



**Operation, Maintenance and Monitoring Report
May 2013**

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

**Work Assignment No.
D007626-25**

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

July 2013



July 15, 2013

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: "May" 2013**

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 35-day period (**April 23 – May 28, 2013**).

With the exceptions noted below, if any, the P&T system was online and operational throughout the reporting period. Approximately 267,830 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 7,700 gallons per day (gpd), compared to 6,800 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 92,584,000 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998. Note that this total has been incorrectly reported each month, beginning with the September 2012 report.

Table 1 summarizes influent and effluent analytical data for water samples collected on May 28, 2013. Although two VOCs were detected at estimated concentrations in system effluent, **there were no exceedances of effluent limitations**. A copy of the analytical laboratory report is attached. Table 2 summarizes selected operational data as recorded on the sampling date.

As reported in an email dated May 29, the effluent pump failed on May 19, resulting in 9 days of system downtime in the reporting period.

AECOM made two site visits during the period to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. The April 23 service visit was described in the previous report. Details for the current period follow:

May 28 – System down upon arrival. Removed failed effluent pump; installed spare pump on standby in the treatment building. Started system; collected monthly influent and effluent samples after approximately one hour of run-time. The blower was operating at 55 Hz for sample collection. The technician noted an apparent problem with pilot ignition on the building propane heater. Porco Energy will be contacted for inspection and repair before the cool weather returns.

Page 2
Mr. Carl Hoffman
NYSDEC

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.

A handwritten signature in cursive script that reads "Stephen Choiniere".

Stephen R. Choiniere
Project Manager

Table 1
Summary of Influent and Effluent Data
Sampling Date: May 28, 2013
NOW Corporation Site
NYSDEC Site No. 3-14-008
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		7,652				Monitor	gallons
pH	6.7	6.8				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	280	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	69 J	76 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	36 J	60 J	NA	NA	NA	600	ug/L
Mercury	<0.2	<0.2	NA	NA	NA	0.8	ug/L
Manganese	160	89	NA	NA	NA	Monitor	ug/L
Nickel	1.3 J	1.2 J	NA	NA	NA	200	ug/L
Zinc	6.3 J	<50	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	240	<0.5	8.3	380	1.3	10	ug/L
1,1,2-Trichloroethane	<5	<0.5	<2	<10	<0.5	1.2	ug/L
1,1-Dichloroethane	140	0.26 J	69	200	9.6	10	ug/L
1,1-Dichloroethene	11	<0.5	14	47	1.5	0.5	ug/L
1,2-Dichloroethane	<5	<0.5	<2	<10	<0.5	1.6	ug/L
Benzene	<5	<0.5	<2	<10	<0.5	1.4	ug/L
Chlorobenzene	<5	<0.5	<2	<10	<0.5	10	ug/L
Chloroethane	<5	<0.5	<2	<10	<0.5	10	ug/L
cis -1,2-Dichloroethene	13	<0.5	13	21	0.34 J	5	ug/L
Ethylbenzene	<5	<0.5	<2	<10	<0.5	10	ug/L
o-Xylene	<5	<0.5	<2	<10	<0.5	5	ug/L
m,p-Xylene	<5	<0.5	<2	<10	<0.5	10	ug/L
Tetrachloroethene	<5	<0.5	<2	<10	<0.5	1.4	ug/L
Toluene	<5	<0.5	<2	<10	<0.5	10	ug/L
trans -1,2-Dichloroethene	<5	<0.5	<2	<10	<0.5	5	ug/L
Trichloroethene	290	0.29 J	110	430	9.1	6	ug/L
Vinyl Chloride	<5	<0.5	<2	<10	<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 2
Summary of May 2013 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:	5/28/13	Units
<i>TW-1</i>		
Pumping Rate	2	GPM
Water Level Above Transducer	80.84	feet
Flow Meter Reading	6,617,700	gallons
Pump Pressure	85	psi
<i>TW-2A</i>		
Pumping Rate	~14	GPM
Water Level Above Transducer	50.72	feet
Flow Meter Reading	27,062,800	gallons
Pump Pressure	10	psi
<i>TW-3</i>		
Pumping Rate	6	GPM
Water Level Above Transducer	34.81	feet
Flow Meter Reading	10,942,400	gallons
Pump Pressure	65	psi
<i>VFD Setting</i>		
Arrival	55	Hz
Departure	55	Hz
<i>Air Stripper</i>		
Stripper Blower Pressure	17	inches H ₂ O
Air Temperature in Stripper	50	°F
<i>Effluent Flow</i>		
Effluent Flow this period (calculated)	267,830	gallons
Total Effluent Flow (calculated)	92,584,100	gallons

