

**Operation, Maintenance and Monitoring Report  
March 2011**

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

**Work Assignment No.  
D004445-4.2**

Prepared for:

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

Prepared by:

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

May 2011

May 13, 2011

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: "March" 2011**

Dear Mr. Hoffman:

This monthly summary report describes the operation, monitoring and maintenance (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York, for a 32-day period (**February 25 – March 29, 2011**).

With the exceptions noted below, if any, the P&T system was online and operational throughout the reporting period. Approximately 836,900 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 26,150 gallons per day (gpd), higher than the 19,960 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 83,315,000 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 March 29, 2011. **Effluent limitations were not exceeded for any analyte.** Table 2 and Table 3 summarize selected operational data and quarterly groundwater levels, respectively, as recorded on the sampling date. Monitoring well locations are shown on Figure 1.

AECOM made one site visit during the period to conduct the required system inspection, perform scheduled maintenance, perform groundwater level measurements, and to collect water samples. The February 25 service visit was described in the previous report. Details for the current period follow:

March 29 – Monthly O&M service visit. Recorded instrument/meter readings. Collected water level readings and influent and effluent samples. Lubricated the hinges on the monitoring well locking covers, in anticipation of annual sampling event next month (April).

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: March 29, 2011**  
**NOW Corporation Site**  
**Town of Clinton, New York**

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	
			TW-1	TW-2A	TW-3	(units)	
Quantity treated, per day		26,153				Monitor	gallons
pH	6.8	7.1				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>270</b>	<b>260</b>	NA	NA	NA	1000	mg/L
TSS	<b>11</b>	<10	NA	NA	NA	50	mg/L
Aluminum, Total	<200	<200	NA	NA	NA	2000	ug/L
Arsenic, Total	<20	<20	NA	NA	NA	50	ug/L
Barium, Total	<b>61 J</b>	<b>59 J</b>	NA	NA	NA	2000	ug/L
Chromium	<20	<20	NA	NA	NA	100	ug/L
Copper	<30	<25	NA	NA	NA	24	ug/L
Iron	<b>47 J</b>	<200	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	<b>95</b>	<b>29 J</b>	NA	NA	NA	600	ug/L
Nickel	<50	<50	NA	NA	NA	200	ug/L
Zinc	<b>11 J</b>	<b>10 J</b>	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	<b>190</b>	<0.50	<b>6</b>	<b>320</b>	<b>2.8</b>	5	ug/L
1,1,2-Trichloroethane	<8	<0.50	<2.5	<13	<0.50	1.2	ug/L
1,1-Dichloroethane	<b>83</b>	<0.50	<b>50</b>	<b>130</b>	<b>8</b>	5	ug/L
1,1-Dichloroethene	<b>19</b>	<0.50	<b>11</b>	<b>37</b>	<b>1.3</b>	0.5	ug/L
1,2-Dichloroethane	<8	<0.50	<2.5	<13	<0.50	1.6	ug/L
Benzene	<8	<0.50	<2.5	<13	<0.50	0.8	ug/L
Chlorobenzene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Chloroethane	<8	<0.50	<2.5	<13	<0.50	5	ug/L
cis -1,2-Dichloroethene	<b>8.3</b>	<0.50	<b>10</b>	<13	<0.50	5	ug/L
Ethylbenzene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Methyl tert-butyl ether	<8	<0.50	<2.5	<13	<0.50	5	ug/L
o-Xylene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
m,p-Xylene	<8	<0.50	<2.5	<13	<0.50	10	ug/L
Tetrachloroethene	<8	<0.50	<2.5	<13	<0.50	1.4	ug/L
Toluene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
trans -1,2-Dichloroethene	<8	<0.50	<2.5	<13	<0.50	5	ug/L
Trichloroethene	<b>210</b>	<0.50	<b>99</b>	<b>350</b>	<b>7.3</b>	5	ug/L
Vinyl Chloride	<8	<0.50	<2.5	<13	<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 March 2011 O&M Data**

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

<b>Instrumentation/Readings:</b>		<b>3/29/11</b>	<b>Units</b>
<b><i>TW-1</i></b>			
	Pumping Rate	3	GPM
	Water Level Above Transducer	15.82	feet
	Flow Meter Reading	6,032,600	gallons
	Pump Pressure	75	psi
<b><i>TW-2A</i></b>			
	Pumping Rate	~14	GPM
	Water Level Above Transducer	52.59	feet
	Flow Meter Reading	20,533,200	gallons
	Pump Pressure	2	psi
<b><i>TW-3</i></b>			
	Pumping Rate	4	GPM
	Water Level Above Transducer	27.44	feet
	Flow Meter Reading	8,788,100	gallons
	Pump Pressure	62	psi
<b><i>Air Stripper</i></b>			
	Stripper Blower Pressure	21.5	inches H <sub>2</sub> O
	Air Temperature in Stripper	47	°F
	Pressure Gauge - Left Leg	1.8	inches H <sub>2</sub> O
	Pressure Gauge - Right Leg	3.5	inches H <sub>2</sub> O
<b><i>Effluent Flow</i></b>			
	Effluent Flow this period (calculated)	836,900	gallons
	Total Effluent Flow (calculated)	83,315,100	gallons

