

# **Operation, Maintenance and Monitoring Report October 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

December 2013

December 20, 2013

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

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

With the exceptions noted below, if any, the pump and treat system was online and operational throughout the reporting period. Approximately 264,000 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 8,800 gallons per day (gpd), compared to 10,500 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 94,686,100 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 October 30, 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 30-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:

October 30 – Performed monthly system inspection and influent and effluent sampling. No changes to the VFD.

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: October 30, 2013**  
**NOW Corporation Site**  
**NYSDEC Site No. 3-14-008**  
**Town of Clinton, New York**

| Analytes/<br>Parameters   | Total<br>Influent | Effluent     | Recovery Wells |            |               | Effluent<br>Limitations |                |
|---------------------------|-------------------|--------------|----------------|------------|---------------|-------------------------|----------------|
|                           |                   |              | TW-1           | TW-2A      | TW-3          | (units)                 |                |
| Quantity treated, per day |                   | 8,813        |                |            |               | Monitor                 | gallons        |
| pH                        | 7.5               | 8.4          |                |            |               | 6.5 to 8.5              | standard units |
| Oil and Grease            | <5.0              | <5.0         | NA             | NA         | NA            | 15                      | mg/L           |
| Total Cyanide             | <10               | <10          | NA             | NA         | NA            | 10                      | ug/L           |
| TDS                       | <b>320</b>        | <b>290</b>   | 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             | <b>88 BJ</b>      | <b>95 BJ</b> | NA             | NA         | NA            | Monitor                 | ug/L           |
| Chromium                  | <20               | <20          | NA             | NA         | NA            | 400                     | ug/L           |
| Copper                    | <b>72</b>         | <25          | NA             | NA         | NA            | 24                      | ug/L           |
| Iron                      | <200              | <200         | NA             | NA         | NA            | 600                     | ug/L           |
| Mercury                   | <0.20             | <0.20        | NA             | NA         | NA            | 0.8                     | ug/L           |
| Manganese                 | <b>120</b>        | <b>110</b>   | NA             | NA         | NA            | Monitor                 | ug/L           |
| Nickel                    | <b>6.3 J</b>      | <b>1.2 J</b> | NA             | NA         | NA            | 200                     | ug/L           |
| Zinc                      | <b>13 J</b>       | <50          | NA             | NA         | NA            | 150                     | ug/L           |
| 1,1,1-Trichloroethane     | <b>320</b>        | <0.50        | <b>1.4 J</b>   | <b>720</b> | <b>7.2</b>    | 10                      | ug/L           |
| 1,1,2-Trichloroethane     | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 1.2                     | ug/L           |
| 1,1-Dichloroethane        | <b>140</b>        | <0.50        | <b>34</b>      | <b>290</b> | <b>20</b>     | 10                      | ug/L           |
| 1,1-Dichloroethene        | <b>14</b>         | <0.50        | <b>11</b>      | <b>22</b>  | <b>1.8</b>    | 0.5                     | ug/L           |
| 1,2-Dichloroethane        | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 1.6                     | ug/L           |
| Benzene                   | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 1.4                     | ug/L           |
| Chlorobenzene             | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 10                      | ug/L           |
| Chloroethane              | <5.0              | <0.50        | <2.0           | <10        | <b>0.49 J</b> | 10                      | ug/L           |
| cis -1,2-Dichloroethene   | <b>9.7</b>        | <0.50        | <b>3.3</b>     | <b>18</b>  | <b>0.29 J</b> | 5                       | ug/L           |
| Ethylbenzene              | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 10                      | ug/L           |
| o-Xylene                  | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 5                       | ug/L           |
| m,p-Xylene                | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 10                      | ug/L           |
| Tetrachloroethene         | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 1.4                     | ug/L           |
| Toluene                   | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 10                      | ug/L           |
| trans -1,2-Dichloroethene | <5.0              | <0.50        | <2.0           | <10        | <0.50         | 5                       | ug/L           |
| Trichloroethene           | <b>260</b>        | <0.50        | <b>45</b>      | <b>550</b> | <b>10</b>     | 6                       | ug/L           |
| Vinyl Chloride            | <5.0              | <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 October 2013 O&M Data**

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

| <b>Instrumentation/Readings:</b> |                                        | <b>10/30/13</b> | <b>Units</b>            |
|----------------------------------|----------------------------------------|-----------------|-------------------------|
| <b><i>TW-1</i></b>               |                                        |                 |                         |
|                                  | Pumping Rate                           | 3.2             | GPM                     |
|                                  | Water Level Above Transducer           | 21.08           | feet                    |
|                                  | Flow Meter Reading                     | 6,790,800       | gallons                 |
|                                  | Pump Pressure                          | 67              | psi                     |
| <b><i>TW-2A</i></b>              |                                        |                 |                         |
|                                  | Pumping Rate                           | N/A             | GPM                     |
|                                  | Water Level Above Transducer           | 18.38           | feet                    |
|                                  | Flow Meter Reading                     | 27,944,200      | gallons                 |
|                                  | Pump Pressure                          | 0               | psi                     |
| <b><i>TW-3</i></b>               |                                        |                 |                         |
|                                  | Pumping Rate                           | 2               | GPM                     |
|                                  | Water Level Above Transducer           | 11.61           | feet                    |
|                                  | Flow Meter Reading                     | 11,527,000      | gallons                 |
|                                  | Pump Pressure                          | 59              | psi                     |
| <b><i>VFD Setting</i></b>        |                                        |                 |                         |
|                                  | Arrival                                | 55              | Hz                      |
|                                  | Departure                              | 55              | Hz                      |
| <b><i>Air Stripper</i></b>       |                                        |                 |                         |
|                                  | Stripper Blower Pressure               | 15.5            | inches H <sub>2</sub> O |
|                                  | Air Temperature in Stripper            | 49              | °F                      |
| <b><i>Effluent Flow</i></b>      |                                        |                 |                         |
|                                  | Effluent Flow this period (calculated) | 264,400         | gallons                 |
|                                  | Total Effluent Flow (calculated)       | 94,686,100      | gallons                 |

Report Date:  
19-Nov-13 15:25



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

## Laboratory Report

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

Work Order: M2121  
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> |
|----------------------|-------------------------|---------------|---------------------|----------------------|
| M2121-01             | EFF-55 103013           | Aqueous       | 30-Oct-13 15:00     | 31-Oct-13 10:22      |
| M2121-02             | INF-103013              | Aqueous       | 30-Oct-13 15:10     | 31-Oct-13 10:22      |
| M2121-03             | TW-1 103013             | Aqueous       | 30-Oct-13 15:15     | 31-Oct-13 10:22      |
| M2121-04             | TW-2A 103013            | Aqueous       | 30-Oct-13 15:20     | 31-Oct-13 10:22      |
| M2121-05             | TW-3 103013             | Aqueous       | 30-Oct-13 15:25     | 31-Oct-13 10:22      |
| M2121-06             | TB 103013               | Aqueous       | 30-Oct-13 00:00     | 31-Oct-13 10:22      |

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](http://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   |



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 #: M2121**

**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-103013 (M2121-02A) : Dilution Factor: 10

TW-1 103013 (M2121-03A) : Dilution Factor: 4

TW-2A 103013 (M2121-04A) : 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: \_\_\_\_\_ 11/19/2013 \_\_\_\_\_



## **REPORT NARRATIVE**

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

**Client : AECOM Technical Services, Inc.**

**Project: NOW Corp. Site**

**Laboratory Workorder / SDG #: M2121**

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

Instrument Code: OPTIMA2  
Instrument Type: ICP  
Description: Optima 3100 XL  
Manufacturer: Perkin-Elmer  
Model: 3100 XL

## **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.

A handwritten signature in black ink, consisting of a large, stylized 'A' shape with a horizontal line extending to the right.

