

## **CBS** Corporation

Environmental Remediation 11 Stanwix Street Pittsburgh, PA 15222

December 7, 2008

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 report on the status of 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 defined in the Order. This report covers activities during the period of November 1 through November 30, 2008 and transmits the discharge monitoring report for this period.

# 1. Site Activities and Status

- A. On November 7, 2008, CBS submitted to NYSDEC a revised work plan for the partial closure those portions of the groundwater collection system that drain to Sumps 001 and 002 in response to the NYSDEC comments forwarded to CBS and the Niagara Frontier Transportation Authority (NFTA) via its letter dated October 8, 2008.
- B. On November 10, 2008, CBS submitted to NYSDEC a monthly report on the status of both routine and non-routine O&M activities at the Site for the October 2008 operating period. That status report also transmitted the discharge monitoring data for October 2008.
- C. The recovery and treatment system operated from November 1 through November 15, 2008.

William P. Murray, P.E. December 7, 2008 Page 2

- D. While inspecting the treatment system on Saturday, November 15, 2008, Conestoga-Rovers & Associates (CRA) personnel discovered that a bolt had broken on the mounting for the mixer in the pH adjustment tank, allowing the mixer shaft and blade to swing. The mixing blade apparently hit the side of the tank, resulting in a tear in the side of this epoxy-lined steel vessel. CRA personnel then drained down the pH adjustment tank and shut down the system until the tank could be properly repaired.
- E. The treatment system remained down for the remainder of the November operating period, except on November 25, 2008, when CRA manually operated the treatment system to allow for collection of a monthly effluent sample.
- F. The repairs of the pH adjustment tank involved welding to close the tear and reapplying a two-coat epoxy lining in the area of the repair. These repairs were completed on December 2, 2008, and, after allowing the epoxy to thoroughly set and dry, the system was successfully restarted on December 3, 2008.

# 2. Sampling Results and Other Site Data

- A. In November 2008, the groundwater system recovered and treated an estimated 137,000 gallons.<sup>1</sup>
- B. Attachment A provides the discharge monitoring report for November 2008 based on effluent sample collected on November 25, 2008. Attachment B provides the analytical laboratory report for the effluent sample collected on November 25, 2008.
- C. In reviewing the treatment system effluent monitoring information, please note the following:
  - The flow data are provided via on-site readings and calls into the Autodialer. The maximum daily flow was calculated from these data.
  - The pH data are provided via on-site readings, calls into the Autodialer, and laboratory analysis of the monthly effluent sample. 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.

<sup>&</sup>lt;sup>1</sup> Based on additional information and recalculation, the estimated total discharge for October 2008 has been revised to 213,000 gallons from the 219,000 gallons as indicated in the October 008 monthly status report.

D. For the November 2008 reporting period, the effluent complied with all discharge limitations.

# **3.** Upcoming Activities

- A. CBS will continue required O&M activities.
- B. Upon NYSDEC authorization to proceed, CBS will implement the Revised Work Plan (Rev. 1, November 7, 2008) for shutdown of those portions of the groundwater collection system that drain to Sumps 001 and 002.

# 4. **Operational Problems**

- A. Previously reported operational problems associated with elevated pH, hardness, and inflow continue. These operational problems are expected to be largely resolved with the partial shutdown of the collection and treatment system and limitation of inflows to those associated with Sump 003.
- B. As previously observed by and described to NYSDEC, the water levels in Sumps 001 and 002 have risen to the point where the water overtops these manholes during period of high precipitation or system shutdown. This situation will be remedied through closure of these portions of the groundwater collection system.

\* \* \* \*

We trust this submittal satisfies your requirements at this time. If you have questions regarding this status report, please contact me.