**Table 3**  
**March 2011 Groundwater Levels**

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

Well ID	MP Elevation	3/29/11	
		Depth to Water (Ft below MP)	GW Elevation
MW-1	289.50	9.10	280.40
MW-2	332.51	25.40	307.11
MW-3	312.83	22.30	290.53
MW-3S	312.51	20.11	292.40
MW-4	298.29	20.42	277.87
MW-4D	298.16	20.22	277.94
MW-5	285.48	17.70	267.78
MW-6S	287.90	3.75	284.15
MW-6D	287.25	5.70	281.55
MW-7S	292.12	15.30	276.82
MW-7D	292.54	38.46	254.08
OW-1	307.75	43.71	264.04
OW-2	305.96	66.49	239.47
OW-6	294.81	5.75	289.06
IW-1	312.46	24.22	288.24
IW-2	306.56	35.07	271.49

*Note: N/A indicates data are not available.*  
*MP denotes measuring point.*

Report Date:  
19-Apr-11 14:28



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

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

## Laboratory Report

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

Work Order: K0479  
Project : NOW Corp. Site  
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K0479-01	EFF-032911	Aqueous	29-Mar-11 11:35	30-Mar-11 08:55
K0479-02	INF-032911	Aqueous	29-Mar-11 11:46	30-Mar-11 08:55
K0479-03	TW-1	Aqueous	29-Mar-11 12:05	30-Mar-11 08:55
K0479-04	TW-2A	Aqueous	29-Mar-11 12:10	30-Mar-11 08:55
K0479-05	TW-3	Aqueous	29-Mar-11 12:15	30-Mar-11 08:55
K0479-06	TRIP BLANK	Aqueous	29-Mar-11 00:00	30-Mar-11 08:55

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 Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at [www.mitkem.com](http://www.mitkem.com).

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

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030



Authorized by:

Yihai Ding  
Laboratory Director

## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0479

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. Laboratory Control Spikes (LCS):

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

### E. Internal Standards:

Internal standard peak areas were within the QC limits.

### F. Dilutions:

The following samples were analyzed at dilution:

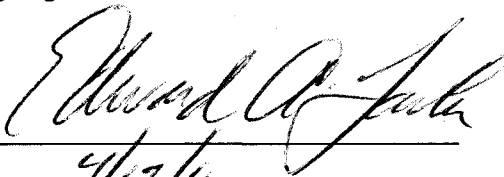
INF-032911 (K0479-02A) : Dilution Factor: 16  
TW-1 (K0479-03A) : Dilution Factor: 5  
TW-2A (K0479-04A) : Dilution Factor: 25

### 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 Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:   
Date: 4/17/14

## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0479

EPA 1664A, Oil & Grease, HEM

### I. SAMPLE RECEIPT

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

### II. HOLDING TIMES

#### A. Sample Preparation:

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

#### B. Sample Analysis:

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

### III. METHODS

Samples were analyzed following procedures in laboratory test code:  
EPA 1664A

### IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

### V. INSTRUMENTATION

The following instrumentation was used to perform Oil and Grease analysis.

Instrument Type: Analytical Balance

Manufacturer: Denver Instrument Company

Model: A-250

## VI. ANALYSIS

### A. Calibration:

Analytical balance was calibrated based on SOP/Method criteria.

### B. Blanks:

Method blanks were within the QC acceptance criteria.

### C. Laboratory Control Spikes (LCS):

Percent recoveries were within the QC acceptance criteria.

### E. Samples:

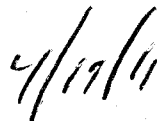
No unusual occurrences were noted during sample analysis.

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

Signed:



Date:



## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0479

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: 7470A

## V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1

Instrument Type: CVAA

Description: FIMS

Manufacturer: Perkin-Elmer

Model: FIMS

Instrument Code: OPTIMA3

Instrument Type: ICP

Description: Optima ICP-OES

Manufacturer: Perkin-Elmer

Model: 4300 DV

## VI. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Laboratory Control Spikes (LCS):

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

### D. 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 Mitkem, both technically and for completeness, except for the conditions noted above. Release of the

data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: Edward A. Jank

Date: 4/19/11

## REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0479

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. INSTRUMENTATION

The following instrumentation was used to perform  
Instrument Code: LACHAT1  
Instrument Type: WC  
Description: Flow Injection Analyzer  
Manufacturer: Zellweger Analytics

Model: Quik-Chem 8000

## V. ANALYSIS

### A. Calibration:

Calibrations met the method/SOP acceptance criteria.

### B. Blanks:

All method blanks were within the acceptance criteria.

### C. Laboratory Control Spikes (LCS):

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

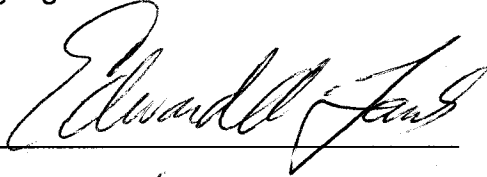
### D. Duplicate sample:

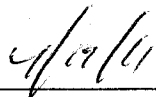
Relative percent differences were within the QC limits.

