:49** SeqNo: **1593173**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	632.0	10	10	537.0	0	118	80	120	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: **MB-61275**	SampType: **MBLK**	TestCode: **SM2540_TSS**			Prep Date: **08/30/11 16:00**			Run ID: **MANUAL_110830D**				
Client ID: **MB-61275**	Batch ID: **61275**	Units: **mg/L**			Analysis Date: **08/30/11 16:00**			SeqNo: **1593192**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	ND	10	10									

Sample ID: **LCS-61275**	SampType: **LCS**	TestCode: **SM2540_TSS**			Prep Date: **08/30/11 16:00**			Run ID: **MANUAL_110830D**				
Client ID: **LCS-61275**	Batch ID: **61275**	Units: **mg/L**			Analysis Date: **08/30/11 16:01**			SeqNo: **1593193**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	47.00	10	10	54.90	0	85.6	80	120	0			

Sample ID: **K1577-01BDUP**	SampType: **DUP**	TestCode: **SM2540_TSS**			Prep Date: **08/30/11 16:00**			Run ID: **MANUAL_110830D**				
Client ID: **EFF-082611**	Batch ID: **61275**	Units: **mg/L**			Analysis Date: **08/30/11 16:14**			SeqNo: **1593206**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	ND	10	10	0	0	0	0	0	0	0	5.0	

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K1577
Project: NOW Corp. Site, 8/2011

ANALYTICAL QC SUMMARY REPORT

SW9012_W

SW846 9012B -- Total Cyanide

Sample ID: **MB-61292**	SampType: **MBLK**	TestCode: **SW9012_W**	Prep Date: **08/31/11 11:00**	Run ID: **LACHAT1_110901B**
Client ID: **MB-61292**	Batch ID: **61292**	Units: **ug/L**	Analysis Date: **09/01/11 13:21**	SeqNo: **1596419**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	ND	7.5	20									

Sample ID: **LCS-61292**	SampType: **LCS**	TestCode: **SW9012_W**	Prep Date: **08/31/11 11:00**	Run ID: **LACHAT1_110901B**
Client ID: **LCS-61292**	Batch ID: **61292**	Units: **ug/L**	Analysis Date: **09/01/11 13:24**	SeqNo: **1596420**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	103.2	7.5	20	100.0	0	103	80	120	0			

Sample ID: **LCSD-61292**	SampType: **LCSD**	TestCode: **SW9012_W**	Prep Date: **08/31/11 11:00**	Run ID: **LACHAT1_110901B**
Client ID: **LCSD-61292**	Batch ID: **61292**	Units: **ug/L**	Analysis Date: **09/01/11 13:26**	SeqNo: **1596421**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	103.0	7.5	20	100.0	0	103	80	120	103.2	0.124	20	

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

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

WorkOrder: K1577

Client ID: EARTH_NY
Project: NOW Corp. Site
WO Name: NOW Corp. Site, 8/2011
Location: NOW_CORP,
Comments: N/A

Case:
SDG:
PO: 94017.02

HC Due: 09/14/11
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
K1577-01A	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-01B	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SM2540_TDS	/					I4
K1577-01B	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SM2540_TSS	/					I4
K1577-01C	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SW6010_W	/ See SEL list				Y	M1
K1577-01C	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SW7470	/ See SEL list					M1
K1577-01D	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	SW9012_W	/				Y	I4
K1577-01E	EFF-082611	08/26/2011 13:07	08/27/2011	Aqueous	E1664	/					I4
K1577-02A	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-02B	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SM2540_TDS	/					I4
K1577-02B	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SM2540_TSS	/					I4
K1577-02C	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SW6010_W	/ See SEL list				Y	M1
K1577-02C	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SW7470	/ See SEL list					M1
K1577-02D	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	SW9012_W	/				Y	I4
K1577-02E	INF-082611	08/26/2011 12:50	08/27/2011	Aqueous	E1664	/					I4
K1577-03A	TW-1-1035082611	08/26/2011 10:35	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-04A	TW-1-110282611	08/26/2011 11:02	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-05A	TW-1-1113082611	08/26/2011 11:13	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-06A	TW-1-1126082611	08/26/2011 11:26	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-07A	TW-2A-082611	08/26/2011 11:59	08/27/2011	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: K1577

Client ID: EARTH_NY
Project: NOW Corp. Site
WO Name: NOW Corp. Site, 8/2011
Location: NOW_CORP,
Comments: N/A

Case:
SDG:
PO: 94017.02

HC Due: 09/14/11
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
K1577-08A	TW-3-082611	08/26/2011 12:14	08/27/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K1577-09A	TB 082611	08/26/2011 00:00	08/27/2011	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

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

Report To: AECOM
40 British American Blvd.
Latham NY 12110

Project Mgr.: Stephen Choiniere

Invoice To: Same

P.O. No.: _____ RQN: _____

Project No.: 60135676.02
Site Name: Now Corp
Location: Statts burg State: NY
Sampler(s): RG

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=None 10=_____ 11=_____

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 8260	Metals*	TDS/TSS	O+G	Cyanide
	EFF-082611	8-26-11	13:07	G	GW	2	3		3	X	X	X	X	X
	INF-082611	8-26-11	12:50				3		3	X	X	X	X	X
	TW-1-103508261l		10:35											
	TW-1-110208261l		11:02											
	TW-1-111308261l		11:13											
	TW-1-112608261l		11:26											
	TW-2A 082611		11:59											
	TW-3 082611		12:14											
	TB 082611	—	—											

List preservative code below: 2 4 9 2 5

Notes:

QA/QC Reporting Level
☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

*Al, As, Ba, Cr, Cu, Fe, Mn, Hg Zn, Ni

☐ E-mail to _____
EDD Format _____

Condition upon receipt: ☑ Iced ☐ Ambient ☑ C 4°C

Relinquished by:	Received by:	Date:	Time:
Steve Gray	FedEx	8-26-11	14:20
FedEx	Daniel Mer	8-27-11	11:15

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.mitkem.com

SPECTRUM ANALYTICAL, INC. RI DIVISION

Sample Condition Form

Page 1 of 1

Received By: David Mercier	Reviewed By: SV	Date: 8-27-11	Spectrum RI Work Order #: K1577
Client Project: Nowcor #4		Client: AECOM	

		Lab Sample ID		Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	H_3PO_4	VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
1) Cooler Sealed	(Yes) / No	K1577	01						H	
			02							
2) Custody Seal(s)	~~Present~~ / Absent		03							
	Coolers / Bottles		04							
	Intact / Broken		05							
			06							
3) Custody Seal Number(s)	N/A		07							
			08						V	
		K1571	09						H	
4) Chain-of-Custody	(Present) / Absent									
5) Cooler Temperature	4°C									
IR Temp Gun ID	MT-1									
Coolant Condition	Ice									
6) Airbill(s)	(Present) / Absent									
Airbill Number(s)	FedEx									
	5747 5541 7289									
	/									
7) Samples Bottles	(Intact) / Broken / Leaking									
8) Date Received	8-27-11									
9) Time Received	11:15									

DRF 8-27-11

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)

Form ID: QAF.0006

Rad OK (yes) no

Last Page of Data Report