AECOM

Operation, Maintenance and Monitoring Report
January 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

March 2011

AECOM

March 24, 2011

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

Re: NOW Corporation - Site #3-14-008
O&M Summary Report: "January" 2011

Dear Mr. Hoffman:

This monthly summary report describes the operation, monitoring and maintenance (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York, for a 29-day period **(December 28, 2010 – January 26, 2011)**.

With the exceptions noted below, if any, the P&T system was online and operational throughout the reporting period. Approximately 567,300 gallons of water were treated during the period. Discharge from the treatment system averaged approximately 19,560 gallons per day (gpd), approximately 25 percent higher than the 15,675 gpd in the prior reporting period.

As of the last day of the reporting period, a total of 81,879,300 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Table 1 summarizes influent and effluent analytical data for water samples collected on January 26, 2011. **Effluent limitations were not exceeded for any analyte.** A copy of the analytical laboratory report is attached. Table 2 summarizes selected operational data recorded on the sampling date.

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

January 26 – Monthly O&M service visit. Recorded instrument/meter readings. Collected influent and effluent samples. The blower pressure was 24.5 inches of water upon arrival. Tech turned down blower intake to reduce the pressure to 20.5 inches of water column.

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: January 26, 2011
NOW Corporation Site
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	(units)
			TW-1	TW-2A	TW-3		
Quantity treated, per day		19,562				Monitor	gallons
pH	7.2	7.3				6.5 to 8.5	standard units
Oil and Grease	<5.0	**8.4**	NA	NA	NA	15	mg/L
Total Cyanide	<10	<10	NA	NA	NA	10	ug/L
TDS	**311**	**247**	NA	NA	NA	1000	mg/L
TSS	<5	<5	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	**72 J**	**71 J**	NA	NA	NA	2000	ug/L
Chromium	<20	<20	NA	NA	NA	100	ug/L
Copper	<25	<25	NA	NA	NA	24	ug/L
Iron	<200	<200	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	**140**	**75**	NA	NA	NA	600	ug/L
Nickel	**1.0 J**	<50	NA	NA	NA	200	ug/L
Zinc	**12 J**	**11 J**	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	**310**	<0.50	**1.8**	**480**	**5.5**	5	ug/L
1,1,2-Trichloroethane	<8	<0.50	<1.0	<13	<0.50	1.2	ug/L
1,1-Dichloroethane	**110**	<0.50	**54**	**180**	**16**	5	ug/L
1,1-Dichloroethene	<8	<0.50	**12**	<13	**1.9**	0.5	ug/L
1,2-Dichloroethane	<8	<0.50	<1.0	<13	<0.50	1.6	ug/L
Benzene	<8	<0.50	<1.0	<13	<0.50	0.8	ug/L
Chlorobenzene	<8	<0.50	<1.0	<13	<0.50	5	ug/L
Chloroethane	<8	<0.50	<1.0	<13	<0.50	5	ug/L
cis -1,2-Dichloroethene	**10**	<0.50	**3.1**	**15**	<0.50	5	ug/L
Ethylbenzene	<8	<0.50	<1.0	<13	<0.50	5	ug/L
Methyl tert-butyl ether	<8	<0.50	<1.0	<13	<0.50	5	ug/L
o-Xylene	<8	<0.50	<1.0	<13	<0.50	5	ug/L
m,p-Xylene	<8	<0.50	<1.0	<13	<0.50	10	ug/L
Tetrachloroethene	<8	<0.50	<1.0	<13	<0.50	1.4	ug/L
Toluene	<8	<0.50	<1.0	<13	<0.50	5	ug/L
trans -1,2-Dichloroethene	<8	<0.50	<1.0	<13	<0.50	5	ug/L
Trichloroethene	**300**	<0.50	**61**	**440**	**17**	5	ug/L
Vinyl Chloride	<8	<0.50	<1.0	<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) "**D**" denotes analytical result for a diluted sample.*

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

Table 2
Summary of January 2011 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:		1/26/11	Units
TW-1			
	Pumping Rate	2	GPM
	Water Level Above Transducer	23.27	feet
	Flow Meter Reading	5,852,800	gallons
	Pump Pressure	78	psi
TW-2A			
	Pumping Rate	~14	GPM
	Water Level Above Transducer	43.28	feet
	Flow Meter Reading	19,539,900	gallons
	Pump Pressure	14	psi
TW-3			
	Pumping Rate	3	GPM
	Water Level Above Transducer	15.80	feet
	Flow Meter Reading	8,525,400	gallons
	Pump Pressure	54	psi
Air Stripper			
	Stripper Blower Pressure	20.5	inches H_2O
	Air Temperature in Stripper	48	°F
	Pressure Gauge - Left Leg	2.3	inches H_2O
	Pressure Gauge - Right Leg	2.9	inches H_2O
Effluent Flow			
	Effluent Flow this period (calculated)	567,300	gallons
	Total Effluent Flow (calculated)	81,879,300	gallons

Report Date:
16-Feb-11 14:08

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

Laboratory Report

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

Work Order: K0149
Project : NOW Corp. Site
Project #:

Attn: Stephen Choiniere

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
K0149-01	EFF-012611	Aqueous	26-Jan-11 11:30	28-Jan-11 08:54
K0149-02	INF-012611	Aqueous	26-Jan-11 11:40	28-Jan-11 08:54
K0149-03	TW-1	Aqueous	26-Jan-11 11:50	28-Jan-11 08:54
K0149-04	TW-2A	Aqueous	26-Jan-11 11:55	28-Jan-11 08:54
K0149-05	TW-3	Aqueous	26-Jan-11 12:00	28-Jan-11 08:54
K0149-06	TRIP BLANK	Aqueous	26-Jan-11 00:00	28-Jan-11 08:54

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

All applicable NELAC or USEPA CLP requirments have been meet.