### 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 Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 



**Mitkem Laboratories**

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-032911

Lab ID: K0479-01

Project: NOW Corp. Site

Collection Date: 03/29/11 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		104/07/2011 1:43	58415
Chloroethane	ND		0.50	µg/L		104/07/2011 1:43	58415
1,1-Dichloroethene	ND		0.50	µg/L		104/07/2011 1:43	58415
trans-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 1:43	58415
Methyl tert-butyl ether	ND		0.50	µg/L		104/07/2011 1:43	58415
1,1-Dichloroethane	ND		0.50	µg/L		104/07/2011 1:43	58415
cis-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 1:43	58415
1,1,1-Trichloroethane	ND		0.50	µg/L		104/07/2011 1:43	58415
1,2-Dichloroethane	ND		0.50	µg/L		104/07/2011 1:43	58415
Benzene	ND		0.50	µg/L		104/07/2011 1:43	58415
Trichloroethene	ND		0.50	µg/L		104/07/2011 1:43	58415
Toluene	ND		0.50	µg/L		104/07/2011 1:43	58415
1,1,2-Trichloroethane	ND		0.50	µg/L		104/07/2011 1:43	58415
Tetrachloroethene	ND		0.50	µg/L		104/07/2011 1:43	58415
Chlorobenzene	ND		0.50	µg/L		104/07/2011 1:43	58415
Ethylbenzene	ND		0.50	µg/L		104/07/2011 1:43	58415
m,p-Xylene	ND		0.50	µg/L		104/07/2011 1:43	58415
o-Xylene	ND		0.50	µg/L		104/07/2011 1:43	58415
Surrogate: Dibromofluoromethane	100		88-124	%REC		104/07/2011 1:43	58415
Surrogate: 1,2-Dichloroethane-d4	106		79-115	%REC		104/07/2011 1:43	58415
Surrogate: Toluene-d8	104		80-114	%REC		104/07/2011 1:43	58415
Surrogate: Bromofluorobenzene	103		60-123	%REC		104/07/2011 1:43	58415

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

**Mitkem Laboratories**

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-032911

Lab ID: K0479-02

Project: NOW Corp. Site

Collection Date: 03/29/11 11:46

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Chloroethane	ND		8.0	µg/L		16 04/07/2011 2:11	58415
1,1-Dichloroethene	19		8.0	µg/L		16 04/07/2011 2:11	58415
trans-1,2-Dichloroethene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Methyl tert-butyl ether	ND		8.0	µg/L		16 04/07/2011 2:11	58415
1,1-Dichloroethane	83		8.0	µg/L		16 04/07/2011 2:11	58415
cis-1,2-Dichloroethene	8.3		8.0	µg/L		16 04/07/2011 2:11	58415
1,1,1-Trichloroethane	190		8.0	µg/L		16 04/07/2011 2:11	58415
1,2-Dichloroethane	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Benzene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Trichloroethene	210		8.0	µg/L		16 04/07/2011 2:11	58415
Toluene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
1,1,2-Trichloroethane	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Tetrachloroethene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Chlorobenzene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Ethylbenzene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
m,p-Xylene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
o-Xylene	ND		8.0	µg/L		16 04/07/2011 2:11	58415
Surrogate: Dibromofluoromethane	96.7		88-124	%REC		16 04/07/2011 2:11	58415
Surrogate: 1,2-Dichloroethane-d4	109		79-115	%REC		16 04/07/2011 2:11	58415
Surrogate: Toluene-d8	105		80-114	%REC		16 04/07/2011 2:11	58415
Surrogate: Bromofluorobenzene	105		60-123	%REC		16 04/07/2011 2:11	58415

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

**Mitkem Laboratories**

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-1

Lab ID: K0479-03

Project: NOW Corp. Site

Collection Date: 03/29/11 12:05

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Chloroethane	ND		2.5	µg/L		5 04/07/2011 2:40	58415
1,1-Dichloroethene	11		2.5	µg/L		5 04/07/2011 2:40	58415
trans-1,2-Dichloroethene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Methyl tert-butyl ether	ND		2.5	µg/L		5 04/07/2011 2:40	58415
1,1-Dichloroethane	50		2.5	µg/L		5 04/07/2011 2:40	58415
cis-1,2-Dichloroethene	10		2.5	µg/L		5 04/07/2011 2:40	58415
1,1,1-Trichloroethane	6.0		2.5	µg/L		5 04/07/2011 2:40	58415
1,2-Dichloroethane	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Benzene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Trichloroethene	99		2.5	µg/L		5 04/07/2011 2:40	58415
Toluene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
1,1,2-Trichloroethane	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Tetrachloroethene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Chlorobenzene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Ethylbenzene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
m,p-Xylene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
o-Xylene	ND		2.5	µg/L		5 04/07/2011 2:40	58415
Surrogate: Dibromofluoromethane	100		88-124	%REC		5 04/07/2011 2:40	58415
Surrogate: 1,2-Dichloroethane-d4	97.3		79-115	%REC		5 04/07/2011 2:40	58415
Surrogate: Toluene-d8	107		80-114	%REC		5 04/07/2011 2:40	58415
Surrogate: Bromofluorobenzene	108		60-123	%REC		5 04/07/2011 2:40	58415