Respectfully submitted,

Leo M. Brausch Consultant/Project Engineer

LMB: Attachments

cc: K. P. Lynch, CRA K. Minkel, NFTA

# ATTACHMENT A

# DISCHARGE MONITORING REPORT NOVEMBER 2008

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

Reporting Month & Year Nov-08

Paramet	er	Daily Minimum	Daily Maximum	Units	Daily Maximum (Ibs/day)	Measurement Frequency	Sample Type
Flow	Monitoring Result Discharge Limitation		<b>12,944</b> 28,800	<b>gpd</b> gpd		Continuous Continuous	Meter Meter
рН	Monitoring Result Discharge Limitation	<mark>6.94</mark> 6.5	<b>7.80</b> 8.5	<mark>s.u.</mark> s.u.		5 Weekly	Grab Grab
Total suspended solids	Monitoring Result Discharge Limitation		<b>&lt; 4.0</b> 20	<b>mg/L</b> mg/L	0.48	1 Monthly	Grab Grab
Toluene	Monitoring Result Discharge Limitation		<b>&lt; 1.0</b> 5	<b>ug/L</b> ug/L	< 0.00011	1 Monthly	Grab Grab
Methylene chloride	Monitoring Result Discharge Limitation		<b>&lt; 1.0</b> 10	<b>ug/L</b> ug/L	< 0.00011	1 Monthly	Grab Grab
1,2-dichlorobenzene	Monitoring Result Discharge Limitation		<b>&lt; 1.0</b> 5	ug/L ug/L	< 0.00011	1 Monthly	Grab Grab
cis-1,2-dichloroethylene	Monitoring Result Discharge Limitation		<mark>0.64</mark> 10	<b>ug/L</b> ug/L	0.000069	1 Monthly	Grab Grab
Trichloroethylene	Monitoring Result Discharge Limitation		<b>&lt; 1.0</b> 10	<b>ug/L</b> ug/L	< 0.00011	1 Monthly	Grab Grab
Tetrachloroethylene	Monitoring Result Discharge Limitation		<b>&lt; 1.0</b> 50	<b>ug/L</b> ug/L	< 0.00011	1 Monthly	Grab Grab
Cadmium	Monitoring Result Discharge Limitation		<b>&lt; 0.43</b> 3	<b>ug/L</b> ug/L	< 0.000046	1 Monthly	Grab Grab
Chromium	Monitoring Result Discharge Limitation		<b>0.73</b> 99	<b>ug/L</b> ug/L	0.000079	1 Monthly	Grab Grab

# ATTACHMENT B

# ANALYTICAL LABORATORY REPORT EFFLUENT SAMPLING - NOVEMBER 2008



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

# **ANALYTICAL REPORT**

PROJECT NO. LEO BRAUSCH BUF

Leo Brausch Buffalo Airport

Lot #: C8K260340

Leo Brausch

Leo Brausch Consulting 131 Wedgewood Drive Gibsonia, PA 15044

TESTAMERICA LABORATORIES, INC.

imber

Carrie L. Gamber Project Manager

December 4, 2008

301 Alpha Drive Pittsburgh, PA 15238 tel 412.963.7058 fax 412.963.2468 www.testamericainc.com



# **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
NFESC	NA	NAVY	х
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	X
Arkansas	(#03-022-1)	WW	X
		HW	х
California - NELAC	04224CA	WW	X
		HW	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E87660)	WW	X
		HW	Χ
Illinois – NELAC	(#200005)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	. WW	X
		HW	Χ
Louisiana - NELAC	(#93200)	WW	X
		HW	X
New Hampshire – NELAC	(#203002)	ww _	X
New Jersey - NELAC	(PA-005)	WW	X
		HW	x
New York – NELAC	(#11182)	WW	X
		HW	x
North Carolina	(#434)	WW	X
		HW	Х
Pennsylvania - NELAC	(#02-00416)	WW	X
		HW	X
South Carolina	(#89014001)	ww	X
		HW	X
Utah – NELAC	(STLP)	ww	Х
	<u> </u>	HW	X
West Virginia	(#142)	ww	
		HW	X
Wisconsin	998027800	ww	X
		HW	Х

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 s

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.