Report Date:
17-Jun-13 16:31



- Final Report
 Re-Issued Report
 Revised Report

Laboratory Report

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

Work Order: M0842
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>
M0842-01	EFF-55-052813	Aqueous	28-May-13 14:30	29-May-13 10:20
M0842-02	INF-052813	Aqueous	28-May-13 14:38	29-May-13 10:20
M0842-03	TW-1 052813	Aqueous	28-May-13 14:42	29-May-13 10:20
M0842-04	TW-2A 052813	Aqueous	28-May-13 14:50	29-May-13 10:20
M0842-05	TW-3 052813	Aqueous	28-May-13 14:58	29-May-13 10:20
M0842-06	TB 052813	Aqueous	28-May-13 00:00	29-May-13 10:20

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 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
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 #: M0842

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: SW5030B

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V5
Instrument Type: GCMS-VOA

Description: HP6890 / HP6890
Manufacturer: Hewlett-Packard
Model: 6890 / 6890

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

Replicate RPDs were within the advisory 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-052813 (M0842-02A) : Dilution Factor: 10

TW-1 052813 (M0842-03A) : Dilution Factor: 4

TW-2A 052813 (M0842-04A) : Dilution Factor: 20

G. Samples:

No other unusual occurrences were noted during sample analysis.

H. Manual Integration

No manual integrations were performed on any sample or standard.

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.', written over a horizontal line.

Signed: _____

Date: _____ 6/13/2013 _____

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: M0842

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

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

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

V. INSTRUMENTATION

The following instrumentation was used:

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):

Serial Dilution analyses were performed on sample: INF-052813 (M0842-02ESD).

Percent differences were within the QC limits.

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, consisting of a series of loops and a long horizontal stroke at the end.

Signed: _____

Date: 06/17/2013

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: M0842

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

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

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: LACHAT1
Instrument Type: WC

Description: Flow Injection Analyzer
Manufacturer: Zellweger Analytics
Model: Quik-Chem 8000

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

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

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, 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, consisting of a series of loops and a long horizontal stroke at the bottom.

Signed: _____

Date: 06/17/2013

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: M0842

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: SW3510C

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):

Matrix spikes were performed on samples: INF-052813 (M0842-02BMS) and INF-052813 (M0842-02BMSD).

Percent recoveries were within the QC limits with the following exceptions:

INF-052813 (M0842-02BMS), recovery is below criteria for Oil & Grease, Total Recoverable at 72% with criteria of (78-114).

INF-052813 (M0842-02BMSD), recovery is below criteria for Oil & Grease, Total Recoverable at 72% with criteria of (78-114).

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.', written over a horizontal line.

Signed: _____

Date: _____ 6/13/2013 _____

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-55-052813

Lab ID: M0842-01

Project: NOW Corp. Site

Collection Date: 05/28/13 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Chloroethane	ND		0.50	ug/L		1 05/29/2013 17:06	71918
1,1-Dichloroethene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/29/2013 17:06	71918
1,1-Dichloroethane	0.26	J	0.50	ug/L		1 05/29/2013 17:06	71918
cis-1,2-Dichloroethene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
1,1,1-Trichloroethane	ND		0.50	ug/L		1 05/29/2013 17:06	71918
1,2-Dichloroethane	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Benzene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Trichloroethene	0.29	J	0.50	ug/L		1 05/29/2013 17:06	71918
Toluene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Tetrachloroethene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Chlorobenzene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Ethylbenzene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
m,p-Xylene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
o-Xylene	ND		0.50	ug/L		1 05/29/2013 17:06	71918
Surrogate: Dibromofluoromethane	104		88-124	%REC		1 05/29/2013 17:06	71918
Surrogate: 1,2-Dichloroethane-d4	104		79-115	%REC		1 05/29/2013 17:06	71918
Surrogate: Toluene-d8	97.6		80-114	%REC		1 05/29/2013 17:06	71918
Surrogate: Bromofluorobenzene	101		60-123	%REC		1 05/29/2013 17:06	71918

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.