**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

**Mitkem Laboratories**

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-2A

Lab ID: K0479-04

Project: NOW Corp. Site

Collection Date: 03/29/11 12:10

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		13	µg/L		25 04/07/2011 3:08	58415
Chloroethane	ND		13	µg/L		25 04/07/2011 3:08	58415
1,1-Dichloroethene	37		13	µg/L		25 04/07/2011 3:08	58415
trans-1,2-Dichloroethene	ND		13	µg/L		25 04/07/2011 3:08	58415
Methyl tert-butyl ether	ND		13	µg/L		25 04/07/2011 3:08	58415
1,1-Dichloroethane	130		13	µg/L		25 04/07/2011 3:08	58415
cis-1,2-Dichloroethene	ND		13	µg/L		25 04/07/2011 3:08	58415
1,1,1-Trichloroethane	320		13	µg/L		25 04/07/2011 3:08	58415
1,2-Dichloroethane	ND		13	µg/L		25 04/07/2011 3:08	58415
Benzene	ND		13	µg/L		25 04/07/2011 3:08	58415
Trichloroethene	350		13	µg/L		25 04/07/2011 3:08	58415
Toluene	ND		13	µg/L		25 04/07/2011 3:08	58415
1,1,2-Trichloroethane	ND		13	µg/L		25 04/07/2011 3:08	58415
Tetrachloroethene	ND		13	µg/L		25 04/07/2011 3:08	58415
Chlorobenzene	ND		13	µg/L		25 04/07/2011 3:08	58415
Ethylbenzene	ND		13	µg/L		25 04/07/2011 3:08	58415
m,p-Xylene	ND		13	µg/L		25 04/07/2011 3:08	58415
o-Xylene	ND		13	µg/L		25 04/07/2011 3:08	58415
Surrogate: Dibromofluoromethane	99.2		88-124	%REC		25 04/07/2011 3:08	58415
Surrogate: 1,2-Dichloroethane-d4	108		79-115	%REC		25 04/07/2011 3:08	58415
Surrogate: Toluene-d8	104		80-114	%REC		25 04/07/2011 3:08	58415
Surrogate: Bromofluorobenzene	106		60-123	%REC		25 04/07/2011 3:08	58415

**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

# Mitkem Laboratories

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TW-3

Lab ID: K0479-05

Project: NOW Corp. Site

Collection Date: 03/29/11 12:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		104/07/2011 3:37	58415
Chloroethane	ND		0.50	µg/L		104/07/2011 3:37	58415
1,1-Dichloroethene	1.3		0.50	µg/L		104/07/2011 3:37	58415
trans-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 3:37	58415
Methyl tert-butyl ether	ND		0.50	µg/L		104/07/2011 3:37	58415
1,1-Dichloroethane	8.0		0.50	µg/L		104/07/2011 3:37	58415
cis-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 3:37	58415
1,1,1-Trichloroethane	2.8		0.50	µg/L		104/07/2011 3:37	58415
1,2-Dichloroethane	ND		0.50	µg/L		104/07/2011 3:37	58415
Benzene	ND		0.50	µg/L		104/07/2011 3:37	58415
Trichloroethene	7.3		0.50	µg/L		104/07/2011 3:37	58415
Toluene	ND		0.50	µg/L		104/07/2011 3:37	58415
1,1,2-Trichloroethane	ND		0.50	µg/L		104/07/2011 3:37	58415
Tetrachloroethene	ND		0.50	µg/L		104/07/2011 3:37	58415
Chlorobenzene	ND		0.50	µg/L		104/07/2011 3:37	58415
Ethylbenzene	ND		0.50	µg/L		104/07/2011 3:37	58415
m,p-Xylene	ND		0.50	µg/L		104/07/2011 3:37	58415
o-Xylene	ND		0.50	µg/L		104/07/2011 3:37	58415
Surrogate: Dibromofluoromethane	103		88-124	%REC		104/07/2011 3:37	58415
Surrogate: 1,2-Dichloroethane-d4	102		79-115	%REC		104/07/2011 3:37	58415
Surrogate: Toluene-d8	103		80-114	%REC		104/07/2011 3:37	58415
Surrogate: Bromofluorobenzene	102		60-123	%REC		104/07/2011 3:37	58415

