AECOM

Operation, Maintenance and Monitoring Report
November 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

January 2014

AECOM

January 15, 2014

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

Re: NOW Corporation - Site #3-14-008
O&M Summary Report: "November" 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 26-day period (**October 30 – November 25, 2013)**.

With the exceptions noted below, if any, the pump and treat system was online and operational throughout the reporting period. Approximately 203,600 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 7,800 gallons per day (gpd), compared to 8,800 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 94,889,700 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 November 25, 2013. **There were no exceedances of effluent limitations.** A copy of the analytical laboratory report is attached. Table 2 summarizes selected operational data recorded on the sampling date.

There was no system downtime for the entire 26-day period.

AECOM made one site visit during the period to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. Details for the current period follow:

November 25 – Performed monthly system inspection and influent and effluent sampling. Observed proper operation of building heater, recently serviced by a NYSDEC contractor. Set heater thermostat to 50°. No changes to the VFD setting (55 Hz).

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: November 25, 2013
NOW Corporation Site
NYSDEC Site No. 3-14-008
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells TW-1	Recovery Wells TW-2A	Recovery Wells TW-3	Effluent Limitations	(units)
Quantity treated, per day		7,831				Monitor	gallons
pH	7.4	7.2				6.5 to 8.5	standard units
Oil and Grease	<1.0	<1.0	NA	NA	NA	15	mg/L
Total Cyanide	<10	<10	NA	NA	NA	10	ug/L
TDS	**330**	**300**	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	**96 J**	**94 J**	NA	NA	NA	Monitor	ug/L
Chromium	<20	**1.2 J**	NA	NA	NA	400	ug/L
Copper	<25	<25	NA	NA	NA	24	ug/L
Iron	**35 J**	**37 J**	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	**200**	**130**	NA	NA	NA	Monitor	ug/L
Nickel	**1.1 J**	**2.0 J**	NA	NA	NA	200	ug/L
Zinc	<50	<50	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	**490**	<0.50	**1.4 J**	**780**	**11**	10	ug/L
1,1,2-Trichloroethane	<10	<0.50	<2.0	<10	<0.50	1.2	ug/L
1,1-Dichloroethane	**210**	<0.50	**36**	**320**	**24**	10	ug/L
1,1-Dichloroethene	**15**	<0.50	**11**	**23**	**1.8**	0.5	ug/L
1,2-Dichloroethane	<10	<0.50	<2.0	<10	<0.50	1.6	ug/L
Benzene	<10	<0.50	<2.0	<10	<0.50	1.4	ug/L
Chlorobenzene	<10	<0.50	<2.0	<10	<0.50	10	ug/L
Chloroethane	<10	<0.50	<2.0	<10	**0.55**	10	ug/L
cis -1,2-Dichloroethene	**13**	<0.50	**3.5**	**19**	**0.30 J**	5	ug/L
Ethylbenzene	<10	<0.50	<2.0	<10	<0.50	10	ug/L
o-Xylene	<10	<0.50	<2.0	<10	<0.50	5	ug/L
m,p-Xylene	<10	<0.50	<2.0	<10	<0.50	10	ug/L
Tetrachloroethene	<10	<0.50	<2.0	<10	<0.50	1.4	ug/L
Toluene	<10	<0.50	<2.0	<10	<0.50	10	ug/L
trans -1,2-Dichloroethene	<10	<0.50	<2.0	<10	<0.50	5	ug/L
Trichloroethene	**360**	<0.50	**45**	**540**	**10**	6	ug/L
Vinyl Chloride	<10	<0.50	<2.0	<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 November 2013 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:		**11/25/13**	**Units**
TW-1			
	Pumping Rate	2	GPM
	Water Level Above Transducer	16.20	feet
	Flow Meter Reading	6,807,300	gallons
	Pump Pressure	70	psi
TW-2A			
	Pumping Rate	14	GPM
	Water Level Above Transducer	15.13	feet
	Flow Meter Reading	28,139,800	gallons
	Pump Pressure	0	psi
TW-3			
	Pumping Rate	2	GPM
	Water Level Above Transducer	32.18	feet
	Flow Meter Reading	11,579,200	gallons
	Pump Pressure	70	psi
VFD Setting	Arrival	55	Hz
	Departure	55	Hz
Air Stripper			
	Stripper Blower Pressure	15	inches H_2O
	Air Temperature in Stripper	52	°F
Effluent Flow			
	Effluent Flow this period (calculated)	203,600	gallons
	Total Effluent Flow (calculated)	94,889,700	gallons

Report Date:
13-Dec-13 10:17

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: M2332
Project : NOW Corp. Site
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
M2332-01	EFF 55 112513	Aqueous	25-Nov-13 12:14	26-Nov-13 10:30
M2332-02	INF 112513	Aqueous	25-Nov-13 12:19	26-Nov-13 10:30
M2332-03	TW-1 112513	Aqueous	25-Nov-13 12:23	26-Nov-13 10:30
M2332-04	TW-2A 112513	Aqueous	25-Nov-13 12:30	26-Nov-13 10:30
M2332-05	TW-3 112513	Aqueous	25-Nov-13 12:40	26-Nov-13 10:30
M2332-06	TB 112513	Aqueous	25-Nov-13 00:00	26-Nov-13 10:30

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

All applicable NELAC or USEPA CLP requirments have been meet.