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 our web site at www.mitkem.com.

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

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
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

Technical Reviewer's Initials:

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0149

SW846 8260C

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_25_PR(METHOD)

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 were within the 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 with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.
LCS-56104 in batch 56104, Percent Recovery is outside QC Limits, recovery is above criteria for Ethylbenzene at 111% with criteria of (87-110)

LCSD-56104 in batch 56104, Percent Recovery is outside QC Limits, recovery is above criteria for o-Xylene at 117% with criteria of (84-114)

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:
INF-012611 (K0149-02A) : Dilution Factor: 16
TW-1 (K0149-03A) : Dilution Factor: 2
TW-2A (K0149-04A) : 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: 2/15/2011

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0149

EPA 1664A

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: E1664_PR(SEPF)

V. INSTRUMENTATION

The following instrumentation was used to perform Oil and Grease analysis.
Instrument Type: Analytical Balance
Manufacturer: Denver Instrument Company
Model: A-250

VI. ANALYSIS

A. Calibration:

Analytical balance was calibrated based on SOP/Method criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

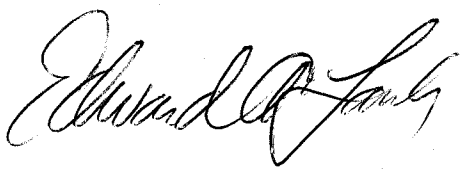
C. Laboratory Control Spikes (LCS):

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

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: 2/10/11

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0149

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: ICP_W_PR(3005A)
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A_PR(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. Spikes:

1. Laboratory Control Spikes (LCS):

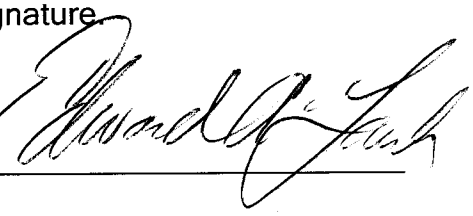
Percent recoveries for lab control samples were within the QC limits.

D. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and 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: 2/14/11

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Technical Services, Inc.

Project: NOW Corp. Site

Laboratory Workorder / SDG #: K0149

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.

Total Dissolved Solids and Total Suspended Solids analyses were performed by Mitkem's parent company Spectrum Analytical, Inc. of Agawam, MA. Spectrum is fully NYSDOH approved for these analyses.

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: CN_W_PR(Midi-distillation)

V. INSTRUMENTATION

The following instrumentation was used to perform
Instrument Code: LACHAT1
Instrument Type: WC
Description: Flow Injection Analyzer
Manufacturer: Zellweger Analytics
Model: Quik-Chem 8000

I. 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.

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. Lang

Date: 2/14/11

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-012611
Lab ID: K0149-01

Project: NOW Corp. Site
Collection Date: 01/26/11 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Chloroethane	ND		0.50	µg/L	1	02/09/2011 18:56	56104
1,1-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Methyl tert-butyl ether	ND		0.50	µg/L	1	02/09/2011 18:56	56104
1,1-Dichloroethane	ND		0.50	µg/L	1	02/09/2011 18:56	56104
cis-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
1,1,1-Trichloroethane	ND		0.50	µg/L	1	02/09/2011 18:56	56104
1,2-Dichloroethane	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Benzene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Trichloroethene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Toluene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
1,1,2-Trichloroethane	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Tetrachloroethene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Chlorobenzene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Ethylbenzene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
m,p-Xylene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
o-Xylene	ND		0.50	µg/L	1	02/09/2011 18:56	56104
Surrogate: Dibromofluoromethane	103		88-124	%REC	1	02/09/2011 18:56	56104
Surrogate: 1,2-Dichloroethane-d4	103		79-115	%REC	1	02/09/2011 18:56	56104
Surrogate: Toluene-d8	101		80-114	%REC	1	02/09/2011 18:56	56104
Surrogate: Bromofluorobenzene	93.1		60-123	%REC	1	02/09/2011 18:56	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: INF-012611
Lab ID: K0149-02

