

# **CBS** Corporation

Environmental Remediation PNC Center 20 Stanwix Street, 10<sup>th</sup> Floor Pittsburgh, PA 15222

December 15, 2010

William P. Murray, P.E. Environmental Engineer I New York State Department of Environmental Conservation Division of Hazardous Waste Remediation Region 9 270 Michigan Avenue Buffalo, NY 14203-2999

Re: Monthly Operation and Maintenance Report NYSDEC Site 9-15-066, Cheektowaga, New York

Dear Mr. Murray:

On behalf of the Respondents to the Order on Consent and Settlement Agreement, Index No. B9-0381-91-8 (the "Order"), CBS Corporation (CBS) submits this monthly status report for operation and maintenance (O&M) activities at New York State Department of Environmental Conservation (NYSDEC) Site No. 9-15-066 in Cheektowaga, New York (the "Site"). Under an Agreement among the Respondents, CBS is managing the Remedial Program pursuant to the Order. This report covers activities during November 2010 and transmits the discharge monitoring report for this period.

# 1. Site Activities and Status

- A. On November 10, 2010, CBS submitted to NYSDEC a monthly report on the status of O&M activities at the Site for October 2010. That status report also transmitted the discharge monitoring data for October 2010.
- B. The recovery and treatment system operated throughout November 2010.
- C. Conestoga-Rovers & Associates (CRA) conducted routine and non-routine O&M, and TestAmerica Laboratories, Inc. provided analytical laboratory services, as required.

D. CRA, and its subcontractor, National Vacuum Corporation (National Vacuum), completed the repairs to Sump 003 and cleaning of the discharge line from this sump to the groundwater treatment facility. CRA also made repairs to the pump at Sump 002.

# 2. Sampling Results and Other Site Data

- A. In November 2010, the groundwater system recovered and treated an estimated 76,000 gallons.<sup>1</sup> This higher flow rate for the month reflected the repairs at Sumps 002 and 003.
- B. Attachment A provides the discharge monitoring report for November 2010 based on the effluent sample collected on November 29, 2010. Attachment B provides the analytical laboratory report for this effluent sample.
- C. In reviewing the treatment system effluent monitoring information, please note the following:
  - Flow data are provided via periodic on-site readings. The maximum daily flow was calculated from these data.
  - The pH data are provided via periodic on-site readings and laboratory analysis of the monthly effluent sample. Effluent pH data are reported only for measurements taken while the treatment pump is operating and the system is actively discharging.
  - The reported daily maximum values (pounds per day) are calculated using the maximum observed daily flow and the results of the monthly effluent monitoring, irrespective of whether the actual maximum daily flow occurred on the day of sampling.
- D. For the November 2010 reporting period, the effluent complied with all discharge limitations.

# 3. Upcoming Activities

A. CBS will continue required O&M activities.

B. With NYSDEC approval, CBS will complete the Phase 1 closure of the 002 system by filling and sealing manholes MH-002-09 and MH-002-10.

Based on additional information and recalculation, the estimated total discharge for October 2010 has been revised to 19,000 gallons from the 18,000 gallons as indicated in the October 2010 monthly status report.

C. After closing MH-002-09, and MH-002-10, CRA will conduct additional water level measurements, surface water monitoring, and groundwater monitoring per the *Revised Work Plan* (Rev. 1, November 7, 2008).

# 4. **Operational Problems**

- A. Previously reported operational problems associated with elevated pH, pH control, and hardness continue. These operational problems are expected to be largely resolved with the phased shutdown of the collection system and limitation of inflows to those associated with Sump 003.
- B. The post-closure monitoring data indicate that the Phase 1 closure of the 001 groundwater collection system has addressed the previously observed high water levels at Sump 001, which had led to periodic overtopping of that manhole. The ongoing periodic overtopping at Sump 002 will be addressed through the partial closure of that portion of the groundwater collection system.
- C. The Phase 1 closure of the 002 system is also expected to reduce the conveyance of groundwater containing volatile organic compounds via storm sewers installed by the Niagara Frontier Transportation Authority as part of airport development.
- D. Other operational issues are being addressed in the course of O&M activities.

\* \* \* \*

Please contact me if you have questions regarding this status report.

Very truly yours.