Client Sample ID: INF-052813

Lab ID: M0842-02

Project: NOW Corp. Site

Collection Date: 05/28/13 14:38

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		5.0	ug/L		10 05/29/2013 17:34	71918
Chloroethane	ND		5.0	ug/L		10 05/29/2013 17:34	71918
1,1-Dichloroethene	11		5.0	ug/L		10 05/29/2013 17:34	71918
trans-1,2-Dichloroethene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Methyl tert-butyl ether	ND		5.0	ug/L		10 05/29/2013 17:34	71918
1,1-Dichloroethane	140		5.0	ug/L		10 05/29/2013 17:34	71918
cis-1,2-Dichloroethene	13		5.0	ug/L		10 05/29/2013 17:34	71918
1,1,1-Trichloroethane	240		5.0	ug/L		10 05/29/2013 17:34	71918
1,2-Dichloroethane	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Benzene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Trichloroethene	290		5.0	ug/L		10 05/29/2013 17:34	71918
Toluene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
1,1,2-Trichloroethane	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Tetrachloroethene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Chlorobenzene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Ethylbenzene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
m,p-Xylene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
o-Xylene	ND		5.0	ug/L		10 05/29/2013 17:34	71918
Surrogate: Dibromofluoromethane	103		88-124	%REC		10 05/29/2013 17:34	71918
Surrogate: 1,2-Dichloroethane-d4	96.5		79-115	%REC		10 05/29/2013 17:34	71918
Surrogate: Toluene-d8	97.2		80-114	%REC		10 05/29/2013 17:34	71918
Surrogate: Bromofluorobenzene	99.6		60-123	%REC		10 05/29/2013 17:34	71918

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.

Client Sample ID: TW-1 052813

Lab ID: M0842-03

Project: NOW Corp. Site

Collection Date: 05/28/13 14:42

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 05/29/2013 18:02	71918
Chloroethane	ND		2.0	ug/L		4 05/29/2013 18:02	71918
1,1-Dichloroethene	14		2.0	ug/L		4 05/29/2013 18:02	71918
trans-1,2-Dichloroethene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Methyl tert-butyl ether	ND		2.0	ug/L		4 05/29/2013 18:02	71918
1,1-Dichloroethane	69		2.0	ug/L		4 05/29/2013 18:02	71918
cis-1,2-Dichloroethene	13		2.0	ug/L		4 05/29/2013 18:02	71918
1,1,1-Trichloroethane	8.3		2.0	ug/L		4 05/29/2013 18:02	71918
1,2-Dichloroethane	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Benzene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Trichloroethene	110		2.0	ug/L		4 05/29/2013 18:02	71918
Toluene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
1,1,2-Trichloroethane	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Tetrachloroethene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Chlorobenzene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Ethylbenzene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
m,p-Xylene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
o-Xylene	ND		2.0	ug/L		4 05/29/2013 18:02	71918
Surrogate: Dibromofluoromethane	105		88-124	%REC		4 05/29/2013 18:02	71918
Surrogate: 1,2-Dichloroethane-d4	104		79-115	%REC		4 05/29/2013 18:02	71918
Surrogate: Toluene-d8	98.8		80-114	%REC		4 05/29/2013 18:02	71918
Surrogate: Bromofluorobenzene	98.7		60-123	%REC		4 05/29/2013 18:02	71918

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.

Client Sample ID: TW-2A 052813

Lab ID: M0842-04

Project: NOW Corp. Site

Collection Date: 05/28/13 14:50

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	ug/L		20 05/29/2013 18:29	71918
Chloroethane	ND		10	ug/L		20 05/29/2013 18:29	71918
1,1-Dichloroethene	47		10	ug/L		20 05/29/2013 18:29	71918
trans-1,2-Dichloroethene	ND		10	ug/L		20 05/29/2013 18:29	71918
Methyl tert-butyl ether	ND		10	ug/L		20 05/29/2013 18:29	71918
1,1-Dichloroethane	200		10	ug/L		20 05/29/2013 18:29	71918
cis-1,2-Dichloroethene	21		10	ug/L		20 05/29/2013 18:29	71918
1,1,1-Trichloroethane	380		10	ug/L		20 05/29/2013 18:29	71918
1,2-Dichloroethane	ND		10	ug/L		20 05/29/2013 18:29	71918
Benzene	ND		10	ug/L		20 05/29/2013 18:29	71918
Trichloroethene	430		10	ug/L		20 05/29/2013 18:29	71918
Toluene	ND		10	ug/L		20 05/29/2013 18:29	71918
1,1,2-Trichloroethane	ND		10	ug/L		20 05/29/2013 18:29	71918
Tetrachloroethene	ND		10	ug/L		20 05/29/2013 18:29	71918
Chlorobenzene	ND		10	ug/L		20 05/29/2013 18:29	71918
Ethylbenzene	ND		10	ug/L		20 05/29/2013 18:29	71918
m,p-Xylene	ND		10	ug/L		20 05/29/2013 18:29	71918
o-Xylene	ND		10	ug/L		20 05/29/2013 18:29	71918
Surrogate: Dibromofluoromethane	104		88-124	%REC		20 05/29/2013 18:29	71918
Surrogate: 1,2-Dichloroethane-d4	103		79-115	%REC		20 05/29/2013 18:29	71918
Surrogate: Toluene-d8	98.4		80-114	%REC		20 05/29/2013 18:29	71918
Surrogate: Bromofluorobenzene	99.2		60-123	%REC		20 05/29/2013 18:29	71918

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.