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

Date: 11/08/2013

## **REPORT NARRATIVE**

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

**Client : AECOM Technical Services, Inc.**

**Project: NOW Corp. Site**

**Laboratory Workorder / SDG #: M2121**

**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 sample: INF-103013  
(M2121-02BMS).

Percent recoveries were within the QC limits.

### **D. Duplicate sample:**

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

### **E. Samples:**

No other unusual occurrences were noted during sample analysis.

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

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

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

Date: \_\_\_\_\_ 11/7/2013 \_\_\_\_\_

## **REPORT NARRATIVE**

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

**Client : AECOM Technical Services, Inc.**

**Project: NOW Corp. Site**

**Laboratory Workorder / SDG #: M2121**

**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

Instrument Code: MANUAL  
Instrument Type: WC  
Description:  
Manufacturer:  
Model:

## **VI. ANALYSIS**

### **A. Calibration:**

Calibrations met the method/SOP acceptance criteria.

### **B. Blanks:**

All method blanks were within the acceptance criteria.

### **C. 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 sample: INF-103013 (M2121-02DMS).

Percent recoveries were within the QC limits.

### **D. Duplicate sample:**

Duplicate analyses were performed on sample: INF-103013 (M2121-02DDUP).

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.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the end.

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

Date: 11/08/2013

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

11/19/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-55 103013

Lab ID: M2121-01

Project: NOW Corp. Site

Collection Date: 10/30/13 15:00

| 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  |    | 11/12/2013 23:11 | 74735       |
| Chloroethane                              | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| 1,1-Dichloroethene                        | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| trans-1,2-Dichloroethene                  | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Methyl tert-butyl ether                   | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| 1,1-Dichloroethane                        | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| cis-1,2-Dichloroethene                    | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| 1,1,1-Trichloroethane                     | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| 1,2-Dichloroethane                        | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Benzene                                   | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Trichloroethene                           | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Toluene                                   | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| 1,1,2-Trichloroethane                     | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Tetrachloroethene                         | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Chlorobenzene                             | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Ethylbenzene                              | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| m,p-Xylene                                | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| o-Xylene                                  | ND     |      | 0.50   | ug/L  |    | 11/12/2013 23:11 | 74735       |
| Surrogate: Dibromofluoromethane           | 101    |      | 88-124 | %REC  |    | 11/12/2013 23:11 | 74735       |
| Surrogate: 1,2-Dichloroethane-d4          | 98.9   |      | 79-115 | %REC  |    | 11/12/2013 23:11 | 74735       |
| Surrogate: Toluene-d8                     | 103    |      | 80-114 | %REC  |    | 11/12/2013 23:11 | 74735       |
| Surrogate: Bromofluorobenzene             | 104    |      | 60-123 | %REC  |    | 11/12/2013 23:11 | 74735       |

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

11/19/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-103013

Lab ID: M2121-02

Project: NOW Corp. Site

Collection Date: 10/30/13 15:10

| Analyses                                  | Result | Qual | RL     | Units | DF | Date Analyzed       | Batch ID    |
|-------------------------------------------|--------|------|--------|-------|----|---------------------|-------------|
| SW846 8260C -- VOC by GC-MS (25 mL Purge) |        |      |        |       |    |                     | SW8260_25_W |
| Vinyl chloride                            | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Chloroethane                              | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| 1,1-Dichloroethene                        | 14     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| trans-1,2-Dichloroethene                  | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Methyl tert-butyl ether                   | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| 1,1-Dichloroethane                        | 140    |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| cis-1,2-Dichloroethene                    | 9.7    |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| 1,1,1-Trichloroethane                     | 320    |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| 1,2-Dichloroethane                        | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Benzene                                   | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Trichloroethene                           | 260    |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Toluene                                   | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| 1,1,2-Trichloroethane                     | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Tetrachloroethene                         | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Chlorobenzene                             | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Ethylbenzene                              | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| m,p-Xylene                                | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| o-Xylene                                  | ND     |      | 5.0    | ug/L  |    | 10 11/12/2013 23:38 | 74735       |
| Surrogate: Dibromofluoromethane           | 98.6   |      | 88-124 | %REC  |    | 10 11/12/2013 23:38 | 74735       |
| Surrogate: 1,2-Dichloroethane-d4          | 105    |      | 79-115 | %REC  |    | 10 11/12/2013 23:38 | 74735       |
| Surrogate: Toluene-d8                     | 103    |      | 80-114 | %REC  |    | 10 11/12/2013 23:38 | 74735       |
| Surrogate: Bromofluorobenzene             | 98.7   |      | 60-123 | %REC  |    | 10 11/12/2013 23:38 | 74735       |

**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

11/19/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** TW-1 103013

**Lab ID:** M2121-03

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:15

| Analyses                                         | Result | Qual | RL     | Units | DF | Date Analyzed     | Batch ID           |
|--------------------------------------------------|--------|------|--------|-------|----|-------------------|--------------------|
| <b>SW846 8260C -- VOC by GC-MS (25 mL Purge)</b> |        |      |        |       |    |                   | <b>SW8260_25_W</b> |
| Vinyl chloride                                   | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Chloroethane                                     | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| 1,1-Dichloroethene                               | 11     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| trans-1,2-Dichloroethene                         | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Methyl tert-butyl ether                          | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| 1,1-Dichloroethane                               | 34     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| cis-1,2-Dichloroethene                           | 3.3    |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| 1,1,1-Trichloroethane                            | 1.4    | J    | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| 1,2-Dichloroethane                               | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Benzene                                          | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Trichloroethene                                  | 45     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Toluene                                          | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| 1,1,2-Trichloroethane                            | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Tetrachloroethene                                | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Chlorobenzene                                    | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Ethylbenzene                                     | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| m,p-Xylene                                       | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| o-Xylene                                         | ND     |      | 2.0    | ug/L  |    | 4 11/13/2013 0:06 | 74735              |
| Surrogate: Dibromofluoromethane                  | 96.2   |      | 88-124 | %REC  |    | 4 11/13/2013 0:06 | 74735              |
| Surrogate: 1,2-Dichloroethane-d4                 | 103    |      | 79-115 | %REC  |    | 4 11/13/2013 0:06 | 74735              |
| Surrogate: Toluene-d8                            | 104    |      | 80-114 | %REC  |    | 4 11/13/2013 0:06 | 74735              |
| Surrogate: Bromofluorobenzene                    | 99.1   |      | 60-123 | %REC  |    | 4 11/13/2013 0:06 | 74735              |

**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

11/19/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** TW-2A 103013

**Lab ID:** M2121-04

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:20

| Analyses                                         | Result | Qual | RL     | Units | DF | Date Analyzed      | Batch ID           |
|--------------------------------------------------|--------|------|--------|-------|----|--------------------|--------------------|
| <b>SW846 8260C -- VOC by GC-MS (25 mL Purge)</b> |        |      |        |       |    |                    | <b>SW8260_25_W</b> |
| Vinyl chloride                                   | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Chloroethane                                     | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| 1,1-Dichloroethene                               | 22     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| trans-1,2-Dichloroethene                         | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Methyl tert-butyl ether                          | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| 1,1-Dichloroethane                               | 290    |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| cis-1,2-Dichloroethene                           | 18     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| 1,1,1-Trichloroethane                            | 720    |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| 1,2-Dichloroethane                               | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Benzene                                          | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Trichloroethene                                  | 550    |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Toluene                                          | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| 1,1,2-Trichloroethane                            | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Tetrachloroethene                                | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Chlorobenzene                                    | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Ethylbenzene                                     | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| m,p-Xylene                                       | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| o-Xylene                                         | ND     |      | 10     | ug/L  |    | 20 11/13/2013 0:33 | 74735              |
| Surrogate: Dibromofluoromethane                  | 96.8   |      | 88-124 | %REC  |    | 20 11/13/2013 0:33 | 74735              |
| Surrogate: 1,2-Dichloroethane-d4                 | 97.5   |      | 79-115 | %REC  |    | 20 11/13/2013 0:33 | 74735              |
| Surrogate: Toluene-d8                            | 103    |      | 80-114 | %REC  |    | 20 11/13/2013 0:33 | 74735              |
| Surrogate: Bromofluorobenzene                    | 98.7   |      | 60-123 | %REC  |    | 20 11/13/2013 0:33 | 74735              |