Project: NOW Corp. Site
Collection Date: 01/26/11 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Chloroethane	ND		8.0	µg/L	16	02/09/2011 19:26	56104
1,1-Dichloroethene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
trans-1,2-Dichloroethene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Methyl tert-butyl ether	ND		8.0	µg/L	16	02/09/2011 19:26	56104
1,1-Dichloroethane	110		8.0	µg/L	16	02/09/2011 19:26	56104
cis-1,2-Dichloroethene	10		8.0	µg/L	16	02/09/2011 19:26	56104
1,1,1-Trichloroethane	310		8.0	µg/L	16	02/09/2011 19:26	56104
1,2-Dichloroethane	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Benzene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Trichloroethene	300		8.0	µg/L	16	02/09/2011 19:26	56104
Toluene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
1,1,2-Trichloroethane	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Tetrachloroethene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Chlorobenzene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Ethylbenzene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
m,p-Xylene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
o-Xylene	ND		8.0	µg/L	16	02/09/2011 19:26	56104
Surrogate: Dibromofluoromethane	101		88-124	%REC	16	02/09/2011 19:26	56104
Surrogate: 1,2-Dichloroethane-d4	89.9		79-115	%REC	16	02/09/2011 19:26	56104
Surrogate: Toluene-d8	97.5		80-114	%REC	16	02/09/2011 19:26	56104
Surrogate: Bromofluorobenzene	85.6		60-123	%REC	16	02/09/2011 19:26	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: TW-1
Lab ID: K0149-03

Project: NOW Corp. Site
Collection Date: 01/26/11 11:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Chloroethane	ND		1.0	µg/L	2	02/09/2011 19:55	56104
1,1-Dichloroethene	12		1.0	µg/L	2	02/09/2011 19:55	56104
trans-1,2-Dichloroethene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Methyl tert-butyl ether	ND		1.0	µg/L	2	02/09/2011 19:55	56104
1,1-Dichloroethane	54		1.0	µg/L	2	02/09/2011 19:55	56104
cis-1,2-Dichloroethene	3.1		1.0	µg/L	2	02/09/2011 19:55	56104
1,1,1-Trichloroethane	1.8		1.0	µg/L	2	02/09/2011 19:55	56104
1,2-Dichloroethane	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Benzene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Trichloroethene	61		1.0	µg/L	2	02/09/2011 19:55	56104
Toluene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
1,1,2-Trichloroethane	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Tetrachloroethene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Chlorobenzene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Ethylbenzene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
m,p-Xylene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
o-Xylene	ND		1.0	µg/L	2	02/09/2011 19:55	56104
Surrogate: Dibromofluoromethane	103		88-124	%REC	2	02/09/2011 19:55	56104
Surrogate: 1,2-Dichloroethane-d4	98.0		79-115	%REC	2	02/09/2011 19:55	56104
Surrogate: Toluene-d8	112		80-114	%REC	2	02/09/2011 19:55	56104
Surrogate: Bromofluorobenzene	104		60-123	%REC	2	02/09/2011 19:55	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: TW-2A
Lab ID: K0149-04