Client Sample ID: TW-3 052813

Lab ID: M0842-05

Project: NOW Corp. Site

Collection Date: 05/28/13 14:58

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 05/29/2013 18:57	71918
Chloroethane	ND		0.50	ug/L		1 05/29/2013 18:57	71918
1,1-Dichloroethene	1.5		0.50	ug/L		1 05/29/2013 18:57	71918
trans-1,2-Dichloroethene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Methyl tert-butyl ether	ND		0.50	ug/L		1 05/29/2013 18:57	71918
1,1-Dichloroethane	9.6		0.50	ug/L		1 05/29/2013 18:57	71918
cis-1,2-Dichloroethene	0.34	J	0.50	ug/L		1 05/29/2013 18:57	71918
1,1,1-Trichloroethane	1.3		0.50	ug/L		1 05/29/2013 18:57	71918
1,2-Dichloroethane	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Benzene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Trichloroethene	9.1		0.50	ug/L		1 05/29/2013 18:57	71918
Toluene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
1,1,2-Trichloroethane	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Tetrachloroethene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Chlorobenzene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Ethylbenzene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
m,p-Xylene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
o-Xylene	ND		0.50	ug/L		1 05/29/2013 18:57	71918
Surrogate: Dibromofluoromethane	103		88-124	%REC		1 05/29/2013 18:57	71918
Surrogate: 1,2-Dichloroethane-d4	101		79-115	%REC		1 05/29/2013 18:57	71918
Surrogate: Toluene-d8	99.7		80-114	%REC		1 05/29/2013 18:57	71918
Surrogate: Bromofluorobenzene	102		60-123	%REC		1 05/29/2013 18:57	71918

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.

Client Sample ID: TB 052813

Lab ID: M0842-06

Project: NOW Corp. Site

Collection Date: 05/28/13 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	05/29/2013 19:25	71918
Chloroethane	ND		0.50	ug/L	1	05/29/2013 19:25	71918
1,1-Dichloroethene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
trans-1,2-Dichloroethene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Methyl tert-butyl ether	ND		0.50	ug/L	1	05/29/2013 19:25	71918
1,1-Dichloroethane	ND		0.50	ug/L	1	05/29/2013 19:25	71918
cis-1,2-Dichloroethene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
1,1,1-Trichloroethane	ND		0.50	ug/L	1	05/29/2013 19:25	71918
1,2-Dichloroethane	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Benzene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Trichloroethene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Toluene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
1,1,2-Trichloroethane	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Tetrachloroethene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Chlorobenzene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Ethylbenzene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
m,p-Xylene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
o-Xylene	ND		0.50	ug/L	1	05/29/2013 19:25	71918
Surrogate: Dibromofluoromethane	104		88-124	%REC	1	05/29/2013 19:25	71918
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC	1	05/29/2013 19:25	71918
Surrogate: Toluene-d8	99.0		80-114	%REC	1	05/29/2013 19:25	71918
Surrogate: Bromofluorobenzene	98.2		60-123	%REC	1	05/29/2013 19:25	71918

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

SW8260_25_W

Project: NOW Corp. Site

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

Sample ID:	MB-71918	SampType:	MBLK	TestCode:	SW8260_25_W	Prep Date:	05/29/13 14:04	Run ID:	V5_130529A			
Client ID:	MB-71918	Batch ID:	71918	Units:	ug/L	Analysis Date:	05/29/13 16:38	SeqNo:	1908648			
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:	10.50		0.50	10.00	0	105	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	11.08		0.50	10.00	0	111	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.893		0.50	10.00	0	98.9	80	114	0			
Surrogate:	10.12		0.50	10.00	0	101	60	123	0			
Bromofluorobenzene												