Leo M. Brausch

Consultant/Project Engineer

LMB:

Attachments

cc: K. P. Lynch, CRA

K. Minkel, NFTA

# ATTACHMENT A DISCHARGE MONITORING REPORT NOVEMBER 2010

Discharge Monitoring Data
Outfall 001 - Treated Groundwater Remediation Discharge
NYSDEC Site No. 9-15-006
Cheektowaga, New York

Reporting Month & Year Nov-10

Paramet	ter	Daily Minimum	Daily Maximum	Units	Daily Maximum (lbs/day)	Measurement Frequency	Sample Type
Flow	Monitoring Result  Discharge Limitation		<b>14,595</b> 28,800	<b>gpd</b> gpd		Continuous Continuous	Meter Meter
рН	Monitoring Result Discharge Limitation	<b>7.20</b> 6.5	<b>7.50</b> 8.5	<b>s.u.</b> s.u.		6 Weekly	<b>Grab</b> Grab
Total suspended solids	Monitoring Result Discharge Limitation		<b>2.4</b> 20	mg/L mg/L	0.29	1 Monthly	<b>Grab</b> Grab
Toluene	Monitoring Result Discharge Limitation		< <b>1.0</b> 5	ug/L ug/L	< 0.00012	1 Monthly	<b>Grab</b> Grab
Methylene chloride	Monitoring Result Discharge Limitation		< 1.0 10	ug/L ug/L	< 0.00013	1 Monthly	<b>Grab</b> Grab
1,2-dichlorobenzene	Monitoring Result Discharge Limitation		< 1.0 5	ug/L ug/L	< 0.00013	1 Monthly	<b>Grab</b> Grab
cis-1,2-dichloroethylene	Monitoring Result Discharge Limitation		< 1.0 10	ug/L ug/L	< 0.00013	1 Monthly	<b>Grab</b> Grab
Trichloroethylene	Monitoring Result Discharge Limitation		< 1.0 10	ug/L ug/L	< 0.00013	1 Monthly	<b>Grab</b> Grab
Tetrachloroethylene	Monitoring Result Discharge Limitation		< <b>1.0</b> 50	ug/L ug/L	< 0.00013	1 Monthly	<b>Grab</b> Grab
Cadmium	Monitoring Result Discharge Limitation		< <b>0.15</b>	ug/L ug/L	< 0.000018	1 Monthly	<b>Grab</b> Grab
Chromium	Monitoring Result Discharge Limitation		< <b>5.0</b> 99	ug/L ug/L	< 0.00061	1 Monthly	<b>Grab</b> Grab

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# ATTACHMENT B ANALYTICAL LABORATORY REPORT NOVEMBER 2010 INFLUENT SAMPLING



TestAmerica Laboratories, Inc.

# ANALYTICAL REPORT

PROJECT NO. LEO BRAUSCH BUF

Leo Brausch Buffalo Airport

Lot #: C0K300504

Leo Brausch

Leo Brausch Consulting 131 Wedgewood Drive Gibsonia, PA 15044

TESTAMERICA LABORATORIES, INC.

Carrie L. Gamber

Project Manager

December 13, 2010

COK300504 1 of 21



# **NELAC REPORTING:**

At the time of analysis the laboratory was in compliance with the current NELAC standards and held accreditation for all analyses performed unless noted by a qualifier. The labs accreditation numbers are listed below. The format and contents of the report meets all applicable NELAC standards except as noted in the narrative and shall not be reproduced except in full, without the written approval of the laboratory. The table below presents a summary of the certifications held by TestAmerica Pittsburgh. Our primary accreditation authority for the Non-potable water and Solid & Hazardous waste programs is Pennsylvania DEP. A more detailed parameter list is available upon request. Please ask your project manager for this information when required.

Certifying State/Program	Certificate #	Program Types	TestAmerica
DoD ELAP	ADE-1442	ww	X
LIC Dont of Agriculture	(#5000 40 00400)	HW	
US Dept of Agriculture	(#P330-10-00139)	Foreign Soil Import Permit	<u>X</u>
Arkansas	(#88-0690)	WW	X
California – NELAC		HW HW	<u>X</u>
California – NELAC	04224CA	WW	X
		HW	<u>X</u>
Connecticut	(#PH-0688)	WW	Χ
Fig. 14. NEL AO		HW	X
Florida – NELAC	(#E871008)	ww	X
		HW	X
Illinois – NELAC	(#002319)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	Χ
 		HW	Χ
Louisiana – NELAC	(#04041)	WW	X
		HW	Χ
New Hampshire – NELAC	(#203010)	ww	Χ
New Jersey – NELAC	(PA-005)	WW	Χ
		HW	Χ
New York - NELAC	(#11182)	WW	X
		HW	Χ
North Carolina	(#434)	WW	X
		HW	Χ
Pennsylvania - NELAC	(#02-00416)	WW	Χ
	1	HW	X
South Carolina	(#89014002)	ww	X
	1	HW	x
Utah - NELAC	(STLP)	ww	X
		HW	X
West Virginia	(#142)	ww	X
	1	HW	X
Wisconsin	998027800	ww	X
		HW	x