**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

11/19/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-3 103013

Lab ID: M2121-05

Project: NOW Corp. Site

Collection Date: 10/30/13 15:25

| Analyses                                  | Result | Qual | RL     | Units | DF | Date Analyzed   | Batch ID    |
|-------------------------------------------|--------|------|--------|-------|----|-----------------|-------------|
| SW846 8260C -- VOC by GC-MS (25 mL Purge) |        |      |        |       |    |                 | SW8260_25_W |
| Vinyl chloride                            | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Chloroethane                              | 0.49   | J    | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| 1,1-Dichloroethene                        | 1.8    |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| trans-1,2-Dichloroethene                  | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Methyl tert-butyl ether                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| 1,1-Dichloroethane                        | 20     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| cis-1,2-Dichloroethene                    | 0.29   | J    | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| 1,1,1-Trichloroethane                     | 7.2    |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| 1,2-Dichloroethane                        | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Benzene                                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Trichloroethene                           | 10     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Toluene                                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| 1,1,2-Trichloroethane                     | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Tetrachloroethene                         | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Chlorobenzene                             | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Ethylbenzene                              | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| m,p-Xylene                                | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| o-Xylene                                  | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:00 | 74735       |
| Surrogate: Dibromofluoromethane           | 97.3   |      | 88-124 | %REC  |    | 11/13/2013 1:00 | 74735       |
| Surrogate: 1,2-Dichloroethane-d4          | 101    |      | 79-115 | %REC  |    | 11/13/2013 1:00 | 74735       |
| Surrogate: Toluene-d8                     | 101    |      | 80-114 | %REC  |    | 11/13/2013 1:00 | 74735       |
| Surrogate: Bromofluorobenzene             | 99.7   |      | 60-123 | %REC  |    | 11/13/2013 1:00 | 74735       |

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

11/19/2013

Client: AECOM Technical Services, Inc.

Client Sample ID: TB 103013

Lab ID: M2121-06

Project: NOW Corp. Site

Collection Date: 10/30/13 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  |    | 11/13/2013 1:28 | 74735       |
| Chloroethane                              | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| 1,1-Dichloroethene                        | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| trans-1,2-Dichloroethene                  | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Methyl tert-butyl ether                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| 1,1-Dichloroethane                        | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| cis-1,2-Dichloroethene                    | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| 1,1,1-Trichloroethane                     | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| 1,2-Dichloroethane                        | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Benzene                                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Trichloroethene                           | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Toluene                                   | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| 1,1,2-Trichloroethane                     | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Tetrachloroethene                         | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Chlorobenzene                             | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Ethylbenzene                              | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| m,p-Xylene                                | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| o-Xylene                                  | ND     |      | 0.50   | ug/L  |    | 11/13/2013 1:28 | 74735       |
| Surrogate: Dibromofluoromethane           | 94.3   |      | 88-124 | %REC  |    | 11/13/2013 1:28 | 74735       |
| Surrogate: 1,2-Dichloroethane-d4          | 93.1   |      | 79-115 | %REC  |    | 11/13/2013 1:28 | 74735       |
| Surrogate: Toluene-d8                     | 101    |      | 80-114 | %REC  |    | 11/13/2013 1:28 | 74735       |
| Surrogate: Bromofluorobenzene             | 101    |      | 60-123 | %REC  |    | 11/13/2013 1:28 | 74735       |

**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: M2121

SW8260\_25\_W

Project: NOW Corp. Site

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

|                                  |                 |                       |                               |                    |             |      |          |           |             |      |          |      |
|----------------------------------|-----------------|-----------------------|-------------------------------|--------------------|-------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: MB-74735              | SampType: MBLK  | TestCode: SW8260_25_W | Prep Date: 11/12/13 12:44     | Run ID: V5_131112A |             |      |          |           |             |      |          |      |
| Client ID: MB-74735              | Batch ID: 74735 | Units: ug/L           | Analysis Date: 11/12/13 22:44 | SeqNo: 2007302     |             |      |          |           |             |      |          |      |
| 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                          |                    |             |      |          |           |             |      |          |      |
| 1,1,1-Dichloroethene             | ND              | 0.19                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| trans-1,2-Dichloroethene         | ND              | 0.14                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Methyl tert-butyl ether          | ND              | 0.13                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| 1,1-Dichloroethane               | ND              | 0.18                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| cis-1,2-Dichloroethene           | ND              | 0.19                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| 1,1,1-Trichloroethane            | ND              | 0.11                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| 1,2-Dichloroethane               | ND              | 0.16                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Benzene                          | ND              | 0.12                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Trichloroethene                  | ND              | 0.13                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Toluene                          | ND              | 0.14                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| 1,1,2-Trichloroethane            | ND              | 0.20                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Tetrachloroethene                | ND              | 0.17                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Chlorobenzene                    | ND              | 0.13                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Ethylbenzene                     | ND              | 0.13                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| m,p-Xylene                       | ND              | 0.22                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| o-Xylene                         | ND              | 0.17                  | 0.50                          |                    |             |      |          |           |             |      |          |      |
| Surrogate:                       | 10.10           |                       | 0.50                          | 10.00              | 0           | 101  | 88       | 124       | 0           |      |          |      |
| Dibromofluoromethane             |                 |                       |                               |                    |             |      |          |           |             |      |          |      |
| Surrogate: 1,2-Dichloroethane-d4 | 10.26           |                       | 0.50                          | 10.00              | 0           | 103  | 79       | 115       | 0           |      |          |      |
| Surrogate: Toluene-d8            | 10.75           |                       | 0.50                          | 10.00              | 0           | 108  | 80       | 114       | 0           |      |          |      |
| Surrogate: Bromofluorobenzene    | 10.33           |                       | 0.50                          | 10.00              | 0           | 103  | 60       | 123       | 0           |      |          |      |