**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

**Mitkem Laboratories**

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: TRIP BLANK

Lab ID: K0479-06

Project: NOW Corp. Site

Collection Date: 03/29/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							SW8260_25_W
Vinyl chloride	ND		0.50	µg/L		104/07/2011 4:06	58415
Chloroethane	ND		0.50	µg/L		104/07/2011 4:06	58415
1,1-Dichloroethene	ND		0.50	µg/L		104/07/2011 4:06	58415
trans-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 4:06	58415
Methyl tert-butyl ether	ND		0.50	µg/L		104/07/2011 4:06	58415
1,1-Dichloroethane	ND		0.50	µg/L		104/07/2011 4:06	58415
cis-1,2-Dichloroethene	ND		0.50	µg/L		104/07/2011 4:06	58415
1,1,1-Trichloroethane	ND		0.50	µg/L		104/07/2011 4:06	58415
1,2-Dichloroethane	ND		0.50	µg/L		104/07/2011 4:06	58415
Benzene	ND		0.50	µg/L		104/07/2011 4:06	58415
Trichloroethene	ND		0.50	µg/L		104/07/2011 4:06	58415
Toluene	ND		0.50	µg/L		104/07/2011 4:06	58415
1,1,2-Trichloroethane	ND		0.50	µg/L		104/07/2011 4:06	58415
Tetrachloroethene	ND		0.50	µg/L		104/07/2011 4:06	58415
Chlorobenzene	ND		0.50	µg/L		104/07/2011 4:06	58415
Ethylbenzene	ND		0.50	µg/L		104/07/2011 4:06	58415
m,p-Xylene	ND		0.50	µg/L		104/07/2011 4:06	58415
o-Xylene	ND		0.50	µg/L		104/07/2011 4:06	58415
Surrogate: Dibromofluoromethane	99.3		88-124	%REC		104/07/2011 4:06	58415
Surrogate: 1,2-Dichloroethane-d4	103		79-115	%REC		104/07/2011 4:06	58415
Surrogate: Toluene-d8	106		80-114	%REC		104/07/2011 4:06	58415
Surrogate: Bromofluorobenzene	106		60-123	%REC		104/07/2011 4:06	58415

**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

SW8260 25 W

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

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
m11.03.22.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

CLIENT: AECOM Technical Services, Inc.

# ANALYTICAL QC SUMMARY REPORT

Work Order: K0479

SW8260\_25\_W

Project: NOW Corp. Site

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

Sample ID: LCS-58415	SampType: LCS	TestCode: SW8260_25_W	Prep Date: 04/06/11 13:41	Run ID: V5_110406A								
Client ID: LCS-58415	Batch ID: 58415	Units: µg/L	Analysis Date: 04/07/11 0:47	SeqNo: 1503995								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.951	0.15	0.50	10.00	0	99.5	77	120	0			
Chloroethane	11.70	0.24	0.50	10.00	0	117	75	135	0			
1,1-Dichloroethene	10.31	0.19	0.50	10.00	0	103	81	125	0			
trans-1,2-Dichloroethene	10.81	0.14	0.50	10.00	0	108	60	137	0			
Methyl tert-butyl ether	10.48	0.13	0.50	10.00	0	105	61	134	0			
1,1-Dichloroethane	10.26	0.18	0.50	10.00	0	103	82	120	0			
cis-1,2-Dichloroethene	10.86	0.19	0.50	10.00	0	109	84	116	0			
1,1,1-Trichloroethane	10.97	0.11	0.50	10.00	0	110	80	124	0			
1,2-Dichloroethane	11.11	0.16	0.50	10.00	0	111	86	117	0			
Benzene	10.46	0.12	0.50	10.00	0	105	81	121	0			
Trichloroethene	10.38	0.13	0.50	10.00	0	104	74	123	0			
Toluene	10.43	0.14	0.50	10.00	0	104	88	117	0			
1,1,2-Trichloroethane	9.858	0.20	0.50	10.00	0	98.6	83	121	0			
Tetrachloroethene	11.13	0.17	0.50	10.00	0	111	74	115	0			
Chlorobenzene	11.07	0.13	0.50	10.00	0	111	83	112	0			
Ethylbenzene	10.93	0.13	0.50	10.00	0	109	87	110	0			
m,p-Xylene	21.47	0.22	0.50	20.00	0	107	87	114	0			
o-Xylene	10.96	0.17	0.50	10.00	0	110	84	114	0			
Surrogate:	10.52		0.50	10.00	0	105	88	124	0			
Dibromofluoromethane												
Surrogate: 1,2-Dichloroethane-d4	10.90		0.50	10.00	0	109	79	115	0			
Surrogate: Toluene-d8	10.20		0.50	10.00	0	102	80	114	0			
Surrogate: Bromofluorobenzene	10.27		0.50	10.00	0	103	60	123	0			

0010

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

m11.03.22.A

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

RL - Reporting Limit



# Mitkem Laboratories

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-032911

Lab ID: K0479-01

Project: NOW Corp. Site

Collection Date: 03/29/11 11:35

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 04/14/2011 0:00	58576

**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

# Mitkem Laboratories

Date: 14-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-032911

Lab ID: K0479-02

Project: NOW Corp. Site

Collection Date: 03/29/11 11:46

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM							E1664
Oil & Grease, Total Recoverable	ND		5.0	mg/L		1 04/14/2011 0:00	58576