Project: NOW Corp. Site
Collection Date: 01/26/11 11:55

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	02/09/2011 20:24	56104
Chloroethane	ND		13	µg/L	25	02/09/2011 20:24	56104
1,1-Dichloroethene	ND		13	µg/L	25	02/09/2011 20:24	56104
trans-1,2-Dichloroethene	ND		13	µg/L	25	02/09/2011 20:24	56104
Methyl tert-butyl ether	ND		13	µg/L	25	02/09/2011 20:24	56104
1,1-Dichloroethane	180		13	µg/L	25	02/09/2011 20:24	56104
cis-1,2-Dichloroethene	15		13	µg/L	25	02/09/2011 20:24	56104
1,1,1-Trichloroethane	480		13	µg/L	25	02/09/2011 20:24	56104
1,2-Dichloroethane	ND		13	µg/L	25	02/09/2011 20:24	56104
Benzene	ND		13	µg/L	25	02/09/2011 20:24	56104
Trichloroethene	440		13	µg/L	25	02/09/2011 20:24	56104
Toluene	ND		13	µg/L	25	02/09/2011 20:24	56104
1,1,2-Trichloroethane	ND		13	µg/L	25	02/09/2011 20:24	56104
Tetrachloroethene	ND		13	µg/L	25	02/09/2011 20:24	56104
Chlorobenzene	ND		13	µg/L	25	02/09/2011 20:24	56104
Ethylbenzene	ND		13	µg/L	25	02/09/2011 20:24	56104
m,p-Xylene	ND		13	µg/L	25	02/09/2011 20:24	56104
o-Xylene	ND		13	µg/L	25	02/09/2011 20:24	56104
Surrogate: Dibromofluoromethane	102		88-124	%REC	25	02/09/2011 20:24	56104
Surrogate: 1,2-Dichloroethane-d4	109		79-115	%REC	25	02/09/2011 20:24	56104
Surrogate: Toluene-d8	107		80-114	%REC	25	02/09/2011 20:24	56104
Surrogate: Bromofluorobenzene	85.7		60-123	%REC	25	02/09/2011 20:24	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: TW-3
Lab ID: K0149-05
Project: NOW Corp. Site
Collection Date: 01/26/11 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Chloroethane	ND		0.50	µg/L	1	02/09/2011 20:53	56104
1,1-Dichloroethene	1.9		0.50	µg/L	1	02/09/2011 20:53	56104
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Methyl tert-butyl ether	ND		0.50	µg/L	1	02/09/2011 20:53	56104
1,1-Dichloroethane	16		0.50	µg/L	1	02/09/2011 20:53	56104
cis-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
1,1,1-Trichloroethane	5.5		0.50	µg/L	1	02/09/2011 20:53	56104
1,2-Dichloroethane	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Benzene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Trichloroethene	17		0.50	µg/L	1	02/09/2011 20:53	56104
Toluene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
1,1,2-Trichloroethane	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Tetrachloroethene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Chlorobenzene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Ethylbenzene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
m,p-Xylene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
o-Xylene	ND		0.50	µg/L	1	02/09/2011 20:53	56104
Surrogate: Dibromofluoromethane	106		88-124	%REC	1	02/09/2011 20:53	56104
Surrogate: 1,2-Dichloroethane-d4	105		79-115	%REC	1	02/09/2011 20:53	56104
Surrogate: Toluene-d8	105		80-114	%REC	1	02/09/2011 20:53	56104
Surrogate: Bromofluorobenzene	86.5		60-123	%REC	1	02/09/2011 20:53	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: TRIP BLANK
Lab ID: K0149-06
Project: NOW Corp. Site
Collection Date: 01/26/11 0:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 8260C -- VOC by GC-MS (25 mL Purge)							**SW8260_25_W**
Vinyl chloride	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Chloroethane	ND		0.50	µg/L	1	02/09/2011 21:22	56104
1,1-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
trans-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Methyl tert-butyl ether	ND		0.50	µg/L	1	02/09/2011 21:22	56104
1,1-Dichloroethane	ND		0.50	µg/L	1	02/09/2011 21:22	56104
cis-1,2-Dichloroethene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
1,1,1-Trichloroethane	ND		0.50	µg/L	1	02/09/2011 21:22	56104
1,2-Dichloroethane	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Benzene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Trichloroethene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Toluene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
1,1,2-Trichloroethane	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Tetrachloroethene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Chlorobenzene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Ethylbenzene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
m,p-Xylene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
o-Xylene	ND		0.50	µg/L	1	02/09/2011 21:22	56104
Surrogate: Dibromofluoromethane	108		88-124	%REC	1	02/09/2011 21:22	56104
Surrogate: 1,2-Dichloroethane-d4	104		79-115	%REC	1	02/09/2011 21:22	56104
Surrogate: Toluene-d8	104		80-114	%REC	1	02/09/2011 21:22	56104
Surrogate: Bromofluorobenzene	80.1		60-123	%REC	1	02/09/2011 21:22	56104

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **MB-56104** SampType: **MBLK** TestCode: **SW8260_25_W** Prep Date: **02/09/11 6:55** Run ID: **V5_110209A**
Client ID: **MB-56104** Batch ID: **56104** Units: **µg/L** Analysis Date: **02/09/11 18:28** SeqNo: **1476877**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.15	0.50									
Chloroethane	ND	0.24	0.50									
1,1-Dichloroethene	ND	0.19	0.50									
trans-1,2-Dichloroethene	ND	0.14	0.50									
Methyl tert-butyl ether	ND	0.13	0.50									
1,1-Dichloroethane	ND	0.18	0.50									
cis-1,2-Dichloroethene	ND	0.19	0.50									
1,1,1-Trichloroethane	ND	0.11	0.50									
1,2-Dichloroethane	ND	0.16	0.50									
Benzene	ND	0.12	0.50									
Trichloroethene	ND	0.13	0.50									
Toluene	ND	0.14	0.50									
1,1,2-Trichloroethane	ND	0.20	0.50									
Tetrachloroethene	ND	0.17	0.50									
Chlorobenzene	ND	0.13	0.50									
Ethylbenzene	ND	0.13	0.50									
m,p-Xylene	ND	0.22	0.50									
o-Xylene	ND	0.17	0.50									
Surrogate: Dibromofluoromethane	10.19		0.50	10.00	0	102	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	10.67		0.50	10.00	0	107	79	115	0			
Surrogate: Toluene-d8	10.21		0.50	10.00	0	102	80	114	0			
Surrogate: Bromofluorobenzene	9.067		0.50	10.00	0	90.7	60	123	0			