| Sample ID: LCS-74735      | SampType: LCS   | TestCode: SW8260_25_W | Prep Date: 11/12/13 12:44     | Run ID: V5_131112A |             |      |          |           |             |      |          |      |
|---------------------------|-----------------|-----------------------|-------------------------------|--------------------|-------------|------|----------|-----------|-------------|------|----------|------|
| Client ID: LCS-74735      | Batch ID: 74735 | Units: ug/L           | Analysis Date: 11/12/13 21:21 | SeqNo: 2007298     |             |      |          |           |             |      |          |      |
| Analyte                   | Result          | MDL                   | RL                            | SPK value          | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Vinyl chloride            | 10.10           | 0.15                  | 0.50                          | 10.00              | 0           | 101  | 77       | 120       | 0           |      |          |      |
| Chloroethane              | 9.629           | 0.24                  | 0.50                          | 10.00              | 0           | 96.3 | 75       | 135       | 0           |      |          |      |
| 1,1,1-Dichloroethene      | 9.848           | 0.19                  | 0.50                          | 10.00              | 0           | 98.5 | 81       | 125       | 0           |      |          |      |
| trans-1,2-Dichloroethene  | 10.03           | 0.14                  | 0.50                          | 10.00              | 0           | 100  | 60       | 137       | 0           |      |          |      |
| Methyl tert-butyl ether   | 9.621           | 0.13                  | 0.50                          | 10.00              | 0           | 96.2 | 61       | 134       | 0           |      |          |      |
| 1,1,1-Dichloroethane      | 9.818           | 0.18                  | 0.50                          | 10.00              | 0           | 98.2 | 82       | 120       | 0           |      |          |      |
| cis-1,2-Dichloroethene    | 9.742           | 0.19                  | 0.50                          | 10.00              | 0           | 97.4 | 84       | 116       | 0           |      |          |      |
| 1,1,1,1-Trichloroethane   | 9.947           | 0.11                  | 0.50                          | 10.00              | 0           | 99.5 | 80       | 124       | 0           |      |          |      |
| 1,2-Dichloroethane        | 9.774           | 0.16                  | 0.50                          | 10.00              | 0           | 97.7 | 86       | 117       | 0           |      |          |      |
| Benzene                   | 9.502           | 0.12                  | 0.50                          | 10.00              | 0           | 95.0 | 81       | 121       | 0           |      |          |      |
| Trichloroethene           | 9.936           | 0.13                  | 0.50                          | 10.00              | 0           | 99.4 | 74       | 123       | 0           |      |          |      |
| Toluene                   | 9.977           | 0.14                  | 0.50                          | 10.00              | 0           | 99.8 | 88       | 117       | 0           |      |          |      |
| 1,1,1,1,2-Trichloroethane | 9.730           | 0.20                  | 0.50                          | 10.00              | 0           | 97.3 | 83       | 121       | 0           |      |          |      |
| Tetrachloroethene         | 9.221           | 0.17                  | 0.50                          | 10.00              | 0           | 92.2 | 74       | 115       | 0           |      |          |      |
| Chlorobenzene             | 9.748           | 0.13                  | 0.50                          | 10.00              | 0           | 97.5 | 83       | 112       | 0           |      |          |      |
| Ethylbenzene              | 10.08           | 0.13                  | 0.50                          | 10.00              | 0           | 101  | 87       | 110       | 0           |      |          |      |
| m,p-Xylene                | 19.92           | 0.22                  | 0.50                          | 20.00              | 0           | 99.6 | 87       | 114       | 0           |      |          |      |
| o-Xylene                  | 10.14           | 0.17                  | 0.50                          | 10.00              | 0           | 101  | 84       | 114       | 0           |      |          |      |
| Surrogate:                | 10.07           |                       | 0.50                          | 10.00              | 0           | 101  | 88       | 124       | 0           |      |          |      |
| Dibromofluoromethane      |                 |                       |                               |                    |             |      |          |           |             |      |          |      |
| Surrogate: 1,2-           | 10.04           |                       | 0.50                          | 10.00              | 0           | 100  | 79       | 115       | 0           |      |          |      |
| Dichloroethane-d4         |                 |                       |                               |                    |             |      |          |           |             |      |          |      |
| Surrogate: Toluene-d8     | 10.34           |                       | 0.50                          | 10.00              | 0           | 103  | 80       | 114       | 0           |      |          |      |
| Surrogate:                | 9.984           |                       | 0.50                          | 10.00              | 0           | 99.8 | 60       | 123       | 0           |      |          |      |
| Bromofluorobenzene        |                 |                       |                               |                    |             |      |          |           |             |      |          |      |

CLIENT: AECOM Technical Services, Inc.  
Work Order: M2121  
Project: NOW Corp. Site

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

Sample ID: LCSD-74735      SampType: LCSD      TestCode: SW8260\_25\_W      Prep Date: 11/12/13 12:44      Run ID: V5\_131112A  
Client ID: LCSD-74735      Batch ID: 74735      Units: ug/L      Analysis Date: 11/12/13 21:49      SeqNo: 2007301

| Analyte                          | Result | MDL  | RL   | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD   | RPDLimit | Qual |
|----------------------------------|--------|------|------|-----------|-------------|------|----------|-----------|-------------|--------|----------|------|
| Vinyl chloride                   | 10.11  | 0.15 | 0.50 | 10.00     | 0           | 101  | 77       | 120       | 10.10       | 0.0528 | 40       |      |
| Chloroethane                     | 9.907  | 0.24 | 0.50 | 10.00     | 0           | 99.1 | 75       | 135       | 9.629       | 2.85   | 40       |      |
| 1,1-Dichloroethene               | 10.41  | 0.19 | 0.50 | 10.00     | 0           | 104  | 81       | 125       | 9.848       | 5.57   | 40       |      |
| trans-1,2-Dichloroethene         | 10.33  | 0.14 | 0.50 | 10.00     | 0           | 103  | 60       | 137       | 10.03       | 2.99   | 40       |      |
| Methyl tert-butyl ether          | 9.919  | 0.13 | 0.50 | 10.00     | 0           | 99.2 | 61       | 134       | 9.621       | 3.05   | 40       |      |
| 1,1-Dichloroethane               | 10.23  | 0.18 | 0.50 | 10.00     | 0           | 102  | 82       | 120       | 9.818       | 4.08   | 40       |      |
| cis-1,2-Dichloroethene           | 10.33  | 0.19 | 0.50 | 10.00     | 0           | 103  | 84       | 116       | 9.742       | 5.87   | 40       |      |
| 1,1,1-Trichloroethane            | 10.52  | 0.11 | 0.50 | 10.00     | 0           | 105  | 80       | 124       | 9.947       | 5.55   | 40       |      |
| 1,2-Dichloroethane               | 10.12  | 0.16 | 0.50 | 10.00     | 0           | 101  | 86       | 117       | 9.774       | 3.43   | 40       |      |
| Benzene                          | 10.07  | 0.12 | 0.50 | 10.00     | 0           | 101  | 81       | 121       | 9.502       | 5.8    | 40       |      |
| Trichloroethene                  | 10.33  | 0.13 | 0.50 | 10.00     | 0           | 103  | 74       | 123       | 9.936       | 3.85   | 40       |      |
| Toluene                          | 10.58  | 0.14 | 0.50 | 10.00     | 0           | 106  | 88       | 117       | 9.977       | 5.83   | 40       |      |
| 1,1,2-Trichloroethane            | 9.737  | 0.20 | 0.50 | 10.00     | 0           | 97.4 | 83       | 121       | 9.730       | 0.0707 | 40       |      |
| Tetrachloroethene                | 9.741  | 0.17 | 0.50 | 10.00     | 0           | 97.4 | 74       | 115       | 9.221       | 5.49   | 40       |      |
| Chlorobenzene                    | 10.02  | 0.13 | 0.50 | 10.00     | 0           | 100  | 83       | 112       | 9.748       | 2.74   | 40       |      |
| Ethylbenzene                     | 10.65  | 0.13 | 0.50 | 10.00     | 0           | 106  | 87       | 110       | 10.08       | 5.46   | 40       |      |
| m,p-Xylene                       | 21.19  | 0.22 | 0.50 | 20.00     | 0           | 106  | 87       | 114       | 19.92       | 6.17   | 40       |      |
| o-Xylene                         | 10.54  | 0.17 | 0.50 | 10.00     | 0           | 105  | 84       | 114       | 10.14       | 3.88   | 40       |      |
| Surrogate:                       | 9.714  |      | 0.50 | 10.00     | 0           | 97.1 | 88       | 124       | 0           |        |          |      |
| Dibromofluoromethane             |        |      |      |           |             |      |          |           |             |        |          |      |
| Surrogate: 1,2-Dichloroethane-d4 | 10.29  |      | 0.50 | 10.00     | 0           | 103  | 79       | 115       | 0           |        |          |      |
| Surrogate: Toluene-d8            | 10.68  |      | 0.50 | 10.00     | 0           | 107  | 80       | 114       | 0           |        |          |      |
| Surrogate:                       | 10.10  |      | 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  
m13.11.12.2151      J - Analyte detected below quantitation limits      R - RPD outside accepted recovery limits      RL - Reporting Limit