**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: K0479

E1664

Project: NOW Corp. Site

EPA 1664A -- Oil &amp; Grease, HEM

Sample ID: MB-58576	SampType: MBLK	TestCode: E1664	Prep Date: 04/13/11 10:41	Run ID: MANUAL_110414B							
Client ID: MB-58576	Batch ID: 58576	Units: mg/L	Analysis Date: 04/14/11 0:00	SeqNo: 1509005							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	ND	1.2	5.0								

Sample ID: LCS-58576	SampleType: LCS	TestCode: E1664	Prep Date: 04/13/11 10:41	Run ID: MANUAL_110414B							
Client ID: LCS-58576	Batch ID: 58576	Units: mg/L	Analysis Date: 04/14/11 0:00	SeqNo: 1509003							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	36.80	1.2	5.0	40.00	0	92.0	78	114	0		

Sample ID: LCSD-58576	SampleType: LCSD	TestCode: E1664	Prep Date: 04/13/11 10:41	Run ID: MANUAL_110414B							
Client ID: LCSD-58576	Batch ID: 58576	Units: mg/L	Analysis Date: 04/14/11 0:00	SeqNo: 1509004							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	39.10	1.2	5.0	40.00	0	97.8	78	114	36.80	6.06	18

0021

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
m11.03.22 A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

**Mitkem Laboratories**

Date: 08-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-032911

Lab ID: K0479-01

Project: NOW Corp. Site

Collection Date: 03/29/11 11:35

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
<b>SW846 6010C -- Metals by ICP</b>				<b>SW6010_W</b>
Aluminum	ND	200 µg/L	1 04/01/2011 16:22	58293
Arsenic	ND	20 µg/L	1 04/01/2011 16:22	58293
Barium	59 J	200 µg/L	1 04/01/2011 16:22	58293
Chromium	ND	20 µg/L	1 04/01/2011 16:22	58293
Copper	ND	25 µg/L	1 04/01/2011 16:22	58293
Iron	ND	200 µg/L	1 04/01/2011 16:22	58293
Manganese	29 J	50 µg/L	1 04/01/2011 16:22	58293
Nickel	ND	50 µg/L	1 04/01/2011 16:22	58293
Zinc	10 J	50 µg/L	1 04/01/2011 16:22	58293
<b>SW846 7470A -- Mercury by FIA</b>				<b>SW7470</b>
Mercury	ND	0.20 µg/L	1 04/01/2011 15:52	58318

**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

**Mitkem Laboratories**

Date: 08-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: INF-032911

Lab ID: K0479-02

Project: NOW Corp. Site

Collection Date: 03/29/11 11:46

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
<b>SW846 6010C -- Metals by ICP</b>				<b>SW6010_W</b>
Aluminum	ND	200 µg/L	1 04/01/2011 16:25	58293
Arsenic	ND	20 µg/L	1 04/01/2011 16:25	58293
Barium	61 J	200 µg/L	1 04/01/2011 16:25	58293
Chromium	ND	20 µg/L	1 04/01/2011 16:25	58293
Copper	ND	30 µg/L	1 04/01/2011 16:25	58293
Iron	47 J	200 µg/L	1 04/01/2011 16:25	58293
Manganese	95	50 µg/L	1 04/01/2011 16:25	58293
Nickel	ND	50 µg/L	1 04/01/2011 16:25	58293
Zinc	11 J	50 µg/L	1 04/01/2011 16:25	58293
<b>SW846 7470A -- Mercury by FIA</b>				<b>SW7470</b>
Mercury	ND	0.20 µg/L	1 04/01/2011 15:54	58318

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: K0479

SW6010\_W

Project: NOW Corp. Site

SW846 6010C -- Metals by ICP

Sample ID: MB-58293	SampType: MBLK	TestCode: SW6010_W	Prep Date: 03/31/11 11:45	Run ID: OPTIMA3_110401D							
Client ID: MB-58293	Batch ID: 58293	Units: µg/L	Analysis Date: 04/01/11 15:06	SeqNo: 1501224							
Analyte	Result	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	66									
Arsenic	ND	4.3	200								
Barium	ND	1.1	200								
Chromium	ND	0.64	20								
Copper	ND	3.6	30								
Iron	ND	31	200								
Manganese	ND	10	50								
Nickel	ND	0.85	50								
Zinc	ND	4.9	50								

Sample ID: LCS-58293	SampType: LCS	TestCode: SW6010_W	Prep Date: 03/31/11 11:45	Run ID: OPTIMA3_110401D								
Client ID: LCS-58293	Batch ID: 58293	Units: µg/L	Analysis Date: 04/01/11 15:09	SeqNo: 1501225								
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8845	66	200	9100	0	97.2	80	120	0			
Arsenic	472.6	4.3	20	455.0	0	104	80	120	0			
Barium	9121	1.1	200	9100	0	100	80	120	0			
Chromium	867.2	0.64	20	910.0	0	95.3	80	120	0			
Copper	1117	3.6	30	1130	0	98.8	80	120	0			
Iron	4580	31	200	4550	0	101	80	120	0			
Manganese	2291	10	50	2270	0	101	80	120	0			
Nickel	2344	0.85	50	2270	0	103	80	120	0			
Zinc	2251	4.9	50	2270	0	99.2	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 ml1.03.22.A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

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

SW7470

## SW846 7470A -- Mercury by FIA

Qualifiers:	NID - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
m11.03.22.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

**Mitkem Laboratories**

Date: 07-Apr-11

Client: AECOM Technical Services, Inc.