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCS-56104** SampType: **LCS** TestCode: **SW8260_25_W** Prep Date: **02/09/11 6:55** Run ID: **V5_110209A**
Client ID: **LCS-56104** Batch ID: **56104** Units: **µg/L** Analysis Date: **02/09/11 17:30** SeqNo: **1476875**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	9.292	0.15	0.50	10.00	0	92.9	77	120	0			
Chloroethane	9.450	0.24	0.50	10.00	0	94.5	75	135	0			
1,1-Dichloroethene	10.05	0.19	0.50	10.00	0	101	81	125	0			
trans-1,2-Dichloroethene	11.07	0.14	0.50	10.00	0	111	60	137	0			
Methyl tert-butyl ether	9.407	0.13	0.50	10.00	0	94.1	61	134	0			
1,1-Dichloroethane	9.398	0.18	0.50	10.00	0	94.0	82	120	0			
cis-1,2-Dichloroethene	10.37	0.19	0.50	10.00	0	104	84	116	0			
1,1,1-Trichloroethane	10.39	0.11	0.50	10.00	0	104	80	124	0			
1,2-Dichloroethane	9.487	0.16	0.50	10.00	0	94.9	86	117	0			
Benzene	10.46	0.12	0.50	10.00	0	105	81	121	0			
Trichloroethene	10.77	0.13	0.50	10.00	0	108	74	123	0			
Toluene	9.730	0.14	0.50	10.00	0	97.3	88	117	0			
1,1,2-Trichloroethane	9.439	0.20	0.50	10.00	0	94.4	83	121	0			
Tetrachloroethene	9.745	0.17	0.50	10.00	0	97.5	74	115	0			
Chlorobenzene	9.817	0.13	0.50	10.00	0	98.2	83	112	0			
Ethylbenzene	11.05	0.13	0.50	10.00	0	111	87	110	0			S
m,p-Xylene	22.10	0.22	0.50	20.00	0	111	87	114	0			
o-Xylene	11.10	0.17	0.50	10.00	0	111	84	114	0			
Surrogate: Dibromofluoromethane	10.06		0.50	10.00	0	101	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	9.881		0.50	10.00	0	98.8	79	115	0			
Surrogate: Toluene-d8	10.23		0.50	10.00	0	102	80	114	0			
Surrogate: Bromofluorobenzene	10.41		0.50	10.00	0	104	60	123	0			

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW8260_25_W

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

Sample ID: **LCSD-56104** SampType: **LCSD** TestCode: **SW8260_25_W** Prep Date: **02/09/11 6:55** Run ID: **V5_110209A**
Client ID: **LCSD-56104** Batch ID: **56104** Units: **µg/L** Analysis Date: **02/09/11 17:59** SeqNo: **1476876**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	8.438	0.15	0.50	10.00	0	84.4	77	120	9.292	9.64	40	
Chloroethane	9.011	0.24	0.50	10.00	0	90.1	75	135	9.450	4.76	40	
1,1-Dichloroethene	9.813	0.19	0.50	10.00	0	98.1	81	125	10.05	2.44	40	
trans-1,2-Dichloroethene	10.44	0.14	0.50	10.00	0	104	60	137	11.07	5.92	40	
Methyl tert-butyl ether	9.930	0.13	0.50	10.00	0	99.3	61	134	9.407	5.41	40	
1,1-Dichloroethane	9.301	0.18	0.50	10.00	0	93.0	82	120	9.398	1.03	40	
cis-1,2-Dichloroethene	10.26	0.19	0.50	10.00	0	103	84	116	10.37	1.14	40	
1,1,1-Trichloroethane	10.03	0.11	0.50	10.00	0	100	80	124	10.39	3.46	40	
1,2-Dichloroethane	9.159	0.16	0.50	10.00	0	91.6	86	117	9.487	3.52	40	
Benzene	9.623	0.12	0.50	10.00	0	96.2	81	121	10.46	8.35	40	
Trichloroethene	9.930	0.13	0.50	10.00	0	99.3	74	123	10.77	8.12	40	
Toluene	9.860	0.14	0.50	10.00	0	98.6	88	117	9.730	1.33	40	
1,1,2-Trichloroethane	10.46	0.20	0.50	10.00	0	105	83	121	9.439	10.2	40	
Tetrachloroethene	9.182	0.17	0.50	10.00	0	91.8	74	115	9.745	5.95	40	
Chlorobenzene	9.552	0.13	0.50	10.00	0	95.5	83	112	9.817	2.73	40	
Ethylbenzene	10.89	0.13	0.50	10.00	0	109	87	110	11.05	1.51	40	
m,p-Xylene	21.77	0.22	0.50	20.00	0	109	87	114	22.10	1.51	40	
o-Xylene	11.65	0.17	0.50	10.00	0	117	84	114	11.10	4.89	40	S
Surrogate: Dibromofluoromethane	9.661		0.50	10.00	0	96.6	88	124	0			
Surrogate: 1,2-Dichloroethane-d4	9.389		0.50	10.00	0	93.9	79	115	0			
Surrogate: Toluene-d8	10.24		0.50	10.00	0	102	80	114	0			
Surrogate: Bromofluorobenzene	10.31		0.50	10.00	0	103	60	123	0			

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

m10.08.12.A

Mitkem Laboratories

Date: *01-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-012611
Lab ID: K0149-01

Project: NOW Corp. Site
Collection Date: 01/26/11 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 1664A -- Oil & Grease, HEM							**E1664**
Oil & Grease, Total Recoverable	8.4		5.0	mg/L	1	02/01/2011 14:05	57209

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *01-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: INF-012611
Lab ID: K0149-02

Project: NOW Corp. Site
Collection Date: 01/26/11 11:40

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	02/01/2011 14:05	57209

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

E1664
EPA 1664A -- Oil & Grease, HEM

Sample ID: **MB-57209** SampType: **MBLK** TestCode: **E1664** Prep Date: **02/01/11 8:14** Run ID: **MANUAL_110201A**
Client ID: **MB-57209** Batch ID: **57209** Units: **mg/L** Analysis Date: **02/01/11 14:05** SeqNo: **1471789**