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

NELAP ACCREDITED TNI LABORATORY

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

Laboratory Workorder / SDG #: M2332

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.

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 112513 (M2332-02A) : Dilution Factor: 20
TW-1 112513 (M2332-03A) : Dilution Factor: 4
TW-2A 112513 (M2332-04A) : Dilution Factor: 20

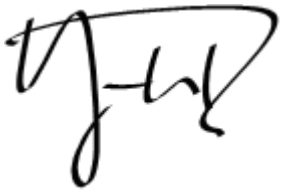
G. Samples:

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.



Signed:_____ _____

Date:_____12/11/2013_____

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: M2332

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):

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

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: 12/12/2013

REPORT NARRATIVE

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

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: M2332

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:

Duplicate analyses were performed on sample: INF 112513 (M2332-02CDUP).

Relative percent differences were within the QC limits.

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.

Signed: 

Date: 12/12/2013

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF 55 112513
Lab ID: M2332-01
Project: NOW Corp. Site
Collection Date: 11/25/13 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	ug/L	1	11/27/2013 19:58	75030
Chloroethane	ND		0.50	ug/L	1	11/27/2013 19:58	75030
1,1-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
trans-1,2-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Methyl tert-butyl ether	ND		0.50	ug/L	1	11/27/2013 19:58	75030
1,1-Dichloroethane	ND		0.50	ug/L	1	11/27/2013 19:58	75030
cis-1,2-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
1,1,1-Trichloroethane	ND		0.50	ug/L	1	11/27/2013 19:58	75030
1,2-Dichloroethane	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Benzene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Trichloroethene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Toluene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
1,1,2-Trichloroethane	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Tetrachloroethene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Chlorobenzene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Ethylbenzene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
m,p-Xylene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
o-Xylene	ND		0.50	ug/L	1	11/27/2013 19:58	75030
Surrogate: Dibromofluoromethane	101		88-124	%REC	1	11/27/2013 19:58	75030
Surrogate: 1,2-Dichloroethane-d4	104		79-115	%REC	1	11/27/2013 19:58	75030
Surrogate: Toluene-d8	101		80-114	%REC	1	11/27/2013 19:58	75030
Surrogate: Bromofluorobenzene	99.1		60-123	%REC	1	11/27/2013 19:58	75030

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 112513 **Project:** NOW Corp. Site
Lab ID: M2332-02 **Collection Date:** 11/25/13 12:19

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	11/27/2013 20:26	75030
Chloroethane	ND		10	ug/L	20	11/27/2013 20:26	75030
1,1-Dichloroethene	15		10	ug/L	20	11/27/2013 20:26	75030
trans-1,2-Dichloroethene	ND		10	ug/L	20	11/27/2013 20:26	75030
Methyl tert-butyl ether	ND		10	ug/L	20	11/27/2013 20:26	75030
1,1-Dichloroethane	210		10	ug/L	20	11/27/2013 20:26	75030
cis-1,2-Dichloroethene	13		10	ug/L	20	11/27/2013 20:26	75030
1,1,1-Trichloroethane	490		10	ug/L	20	11/27/2013 20:26	75030
1,2-Dichloroethane	ND		10	ug/L	20	11/27/2013 20:26	75030
Benzene	ND		10	ug/L	20	11/27/2013 20:26	75030
Trichloroethene	360		10	ug/L	20	11/27/2013 20:26	75030
Toluene	ND		10	ug/L	20	11/27/2013 20:26	75030
1,1,2-Trichloroethane	ND		10	ug/L	20	11/27/2013 20:26	75030
Tetrachloroethene	ND		10	ug/L	20	11/27/2013 20:26	75030
Chlorobenzene	ND		10	ug/L	20	11/27/2013 20:26	75030
Ethylbenzene	ND		10	ug/L	20	11/27/2013 20:26	75030
m,p-Xylene	ND		10	ug/L	20	11/27/2013 20:26	75030
o-Xylene	ND		10	ug/L	20	11/27/2013 20:26	75030
Surrogate: Dibromofluoromethane	100		88-124	%REC	20	11/27/2013 20:26	75030
Surrogate: 1,2-Dichloroethane-d4	107		79-115	%REC	20	11/27/2013 20:26	75030
Surrogate: Toluene-d8	95.9		80-114	%REC	20	11/27/2013 20:26	75030
Surrogate: Bromofluorobenzene	103		60-123	%REC	20	11/27/2013 20:26	75030