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## CASE NARRATIVE

## Leo Brausch Consulting

Lot # C8K260340

## Sample Receiving:

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TestAmerica's Pittsburgh laboratory received one sample on November 26, 2008. 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. All results are included in the report.

## **Metals:**

There were no problems associated with the analysis.

## 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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Nagak talls NY	P.HSBURGH			ſ	Q	Hupertal	¥
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SEQ. DATE TIME SAMPLE No.		SAMPLE 20. of Contair	A A A A A A A A A A A A A A A A A A A		$\langle$		
11112/08/09:20 EFF-1108	M	Water 5	110				
Temo Blank							
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(							
TOTAL NUMBER OF CONTAINERS	ERS	S	Η	HEALTH/CHEMICAL HAZARDS	MICAL H	VZARDS	
HEAM BAILSHED BY: A	DATE: 11 25 OS	RECEIVED BY:	ED BY:			DATE:	
	- 11ME: 030 +-						
RELINUCIONED BY:	DATE: TIME:		EU BY:			DATE: TIMF:	
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	ED BY:			DATE:	
	-   111446						
		WAY BI	L No.				
	SAMPLE TEAM: Lynch		RECEIVED	FOR LABOF	ABORATORY BY	<sup>3Y:</sup> Nº CRA 18005	05
Pink — Sampler Copy	-			IL 26 TIME: _	1:01		
	* Cralor	Sool.	U	· Lismon +	+	1001 (D) APR 28/97(NF) REV. 0 (F-15)	REV 0 (F-15)

# **METHODS SUMMARY**

#### C8K260340

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH (Electrometric) Purgeables	SM20 4500-H+B CFR136A 624	SW846 5030B
Total Suspended Solids SM 2540 D	SM20 2540D	
Trace Inductively Coupled Plasma (ICP) Metals	MCAWW 200.7	MCAWW 200.7

#### References:

- 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", EPA-600/4-79-020, March 1983 and subsequent revisions.
- SM20 "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", 20TH EDITION."

# SAMPLE SUMMARY

#### C8K260340

WO # SAMPLE# CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
K3Q24 001 EFF-1108	11/25/08	09:30
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: EFF-1108

# GC/MS Volatiles

Lot-Sample #: C8K260340-001 Date Sampled: 11/25/08	Date Received:	11/26/08		x: WATER N <b>#:</b> 8335021
<b>Prep Date:</b> 11/29/08	Analysis Date:			
Prep Batch #: 8335075	Analysis Time:	21:15		
Dilution Factor: 1				
	Method	CFR136A 62	:4	
		REPORTING		
PARAMETER	RESULT	LIMIT	UNITS	MDL
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
cis-1,2-Dichloroethene	0.64 J	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	93	(80 - 125)	-	
Toluene-d8	87	(84 - 110)		
Bromofluorobenzene	86	(81 - 112)		

NOTE (S) : J Estimated result. Result is less than RL.

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#### METHOD BLANK REPORT

# GC/MS Volatiles

Client Lot #: C8K260340 MB Lot-Sample #: A8K300000-075	Work Order #: K3T6N1AA	Matrix: WATER
Analysis Date: 11/29/08 Dilution Factor: 1	Prep Date: 11/29/08 Prep Batch #: 8335075	Analysis Time: 15:09

		REPORTI	NG		
PARAMETER	RESULT	LIMIT	UNITS	METHOD	
Methylene chloride	ND	1.0	ug/L	CFR136A 62	4
Tetrachloroethene	ND	1.0	ug/L	CFR136A 62	4
Toluene	ND	1.0	ug/L	CFR136A 62	4
cis-1,2-Dichloroethene	ND	1.0	ug/L	CFR136A 62	4
Trichloroethene	ND	1.0	ug/L	CFR136A 62	4
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 62	4
	PERCENT	RECOVER	Y		
SURROGATE	RECOVERY	LIMITS			
1,2-Dichloroethane-d4	97	(80 - 1)	25)		
Toluene-d8	85	(84 - 1)	10)		
Bromofluorobenzene	90	(81 - 1)	12)		