Client Sample ID: EFF-032911

Lab ID: K0479-01

Project: NOW Corp. Site

Collection Date: 03/29/11 11:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b>							<b>SM2540_TDS</b>
Total Dissolved Solids	260		10	mg/L	1	04/01/2011 1:38	58308
<b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b>							<b>SM2540_TSS</b>
Total Suspended Solids	ND		10	mg/L	1	04/01/2011 1:38	58309
<b>SW846 9012B -- Total Cyanide</b>							<b>SW9012_W</b>
Cyanide	ND		10	ug/L	1	04/07/2011 11:06	58418

**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



**Mitkem Laboratories****Date:** 07-Apr-11**Client:** AECOM Technical Services, Inc.**Client Sample ID:** INF-032911**Lab ID:** K0479-02**Project:** NOW Corp. Site**Collection Date:** 03/29/11 11:46

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
<b>SM 2540C -- TOTAL DISSOLVED SOLIDS</b>							<b>SM2540_TDS</b>
Total Dissolved Solids	270		10	mg/L	1	04/01/2011 3:55	58308
<b>SM 2540D -- TOTAL SUSPENDED SOLIDS</b>							<b>SM2540_TSS</b>
Total Suspended Solids	11		10	mg/L	1	04/01/2011 3:55	58309
<b>SW846 9012B -- Total Cyanide</b>							<b>SW9012_W</b>
Cyanide	ND		10	ug/L	1	04/07/2011 11:13	58418

**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: K0479

SM2540\_TDS

Project: NOW Corp. Site

SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-58308	Sample Type: MBLK	Test Code: SM2540_TDS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331B	
Client ID: MB-58308	Batch ID: 58308	Units: mg/L	Analysis Date: 03/31/11 16:30	SeqNo: 1501708	
Analyte	Result	MDL	SPK Ref Val	SPK value	RPD Ref Val %RPD RPD Limit Qual
Total Dissolved Solids		ND	10	10	

Sample ID: LCS-58308	Sample Type: LCS	Test Code: SM2540_TDS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331B	
Client ID: LCS-58308	Batch ID: 58308	Units: mg/L	Analysis Date: 03/31/11 18:47	SeqNo: 1501709	
Analyte	Result	MDL	SPK Ref Val	SPK value	RPD Ref Val %RPD RPD Limit Qual
Total Dissolved Solids		395.0	10	10	372.0 0 106 80 120 0

Sample ID: K0479-02CDUP	Sample Type: DUP	Test Code: SM2540_TDS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331B	
Client ID: INF-032911	Batch ID: 58308	Units: mg/L	Analysis Date: 04/01/11 6:12	SeqNo: 1501714	
Analyte	Result	MDL	SPK Ref Val	SPK value	RPD Ref Val %RPD RPD Limit Qual
Total Dissolved Solids		255.0	10	10	0 0 0 0 0 268.0 4.97 5.0

0028

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 m11.03.22.A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

# ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.  
 Work Order: K0479  
 Project: NOW Corp. Site

SM2540\_TSS  
 SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-58309	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331C	
Client ID: MB-58309	Batch ID: 58309	Units: mg/L	Analysis Date: 03/31/11 16:30	SeqNo: 1501755	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val %RPD RPDLimit Qual
	ND	10			
Total Suspended Solids		10			
Sample ID: LCS-58309	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331C	
Client ID: LCS-58309	Batch ID: 58309	Units: mg/L	Analysis Date: 03/31/11 18:47	SeqNo: 1501756	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val %RPD RPDLimit Qual
	73.00	10	68.60	0	106 80 120 0
Total Suspended Solids					
Sample ID: K0479-02CDUP	SampType: DUP	TestCode: SM2540_TSS	Prep Date: 03/31/11 16:30	Run ID: MANUAL_110331C	
Client ID: INF-032911	Batch ID: 58309	Units: mg/L	Analysis Date: 04/01/11 6:12	SeqNo: 1501761	
Analyte	Result	MDL	SPK value	SPK Ref Val	RPD Ref Val %RPD RPDLimit Qual
	ND	10	0	0	11.00 0 5.0
Total Suspended Solids					

0029

Qualifiers: ND - Not Detected at the Reporting Limit S - Recovery outside accepted recovery limits MDL - Method Detection Limit B - Analyte detected in the associated Method Blank  
 m11.03.22.A J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits RL - Reporting Limit

# ANALYTICAL QC SUMMARY REPORT

CLIENT: AECOM Technical Services, Inc.