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 112513 **Project:** NOW Corp. Site
Lab ID: M2332-03 **Collection Date:** 11/25/13 12:23

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	11/27/2013 20:53	75030
Chloroethane	ND		2.0	ug/L	4	11/27/2013 20:53	75030
1,1-Dichloroethene	11		2.0	ug/L	4	11/27/2013 20:53	75030
trans-1,2-Dichloroethene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Methyl tert-butyl ether	ND		2.0	ug/L	4	11/27/2013 20:53	75030
1,1-Dichloroethane	36		2.0	ug/L	4	11/27/2013 20:53	75030
cis-1,2-Dichloroethene	3.5		2.0	ug/L	4	11/27/2013 20:53	75030
1,1,1-Trichloroethane	1.4	J	2.0	ug/L	4	11/27/2013 20:53	75030
1,2-Dichloroethane	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Benzene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Trichloroethene	45		2.0	ug/L	4	11/27/2013 20:53	75030
Toluene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
1,1,2-Trichloroethane	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Tetrachloroethene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Chlorobenzene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Ethylbenzene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
m,p-Xylene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
o-Xylene	ND		2.0	ug/L	4	11/27/2013 20:53	75030
Surrogate: Dibromofluoromethane	97.9		88-124	%REC	4	11/27/2013 20:53	75030
Surrogate: 1,2-Dichloroethane-d4	102		79-115	%REC	4	11/27/2013 20:53	75030
Surrogate: Toluene-d8	101		80-114	%REC	4	11/27/2013 20:53	75030
Surrogate: Bromofluorobenzene	99.2		60-123	%REC	4	11/27/2013 20:53	75030

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-2A 112513 **Project:** NOW Corp. Site
Lab ID: M2332-04 **Collection Date:** 11/25/13 12:30

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		10	ug/L	20	11/27/2013 21:21	75030
Chloroethane	ND		10	ug/L	20	11/27/2013 21:21	75030
1,1-Dichloroethene	23		10	ug/L	20	11/27/2013 21:21	75030
trans-1,2-Dichloroethene	ND		10	ug/L	20	11/27/2013 21:21	75030
Methyl tert-butyl ether	ND		10	ug/L	20	11/27/2013 21:21	75030
1,1-Dichloroethane	320		10	ug/L	20	11/27/2013 21:21	75030
cis-1,2-Dichloroethene	19		10	ug/L	20	11/27/2013 21:21	75030
1,1,1-Trichloroethane	780		10	ug/L	20	11/27/2013 21:21	75030
1,2-Dichloroethane	ND		10	ug/L	20	11/27/2013 21:21	75030
Benzene	ND		10	ug/L	20	11/27/2013 21:21	75030
Trichloroethene	540		10	ug/L	20	11/27/2013 21:21	75030
Toluene	ND		10	ug/L	20	11/27/2013 21:21	75030
1,1,2-Trichloroethane	ND		10	ug/L	20	11/27/2013 21:21	75030
Tetrachloroethene	ND		10	ug/L	20	11/27/2013 21:21	75030
Chlorobenzene	ND		10	ug/L	20	11/27/2013 21:21	75030
Ethylbenzene	ND		10	ug/L	20	11/27/2013 21:21	75030
m,p-Xylene	ND		10	ug/L	20	11/27/2013 21:21	75030
o-Xylene	ND		10	ug/L	20	11/27/2013 21:21	75030
Surrogate: Dibromofluoromethane	98.6		88-124	%REC	20	11/27/2013 21:21	75030
Surrogate: 1,2-Dichloroethane-d4	98.4		79-115	%REC	20	11/27/2013 21:21	75030
Surrogate: Toluene-d8	98.9		80-114	%REC	20	11/27/2013 21:21	75030
Surrogate: Bromofluorobenzene	99.4		60-123	%REC	20	11/27/2013 21:21	75030

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 112513
Lab ID: M2332-05
Project: NOW Corp. Site
Collection Date: 11/25/13 12:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Chloroethane	0.55		0.50	ug/L	1	11/27/2013 21:48	75030
1,1-Dichloroethene	1.8		0.50	ug/L	1	11/27/2013 21:48	75030
trans-1,2-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Methyl tert-butyl ether	ND		0.50	ug/L	1	11/27/2013 21:48	75030
1,1-Dichloroethane	24		0.50	ug/L	1	11/27/2013 21:48	75030
cis-1,2-Dichloroethene	0.30	J	0.50	ug/L	1	11/27/2013 21:48	75030
1,1,1-Trichloroethane	11		0.50	ug/L	1	11/27/2013 21:48	75030
1,2-Dichloroethane	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Benzene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Trichloroethene	10		0.50	ug/L	1	11/27/2013 21:48	75030
Toluene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
1,1,2-Trichloroethane	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Tetrachloroethene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Chlorobenzene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Ethylbenzene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
m,p-Xylene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
o-Xylene	ND		0.50	ug/L	1	11/27/2013 21:48	75030
Surrogate: Dibromofluoromethane	100		88-124	%REC	1	11/27/2013 21:48	75030
Surrogate: 1,2-Dichloroethane-d4	106		79-115	%REC	1	11/27/2013 21:48	75030
Surrogate: Toluene-d8	102		80-114	%REC	1	11/27/2013 21:48	75030
Surrogate: Bromofluorobenzene	103		60-123	%REC	1	11/27/2013 21:48	75030