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

11/08/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** EFF-55 103013

**Lab ID:** M2121-01

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:00

| Analyses                             | Result | Qual | RL   | Units | DF | Date Analyzed      | Batch ID        |
|--------------------------------------|--------|------|------|-------|----|--------------------|-----------------|
| <b>SW846 6010C -- Metals by ICP</b>  |        |      |      |       |    |                    | <b>SW6010_W</b> |
| Aluminum                             | ND     |      | 200  | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Arsenic                              | ND     |      | 20   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Barium                               | 95     | BJ   | 200  | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Chromium                             | ND     |      | 20   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Copper                               | ND     |      | 25   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Iron                                 | ND     |      | 200  | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Manganese                            | 110    |      | 50   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Nickel                               | 1.2    | J    | 50   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| Zinc                                 | ND     |      | 50   | ug/L  |    | 1 11/08/2013 9:33  | 74661           |
| <b>SW846 7470A -- Mercury by FIA</b> |        |      |      |       |    |                    | <b>SW7470</b>   |
| Mercury                              | ND     |      | 0.20 | µg/L  |    | 1 11/06/2013 11:13 | 74622           |

**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

11/08/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** INF-103013

**Lab ID:** M2121-02

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:10

| Analyses                             | Result | Qual | RL   | Units | DF | Date Analyzed      | Batch ID        |
|--------------------------------------|--------|------|------|-------|----|--------------------|-----------------|
| <b>SW846 6010C -- Metals by ICP</b>  |        |      |      |       |    |                    | <b>SW6010_W</b> |
| Aluminum                             | ND     |      | 200  | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Arsenic                              | ND     |      | 20   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Barium                               | 88     | BJ   | 200  | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Chromium                             | ND     |      | 20   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Copper                               | 72     |      | 25   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Iron                                 | ND     |      | 200  | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Manganese                            | 120    |      | 50   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Nickel                               | 6.3    | J    | 50   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| Zinc                                 | 13     | J    | 50   | ug/L  |    | 1 11/08/2013 9:37  | 74661           |
| <b>SW846 7470A -- Mercury by FIA</b> |        |      |      |       |    |                    | <b>SW7470</b>   |
| Mercury                              | ND     |      | 0.20 | µg/L  |    | 1 11/06/2013 11:15 | 74622           |

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

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

CLIENT: AECOM Technical Services, Inc.

Work Order: M2121

Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW6010\_W

SW846 6010C -- Metals by ICP

|                     |                 |                    |                              |                         |             |      |          |           |             |      |          |      |
|---------------------|-----------------|--------------------|------------------------------|-------------------------|-------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: MB-74661 | SampType: MBLK  | TestCode: SW6010_W | Prep Date: 11/07/13 14:00    | Run ID: OPTIMA2_131108A |             |      |          |           |             |      |          |      |
| Client ID: MB-74661 | Batch ID: 74661 | Units: ug/L        | Analysis Date: 11/08/13 9:12 | SeqNo: 2005866          |             |      |          |           |             |      |          |      |
| 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              | 1.188           | 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                           |                         |             |      |          |           |             |      |          |      |

J

|                      |        |                 |     |                    |             |                              |          |                         |             |      |          |      |
|----------------------|--------|-----------------|-----|--------------------|-------------|------------------------------|----------|-------------------------|-------------|------|----------|------|
| Sample ID: LCS-74661 |        | SampType: LCS   |     | TestCode: SW6010_W |             | Prep Date: 11/07/13 14:00    |          | Run ID: OPTIMA2_131108A |             |      |          |      |
| Client ID: LCS-74661 |        | Batch ID: 74661 |     | Units: ug/L        |             | Analysis Date: 11/08/13 9:16 |          | SeqNo: 2005867          |             |      |          |      |
| Analyte              | Result | MDL             | RL  | SPK value          | SPK Ref Val | %REC                         | LowLimit | HighLimit               | RPD Ref Val | %RPD | RPDLimit | Qual |
| Aluminum             | 9214   | 66              | 200 | 9100               | 0           | 101                          | 80       | 120                     | 0           |      |          |      |
| Arsenic              | 490.8  | 4.3             | 20  | 455.0              | 0           | 108                          | 80       | 120                     | 0           |      |          |      |
| Barium               | 9489   | 1.1             | 200 | 9100               | 0           | 104                          | 80       | 120                     | 0           |      |          | B    |
| Chromium             | 912.9  | 0.64            | 20  | 910.0              | 0           | 100                          | 80       | 120                     | 0           |      |          |      |
| Copper               | 1143   | 3.6             | 30  | 1130               | 0           | 101                          | 80       | 120                     | 0           |      |          |      |
| Iron                 | 4832   | 31              | 200 | 4550               | 0           | 106                          | 80       | 120                     | 0           |      |          |      |
| Manganese            | 2356   | 10              | 50  | 2270               | 0           | 104                          | 80       | 120                     | 0           |      |          |      |
| Nickel               | 2303   | 0.85            | 50  | 2270               | 0           | 101                          | 80       | 120                     | 0           |      |          |      |
| Zinc                 | 2306   | 4.9             | 50  | 2270               | 0           | 102                          | 80       | 120                     | 0           |      |          |      |

CLIENT: AECOM Technical Services, Inc.  
Work Order: M2121  
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT  
SW6010\_W  
SW846 6010C -- Metals by ICP

|                       |        |                 |     |                    |             |                              |          |                         |             |      |          |      |
|-----------------------|--------|-----------------|-----|--------------------|-------------|------------------------------|----------|-------------------------|-------------|------|----------|------|
| Sample ID: LCSD-74661 |        | SampType: LCSD  |     | TestCode: SW6010_W |             | Prep Date: 11/07/13 14:00    |          | Run ID: OPTIMA2_131108A |             |      |          |      |
| Client ID: LCSD-74661 |        | Batch ID: 74661 |     | Units: ug/L        |             | Analysis Date: 11/08/13 9:19 |          | SeqNo: 2005868          |             |      |          |      |
| Analyte               | Result | MDL             | RL  | SPK value          | SPK Ref Val | %REC                         | LowLimit | HighLimit               | RPD Ref Val | %RPD | RPDLimit | Qual |
| Aluminum              | 9080   | 66              | 200 | 9100               | 0           | 99.8                         | 80       | 120                     | 9214        | 1.47 | 20       |      |
| Arsenic               | 483.7  | 4.3             | 20  | 455.0              | 0           | 106                          | 80       | 120                     | 490.8       | 1.45 | 20       |      |
| Barium                | 9360   | 1.1             | 200 | 9100               | 0           | 103                          | 80       | 120                     | 9489        | 1.38 | 20       | B    |
| Chromium              | 899.5  | 0.64            | 20  | 910.0              | 0           | 98.8                         | 80       | 120                     | 912.9       | 1.48 | 20       |      |
| Copper                | 1129   | 3.6             | 30  | 1130               | 0           | 99.9                         | 80       | 120                     | 1143        | 1.17 | 20       |      |
| Iron                  | 4759   | 31              | 200 | 4550               | 0           | 105                          | 80       | 120                     | 4832        | 1.54 | 20       |      |
| Manganese             | 2326   | 10              | 50  | 2270               | 0           | 102                          | 80       | 120                     | 2356        | 1.26 | 20       |      |
| Nickel                | 2270   | 0.85            | 50  | 2270               | 0           | 100                          | 80       | 120                     | 2303        | 1.48 | 20       |      |
| Zinc                  | 2268   | 4.9             | 50  | 2270               | 0           | 99.9                         | 80       | 120                     | 2306        | 1.65 | 20       |      |