## NOTE (S) :

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

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #:		Work Order #: K3T6N1AC	Matrix WATER
LCS Lot-Sample#:	A8K300000-075		
Prep Date:	11/29/08	Analysis Date: 11/29/08	
Prep Batch #:	8335075	Analysis Time: 14:22	
Dilution Factor:	1		

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Benzene	89	(37 - 151)	CFR136A 624
Bromodichloromethane	95	(35 - 155)	CFR136A 624
Bromoform	89	(45 - 169)	CFR136A 624
Bromomethane	117	(10 - 242)	CFR136A 624
Carbon tetrachloride	104	(70 - 140)	CFR136A 624
Chlorobenzene	90	(37 - 160)	CFR136A 624
Chloroethane	97	(14 - 230)	CFR136A 624
2-Chloroethyl vinyl ether	100	(10 - 305)	CFR136A 624
Chloroform	97	(51 - 138)	CFR136A 624
Chloromethane	68	(10 - 273)	CFR136A 624
Dibromochloromethane	97	(53 - 149)	CFR136A 624
1,3-Dichlorobenzene	82	(59 - 156)	CFR136A 624
1,4-Dichlorobenzene	82	(18 - 190)	CFR136A 624
1,1-Dichloroethane	93	(59 - 155)	CFR136A 624
1,2-Dichloroethane	102	(49 - 155)	CFR136A 624
1,1-Dichloroethene	129	(10 - 234)	CFR136A 624
trans-1,2-Dichloroethene	99	(54 - 156)	CFR136A 624
1,2-Dichloropropane	84	(10 - 210)	CFR136A 624
cis-1,3-Dichloropropene	82	(10 - 227)	CFR136A 624
trans-1,3-Dichloropropene	75	(17 - 183)	CFR136A 624
Ethylbenzene	81	(37 - 162)	CFR136A 624
1,1,2,2-Tetrachloroethane	91	(46 - 157)	CFR136A 624
1,1,1-Trichloroethane	113	(52 - 162)	CFR136A 624
1,1,2-Trichloroethane	89	(52 - 150)	CFR136A 624
Trichlorofluoromethane	146	(17 - 181)	CFR136A 624
Vinyl chloride	91	(10 - 251)	CFR136A 624
1,2-Dichlorobenzene	87	(18 - 190)	CFR136A 624
Methylene chloride	98	(10 - 221)	CFR136A 624
Tetrachloroethene	84	(64 - 148)	CFR136A 624
Toluene	78	(47 - 150)	CFR136A 624
Trichloroethene	102	(71 - 157)	CFR136A 624

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#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
1,2-Dichloroethane-d4	103	(80 - 125)
Toluene-d8	87	(84 - 110)
Bromofluorobenzene	93	(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 #:	C8K260340	Work Order #:	K3QLF1AC	Matrix: WATER
MS Lot-Sample #:	A8K260274-001			
Date Sampled:	11/24/08	Date Received:	11/26/08	
Prep Date:	11/29/08	Analysis Date:	11/29/08	
Prep Batch #:	8335075	MS Run #:	8335021	
Dilution Factor:	1			