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

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

SW8260_25_W

Project: NOW Corp. Site

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

Sample ID:	LCS-71918	SampType:	LCS	TestCode:	SW8260_25_W	Prep Date:	05/29/13 14:04	Run ID:	V5_130529A			
Client ID:	LCS-71918	Batch ID:	71918	Units:	ug/L	Analysis Date:	05/29/13 16:11	SeqNo:	1908647			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.08	0.15	0.50	10.00	0	101	77	120	0			
Chloroethane	9.600	0.24	0.50	10.00	0	96.0	75	135	0			
1,1-Dichloroethene	10.19	0.19	0.50	10.00	0	102	81	125	0			
trans-1,2-Dichloroethene	10.38	0.14	0.50	10.00	0	104	60	137	0			
Methyl tert-butyl ether	10.59	0.13	0.50	10.00	0	106	61	134	0			
1,1-Dichloroethane	10.29	0.18	0.50	10.00	0	103	82	120	0			
cis-1,2-Dichloroethene	9.922	0.19	0.50	10.00	0	99.2	84	116	0			
1,1,1-Trichloroethane	10.06	0.11	0.50	10.00	0	101	80	124	0			
1,2-Dichloroethane	10.88	0.16	0.50	10.00	0	109	86	117	0			
Benzene	10.30	0.12	0.50	10.00	0	103	81	121	0			
Trichloroethene	10.16	0.13	0.50	10.00	0	102	74	123	0			
Toluene	10.56	0.14	0.50	10.00	0	106	88	117	0			
1,1,2-Trichloroethane	10.20	0.20	0.50	10.00	0	102	83	121	0			
Tetrachloroethene	9.582	0.17	0.50	10.00	0	95.8	74	115	0			
Chlorobenzene	9.906	0.13	0.50	10.00	0	99.1	83	112	0			
Ethylbenzene	10.02	0.13	0.50	10.00	0	100	87	110	0			
m,p-Xylene	20.32	0.22	0.50	20.00	0	102	87	114	0			
o-Xylene	9.953	0.17	0.50	10.00	0	99.5	84	114	0			
Surrogate:	10.47		0.50	10.00	0	105	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-	10.25		0.50	10.00	0	102	79	115	0			
Dichloroethane-d4												
Surrogate: Toluene-d8	9.617		0.50	10.00	0	96.2	80	114	0			
Surrogate:	10.31		0.50	10.00	0	103	60	123	0			
Bromofluorobenzene												

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

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/17/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-55-052813

Lab ID: M0842-01

Project: NOW Corp. Site

Collection Date: 05/28/13 14:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							SW6010_W
Aluminum	ND		200	ug/L		1 06/06/2013 13:54	72048
Arsenic	ND		20	ug/L		1 06/06/2013 13:54	72048
Barium	76	J	200	ug/L		1 06/06/2013 13:54	72048
Chromium	ND		20	ug/L		1 06/06/2013 13:54	72048
Copper	ND		25	ug/L		1 06/06/2013 13:54	72048
Iron	60	J	200	ug/L		1 06/06/2013 13:54	72048
Manganese	89		50	ug/L		1 06/06/2013 13:54	72048
Nickel	1.2	J	50	ug/L		1 06/06/2013 13:54	72048
Zinc	ND		50	ug/L		1 06/06/2013 13:54	72048
SW846 7470A -- Mercury by FIA							SW7470
Mercury	ND		0.20	µg/L		1 06/14/2013 15:31	72237

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. - North Kingstown RI -- Rhode Island Division

06/17/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-052813

Lab ID: M0842-02

Project: NOW Corp. Site

Collection Date: 05/28/13 14:38

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							SW6010_W
Aluminum	ND		200	ug/L		1 06/06/2013 13:57	72048
Arsenic	ND		20	ug/L		1 06/06/2013 13:57	72048
Barium	69	J	200	ug/L		1 06/06/2013 13:57	72048
Chromium	ND		20	ug/L		1 06/06/2013 13:57	72048
Copper	ND		25	ug/L		1 06/06/2013 13:57	72048
Iron	36	J	200	ug/L		1 06/06/2013 13:57	72048
Manganese	160		50	ug/L		1 06/06/2013 13:57	72048
Nickel	1.3	J	50	ug/L		1 06/06/2013 13:57	72048
Zinc	6.3	J	50	ug/L		1 06/06/2013 13:57	72048
SW846 7470A -- Mercury by FIA							SW7470
Mercury	ND		0.20	µg/L		1 06/14/2013 15:32	72237

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

Client: AECOM Technical Services, Inc.
Work Order: M0842
Project: NOW Corp. Site

SW6010_W
SW846 6010C -- Metals by ICP

Sample ID: MB-72048	SampType: MBLK	TestCode: SW6010_W	Prep Date: 06/05/13 13:00	Run ID: OPTIMA3_130606B							
Client ID: MB-72048	Batch ID: 72048	Units: ug/L	Analysis Date: 06/06/13 13:43	SeqNo: 1913075							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	66					200				
Arsenic	ND	4.3					20				
Barium	ND	1.1					200				
Chromium	ND	0.64					20				
Copper	ND	3.6					30				
Iron	ND	31					200				
Manganese	ND	10					50				
Nickel	ND	0.85					50				
Zinc	ND	4.9					50				