Qualifiers: ND - Not Detected at the MDL  
J - Analyte detected below quantitation 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: M2121  
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT  
SW7470  
SW846 7470A -- Mercury by FIA

|                            |                        |                         |                                      |                              |      |          |           |             |      |          |      |
|----------------------------|------------------------|-------------------------|--------------------------------------|------------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-74622</b> | SampType: <b>MBLK</b>  | TestCode: <b>SW7470</b> | Prep Date: <b>11/05/13 19:00</b>     | Run ID: <b>FIMS1_131106B</b> |      |          |           |             |      |          |      |
| Client ID: <b>MB-74622</b> | Batch ID: <b>74622</b> | Units: <b>µg/L</b>      | Analysis Date: <b>11/06/13 11:06</b> | SeqNo: <b>2005781</b>        |      |          |           |             |      |          |      |
| Analyte                    | Result                 | MDL                     | SPK value                            | SPK Ref Val                  | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury                    | ND                     | 0.028                   | 0.20                                 |                              |      |          |           |             |      |          |      |

|                             |                        |                         |                                      |                              |      |          |           |             |      |          |      |
|-----------------------------|------------------------|-------------------------|--------------------------------------|------------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS-74622</b> | SampType: <b>LCS</b>   | TestCode: <b>SW7470</b> | Prep Date: <b>11/05/13 19:00</b>     | Run ID: <b>FIMS1_131106B</b> |      |          |           |             |      |          |      |
| Client ID: <b>LCS-74622</b> | Batch ID: <b>74622</b> | Units: <b>µg/L</b>      | Analysis Date: <b>11/06/13 11:08</b> | SeqNo: <b>2005782</b>        |      |          |           |             |      |          |      |
| Analyte                     | Result                 | MDL                     | SPK value                            | SPK Ref Val                  | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury                     | 4.418                  | 0.028                   | 0.20                                 | 4.550                        | 0    | 97.1     | 80        | 120         | 0    |          |      |

|                       |                 |                  |                               |                       |             |      |          |           |             |      |          |      |
|-----------------------|-----------------|------------------|-------------------------------|-----------------------|-------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: LCSD-74622 | SampType: LCSD  | TestCode: SW7470 | Prep Date: 11/05/13 19:00     | Run ID: FIMS1_131106B |             |      |          |           |             |      |          |      |
| Client ID: LCSD-74622 | Batch ID: 74622 | Units: µg/L      | Analysis Date: 11/06/13 11:10 | SeqNo: 2005783        |             |      |          |           |             |      |          |      |
| Analyte               | Result          | MDL              | RL                            | SPK value             | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Mercury               | 4.572           | 0.028            | 0.20                          | 4.550                 | 0           | 100  | 80       | 120       | 4.418       | 3.42 | 20       |      |

**Client:** AECOM Technical Services, Inc.  
**Client Sample ID:** EFF-55 103013  
**Lab ID:** M2121-01

**Project:** NOW Corp. Site  
**Collection Date:** 10/30/13 15:00

| 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  | 11/06/2013 9:07 | 74604    |

**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-103013

**Lab ID:** M2121-02

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:10

| 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  | 11/06/2013 9:07 | 74604    |

**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: M2121  
Project: NOW Corp. Site

E1664  
EPA 1664A -- Oil & Grease, HEM

|                                 |                 |                 |                              |                        |      |          |           |             |      |          |      |
|---------------------------------|-----------------|-----------------|------------------------------|------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: MB-74604             | SampType: MBLK  | TestCode: E1664 | Prep Date: 11/04/13 16:36    | Run ID: MANUAL_131106A |      |          |           |             |      |          |      |
| Client ID: MB-74604             | Batch ID: 74604 | Units: mg/L     | Analysis Date: 11/06/13 9:07 | SeqNo: 2004244         |      |          |           |             |      |          |      |
| Analyte                         | Result          | MDL             | SPK Ref Val                  | SPK value              | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | ND              | 1.2             |                              |                        |      |          | 5.0       |             |      |          |      |

|                                 |                 |                 |                              |                        |      |          |           |             |      |          |      |
|---------------------------------|-----------------|-----------------|------------------------------|------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: LCS-74604            | SampType: LCS   | TestCode: E1664 | Prep Date: 11/04/13 16:36    | Run ID: MANUAL_131106A |      |          |           |             |      |          |      |
| Client ID: LCS-74604            | Batch ID: 74604 | Units: mg/L     | Analysis Date: 11/06/13 9:07 | SeqNo: 2004239         |      |          |           |             |      |          |      |
| Analyte                         | Result          | MDL             | SPK Ref Val                  | SPK value              | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | 37.50           | 1.2             | 0                            | 40.00                  | 93.8 | 78       | 114       | 0           |      |          |      |

|                                 |                 |                 |                              |                        |      |          |           |             |      |          |      |
|---------------------------------|-----------------|-----------------|------------------------------|------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: M2121-02BMS          | SampType: MS    | TestCode: E1664 | Prep Date: 11/04/13 16:36    | Run ID: MANUAL_131106A |      |          |           |             |      |          |      |
| Client ID: INF-103013           | Batch ID: 74604 | Units: mg/L     | Analysis Date: 11/06/13 9:07 | SeqNo: 2004242         |      |          |           |             |      |          |      |
| Analyte                         | Result          | MDL             | SPK Ref Val                  | SPK value              | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | 35.10           | 1.2             | 0                            | 40.00                  | 87.8 | 78       | 114       | 0           |      |          |      |

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

11/08/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** EFF-55 103013

**Lab ID:** M2121-01

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:00

| Analyses                                  | Result | Qual | RL | Units | DF | Date Analyzed    | Batch ID          |
|-------------------------------------------|--------|------|----|-------|----|------------------|-------------------|
| <b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b> |        |      |    |       |    |                  | <b>SM2540_TDS</b> |
| Total Dissolved Solids                    | 290    |      | 10 | mg/L  | 1  | 11/01/2013 22:54 | 74575             |
| <b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b> |        |      |    |       |    |                  | <b>SM2540_TSS</b> |
| Total Suspended Solids                    | ND     |      | 10 | mg/L  | 1  | 11/01/2013 23:46 | 74576             |
| <b>SW846 9012B -- Total Cyanide</b>       |        |      |    |       |    |                  | <b>SW9012_W</b>   |
| Cyanide                                   | ND     |      | 10 | ug/L  | 1  | 11/05/2013 11:16 | 74595             |

**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

11/08/2013

**Client:** AECOM Technical Services, Inc.

**Client Sample ID:** INF-103013

**Lab ID:** M2121-02

**Project:** NOW Corp. Site

**Collection Date:** 10/30/13 15:10

| Analyses                                  | Result | Qual | RL | Units | DF | Date Analyzed    | Batch ID          |
|-------------------------------------------|--------|------|----|-------|----|------------------|-------------------|
| <b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b> |        |      |    |       |    |                  | <b>SM2540_TDS</b> |
| Total Dissolved Solids                    | 320    |      | 10 | mg/L  | 1  | 11/02/2013 0:30  | 74575             |
| <b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b> |        |      |    |       |    |                  | <b>SM2540_TSS</b> |
| Total Suspended Solids                    | ND     |      | 10 | mg/L  | 1  | 11/02/2013 1:13  | 74576             |
| <b>SW846 9012B -- Total Cyanide</b>       |        |      |    |       |    |                  | <b>SW9012_W</b>   |
| Cyanide                                   | ND     |      | 10 | ug/L  | 1  | 11/05/2013 11:24 | 74595             |