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 112513 **Project:** NOW Corp. Site
Lab ID: M2332-06 **Collection Date:** 11/25/13 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	11/27/2013 19:31	75030
Chloroethane	ND		0.50	ug/L	1	11/27/2013 19:31	75030
1,1-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
trans-1,2-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Methyl tert-butyl ether	ND		0.50	ug/L	1	11/27/2013 19:31	75030
1,1-Dichloroethane	ND		0.50	ug/L	1	11/27/2013 19:31	75030
cis-1,2-Dichloroethene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
1,1,1-Trichloroethane	ND		0.50	ug/L	1	11/27/2013 19:31	75030
1,2-Dichloroethane	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Benzene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Trichloroethene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Toluene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
1,1,2-Trichloroethane	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Tetrachloroethene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Chlorobenzene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Ethylbenzene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
m,p-Xylene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
o-Xylene	ND		0.50	ug/L	1	11/27/2013 19:31	75030
Surrogate: Dibromofluoromethane	100		88-124	%REC	1	11/27/2013 19:31	75030
Surrogate: 1,2-Dichloroethane-d4	99.8		79-115	%REC	1	11/27/2013 19:31	75030
Surrogate: Toluene-d8	96.7		80-114	%REC	1	11/27/2013 19:31	75030
Surrogate: Bromofluorobenzene	98.1		60-123	%REC	1	11/27/2013 19:31	75030

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

M2332

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **MB-75030** SampType: **MBLK** TestCode: **SW8260_25_W** Prep Date: **11/27/13 12:45** Run ID: **V5_131127B**
Client ID: **MB-75030** Batch ID: **75030** Units: **ug/L** Analysis Date **11/27/13 19:04** SeqNo: **2018389**