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

Sample ID: **LCS-57209** SampType: **LCS** TestCode: **E1664** Prep Date: **02/01/11 8:14** Run ID: **MANUAL_110201A**
Client ID: **LCS-57209** Batch ID: **57209** Units: **mg/L** Analysis Date: **02/01/11 14:05** SeqNo: **1471787**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	36.70	1.2	5.0	40.00	0	91.8	78	114	0			

Sample ID: **LCSD-57209** SampType: **LCSD** TestCode: **E1664** Prep Date: **02/01/11 8:14** Run ID: **MANUAL_110201A**
Client ID: **LCSD-57209** Batch ID: **57209** Units: **mg/L** Analysis Date: **02/01/11 14:05** SeqNo: **1471788**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease, Total Recoverable	39.60	1.2	5.0	40.00	0	99.0	78	114	36.70	7.6	18	

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-012611
Lab ID: K0149-01

Project: NOW Corp. Site
Collection Date: 01/26/11 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	µg/L	1	02/09/2011 11:31	57356
Arsenic	ND		20	µg/L	1	02/09/2011 11:31	57356
Barium	71	J	200	µg/L	1	02/09/2011 11:31	57356
Chromium	ND		20	µg/L	1	02/09/2011 11:31	57356
Copper	ND		25	µg/L	1	02/09/2011 11:31	57356
Iron	ND		200	µg/L	1	02/09/2011 11:31	57356
Manganese	75		50	µg/L	1	02/09/2011 11:31	57356
Nickel	ND		50	µg/L	1	02/09/2011 11:31	57356
Zinc	11	J	50	µg/L	1	02/09/2011 11:31	57356
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	02/04/2011 16:51	57313

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *15-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: INF-012611
Lab ID: K0149-02
Project: NOW Corp. Site
Collection Date: 01/26/11 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 6010C -- Metals by ICP							**SW6010_W**
Aluminum	ND		200	µg/L	1	02/09/2011 11:34	57356
Arsenic	ND		20	µg/L	1	02/09/2011 11:34	57356
Barium	72	J	200	µg/L	1	02/09/2011 11:34	57356
Chromium	ND		20	µg/L	1	02/09/2011 11:34	57356
Copper	ND		25	µg/L	1	02/09/2011 11:34	57356
Iron	ND		200	µg/L	1	02/09/2011 11:34	57356
Manganese	140		50	µg/L	1	02/09/2011 11:34	57356
Nickel	1.0	J	50	µg/L	1	02/09/2011 11:34	57356
Zinc	12	J	50	µg/L	1	02/09/2011 11:34	57356
SW846 7470A -- Mercury by FIA							**SW7470**
Mercury	ND		0.20	µg/L	1	02/04/2011 16:53	57313

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW6010_W
SW846 6010C -- Metals by ICP

Sample ID: **MB-57356** SampType: **MBLK** TestCode: **SW6010_W** Prep Date: **02/08/11 10:30** Run ID: **OPTIMA3_110209B**
Client ID: **MB-57356** Batch ID: **57356** Units: **µg/L** Analysis Date: **02/09/11 10:07** SeqNo: **1475986**

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

Sample ID: **LCS-57356** SampType: **LCS** TestCode: **SW6010_W** Prep Date: **02/08/11 10:30** Run ID: **OPTIMA3_110209B**
Client ID: **LCS-57356** Batch ID: **57356** Units: **µg/L** Analysis Date: **02/09/11 10:10** SeqNo: **1475988**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8547	66	200	9100	0	93.9	80	120	0			
Arsenic	436.8	4.3	20	455.0	0	96.0	80	120	0			
Barium	8864	1.1	200	9100	0	97.4	80	120	0			
Chromium	862.7	0.64	20	910.0	0	94.8	80	120	0			
Copper	1056	3.6	30	1130	0	93.5	80	120	0			
Iron	4493	31	200	4550	0	98.7	80	120	0			
Manganese	2193	10	50	2270	0	96.6	80	120	0			
Nickel	2194	0.85	50	2270	0	96.7	80	120	0			
Zinc	2130	4.9	50	2270	0	93.8	80	120	0			

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW7470
SW846 7470A -- Mercury by FIA

Sample ID: MB-57313	SampType: MBLK	TestCode: SW7470	Prep Date: 02/04/11 11:30	Run ID: FIMS1_110204E
Client ID: MB-57313	Batch ID: 57313	Units: µg/L	Analysis Date: 02/04/11 16:33	SeqNo: 1474245

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.028	0.20									

Sample ID: LCS-57313	SampType: LCS	TestCode: SW7470	Prep Date: 02/04/11 11:30	Run ID: FIMS1_110204E
Client ID: LCS-57313	Batch ID: 57313	Units: µg/L	Analysis Date: 02/04/11 16:35	SeqNo: 1474246

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.446	0.028	0.20	4.550	0	97.7	80	120	0			