Sample ID: LCS-72048	SampType: LCS	TestCode: SW6010_W	Prep Date: 06/05/13 13:00	Run ID: OPTIMA3_130606B							
Client ID: LCS-72048	Batch ID: 72048	Units: ug/L	Analysis Date: 06/06/13 13:46	SeqNo: 1913076							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9561	66	9100	0	105	80	120	0			
Arsenic	501.3	4.3	455.0	0	110	80	120	0			
Barium	9849	1.1	9100	0	108	80	120	0			
Chromium	967.4	0.64	910.0	0	106	80	120	0			
Copper	1198	3.6	1130	0	106	80	120	0			
Iron	5013	31	4550	0	110	80	120	0			
Manganese	2446	10	2270	0	108	80	120	0			
Nickel	2424	0.85	2270	0	107	80	120	0			
Zinc	2428	4.9	2270	0	107	80	120	0			

CLIENT: AECOM Technical Services, Inc.
 Work Order: M0842
 Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW6010_W
 SW846 6010C -- Metals by ICP

Sample ID: LCSD-72048 SampType: LCSD TestCode: SW6010_W Prep Date: 06/05/13 13:00 Run ID: OPTIMA3_130606B
 Client ID: LCSD-72048 Batch ID: 72048 Units: ug/L Analysis Date: 06/06/13 13:50 SeqNo: 1913077

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9443	66	200	9100	0	104	80	120	9561	1.24	20	
Arsenic	483.4	4.3	20	455.0	0	106	80	120	501.3	3.63	20	
Barium	9866	1.1	200	9100	0	108	80	120	9849	0.172	20	
Chromium	955.2	0.64	20	910.0	0	105	80	120	967.4	1.27	20	
Copper	1180	3.6	30	1130	0	104	80	120	1198	1.51	20	
Iron	4947	31	200	4550	0	109	80	120	5013	1.34	20	
Manganese	2448	10	50	2270	0	108	80	120	2446	0.0844	20	
Nickel	2397	0.85	50	2270	0	106	80	120	2424	1.11	20	
Zinc	2404	4.9	50	2270	0	106	80	120	2428	0.994	20	

Sample ID: M0842-02ESD SampType: SD TestCode: SW6010_W Prep Date: 06/05/13 13:00 Run ID: OPTIMA3_130606B
 Client ID: INF-052813 Batch ID: 72048 Units: ug/L Analysis Date: 06/06/13 14:01 SeqNo: 1913080

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	330	1000	0	0	0	0	0	0	0	10	
Arsenic	ND	22	100	0	0	0	0	0	0	0	10	
Barium	68.01	5.5	1000	0	0	0	0	0	68.72	1.04	10	J
Chromium	ND	3.2	100	0	0	0	0	0	0	0	10	
Copper	ND	18	130	0	0	0	0	0	0	0	10	
Iron	ND	160	1000	0	0	0	0	0	35.93	0	10	
Manganese	160.1	50	250	0	0	0	0	0	159.7	0.207	10	J
Nickel	ND	4.3	250	0	0	0	0	0	1.307	0	10	
Zinc	ND	25	250	0	0	0	0	0	6.265	0	10	

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
 m13.05.3.1.A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

Project: NOW Corp. Site

SW7470

SW846 7470A -- Mercury by FIA

Sample ID: MB-72237	SampType: MBLK	TestCode: SW7470	Prep Date: 06/14/13 12:00	Run ID: FIMS2_130614A
Client ID: MB-72237	Batch ID: 72237	Units: µg/L	Analysis Date: 06/14/13 15:27	SeqNo: 1918307
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Mercury	ND	0.028	0	94.0 80 120

Sample ID: LCS-72237	SampType: LCS	TestCode: SW7470	Prep Date: 06/14/13 12:00	Run ID: FIMS2_130614A
Client ID: LCS-72237	Batch ID: 72237	Units: µg/L	Analysis Date: 06/14/13 15:29	SeqNo: 1918308
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Mercury	4.276	0.028	0	94.0 80 120

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/17/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-55-052813

Lab ID: M0842-01

Project: NOW Corp. Site

Collection Date: 05/28/13 14:30

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	05/30/2013 18:27	71967
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	ND		10	mg/L	1	05/30/2013 19:15	71968
SW846 9012B -- Total Cyanide							SW9012_W
Cyanide	ND		10	ug/L	1	06/05/2013 10:20	72036

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. - North Kingstown RI -- Rhode Island Division

06/17/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-052813

Lab ID: M0842-02

Project: NOW Corp. Site

Collection Date: 05/28/13 14:38

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	05/30/2013 18:28	71967
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	ND		10	mg/L	1	05/30/2013 19:53	71968
SW846 9012B -- Total Cyanide							SW9012_W
Cyanide	ND		10	ug/L	1	06/05/2013 10:22	72036

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.
Work Order: M0842
Project: NOW Corp. Site

SM2540_TDS
SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-71967	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 05/30/13 18:00	Run ID: MANUAL_130530A
Client ID: MB-71967	Batch ID: 71967	Units: mg/L	Analysis Date: 05/30/13 18:00	SeqNo: 1913154
Analyte	Result	MDL	SPK Ref Val	%REC
	ND	10		
			SPK value	LowLimit HighLimit
				RPD Ref Val %RPD RPDLimit