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	10.02		0.50	10.00	0	100	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	10.49		0.50	10.00	0	105	79	115	0			
Surrogate: Toluene-d8	10.01		0.50	10.00	0	100	80	114	0			
Surrogate: Bromofluorobenzene	9.748		0.50	10.00	0	97.5	60	123	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCS-75030** SampType: **LCS** TestCode: **SW8260_25_W** Prep Date: **11/27/13 12:45** Run ID: **V5_131127B**
Client ID: **LCS-75030** Batch ID: **75030** Units: **ug/L** Analysis Date **11/27/13 18:08** SeqNo: **2018387**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.58	0.15	0.50	10.00	0	106	77	120	0			
Chloroethane	10.09	0.24	0.50	10.00	0	101	75	135	0			
1,1-Dichloroethene	9.795	0.19	0.50	10.00	0	98.0	81	125	0			
trans-1,2-Dichloroethene	10.23	0.14	0.50	10.00	0	102	60	137	0			
Methyl tert-butyl ether	10.76	0.13	0.50	10.00	0	108	61	134	0			
1,1-Dichloroethane	10.28	0.18	0.50	10.00	0	103	82	120	0			
cis-1,2-Dichloroethene	10.29	0.19	0.50	10.00	0	103	84	116	0			
1,1,1-Trichloroethane	10.22	0.11	0.50	10.00	0	102	80	124	0			
1,2-Dichloroethane	10.74	0.16	0.50	10.00	0	107	86	117	0			
Benzene	10.20	0.12	0.50	10.00	0	102	81	121	0			
Trichloroethene	10.37	0.13	0.50	10.00	0	104	74	123	0			
Toluene	10.21	0.14	0.50	10.00	0	102	88	117	0			
1,1,2-Trichloroethane	10.84	0.20	0.50	10.00	0	108	83	121	0			
Tetrachloroethene	9.632	0.17	0.50	10.00	0	96.3	74	115	0			
Chlorobenzene	10.15	0.13	0.50	10.00	0	102	83	112	0			
Ethylbenzene	10.29	0.13	0.50	10.00	0	103	87	110	0			
m,p-Xylene	20.09	0.22	0.50	20.00	0	100	87	114	0			
o-Xylene	10.32	0.17	0.50	10.00	0	103	84	114	0			
Surrogate: Dibromofluoromethane	10.47		0.50	10.00	0	105	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	10.08		0.50	10.00	0	101	79	115	0			
Surrogate: Toluene-d8	9.987		0.50	10.00	0	99.9	80	114	0			
Surrogate: Bromofluorobenzene	10.28		0.50	10.00	0	103	60	123	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCSD-75030** SampType: **LCSD** TestCode: **SW8260_25_W** Prep Date: **11/27/13 12:45** Run ID: **V5_131127B**
Client ID: **LCSD-75030** Batch ID: **75030** Units: **ug/L** Analysis Date **11/27/13 18:36** SeqNo: **2018388**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	10.87	0.15	0.50	10.00	0	109	77	120	10.58	2.64	40	
Chloroethane	10.15	0.24	0.50	10.00	0	101	75	135	10.09	0.577	40	
1,1-Dichloroethene	10.15	0.19	0.50	10.00	0	102	81	125	9.795	3.6	40	
trans-1,2-Dichloroethene	10.16	0.14	0.50	10.00	0	102	60	137	10.23	0.725	40	
Methyl tert-butyl ether	10.96	0.13	0.50	10.00	0	110	61	134	10.76	1.8	40	
1,1-Dichloroethane	10.57	0.18	0.50	10.00	0	106	82	120	10.28	2.84	40	
cis-1,2-Dichloroethene	10.63	0.19	0.50	10.00	0	106	84	116	10.29	3.26	40	
1,1,1-Trichloroethane	10.14	0.11	0.50	10.00	0	101	80	124	10.22	0.784	40	
1,2-Dichloroethane	10.68	0.16	0.50	10.00	0	107	86	117	10.74	0.472	40	
Benzene	10.24	0.12	0.50	10.00	0	102	81	121	10.20	0.41	40	
Trichloroethene	10.37	0.13	0.50	10.00	0	104	74	123	10.37	0.0115	40	
Toluene	10.55	0.14	0.50	10.00	0	105	88	117	10.21	3.24	40	
1,1,2-Trichloroethane	10.69	0.20	0.50	10.00	0	107	83	121	10.84	1.43	40	
Tetrachloroethene	9.863	0.17	0.50	10.00	0	98.6	74	115	9.632	2.36	40	
Chlorobenzene	9.952	0.13	0.50	10.00	0	99.5	83	112	10.15	2.01	40	
Ethylbenzene	10.28	0.13	0.50	10.00	0	103	87	110	10.29	0.0828	40	
m,p-Xylene	20.12	0.22	0.50	20.00	0	101	87	114	20.09	0.133	40	
o-Xylene	10.37	0.17	0.50	10.00	0	104	84	114	10.32	0.466	40	
Surrogate: Dibromofluoromethane	10.47		0.50	10.00	0	105	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	10.01		0.50	10.00	0	100	79	115	0			
Surrogate: Toluene-d8	9.789		0.50	10.00	0	97.9	80	114	0			
Surrogate: Bromofluorobenzene	10.18		0.50	10.00	0	102	60	123	0			

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

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF 55 112513 **Project:** NOW Corp. Site

Lab ID: M2332-01 **Collection Date:** 11/25/13 12:14

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	ug/L	1	12/03/2013 14:09	75022
Arsenic	ND		20	ug/L	1	12/03/2013 14:09	75022
Barium	94	J	200	ug/L	1	12/03/2013 14:09	75022
Chromium	1.2	J	20	ug/L	1	12/03/2013 14:09	75022
Copper	ND		25	ug/L	1	12/03/2013 14:09	75022
Iron	37	J	200	ug/L	1	12/03/2013 14:09	75022
Manganese	130		50	ug/L	1	12/03/2013 14:09	75022
Nickel	2.0	J	50	ug/L	1	12/03/2013 14:09	75022
Zinc	ND		50	ug/L	1	12/03/2013 14:09	75022
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	12/05/2013 16:53	75081

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 112513 **Project:** NOW Corp. Site

Lab ID: M2332-02 **Collection Date:** 11/25/13 12:19

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	ug/L	1	12/03/2013 14:13	75022
Arsenic	ND		20	ug/L	1	12/03/2013 14:13	75022
Barium	96	J	200	ug/L	1	12/03/2013 14:13	75022
Chromium	ND		20	ug/L	1	12/03/2013 14:13	75022
Copper	ND		25	ug/L	1	12/03/2013 14:13	75022
Iron	35	J	200	ug/L	1	12/03/2013 14:13	75022
Manganese	200		50	ug/L	1	12/03/2013 14:13	75022
Nickel	1.1	J	50	ug/L	1	12/03/2013 14:13	75022
Zinc	ND		50	ug/L	1	12/03/2013 14:13	75022
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	12/05/2013 16:54	75081

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: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW6010_W