Sample ID: LCSD-57313	SampType: LCSD	TestCode: SW7470	Prep Date: 02/04/11 11:30	Run ID: FIMS1_110204E
Client ID: LCSD-57313	Batch ID: 57313	Units: µg/L	Analysis Date: 02/04/11 16:36	SeqNo: 1474247

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.379	0.028	0.20	4.550	0	96.2	80	120	4.446	1.54	20	

S526

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

m10.08.12.A

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

Mitkem Laboratories

Date: *16-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: EFF-012611
Lab ID: K0149-01

Project: NOW Corp. Site
Collection Date: 01/26/11 11:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	247		5	mg/L	1	02/01/2011 0:00	SUBBED
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		5	mg/L	1	02/01/2011 0:00	SUBBED
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	02/04/2011 10:29	57278

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Mitkem Laboratories

Date: *16-Feb-11*

Client: AECOM Technical Services, Inc.
Client Sample ID: INF-012611
Lab ID: K0149-02

Project: NOW Corp. Site
Collection Date: 01/26/11 11:40

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							**SM2540_TDS**
Total Dissolved Solids	311		5	mg/L	1	02/01/2011 0:00	SUBBED
SM 2540D -- TOTAL SUSPENDED SOLIDS							**SM2540_TSS**
Total Suspended Solids	ND		5	mg/L	1	02/01/2011 0:00	SUBBED
SW846 9012B -- Total Cyanide							**SW9012_W**
Cyanide	ND		10	ug/L	1	02/04/2011 10:31	57278

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SW9012_W
SW846 9012B -- Total Cyanide

Sample ID: **MB-57278**	SampType: **MBLK**	TestCode: **SW9012_W**			Prep Date: **02/03/11 10:45**			Run ID: **LACHAT1_110204A**				
Client ID: **MB-57278**	Batch ID: **57278**	Units: **ug/L**			Analysis Date: **02/04/11 10:21**			SeqNo: **1473922**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	*ND*	7.5	20									

Sample ID: **LCS-57278**	SampType: **LCS**	TestCode: **SW9012_W**			Prep Date: **02/03/11 10:45**			Run ID: **LACHAT1_110204A**				
Client ID: **LCS-57278**	Batch ID: **57278**	Units: **ug/L**			Analysis Date: **02/04/11 10:24**			SeqNo: **1473923**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	100.8	7.5	20	100.0	0	101	80	120	0			

Sample ID: **LCSD-57278**	SampType: **LCSD**	TestCode: **SW9012_W**			Prep Date: **02/03/11 10:45**			Run ID: **LACHAT1_110204A**				
Client ID: **LCSD-57278**	Batch ID: **57278**	Units: **ug/L**			Analysis Date: **02/04/11 10:39**			SeqNo: **1473929**				
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	101.7	7.5	20	100.0	0	102	80	120	100.8	0.803	20	

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

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TDS
SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: 1102059-BLK2	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 02/01/11 16:56	Run ID: SUB_110209A
Client ID: 1102059-BLK2	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 17:02	SeqNo: 1476435

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	U		5.00	0		0	0	0				U

Sample ID: 1102059-BLK2	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102059-BLK2	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479287

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	U		5.0	0		0	0	0				

Sample ID: 1102059-BS1	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 02/01/11 16:56	Run ID: SUB_110209A
Client ID: 1102059-BS1	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 17:02	SeqNo: 1476436

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	496.0		10.0	489.0	0	101	90	110				

Sample ID: 1102059-BS1	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102059-BS1	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479288

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	496.0		10	489.0	0	101	90	110				

Sample ID: 1102059-BS2	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 02/01/11 16:56	Run ID: SUB_110209A
Client ID: 1102059-BS2	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 17:02	SeqNo: 1476437

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	496.0		10.0	489.0	0	101	90	110				

Sample ID: 1102059-BS2	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102059-BS2	Batch ID: SAI-1102059	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479289

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	496.0		10	489.0	0	101	90	110				

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TDS
SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: **K0149-01BDUP1** SampType: **DUP** TestCode: **SM2540_TDS** Prep Date: **02/01/11 0:00** Run ID: **SUB_110201A**
Client ID: **EFF-012611** Batch ID: **SAI-1102059** Units: **mg/L** Analysis Date: **02/01/11 0:00** SeqNo: **1479290**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	247.0		5.0	247.0	0	0	0	20	247.0			

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

m10.08.12.A

CLIENT: AECOM Technical Services, Inc.
Work Order: K0149
Project: NOW Corp. Site

ANALYTICAL QC SUMMARY REPORT

SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: 1102058-BLK2	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 02/01/11 16:54	Run ID: SUB_110209B
Client ID: 1102058-BLK2	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 18:11	SeqNo: 1476445

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	U		5.00	0		0	0	0				U

Sample ID: 1102058-BLK2	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102058-BLK2	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479281

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	U		5.0	0		0	0	0				

Sample ID: 1102058-BS1	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 02/01/11 16:54	Run ID: SUB_110209B
Client ID: 1102058-BS1	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 18:11	SeqNo: 1476446

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	88.00		10.0	82.00	0	107	90	110				