**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: M2121  
Project: NOW Corp. Site

SM2540\_TDS  
SM 2540C -- TOTAL DISSOLVED SOLIDS

|                        |                 |                      |                               |                        |
|------------------------|-----------------|----------------------|-------------------------------|------------------------|
| Sample ID: MB-74575    | SampType: MBLK  | TestCode: SM2540_TDS | Prep Date: 11/01/13 16:30     | Run ID: MANUAL_131101B |
| Client ID: MB-74575    | Batch ID: 74575 | Units: mg/L          | Analysis Date: 11/01/13 16:30 | SeqNo: 2003829         |
| Analyte                | Result          | MDL                  | SPK Ref Val                   | SPK value              |
|                        | ND              | 10                   | %REC                          | LowLimit HighLimit     |
| Total Dissolved Solids |                 |                      | RPD Ref Val                   | %RPD RPDLimit          |
|                        |                 |                      |                               | Qual                   |
| Sample ID: LCS-74575   | SampType: LCS   | TestCode: SM2540_TDS | Prep Date: 11/01/13 16:30     | Run ID: MANUAL_131101B |
| Client ID: LCS-74575   | Batch ID: 74575 | Units: mg/L          | Analysis Date: 11/01/13 18:06 | SeqNo: 2003830         |
| Analyte                | Result          | MDL                  | SPK Ref Val                   | SPK value              |
|                        | 420.0           | 10                   | 0                             | 414.0                  |
| Total Dissolved Solids |                 |                      | %REC                          | LowLimit HighLimit     |
|                        |                 |                      | RPD Ref Val                   | %RPD RPDLimit          |
|                        |                 |                      |                               | Qual                   |
|                        |                 |                      | 0                             | 120                    |
|                        |                 |                      | 101                           | 80                     |
|                        |                 |                      | 0                             | 0                      |

CLIENT: AECOM Technical Services, Inc.

ANALYTICAL QC SUMMARY REPORT

Work Order: M2121

SM2540\_TSS

Project: NOW Corp. Site

SM 2540D -- TOTAL SUSPENDED SOLIDS

|                            |                        |                             |                                      |                               |      |          |           |     |         |      |          |      |
|----------------------------|------------------------|-----------------------------|--------------------------------------|-------------------------------|------|----------|-----------|-----|---------|------|----------|------|
| Sample ID: <b>MB-74576</b> | SampType: <b>MBLK</b>  | TestCode: <b>SM2540_TSS</b> | Prep Date: <b>11/01/13 16:30</b>     | Run ID: <b>MANUAL_131101C</b> |      |          |           |     |         |      |          |      |
| Client ID: <b>MB-74576</b> | Batch ID: <b>74576</b> | Units: <b>mg/L</b>          | Analysis Date: <b>11/01/13 16:30</b> | SeqNo: <b>2003874</b>         |      |          |           |     |         |      |          |      |
| Analyte                    | Result                 | MDL                         | SPK value                            | SPK Ref Val                   | %REC | LowLimit | HighLimit | RPD | Ref Val | %RPD | RPDLimit | Qual |
| Total Suspended Solids     |                        | ND                          | 10                                   | 10                            |      |          |           |     |         |      |          |      |

|                        |                 |                      |                               |                        |      |          |           |             |      |          |      |
|------------------------|-----------------|----------------------|-------------------------------|------------------------|------|----------|-----------|-------------|------|----------|------|
| Sample ID: LCS-74576   | SampType: LCS   | TestCode: SM2540_TSS | Prep Date: 11/01/13 16:30     | Run ID: MANUAL_131101C |      |          |           |             |      |          |      |
| Client ID: LCS-74576   | Batch ID: 74576 | Units: mg/L          | Analysis Date: 11/01/13 17:57 | SeqNo: 2003875         |      |          |           |             |      |          |      |
| Analyte                | Result          | MDL                  | SPK value                     | SPK Ref Val            | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Total Suspended Solids | 37.00           | 10                   | 10                            | 36.50                  | 0    | 101      | 80        | 120         | 0    |          |      |

CLIENT: AECOM Technical Services, Inc.  
Work Order: M2121  
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT  
SW9012\_W  
SW846 9012B -- Total Cyanide

|                     |                 |                    |                               |                         |             |               |      |
|---------------------|-----------------|--------------------|-------------------------------|-------------------------|-------------|---------------|------|
| Sample ID: MB-74595 | SampType: MBLK  | TestCode: SW9012_W | Prep Date: 11/04/13 14:30     | Run ID: LACHAT1_131105A |             |               |      |
| Client ID: MB-74595 | Batch ID: 74595 | Units: ug/L        | Analysis Date: 11/05/13 11:01 | SeqNo: 2004011          |             |               |      |
| Analyte             | Result          | MDL                | SPK Ref Val                   | %REC LowLimit HighLimit | RPD Ref Val | %RPD RPDLimit | Qual |
| Cyanide             | ND              | 7.5                | RL                            | 20                      |             |               |      |

|                      |                 |                    |                               |                         |             |               |      |   |
|----------------------|-----------------|--------------------|-------------------------------|-------------------------|-------------|---------------|------|---|
| Sample ID: LCS-74595 | SampType: LCS   | TestCode: SW9012_W | Prep Date: 11/04/13 14:30     | Run ID: LACHAT1_131105A |             |               |      |   |
| Client ID: LCS-74595 | Batch ID: 74595 | Units: ug/L        | Analysis Date: 11/05/13 11:04 | SeqNo: 2004012          |             |               |      |   |
| Analyte              | Result          | MDL                | SPK Ref Val                   | %REC LowLimit HighLimit | RPD Ref Val | %RPD RPDLimit | Qual |   |
| Cyanide              | 109.5           | 7.5                | RL                            | 20                      | 100.0       | 0             | 120  | 0 |

|                       |                 |                    |                               |                         |             |               |       |      |    |
|-----------------------|-----------------|--------------------|-------------------------------|-------------------------|-------------|---------------|-------|------|----|
| Sample ID: LCSD-74595 | SampType: LCSD  | TestCode: SW9012_W | Prep Date: 11/04/13 14:30     | Run ID: LACHAT1_131105A |             |               |       |      |    |
| Client ID: LCSD-74595 | Batch ID: 74595 | Units: ug/L        | Analysis Date: 11/05/13 11:06 | SeqNo: 2004013          |             |               |       |      |    |
| Analyte               | Result          | MDL                | SPK Ref Val                   | %REC LowLimit HighLimit | RPD Ref Val | %RPD RPDLimit | Qual  |      |    |
| Cyanide               | 96.37           | 7.5                | RL                            | 20                      | 100.0       | 0             | 109.5 | 12.7 | 20 |

|                         |                 |                    |                               |                         |                         |             |               |      |
|-------------------------|-----------------|--------------------|-------------------------------|-------------------------|-------------------------|-------------|---------------|------|
| Sample ID: M2121-02DDUP | SampType: DUP   | TestCode: SW9012_W | Prep Date:                    | Run ID: LACHAT1_131105A |                         |             |               |      |
| Client ID: INF-103013   | Batch ID: 74595 | Units: ug/L        | Analysis Date: 11/05/13 11:27 | SeqNo: 2004021          |                         |             |               |      |
| Analyte                 | Result          | MDL                | SPK value                     | SPK Ref Val             | %REC LowLimit HighLimit | RPD Ref Val | %RPD RPDLimit | Qual |
| Cyanide                 | ND              | 2.5                | RL                            | 10                      | 0                       | 0           | 0             | 20   |

|                        |        |                 |    |                    |             |                               |          |                         |             |      |          |      |
|------------------------|--------|-----------------|----|--------------------|-------------|-------------------------------|----------|-------------------------|-------------|------|----------|------|
| Sample ID: M2121-02DMS |        | SampType: MS    |    | TestCode: SW9012_W |             | Prep Date:                    |          | Run ID: LACHAT1_131105A |             |      |          |      |
| Client ID: INF-103013  |        | Batch ID: 74595 |    | Units: ug/L        |             | Analysis Date: 11/05/13 11:29 |          | SeqNo: 2004022          |             |      |          |      |
| Analyte                | Result | MDL             | RL | SPK value          | SPK Ref Val | %REC                          | LowLimit | HighLimit               | RPD Ref Val | %RPD | RPDLimit | Qual |
| Cyanide                | 119.8  | 2.5             | 10 | 100.0              | 0           | 120                           | 75       | 125                     | 0           |      |          |      |