Work Order: K0479

SW9012\_W

Project: NOW Corp. Site

SW846 9012B -- Total Cyanide

Sample ID: MB-58418	SampType: MBLK	TestCode: SW9012_W	Prep Date: 04/06/11 13:00	Run ID: LACHAT1_110407A
Client ID: MB-58418	Batch ID: 58418	Units: ug/L	Analysis Date: 04/07/11 10:23	SeqNo: 1504209
Analyte	Result	MDL	SPK Ref Val	RPD Ref Val
Cyanide	ND	7.5	SPK value	%RPD RPDLimit
		20		Qual
Sample ID: LCS-58418	SampType: LCS	TestCode: SW9012_W	Prep Date: 04/06/11 13:00	Run ID: LACHAT1_110407A
Client ID: LCS-58418	Batch ID: 58418	Units: ug/L	Analysis Date: 04/07/11 10:26	SeqNo: 1504210
Analyte	Result	MDL	SPK Ref Val	RPD Ref Val
Cyanide	101.5	7.5	100.0	%RPD RPDLimit
		20	0	Qual
			102	0
			80	120

0030

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Recovery outside accepted recovery limits	MDL - Method Detection Limit	B - Analyte detected in the associated Method Blank
m11.03.22.A	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	RL - Reporting Limit	

**WorkOrder: K0479****03/31/2011 07:29****Mitkem Laboratories**

Client ID: EARTH\_NY

Project: NOW Corp. Site

WO Name: NOW Corp. Site

Location: NOW\_CORP,

Comments: N/A

Case:

SDG:

HC Due: 04/15/11

Fax Due:

Fax Report: ☐

Report Level: LEVEL 2

Special Program:

EDD:

PO: 94017.02

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0479-01A	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0479-01B	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SW6010_W	/ See SEL list				Y	M4
K0479-01B	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SW7470	/ See SEL list					M4
K0479-01C	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SM2540_TDS	/				E4	E4
K0479-01C	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SM2540_TSS	/				E4	E4
K0479-01D	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	SW9012_W	/				Y	E4
K0479-01E	EFF-032911	03/29/2011 11:35	03/30/2011	Aqueous	E1664	/				E4	E4
K0479-02A	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0479-02B	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SW6010_W	/ See SEL list				Y	M4
K0479-02B	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SW7470	/ See SEL list					M4
K0479-02C	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SM2540_TDS	/				E4	E4
K0479-02C	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SM2540_TSS	/				E4	E4
K0479-02D	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	SW9012_W	/				Y	E4
K0479-02E	INF-032911	03/29/2011 11:46	03/30/2011	Aqueous	E1664	/				E4	E4
K0479-03A	TW-1	03/29/2011 12:05	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0479-04A	TW-2A	03/29/2011 12:10	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0479-05A	TW-3	03/29/2011 12:15	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0479-06A	TRIP BLANK	03/29/2011 00:00	03/30/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold



## MITKEM LABORATORIES

## Sample Condition Form

Page \_\_\_\_ of \_\_\_\_

Received By: <u>Samuel Muen</u>		Reviewed By: <u>SN</u>		Date: <u>3/30/11</u>		Mitekem Work Order #: <u>K0479</u>				
Client Project: <u>M <sup>000</sup> 3/20/11 NOW CORP</u>				Client: <u>EARTH NY</u>						
		Lab Sample ID		Preservation (pH)					VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
				HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	HCl	NaOH	H <sub>3</sub> PO <sub>4</sub>		
1) Cooler Sealed	<u>Yes</u> / No	<u>K0479</u>	<u>01</u>	<u>&lt;2</u>	<u>130/11</u>	<u>&lt;2</u>	<u>&lt;2</u>		<u>H</u>	
			<u>02</u>	<u>&lt;2</u>		<u>&lt;2</u>	<u>7/2</u>		<u>↓</u>	
2) Custody Seal(s)	<u>Present</u> / Absent		<u>03</u>							
	<u>Coolers</u> / Bottles		<u>04</u>							
	<u>Intact</u> / Broken		<u>05</u>						<u>↓</u>	
3) Custody Seal Number(s)	<u>N/A</u>	<u>K0479</u>	<u>06</u>						<u>H</u>	
		<div style="transform: rotate(-45deg); position: absolute; top: 50%; left: 50%; font-weight: bold; font-size: 2em;">             DRN 03/30/11           </div>								
4) Chain-of-Custody	<u>Present</u> / Absent									
5) Cooler Temperature	<u>4 °C</u>									
IR Temp Gun ID	<u>MT-1</u>									
Coolant Condition	<u>iced</u>									
6) Airbill(s)	<u>Present</u> / Absent									
Airbill Number(s)	<u>Fed Ex 8747 55417267</u>									
7) Samples Bottles	<u>Intact</u> / Broken / Leaking									
8) Date Received	<u>3/30/11</u>									
9) Time Received	<u>8:55</u>									
Preservative Name/Lot No.:										

VOA Matrix Key:  
 US = Unpreserved Soil      A = Air  
 UA = Unpreserved Aqueous      H = HCl  
 M = MeOH      E = Encore  
 N = NaHSO<sub>4</sub>      F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no

\\Bernoulli\qa\_safety\Controlled Forms\QAF.0006 sample condition form

0033

**Last Page of Data Report**