Sample ID: LCS-71967	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 05/30/13 18:00	Run ID: MANUAL_130530A
Client ID: LCS-71967	Batch ID: 71967	Units: mg/L	Analysis Date: 05/30/13 18:01	SeqNo: 1913155
Analyte	Result	MDL	SPK Ref Val	%REC
	249.0	10	0	105
			SPK value	LowLimit HighLimit
				RPD Ref Val %RPD RPDLimit
Total Dissolved Solids				0

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

SM2540_TSS

Project: NOW Corp. Site

SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-71968	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 05/30/13 18:00	Run ID: MANUAL_130530D
Client ID: MB-71968	Batch ID: 71968	Units: mg/L	Analysis Date: 05/30/13 18:00	SeqNo: 1911293
Analyte	Result	MDL	SPK Ref Val	%REC
	ND	1.0	0	98.0
Total Suspended Solids		1.0	46.95	0

Sample ID: LCS-71968	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 05/30/13 18:00	Run ID: MANUAL_130530D
Client ID: LCS-71968	Batch ID: 71968	Units: mg/L	Analysis Date: 05/30/13 18:37	SeqNo: 1911294
Analyte	Result	MDL	SPK Ref Val	%REC
	46.00	1.0	0	98.0
Total Suspended Solids		1.0	46.95	0

			RPD Ref Val	%RPD	RPDLimit	Qual
			0	0	1.20	0

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

SW9012_W

Project: NOW Corp. Site

SW846 9012B -- Total Cyanide

Sample ID: MB-72036	SampType: MBLK	TestCode: SW9012_W	Prep Date: 06/04/13 13:00	Run ID: LACHAT1_130605A
Client ID: MB-72036	Batch ID: 72036	Units: ug/L	Analysis Date: 06/05/13 10:02	SeqNo: 1911950
Analyte	Result	MDL	SPK Ref Val	%REC
	ND	7.5	0	102
		20	0	80
			100.0	120
			0	0
			RPD Ref Val	%RPD RPDLimit
				Qual

Sample ID: LCS-72036	SampType: LCS	TestCode: SW9012_W	Prep Date: 06/04/13 13:00	Run ID: LACHAT1_130605A
Client ID: LCS-72036	Batch ID: 72036	Units: ug/L	Analysis Date: 06/05/13 10:05	SeqNo: 1911952
Analyte	Result	MDL	SPK Ref Val	%REC
	101.8	7.5	0	102
		20	0	80
			100.0	120
			0	0
			RPD Ref Val	%RPD RPDLimit
				Qual

Cyanide

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

06/12/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-55-052813

Lab ID: M0842-01

Project: NOW Corp. Site

Collection Date: 05/28/13 14:30

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM				E1664
Oil & Grease, Total Recoverable	ND	5.0 mg/L	1 05/31/2013 15:24	71963

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. - North Kingstown RI -- Rhode Island Division

06/12/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-052813

Lab ID: M0842-02

Project: NOW Corp. Site

Collection Date: 05/28/13 14:38

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM							E1664
Oil & Grease, Total Recoverable	ND		5.0	mg/L	1	05/31/2013 15:24	71963

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: M0842

E1664

Project: NOW Corp. Site

EPA 1664A -- Oil & Grease, HEM

Sample ID: MB-71963	SampType: MBLK	TestCode: E1664	Prep Date: 05/30/13 15:33	Run ID: MANUAL_130531A
Client ID: MB-71963	Batch ID: 71963	Units: mg/L	Analysis Date: 05/31/13 15:24	SeqNo: 1909576
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Oil & Grease, Total Recoverable	ND	1.2	0	78 114
			SPK value	RPD Ref Val %RPD RPDLimit Qual
			40.00	0 0

Sample ID: LCS-71963	SampType: LCS	TestCode: E1664	Prep Date: 05/30/13 15:33	Run ID: MANUAL_130531A
Client ID: LCS-71963	Batch ID: 71963	Units: mg/L	Analysis Date: 05/31/13 15:24	SeqNo: 1909558
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Oil & Grease, Total Recoverable	37.60	1.2	0	78 114
			SPK value	RPD Ref Val %RPD RPDLimit Qual
			40.00	0 0

Sample ID: M0842-02BMS	SampType: MS	TestCode: E1664	Prep Date: 05/30/13 15:33	Run ID: MANUAL_130531A
Client ID: INF-052813	Batch ID: 71963	Units: mg/L	Analysis Date: 05/31/13 15:24	SeqNo: 1909573
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Oil & Grease, Total Recoverable	28.70	1.2	0	71.8 78 114
			SPK value	RPD Ref Val %RPD RPDLimit Qual
			40.00	0 0