SW846 6010C -- Metals by ICP

Sample ID: **MB-75022** SampType: **MBLK** TestCode: **SW6010_W** Prep Date: **11/27/13 11:30** Run ID: **OPTIMA3_131203A**
Client ID: **MB-75022** Batch ID: **75022** Units: **ug/L** Analysis Date: **12/03/13 12:40** SeqNo: **2020144**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	66	200									
Arsenic	ND	4.3	20									
Barium	ND	1.1	200									
Chromium	ND	0.64	20									
Copper	ND	3.6	30									
Iron	ND	31	200									
Manganese	ND	10	50									
Nickel	ND	0.85	50									
Zinc	ND	4.9	50									

Sample ID: **LCS-75022** SampType: **LCS** TestCode: **SW6010_W** Prep Date: **11/27/13 11:30** Run ID: **OPTIMA3_131203A**
Client ID: **LCS-75022** Batch ID: **75022** Units: **ug/L** Analysis Date: **12/03/13 12:44** SeqNo: **2020145**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8882	66	200	9100	0	97.6	80	120	0			
Arsenic	469.2	4.3	20	455.0	0	103	80	120	0			
Barium	9343	1.1	200	9100	0	103	80	120	0			
Chromium	920.0	0.64	20	910.0	0	101	80	120	0			
Copper	1134	3.6	30	1130	0	100	80	120	0			
Iron	4641	31	200	4550	0	102	80	120	0			
Manganese	2323	10	50	2270	0	102	80	120	0			
Nickel	2308	0.85	50	2270	0	102	80	120	0			
Zinc	2295	4.9	50	2270	0	101	80	120	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW7470
SW846 7470A -- Mercury by FIA

Sample ID: **MB-75081**	SampType: **MBLK**	TestCode: **SW7470**			Prep Date: **12/04/13 14:00**				Run ID: **FIMS2_131205A**		
Client ID: **MB-75081**	Batch ID: **75081**	Units: **µg/L**			Analysis Date: **12/05/13 16:29**				SeqNo: **2021713**		
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-75081**	SampType: **LCS**	TestCode: **SW7470**			Prep Date: **12/04/13 14:00**				Run ID: **FIMS2_131205A**		
Client ID: **LCS-75081**	Batch ID: **75081**	Units: **µg/L**			Analysis Date: **12/05/13 16:31**				SeqNo: **2021714**		
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.401	0.028	0.20	4.550	0	96.7	80	120	0			

Qualifiers: ND - Not Detected at the MDL; 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 55 112513 **Project:** NOW Corp. Site
Lab ID: M2332-01 **Collection Date:** 11/25/13 12:14

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	300		10	mg/L	1	11/28/2013 7:10	75033
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		10	mg/L	1	11/28/2013 5:52	75034
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	12/06/2013 13:44	75080

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 112513
Lab ID: M2332-02
Project: NOW Corp. Site
Collection Date: 11/25/13 12:19

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	330		10	mg/L	1	11/28/2013 7:50	75033
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		10	mg/L	1	11/28/2013 6:45	75034
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	12/06/2013 13:46	75080

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

M2332

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TDS

SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: **MB-75033**	SampType: **MBLK**	TestCode: **SM2540_TDS**			Prep Date: **11/27/13 18:30**				Run ID: **MANUAL_131127A**			
Client ID: **MB-75033**	Batch ID: **75033**	Units: **mg/L**			Analysis Date: **11/27/13 18:30**				SeqNo: **2019574**			
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-75033**	SampType: **LCS**	TestCode: **SM2540_TDS**			Prep Date: **11/27/13 18:30**				Run ID: **MANUAL_131127A**			
Client ID: **LCS-75033**	Batch ID: **75033**	Units: **mg/L**			Analysis Date: **11/27/13 19:10**				SeqNo: **2019575**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	303.0	10	10	299.0	0	101	80	120	0			

Qualifiers:
ND - Not Detected at the MDL
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: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: **MB-75034**	SampType: **MBLK**	TestCode: **SM2540_TSS**			Prep Date: **11/27/13 18:30**				Run ID: **MANUAL_131127B**			
Client ID: **MB-75034**	Batch ID: **75034**	Units: **mg/L**			Analysis Date: **11/27/13 18:30**				SeqNo: **2019595**			
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-75034**	SampType: **LCS**	TestCode: **SM2540_TSS**			Prep Date: **11/27/13 18:30**				Run ID: **MANUAL_131127B**			
Client ID: **LCS-75034**	Batch ID: **75034**	Units: **mg/L**			Analysis Date: **11/27/13 19:22**				SeqNo: **2019596**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	55.00	10	10	60.50	0	90.9	80	120	0			

Sample ID: **M2332-02CDUP**	SampType: **DUP**	TestCode: **SM2540_TSS**			Prep Date: **11/27/13 18:30**				Run ID: **MANUAL_131127B**			
Client ID: **INF 112513**	Batch ID: **75034**	Units: **mg/L**			Analysis Date: **11/28/13 7:37**				SeqNo: **2019610**			
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 MDL
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