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

WorkOrder: M2121

Client ID: EARTH\_NY  
 Project: NOW Corp. Site  
 WO Name: NOW Corp. Site  
 Location: NOW\_CORP,  
 Comments: N/A

Case: HC Due: 11/19/13 Report Level: LEVEL 2  
 SDG: Fax Due: Special Program:  
 PO: 6027 6639 1 Fax Report: ☐ EDD:

| Lab Samp ID | Client Sample ID | Collection Date  | Date Recv'd | Matrix  | Test Code   | Samp / Lab Test Comments | HF | HT | MS | SEL | Storage |
|-------------|------------------|------------------|-------------|---------|-------------|--------------------------|----|----|----|-----|---------|
| M2121-01A   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SW8260_25_W | /                        |    |    |    | Y   | VOA     |
| M2121-01B   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | E1664       | /                        |    |    |    |     | K2      |
| M2121-01C   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SM2540_TDS  | /                        |    |    |    |     | K2      |
| M2121-01C   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SM2540_TSS  | /                        |    |    |    |     | K2      |
| M2121-01D   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SW9012_W    | /                        |    |    |    | Y   | K2      |
| M2121-01E   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SW6010_W    | / See SEL list           |    |    |    | Y   | M3      |
| M2121-01E   | EFF-55 103013    | 10/30/2013 15:00 | 10/31/2013  | Aqueous | SW7470      | / See SEL list           |    |    |    |     | M3      |
| M2121-02A   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SW8260_25_W | /                        |    |    |    | Y   | VOA     |
| M2121-02B   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | E1664       | /                        |    |    |    |     | K2      |
| M2121-02C   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SM2540_TDS  | /                        |    |    |    |     | K2      |
| M2121-02C   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SM2540_TSS  | /                        |    |    |    |     | K2      |
| M2121-02D   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SW9012_W    | /                        |    |    |    | Y   | K2      |
| M2121-02E   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SW6010_W    | / See SEL list           |    |    |    | Y   | M3      |
| M2121-02E   | INF-103013       | 10/30/2013 15:10 | 10/31/2013  | Aqueous | SW7470      | / See SEL list           |    |    |    |     | M3      |
| M2121-03A   | TW-1 103013      | 10/30/2013 15:15 | 10/31/2013  | Aqueous | SW8260_25_W | /                        |    |    |    | Y   | VOA     |
| M2121-04A   | TW-2A 103013     | 10/30/2013 15:20 | 10/31/2013  | Aqueous | SW8260_25_W | /                        |    |    |    | Y   | VOA     |
| M2121-05A   | TW-3 103013      | 10/30/2013 15:25 | 10/31/2013  | Aqueous | SW8260_25_W | /                        |    |    |    | Y   | VOA     |
| M2121-06A   | TB 103013        | 10/30/2013 00:00 | 10/31/2013  | 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



# 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- Indicate 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: Stephen Choiniere  
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.: 60276639.1  
Site Name: Now Corp 13-14-008  
Location: Stattsburg State: NY  
Sampler(s): MJEH

1=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

2=HCl

3=H<sub>2</sub>SO<sub>4</sub>

4=HNO<sub>3</sub>

5=NaOH

6=Ascorbic Acid

7=CH<sub>3</sub>OH

8=NaHSO<sub>4</sub>

9=Deionized Water

10=H<sub>3</sub>PO<sub>4</sub>

11=

12=

DW=Drinking Water

GW=Groundwater

WW=Wastewater

OO=Oil

SW=Surface Water

SO=Soil

SL=Sludge

A=Air

X1=

X2=

X3=

Containers:

|                               |   |   |   |  |
|-------------------------------|---|---|---|--|
| List preservative code below: |   |   |   |  |
|                               | 1 | 1 | 2 |  |

QA/QC Reporting Notes:

QA/QC Reporting Level

☐ Level I      ☐ Level II

☐ Level III      ☐ Level IV

☐ Other

| Lab Id. | Sample Id. | Date: | Time: | Type | Matrix |
|---------|------------|-------|-------|------|--------|
|---------|------------|-------|-------|------|--------|

G=Grab C=Composite

| Lab Id: | Sample Id:    | Date:    | Time: |
|---------|---------------|----------|-------|
| 121-01  | EFF-55 103013 | 10/30/13 | 1500  |
| -02     | INF - 103013  |          | 1516  |
| -03     | TW-1 103013   |          | 1515  |
| -04     | TW-2A 103013  |          | 1520  |
| -05     | TW-3 103013   |          | 1525  |
| 21-00   | TB 103013     |          | -     |

\*Al, As, Ba, Co, Cu  
Fe, Mn, Hg, Zn, N

State-specific reporting standards:

Relinquished by:

Received by:

Temp °C

☐ EDD Format

X-570E

Felix  
1/28/20

Time:

Temp °C

□ E-mail to

Condition upon receipt: ☒ Ambient ☐ Refrigerated ☐ Frozen ☐ DI VOA Frozen ☐ Soil Jar Frozen

Custody Seals: ☐ Present ☐ Intact ☐ Broken

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                             |    |                   |    |     |  |   |            |                                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|---------------------------------------------|----|-------------------|----|-----|--|---|------------|-------------------------------------------------|--|
| Received By: VEB<br>Reviewed By: [Signature]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  | Page 01 of 00                               |    |                   |    |     |  |   |            |                                                 |  |
| Work Order: M2121                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  | 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.<br><br>1. Custody Seal(s) Present / Absent<br>Intact / Broken<br>2. Custody Seal Nos. N/A<br>3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists Present / Absent<br>4. Airbill AirBill / Sticker Present / Absent<br>5. Airbill No. FedEx 8042 5922 7350<br>6. Sample Tags Present / Absent<br>Sample Tag Numbers Listed /<br>Not Listed on Chain-of-Custody<br>7. Sample Condition Intact / Broken / Leaking<br>8. Cooler Temperature Indicator Bottle Present / Absent<br>9. Cooler Temperature 4.3 °C<br>10. Does information on TR/COCs and sample tags agree? Yes / No<br>11. Date Received at Laboratory 10/31/2013<br>12. Time Received 10:22<br>Sample Transfer<br>Fraction (1) TVOA/VOA Fraction (2) SVOA/PEST/ARO<br>Area # Area #<br>By By<br>On On<br>IR Temp Gun ID: MT-74<br>Coolant Condition: ICE<br>Preservative Name/Lot No: |  |  |  |  |  | Lab Sample ID                               |    | Preservation (pH) |    |     |  |   | VOA Matrix | Soil HeadSpace or Air Bubble > or equal to 1/4" |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-01                                    | <2 |                   | <2 | >12 |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-02                                    | <2 |                   | <2 | >12 |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-03                                    |    |                   |    |     |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-04                                    |    |                   |    |     |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-05                                    |    |                   |    |     |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  | M2121-06                                    |    |                   |    |     |  | H |            |                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |                                             |    |                   |    |     |  |   |            |                                                 |  |
| VOA Matrix Key:<br>US = Unpreserved Soil      A= Air<br>UA = Unpreserved Aqueous    H = HCl<br>M = MeOH                       E = Encore<br>N = NaHSO4                  F = Freeze<br><br>See Sample Condition Notification/Corrective Action Form    Yes / No<br><br>Rad OK    Yes / No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |                                             |    |                   |    |     |  |   |            |                                                 |  |

## **Last Page of Data Report**