The codes utilized for program types are described below:

HW Hazardous Waste certification

WW Non-potable Water and/or Wastewater certification

X Laboratory has some form of certification under the specific program. Many states certify laboratories for specific parameters or tests within a category. The information in the table indicates the lab is certified in a general category of testing. Please contact the laboratory if parameter specific certification information is required.

Updated: 05/19/10 N:\Reporting\NELAC NARRATIVE Pttsburgh\_Updated 051910.doc

# **CASE NARRATIVE**

# Leo Brausch Consulting

Lot # C0K300504

# Sample Receiving:

TestAmerica's Pittsburgh laboratory received one sample on November 30, 2010. The cooler was received within the proper temperature range.

If project specific QC was not required for samples contained in this report, when batch QC was completed on these samples, anomalous results will be discussed below.

# **GC/MS Volatiles:**

TestAmerica's North Canton laboratory performed the 624 analysis. The results are included in the report.

## Metals:

There were no problems associated with the analyses.

# General Chemistry:

The test for pH is a field parameter. The laboratory pH analysis was completed at the request of the client.

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- I) OT GENERAL	
CONESTOGA-ROVERS & ASSOCIATES  LOS ALUSA PAINS PAINS PAINS PAINS  A 145 A FULL A MINISTRATION OF 1/2 MINIS	AST Area Ca. Maine).  LAST Area Ca.  LAST Area Ca.
SAMPLER'S SIGNATURE: NAME:	
TIME	SAMPLE SO OF TYPE SO O
3/15/29/Wa EFF 1110	Unt 5 3 / 1 /
TOTAL NUMBER OF CONTAINERS	HEALTH/CHEMICAL HAZARDS
RELINQUISHED BY	RECEIVED BY DATE:
RECHACUISHED BY: (2) TIME:	RECEIVED BY:  (2)
ELINQUISHED BY:	CEIVED BY:
METHOD OF SHIPMENT:	NY BILL No.
White —Fully Executed Copy SAMPLE TEAM: Yellow —Receiving Laboratory Copy Pink —Shipper Copy Goldenrod —Sampler Copy	DATE 11/30/10 TIME: 10°0
	1001 (D) APK 28/97(NF) RE

C0K300504

# **METHODS SUMMARY**

# C0K300504

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH (Electrometric) Purgeables Total Suspended Solids SM 2540 D Trace Inductively Coupled Plasma (ICP) Metals	SM20 4500-H+B CFR136A 624 SM20 2540D MCAWW 200.7	SM20 4500-H B SW846 5030B SM20 2540D MCAWW 200.7
References:		
CED126A "Mothoda for Organia Chemical Analysis	of Municipal and	

CFR136A	"Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
MCAWW	"Methods for Chemical Analysis of Water and Wastes", ${\tt EPA-600/4-79-020}$ , March 1983 and subsequent revisions.
SM20	"STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."

# **SAMPLE SUMMARY**

#### C0K300504

 WO # SAMPLE# CLIENT SAMPLE ID
 SAMPLED SAMP

 MAM81 001 EFF1110
 11/29/10 09:00

## NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

# Leo Brausch Consulting

Client Sample ID: EFF1110

## GC/MS Volatiles

Lot-Sample #...: C0K300504-001 Work Order #...: MAM811AD Matrix.....: WATER

Date Sampled...: 11/29/10 Date Received..: 11/30/10 MS Run #....: 0340238

 Prep Date....:
 12/04/10
 Analysis Date..:
 12/04/10

 Prep Batch #...:
 0340388
 Analysis Time..:
 07:05

Dilution Factor: 1

Method....: CFR136A 624

		REPORTIN	'G	
PARAMETER	RESULT	LIMIT	UNITS	MDL
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
Methylene chloride	ND	1.0	ug/L	0.33
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
Trichloroethene	ND	1.0	ug/L	0.17

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
1,2-Dichloroethane-d4	83	(80 - 125)
Toluene-d8	103	(84 - 110)
Bromofluorobenzene	92	(81 - 112)

#### METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: COK300504 Work Order #...: MAX031AA Matrix.....: WATER

MB Lot-Sample #: A0L060000-388

Dilution Factor: 1

		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 624
Methylene chloride	ND	1.0	ug/L	CFR136A 624
Tetrachloroethene	ND	1.0	ug/L	CFR136A 624
Toluene	ND	1.0	ug/L	CFR136A 624
Trichloroethene	ND	1.0	ug/L	CFR136A 624
cis-1,2-Dichloroethene	ND	1.0	ug/L	CFR136A 624
	PERCENT	RECOVERY		
SURROGATE	<u>RECOVERY</u>	LIMITS	_	
1,2-Dichloroethane-d4	92	(80 - 125	)	
Toluene-d8	104	(84 - 110	)	
Bromofluorobenzene	98	(81 - 112	)	

# NOTE(S):

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: COK300504 Work Order #...: MAX031AC Matrix.....: WATER

LCS Lot-Sample#: A0L060000-388

Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
1,2-Dichlorobenzene	100	(18 - 190)	CFR136A 624
Methylene chloride	100	(10 - 221)	CFR136A 624
Tetrachloroethene	105	(64 - 148)	CFR136A 624
Toluene	103	(47 - 150)	CFR136A 624
Trichloroethene	106	(71 - 157)	CFR136A 624
Benzene	102	(37 - 151)	CFR136A 624
Bromodichloromethane	101	(35 - 155)	CFR136A 624
Bromoform	101	(45 - 169)	CFR136A 624
Bromomethane	103	(10 - 242)	CFR136A 624
Carbon tetrachloride	103	(70 - 140)	CFR136A 624
Chlorobenzene	104	(37 - 160)	CFR136A 624
Chloroethane	99	(14 - 230)	CFR136A 624
2-Chloroethyl vinyl ether	96	(10 - 305)	CFR136A 624
Chloroform	100	(51 - 138)	CFR136A 624
Chloromethane	79	(10 - 273)	CFR136A 624
Dibromochloromethane	98	(53 - 149)	CFR136A 624
1,3-Dichlorobenzene	102	(59 - 156)	CFR136A 624
1,4-Dichlorobenzene	99	(18 - 190)	CFR136A 624
1,1-Dichloroethane	101	(59 - 155)	CFR136A 624
1,2-Dichloroethane	97	(49 - 155)	CFR136A 624
1,1-Dichloroethene	110	(10 - 234)	CFR136A 624
trans-1,2-Dichloroethene	105	(54 - 156)	CFR136A 624
1,2-Dichloropropane	105	(10 - 210)	CFR136A 624
cis-1,3-Dichloropropene	101	(10 - 227)	CFR136A 624
trans-1,3-Dichloropropene	106	(17 - 183)	CFR136A 624
Ethylbenzene	103	(37 - 162)	CFR136A 624
1,1,2,2-Tetrachloroethane	99	(46 - 157)	CFR136A 624
1,1,1-Trichloroethane	102	(52 - 162)	CFR136A 624
1,1,2-Trichloroethane	102	(52 - 150)	CFR136A 624
Trichlorofluoromethane	129	(17 - 181)	CFR136A 624
Vinyl chloride	99	(10 - 251)	CFR136A 624

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: COK300504 Work Order #...: MAX031AC Matrix.....: WATER

LCS Lot-Sample#: A0L060000-388

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
1,2-Dichloroethane-d4	98	(80 - 125)
Toluene-d8	105	(84 - 110)
Bromofluorobenzene	103	(81 - 112)

# NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Lot-Sample #...: COK300504 Work Order #...: MAQ911AC Matrix.....: WATER