M2332

CLIENT: AECOM Technical Services, Inc.
Work Order: M2332
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW9012_W
SW846 9012B -- Total Cyanide

Sample ID: **MB-75080**	SampType: **MBLK**	TestCode: **SW9012_W**			Prep Date: **12/04/13 10:00**				Run ID: **LACHAT1_131205A**		
Client ID: **MB-75080**	Batch ID: **75080**	Units: **ug/L**			Analysis Date: **12/05/13 14:24**				SeqNo: **2022201**		
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-75080**	SampType: **LCS**	TestCode: **SW9012_W**			Prep Date: **12/04/13 10:00**				Run ID: **LACHAT1_131206A**		
Client ID: **LCS-75080**	Batch ID: **75080**	Units: **ug/L**			Analysis Date: **12/06/13 13:26**				SeqNo: **2024164**		
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	104.2	7.5	20	100.0	0	104	80	120	0			

Qualifiers:
ND - Not Detected at the MDL
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

Report Date:
10-Dec-13 11:05

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Spectrum Analytical, Inc.
646 Camp Ave.
North Kingstown, RI 02852
Attn: Agnes Huntley

Project: NOW Corp. Site
Project #: M2332

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB81319-01	EFF 55 112513	Aqueous	25-Nov-13 12:14	02-Dec-13 14:30
SB81319-02	INF 112513	Aqueous	25-Nov-13 12:19	02-Dec-13 14:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 6 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received -0.3 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Acceptance Check Form

Client:	Spectrum Analytical, Inc. - North Kingstown, RI
Project:	NOW Corp. Site / M2332
Work Order:	SB81319
Sample(s) received on:	12/2/2013
Received by:	Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
4. Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
5. Were samples refrigerated upon transfer to laboratory representative?	☑	☐	☐
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☐	☑	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification
EFF 55 112513
SB81319-01

Client Project #	Matrix	Collection Date/Time	Received
M2332	Aqueous	25-Nov-13 12:14	02-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
	Oil & Grease	< 1.00	U,OG	mg/l	1.00	0.619	1	EPA 1664B	06-Dec-13	09-Dec-13	JK	1329379	X

Sample Identification
INF 112513
SB81319-02

Client Project #	Matrix	Collection Date/Time	Received
M2332	Aqueous	25-Nov-13 12:19	02-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
	Oil & Grease	< 1.00	U,OG	mg/l	1.00	0.619	1	EPA 1664B	06-Dec-13	09-Dec-13	JK	1329379	X

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1329379 - SW846 3510C										
Blank (1329379-BLK1)						Prepared: 06-Dec-13 Analyzed: 09-Dec-13				
Oil & Grease	< 1.00	U	mg/l	1.00						
LCS (1329379-BS1)						Prepared: 06-Dec-13 Analyzed: 09-Dec-13				
Oil & Grease	**24.7**		mg/l		28.9		85	83-101		

Notes and Definitions

U	Analyte included in the analysis, but not detected at or above the MDL.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
OG	The required Matrix Spike and Matrix Spike Duplicate (MS/MSD) for Oil & Grease method 1664A can only be analyzed when the client has submitted sufficient sample volume. An extra liter per MS/MSD is required to fulfill the method QC criteria. Please refer to Chain of Custody and QC Summary (MS/MSD) of the Laboratory Report to verify ample sample volume was submitted to fulfill the requirement.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly Wisk

SB 81319 BY

CHAIN-OF-CUSTODY RECORD

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

WorkOrder : M2332
Project: NOW Corp. Site
Report Type : LEVEL 2
Due Date : 12/13/2013
FAX Due Date :
Report To : Agnes R Huntley
Purchase Order : M2332
EDD Types : Please generate a Little PEL EDD

Subcontractor:
Spectrum Analytical, Inc. - Agawam, MA
11 Almgren Drive
Agawam, Massachusetts 01001

Phone: (413) 789-9018

EQuISFacilityCode: N/A

= number of containers

Requested Test

E1664

Client Sample ID	Collection Date	#	Matrix	DUP/MS/MSD	Mitkem Sample ID	
EFF 55 112513 81319-01	11/25/2013 12:14	3	Aqueous		M2332-01B	X
INF 112513 -02	11/25/2013 12:19	3	Aqueous		M2332-02B	X

1) E1664, OIL GREASE, HEM

Use 'Client Sample IDs' when reporting data. If needed, truncate 'Client Sample IDs' to fit on reports. Use full 'Client Sample ID' when generating EDD.