Sample ID: 1102058-BS1	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102058-BS1	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479282

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	88.00		10	82.00	0	107	90	110				

Sample ID: 1102058-BS2	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 02/01/11 16:54	Run ID: SUB_110209B
Client ID: 1102058-BS2	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 18:11	SeqNo: 1476447

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	90.00		10.0	82.00	0	110	90	110				

Sample ID: 1102058-BS2	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 02/01/11 0:00	Run ID: SUB_110201A
Client ID: 1102058-BS2	Batch ID: SAI-1102058	Units: mg/L	Analysis Date: 02/01/11 0:00	SeqNo: 1479283

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	90.00		10	82.00	0	110	90	110				

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
m10.08.12.A J - Analyte detected below quanititation limits; R - RPD outside accepted recovery limits; RL - Reporting Limit

WorkOrder: K0149

01/28/2011 14:16

Mitkem Laboratories

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

Case:
SDG:
PO: 94017.02

HC Due: 02/15/11
Fax Due:
Fax Report: ☐

Report Level: LEVEL 2
Special Program:
EDD:

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0149-01A	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0149-01B	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SM2540_TDS	SUB TO AGAWAM /					SUB
K0149-01B	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SM2540_TSS	SUB TO AGAWAM /					SUB
K0149-01C	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SW6010_W	/ See SEL list				Y	M4
K0149-01C	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SW7470	/ See SEL list					M4
K0149-01D	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	SW9012_W	/				Y	I3
K0149-01E	EFF-012611	01/26/2011 11:30	01/28/2011	Aqueous	E1664	/					I3
K0149-02A	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0149-02B	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SM2540_TDS	SUB TO AGAWAM /					SUB
K0149-02B	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SM2540_TSS	SUB TO AGAWAM /					SUB
K0149-02C	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SW6010_W	/ See SEL list				Y	M4
K0149-02C	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SW7470	/ See SEL list					M4
K0149-02D	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	SW9012_W	/				Y	I3
K0149-02E	INF-012611	01/26/2011 11:40	01/28/2011	Aqueous	E1664	/					I3
K0149-03A	TW-1	01/26/2011 11:50	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0149-04A	TW-2A	01/26/2011 11:55	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0149-05A	TW-3	01/26/2011 12:00	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA
K0149-06A	TRIP BLANK	01/26/2011 00:00	01/28/2011	Aqueous	SW8260_25_W	/ use for VOCs,				Y	VOA

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

HT = Test logged in but has been placed on hold

Lab Client Rep: Edward A Lawler

MITKEM LABORATORIES
A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

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

Project Mgr.: Stephen Choiniere

Invoice To: Same

P.O. No.: _____ RQN: _____

Project No.: 60135676 02
Site Name: Now Corp
Location: Stattsburg State: NY
Sampler(s): SRG

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9= None 10=_____ 11=_____

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

G=Grab C=Composite

Lab Id: (K0149)	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses: 8260	Metals*	TDS/TSS	O+G	Cyanide	List preservative code below: 2 4 9 2 5	Notes:
1	EFF - 012611	1/26/11	11:30	G	GW	2	3		3	X	X	X	X	X		*Al, As, Ba, Cr
2	INF - 012611	1/26/11	11:40				3		3	X	X	X	X	X		Cu, Fe, Mn, Hg
3	TW-1	1/26/11	11:50													Zn, N
4	TW-2A	1/26/11	11:55													
5	TW-3	1/26/11	12:00													
6	Trip Blank	—	—													

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

State specific reporting standards:
_____

☐ E-mail to _____
EDD Format _____

Condition upon receipt: ☑ Iced ☐ Ambient ☑ °C 3

Relinquished by:	Received by:	Date:	Time:
		1/26/11	15:00
		1/28/11	8:54

MITKEM LABORATORIES
Sample Condition Form

Received By: SW	Reviewed By: DJ	Date: 1/28/11	Mitkem Work Order #: K0149
Client Project: NOW CORP		Client: AECOM NY	

		Lab Sample ID		Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	H_3PO_4	VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
1) Cooler Sealed	(Yes) / No	K0149	01	<2		<2	7/2		H	
			02	<2		<2	7/2			
2) Custody Seal(s)	(Present) / Absent		03							
	(Coolers) / Bottles		04							
	(Intact) / Broken		05							
		K0149	06						H	
3) Custody Seal Number(s)	NA									
4) Chain-of-Custody	(Present) / Absent									
5) Cooler Temperature	3°C									
IR Temp Gun ID	MT-1									
Coolant Condition	Ice									
6) Airbill(s)	(Present) / Absent									
Airbill Number(s)	FedEx 869079239302									
7) Samples Bottles	(Intact) / Broken / Leaking									
8) Date Received	1/28/11									
9) Time Received	8:54									

1/28/11

Preservative Name/Lot No.:

VOA Matrix Key:

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

See Sample Condition Notification/Corrective Action Form yes (no)

Form ID: QAF.0006

Rad OK (yes) / no

\\Bernoulli\qa_safety\Controlled Forms\QAF.0006 sample condition form

Last Page of Data Report