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Benzene	86 a	(90 - 114)	CFR136A 624
Bromodichloromethane	81	(78 - 123)	CFR136A 624
Bromoform	69	(40 - 141)	CFR136A 624
Bromomethane	109	(42 - 160)	CFR136A 624
Carbon tetrachloride	94	(61 - 129)	CFR136A 624
Chlorobenzene	86 a	(90 - 113)	CFR136A 624
Chloroethane	92	(56 - 133)	CFR136A 624
2-Chloroethyl vinyl ether	0.0 a	(10 - 185)	CFR136A 624
Chloroform	92	(90 - 118)	CFR136A 624
Chloromethane	64	(37 - 127)	CFR136A 624
Dibromochloromethane	77	(65 - 123)	CFR136A 624
1,3-Dichlorobenzene	81 a	(90 - 111)	CFR136A 624
1,4-Dichlorobenzene	80 a	(90 - 112)	CFR136A 624
1,1-Dichloroethane	88 a	(90 - 114)	CFR136A 624
1,2-Dichloroethane	93	(90 - 123)	CFR136A 624
1,1-Dichloroethene	131 a	(83 - 129)	CFR136A 624
trans-1,2-Dichloroethene	95	(85 - 116)	CFR136A 624
1,2-Dichloropropane	83 a	(87 - 119)	CFR136A 624
cis-1,3-Dichloropropene	70 a	(77 - 115)	CFR136A 624
trans-1,3-Dichloropropene	64 a	(71 - 114)	CFR136A 624
Ethylbenzene	76 a	(88 - 111)	CFR136A 624
1,1,2,2-Tetrachloroethane	93	(77 - 133)	CFR136A 624
1,1,1-Trichloroethane	105	(82 - 119)	CFR136A 624
1,1,2-Trichloroethane	86 a	(89 - 123)	CFR136A 624
Trichlorofluoromethane	149 a	(62 - 110)	CFR136A 624
Vinyl chloride	91	(50 - 119)	CFR136A 624
1,2-Dichlorobenzene	84 a	(90 - 115)	CFR136A 624
Methylene chloride	92	(78 - 131)	CFR136A 624
Tetrachloroethene	82	(81 - 112)	CFR136A 624
Toluene	76 a	(87 - 112)	CFR136A 624
Trichloroethene	99	(85 - 114)	CFR136A 624
		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
1,2-Dichloroethane-d4		100	(80 - 125)
Toluene-d8 Bromofluorobenzene		86	(84 - 110)
Bromoriuorobenzene	(0	90	(81 - 112)

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## MATRIX SPIKE SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Lot-Sample #...: C8K260340Work Order #...: K3QLF1ACMatrix.....: WATERMS Lot-Sample #: A8K260274-001

NOTE(S):

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## Leo Brausch Consulting

## Client Sample ID: BFF-1108

## TOTAL Metals

Lot-Sample # Date Sampled			Received	: 11/26/08	Matrix:	WATER
PARAMETER	RESULT	REPORTING	; <u>UNITS</u>	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #	.: 8333310					
Cadmium	ND	5.0	ug/L	MCAWW 200.7	11/28-12/02/08	K3Q241AA
		Dilution Fact	or: 1	Analysis Time: 19:26	MS Run #	: 8333226
		MDL	: 0.43			
Chromium	0.73 B	5.0	ug/L	MCAWW 200.7	11/28-12/02/08	K3Q241AC
		Dilution Fact	or: 1	Analysis Time: 19:26	MS Run #	: 8333226
		MDL	: 0.59			

NOTE(S):

B Estimated result. Result is less than RL.

#### METHOD BLANK REPORT

## TOTAL Metals

Client Lot #: C8K260340         Matrix			Matrix: WATER		
PARAMETER	RESULT	REPORTING	UNITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
MB Lot-Sample	#: C8K280000-	310 Prep Ba	atch #:	8333310	
Cadmium	ND	5.0	ug/L	MCAWW 200.7	11/28-12/02/08 K3TGA1AE
		Dilution Fact	or: 1		
		Analysis Time	: 19:15		
Chromium	ND	5.0	ug/L	MCAWW 200.7	11/28-12/02/08 K3TGA1AF
		Dilution Fact	or: 1		
		Analysis Time	: 19:15		

#### NOTE(S):

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

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #:	C8K260340		Matrix: WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS METHOD	PREPARATION- ANALYSIS DATE WORK ORDER #
LCS Lot-Sample#:	C8K280000-	310 Prep Batch #: 833	3310
Cadmium	101	(85 - 115) MCAWW 200.7	11/28-12/02/08 K3TGA1AT
		Dilution Factor: 1 Ana	lysis Time: 19:20
Chromium	103	(85 - 115) MCAWW 200.7	11/28-12/02/08 K3TGA1AU
		Dilution Factor: 1 Ana	lysis Time: 19:20