Comments:

QV-1 LOB RCI
JH 12/2/13

		Date/Time			Date/Time
Relinquished by:	Agnes R Huntley	12/02/13 9:37	Received by:	12.2.13	1045
Relinquished by:			Received by:	JH	12/2/13 1430 fridge

12/02/2013
Page 1 of 1

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

WorkOrder: M2332

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: 12/13/13
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
M2332-01A	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA
M2332-01B	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	E1664	/ SPECTRUM--Sub to Agawam					SUB
M2332-01C	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SM2540_TDS	/					V2
M2332-01C	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SM2540_TSS	/					V2
M2332-01D	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SW9012_W	/				Y	V2
M2332-01E	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SW6010_W	/ See SEL list				Y	M1
M2332-01E	EFF 55 112513	11/25/2013 12:14	11/26/2013	Aqueous	SW7470	/ See SEL list					M1
M2332-02A	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA
M2332-02B	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	E1664	/ SPECTRUM--Sub to Agawam					SUB
M2332-02C	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SM2540_TDS	/					V2
M2332-02C	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SM2540_TSS	/					V2
M2332-02D	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SW9012_W	/				Y	V2
M2332-02E	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SW6010_W	/ See SEL list				Y	M1
M2332-02E	INF 112513	11/25/2013 12:19	11/26/2013	Aqueous	SW7470	/ See SEL list					M1
M2332-03A	TW-1 112513	11/25/2013 12:23	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA
M2332-04A	TW-2A 112513	11/25/2013 12:30	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA
M2332-05A	TW-3 112513	11/25/2013 12:40	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA
M2332-06A	TB 112513	11/25/2013 00:00	11/26/2013	Aqueous	SW8260_25_W	/				Y	VOA

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Huntley

M2332

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Page _____ of _____

CHAIN OF CUSTODY RECORD

☐ 11 Almgren Drive, Agawam, MA 01001, (413) 789-9018
☐ 8405 Benjamin Road, Ste A, Tampa, FL 33634, (813) 888-9507
☐ 646 Camp Avenue, N Kingstown, RI 02852, (401) 732-3400

Special Handling:

TAT- Ind icate Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

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

Telephone #: 518-951-2200
Project Mgr. Stephen Choiniere

Invoice To: Same

P.O. No.: _____ RQN: _____

Project No.: 602
Site Name: Now Corp / 3-14-008
Location: Staatsburg State: NY
Sampler(s): SRG

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= Deionized Water 10=H_3PO_4 11= _____ 12= _____

List preservative code below:

QA/QC Reporting Notes:

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*	TSS/TDS	O+G	Cyanide			
M2332-01	EFF 112513	11-25-13	12:14	G		2	3		3		X	X	X	X	X			
-02	INF 112513		12:19				3		3			X	X	X	X			
-03	TW-1 112513		12:23															
-04	TW-2A 112513		12:30															
-05	TW-3 112513		12:40															
M2332-06	TB 112513	—	—															

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 and V

Relinquished by:	Received by:	Date:	Time:	Temp°C
Steve Grey FedEx	FedEx	11-25-13	15:48	
	Vern Byl	11/26/13	10:30	3.1 C

☐ EDD Format _____
☐ E-mail to _____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

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

Received By: VGB	Page 01 of 00
Reviewed By: KD	Log-in Date 11/26/2013
Work Order: M2332	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.

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 8042 5922 7360
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed / Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	3.1 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	11/26/2013
12. Time Received	10:30

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
M2332-01	<2		<2	>12		H	
M2332-02	<2		<2	>12		H	
M2332-03						H	
M2332-04						H	
M2332-05						H	
M2332-06						H	

Sample Transfer

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

IR Temp Gun ID:MT-74

CoolantCondition: ICE

Preservative Name/Lot No:

VOA Matrix Key:

US = Unpreserved Soil	A= Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO4	F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

Agnes Huntley [Warwick]

From: Edward Lawler [RI]
Sent: Wednesday, November 27, 2013 4:52 PM
To: Agnes Huntley [Warwick]
Subject: FW: Bottleware needed: NOW Corp site

FYI

From: Choiniere, Stephen R. [mailto:Stephen.Choiniere@aecom.com]
Sent: Tuesday, November 26, 2013 1:12 PM
To: Edward Lawler [RI]; Jennifer Emerson [RI]
Cc: Scaplen, Austin
Subject: FW: Bottleware needed: NOW Corp site

Hi Ed – could you kindly rename the sample with ID "Eff 112513" as

Eff 55 112513

Cooler should have arrived this am. Thanks.

From: Choiniere, Stephen R.
Sent: Monday, November 18, 2013 1:06 PM
To: Edward Lawler [RI] (elawler@spectrum-analytical.com)
Cc: Jennifer Emerson [Warwick] (jemerson@mitkem.com); Gray, Steve; Scaplen, Austin
Subject: Bottleware needed: NOW Corp site

Hi Ed,

Please ship us the usual bottleware, such as M1903, for the referenced site, to arrive by November 22. Sample date will be November 25. Thanks.

Steve

Last Page of Data Report