MS Lot-Sample #: A0L020496-001

 Date Sampled...:
 12/01/10
 Date Received...:
 12/02/10

 Prep Date.....:
 12/04/10
 Analysis Date...:
 12/04/10

 Prep Batch #...:
 0340388
 MS Run #.....:
 0340238

Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
1,2-Dichlorobenzene	92	(90 - 115)	CFR136A 624
Methylene chloride	103	(78 - 131)	CFR136A 624
Tetrachloroethene	98	(81 - 112)	CFR136A 624
Toluene	98	(87 - 112)	CFR136A 624
Trichloroethene	102	(85 - 114)	CFR136A 624
Benzene	102	(90 - 114)	CFR136A 624
Bromodichloromethane	92	(78 - 123)	CFR136A 624
Bromoform	83	(40 - 141)	CFR136A 624
Bromomethane	101	(42 - 160)	CFR136A 624
Carbon tetrachloride	74	(61 - 129)	CFR136A 624
Chlorobenzene	99	(90 - 113)	CFR136A 624
Chloroethane	98	(56 - 133)	CFR136A 624
2-Chloroethyl vinyl ether	0.0 a	(10 - 185)	CFR136A 624
Chloroform	94	(90 - 118)	CFR136A 624
Chloromethane	61	(37 - 127)	CFR136A 624
Dibromochloromethane	86	(65 - 123)	CFR136A 624
1,3-Dichlorobenzene	97	(90 - 111)	CFR136A 624
1,4-Dichlorobenzene	93	(90 - 112)	CFR136A 624
1,1-Dichloroethane	98	(90 - 114)	CFR136A 624
1,2-Dichloroethane	88 a	(90 - 123)	CFR136A 624
1,1-Dichloroethene	100	(83 - 129)	CFR136A 624
trans-1,2-Dichloroethene	94	(85 - 116)	CFR136A 624
1,2-Dichloropropane	104	(87 - 119)	CFR136A 624
cis-1,3-Dichloropropene	89	(77 - 115)	CFR136A 624
trans-1,3-Dichloropropene	90	(71 - 114)	CFR136A 624
Ethylbenzene	95	(88 - 111)	CFR136A 624
1,1,2,2-Tetrachloroethane	105	(77 - 133)	CFR136A 624
1,1,1-Trichloroethane	89	(82 - 119)	CFR136A 624
1,1,2-Trichloroethane	102	(89 - 123)	CFR136A 624
Trichlorofluoromethane	106	(62 - 110)	CFR136A 624
Vinyl chloride	89	(50 - 119)	CFR136A 624
		PERCENT	RECOVERY
SURROGATE		RECOVERY	<u>LIMITS</u>
1,2-Dichloroethane-d4		90	(80 - 125)
Toluene-d8		104	(84 - 110)
Bromofluorobenzene		95	(81 - 112)

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(Continued on next page)

## MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Lot-Sample #...: COK300504 Work Order #...: MAQ911AC Matrix.....: WATER

MS Lot-Sample #: A0L020496-001

# NOTE(S):

 $\label{lem:calculations} \textbf{Calculations} \ \textbf{are} \ \textbf{performed} \ \textbf{before} \ \textbf{rounding} \ \textbf{to} \ \textbf{avoid} \ \textbf{round-off} \ \textbf{errors} \ \textbf{in} \ \textbf{calculated} \ \textbf{results}.$ 

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

# Leo Brausch Consulting

# Client Sample ID: EFF1110

# TOTAL Metals

Matrix....: WATER

Lot-Sample #...: C0K300504-001
Date Sampled...: 11/29/10

Date Sampled	.: 11/29/10	Date	Received.	: 11/30/10		
		REPORTI	NG		PREPARATION-	WORK
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	ORDER #
Prep Batch #	.: 0336163					
Cadmium	ND	5.0	ug/L	MCAWW 200.7	12/02-12/06/10	MAM811AA
		Dilution Fa	ctor: 1	Analysis Time: 19:50	MS Run #	.: 0336099
		MDL	: 0.15			
Chromium	ND	5.0	ug/L	MCAWW 200.7	12/02-12/06/10	MAM811AC
		Dilution Factor: 1		Analysis Time: 19:50	19:50 MS Run #: 0336099	
		MDL	: 0.51			

# METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: COK300504 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD		PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample ‡	#: C0L020000-16	3 Prep Ba	atch #: (	0336163			
Cadmium	ND	5.0	ug/L	MCAWW 2	200.7	12/02-12/06/10	MAQG71AA
	Ι	ilution Fact	or: 1				
	F	nalysis Time	: 19:41				
Chromium	ND	5.0	ug/L	MCAWW 2	200.7	12/02-12/06/10	MAQG71AC
	I	ilution Fact	or: 1				
	P	nalysis Time	: 19:41				
NOTE(S):							

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #...: COK300504 Matrix....: WATER

PERCENT RECOVERY PREPARATION-

PARAMETER RECOVERY LIMITS METHOD ANALYSIS DATE WORK ORDER #

LCS Lot-Sample#: C0L020000-163 Prep Batch #...: 0336163

Cadmium 104 (85 - 115) MCAWW 200.7 12/02-12/06/10 MAQG71AD

Dilution Factor: 1 Analysis Time..: 19:46

Chromium 103 (85 - 115) MCAWW 200.7 12/02-12/06/10 MAQG71AE

Dilution Factor: 1 Analysis Time..: 19:46

NOTE(S):