## NOTE(S):

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

## MATRIX SPIKE SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot Date Sample			ed: 11/26/08	Matrix WATER
PARAMETER	PERCENT RECOVERY	RECOVERY RPD LIMITS RPD LIMIT	S METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
MS Lot-Samp	le #: C8K26	50378-001 Prep Batch #	: 8333310	
Cadmium	99	(70 - 130)	MCAWW 200.7	11/28-12/02/08 K3RCX1CH
	99	(70 - 130) 0.28 (0-20	)) MCAWW 200.7	11/28-12/02/08 K3RCX1CJ
		Dilution Factor: 1		
		Analysis Time: 20:	:15	
		MS Run #: 833	33226	
Chromium	101	(70 - 130)	MCAWW 200.7	11/28-12/02/08 K3RCX1CK
	102	(70 - 130) 0.52 (0-20	) MCAWW 200.7	11/28-12/02/08 K3RCX1CL
		Dilution Factor: 1		
		Analysis Time: 20:	:15	
		MS Run #: 833	33226	

## NOTE(S):

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

.

## Leo Brausch Consulting

## Client Sample ID: EFF-1108

## General Chemistry

Lot-Sample #: C8K260340-001	Work Order #: K3Q24	Matrix: WATER
Date Sampled: 11/25/08	Date Received: 11/26/08	

<u>PARAMETER</u> <b>PH</b>		RL  Dilution Fac		METHOD SM20 4500-H+B Analysis Time: 15:36	PREPARATION- ANALYSIS DATE 11/28/08 MS Run #	PREP BATCH # 8333210 .: 8333167
Total Suspended Solids	ND	4.0	mg/L	SM20 2540D	11/28-11/29/08	8333080
	-	Dilution Fac		Analysis Time: 00:00	MS Run #	.: 8333050

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## METHOD BLANK REPORT

#### General Chemistry

## **Client Lot #...:** C8K260340

Matrix.....: WATER

PARAMETER Total Suspended Solids	RESULT	REPORTING LIMIT Work Order	UNITS	METHOD MB Lot-Sample #:	PREPARATION- ANALYSIS DATE C8K280000-080	PREP BATCH #
	ND	4.0 Dilution Facto Analysis Time		SM20 2540D	11/28-11/29/08	8333080
NOTE (S):						

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### General Chemistry

Client Lot #	: C8K26034	0 Matrix: WATER
PARAMETER	PERCENT RECOVERY	RECOVERYPREPARATION -PREPLIMITSMETHODANALYSIS DATEBATCH #
рн	100	Work Order #:         K3R661AA         LCS         Lot-Sample#:         C8K280000-210           (99 - 101)         SM20         4500-H+B         11/28/08         8333210           Dilution Factor:         1         Analysis Time:         00:00
Total Suspended Solids	l	Work Order #: K3RJW1AC LCS Lot-Sample#: C8K280000-080
	98	(80 - 120) SM20 2540D 11/28-11/29/08 8333080 Dilution Factor: 1 Analysis Time: 00:00

## NOTE(S):

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

#### SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #:	C8K260340	Work	Order	<b>#:</b> КЗ КЗ	Q45-SMP Ma	atrix: WATER	
Date Sampled:	11/25/08	Date	Receiv	ed: 11	/26/08		
PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD		REP ATCH #
Total Suspended Solids					SD Lot-Sample	#: C8K260353-001	
8.0	7.6	mg/L Dilution Fac	5.1 tor: 1	(0-20) Ana	SM20 2540D alysis Time: 00:0	11/28-11/29/08 8 0 MS Run Number: 833	

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #: C8K260340	Work Order #: K3Q24-SMP	Matrix WATER
Date Sampled: 11/25/08	K3Q24-DUP Date Received: 11/26/08	

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
рн 7.8	7.8	NO Units Dilution Facto		(0-2.0)	SD Lot-Sample #: SM20 4500-H+B lysis Time: 15:36	C8K260340-001 11/28/08 MS Run Number:	8333210

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