Sample ID: M0842-02BMSD	SampType: MSD	TestCode: E1664	Prep Date: 05/30/13 15:33	Run ID: MANUAL_130531A
Client ID: INF-052813	Batch ID: 71963	Units: mg/L	Analysis Date: 05/31/13 15:24	SeqNo: 1909574
Analyte	Result	MDL	SPK Ref Val	%REC LowLimit HighLimit
Oil & Grease, Total Recoverable	28.80	1.2	0	72.0 78 114
			SPK value	RPD Ref Val %RPD RPDLimit Qual
			40.00	28.70 0.348 18 S

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

WorkOrder: M0842

Client ID: EARTH_NY

Project: NOW Corp. Site

WO Name: NOW Corp. Site

Location: NOW_CORP,

Comments: N/A

Case:

SDG:

PO: 6027 6639 1

HC Due: 06/17/13

Fax Due:

Fax Report:

Report Level: LEVEL 2

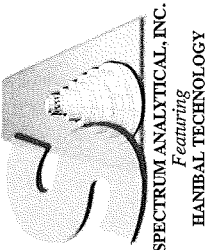
Special Program:

EDD:

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
M0842-01A	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA
M0842-01B	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	E1664	/					S3
M0842-01C	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SM2540_TDS	/					S3
M0842-01C	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SM2540_TSS	/					S3
M0842-01D	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SW9012_W	/				Y	S3
M0842-01E	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SW6010_W	/ See SEL list				Y	M5
M0842-01E	EFF-55-052813	05/28/2013 14:30	05/29/2013	Aqueous	SW7470	/ See SEL list					M5
M0842-02A	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA
M0842-02B	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	E1664	/					S3
M0842-02C	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SM2540_TDS	/					S3
M0842-02C	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SM2540_TSS	/					S3
M0842-02D	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SW9012_W	/				Y	S3
M0842-02E	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SW6010_W	/ See SEL list				Y	M5
M0842-02E	INF-052813	05/28/2013 14:38	05/29/2013	Aqueous	SW7470	/ See SEL list					M5
M0842-03A	TW-1 052813	05/28/2013 14:42	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA
M0842-04A	TW-2A 052813	05/28/2013 14:50	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA
M0842-05A	TW-3 052813	05/28/2013 14:58	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA
M0842-06A	TB 052813	05/28/2013 00:00	05/29/2013	Aqueous	SW8260_25_W	/				Y	VOA

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

HT = Test logged in but has been placed on hold



Report To: AECOM
46 British American Blvd
Latham NY 12110

Telephone #: 518 951 2200
 Project Mgr. Steve Choiniere

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11=Ice 12=

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

Invoice To: SAME RQN:

P.O. No.:

Project No.: 60276639.1

Site Name: NewCo.P State: NY

Location: Staatsburg

Sampler(s): Mark Howard + Steve Gray

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 60 days unless otherwise instructed.

11. Almgren Drive 8405 Benjamin Road, Ste A 646 Camp Avenue
 Agawam, MA 01001 Tampa, FL 33634
 (413) 789-9018 (813) 888-9507 (401) 732-3400

Lab Id.	Sample Id.	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Temp °C
M0842-01	EFF-55-052813	5/28/13	1430	G	GW	2	3	3	3	X
-02	INF-052813		1438			1	3	3	3	
-03	TW-1 052813		1442			1	3	3	3	
-04	TW-2A 052813		1450			1	3	3	3	
-05	TW-3 052813		1458			1	3	3	3	
M0842-06	TB 052813				X1	1	3	3	3	

Containers:

Analyses: Grease, Metals, Cyanide

QA/QC Reporting Level: Level I Level II Level III Level IV Other

State-specific reporting standards:

Condition upon receipt: Ambient Refrigerated D/VOA Frozen Broken Intact Broken Broken

E-mail to:

EDD Format:

Relinquished by: Mark Howard Received by: FedEx

Date: 5/28/13 Time: 16:00

Date: 5/29/13 Time: 10:00

Temp °C: 6°

Received By: <u>VEB</u>	Page 01 of 00
Reviewed By: <u>AED</u>	Log-in Date 05/29/2013
Work Order: M0842	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		
M0842-01	<2		<2	>12		H	
M0842-02	<2		<2	>12		H	
M0842-03						H	
M0842-04						H	
M0842-05						H	
M0842-06						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 8014 0638 8471
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	6 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	05/29/2013
12. Time Received	10:20
Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID: MT-1	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 / <u>No</u>	
Rad OK <u>Yes</u> / No	

Last Page of Data Report