#### MATRIX SPIKE SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #...: C0K300504 Matrix....: WATER Date Sampled...: 11/29/10 Date Received..: 11/30/10 PERCENT RECOVERY RPD PREPARATION-WORK RECOVERY LIMITS RPD LIMITS METHOD PARAMETER\_\_\_ ANALYSIS DATE ORDER # MS Lot-Sample #: C0K300504-001 Prep Batch #...: 0336163 Cadmium 102 (70 - 130)MCAWW 200.7 12/02-12/06/10 MAM811AG 100 (70 - 130) 2.1 (0-20) MCAWW 200.7 12/02-12/06/10 MAM811AH Dilution Factor: 1 Analysis Time..: 20:00 MS Run #....: 0336099 Chromium 102 (70 - 130)MCAWW 200.7 12/02-12/06/10 MAM811AJ 101 (70 - 130) 1.6 (0-20) MCAWW 200.7 12/02-12/06/10 MAM811AK

Dilution Factor: 1
Analysis Time..: 20:00
MS Run #.....: 0336099

NOTE(S):

# Leo Brausch Consulting

Client Sample ID: EFF1110

# General Chemistry

Lot-Sample #...: C0K300504-001 Work Order #...: MAM81 Matrix.....: WATER

Date Sampled...: 11/29/10 Date Received..: 11/30/10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
рН	7.2			SM20 4500-H+B	12/01/10	0335273
		Dilution Factor: 1		Analysis Time: 14:36	MS Run #: 033513	
		MDL	: 0.0			
Total Suspended	2.4 B	4.0	mg/L	SM20 2540D	12/02-12/03/10	0336342
Solids						
		Dilution Fac	ctor: 1	Analysis Time: 11:11	MS Run #	: 0336197
		MDL	: 2.0			

# NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

## METHOD BLANK REPORT

# General Chemistry

Client Lot #...: COK300504 Matrix.....: WATER

REPORTING PREPARATION- PREPARAMETER RESULT LIMIT UNITS METHOD ANALYSIS DATE BATCH #

Total Suspended Solids

ND 4.0 mg/L SM20 2540D 12/02-12/03/10 0336342

Dilution Factor: 1

Analysis Time..: 11:11

NOTE(S):

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

# General Chemistry

Client Lot #...: COK300504 Matrix.....: WATER

	PERCENT	RECOVERY		PREPARATION-	PREP
PARAMETER	RECOVERY	LIMITS	METHOD	ANALYSIS DATE	BATCH #
рН		Work Order #	: MAPJE1AA LCS Lot	-Sample#: C0L010000-	-273
	99	(99 - 101)	SM20 4500-H+B	12/01/10	0335273
		Dilution Factor	r: 1 Analysis Ti	me: 14:30	
Total Suspended Solids		Work Order #	: MARNM1AC LCS Lot	-Sample#: COLO20000-	-342
	100	(80 - 120)	SM20 2540D	12/02-12/03/10	0336342
		Dilution Factor	r: 1	me: 11:11	

NOTE(S):

 $\label{lem:calculations} \textbf{Calculations} \ \text{are performed before rounding to avoid round-off errors in calculated results}.$ 

## SAMPLE DUPLICATE EVALUATION REPORT

# General Chemistry

Client Lot #...: COK300504 Work Order #...: MAMXL-SMP Matrix.....: WATER

MAMXL-DUP

Date Sampled...: 11/28/10 Date Received..: 11/30/10

 PARAM RESULT
 RESULT
 UNITS
 RPD
 PREPARATION PREPA

#### SAMPLE DUPLICATE EVALUATION REPORT

# General Chemistry

Client Lot #...: COK300504 Work Order #...: MAM81-SMP Matrix.....: WATER

MAM81-DUP

Date Sampled...: 11/29/10 Date Received..: 11/30/10

RPD DUPLICATE PREPARATION-PREP <u>UNITS RPD LIMIT METHOD</u> ANALYSIS DATE BATCH # PARAM RESULT RESULT Total Suspended SD Lot-Sample #: C0K300504-001 Solids 2.4 B 2.4 B 0.0 (0-20) SM20 2540D 12/02-12/03/10 0336342 mg/L Dilution Factor: 1 Analysis Time..: 11:11 MS Run Number..: 0336197

## NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.