

# **CBS** Corporation

Environmental Remediation 11 Stanwix Street Pittsburgh, PA 15222

October 10, 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 September 1 through September 30, 2008 and transmits the discharge monitoring report for this period.

# **1.** Site Activities and Status

- A. On September 3, 2008, CBS submitted to NYSDEC the Revised Work Plan for the partial closure those portions of the groundwater collection system that drain to Sumps 001 and 002.
- B. On September 17, 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 August 2008 operating period. That status report also transmitted the discharge monitoring data for August 2008.
- C. The recovery and treatment system operated throughout the September 2008 reporting period.

- D. Conestoga-Rovers & Associates (CRA) conducted routine and non-routine O&M on behalf of CBS, and TestAmerica Laboratories, Inc. provided analytical laboratory services, as required.
- E. Pursuant to the agreements reached at the meeting of June 26, 2006, as subsequently documented via CBS' correspondence of August 8, 2006, NYSDEC is working directly with the Niagara Frontier Transportation Authority and Mercy Flight of Western New York, Inc. regarding vapor intrusion issues associated with the redevelopment of the Flying Tigers Area (Area P) of the Site.

# 2. Sampling Results and Other Site Data

- A. In September 2008, the groundwater system recovered and treated an estimated 228,000 gallons.
- B. Attachment A provides the discharge monitoring report for September 2008 based on effluent sample collected on September 21, 2008. Attachment B provides the analytical laboratory report for the effluent sample collected on September 18, 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.
- D. For the September 2008 reporting period, the effluent complied with all discharge limitations.
- E. Table 1 presents the results of influent sampling data, including the most recent influent sample collected on September 18, 2008. Attachment B includes the analytical laboratory report for this influent sample.

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# **3.** Upcoming Activities

- A. CBS will continue required O&M activities.
- B. Upon NYSDEC authorization to proceed, CBS will implement the Revised Work Plan 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 phased 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. 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 TABLE

# Table 1Summary of Treatment SystemInfluent Monitoring Data

				Constituen	t Concentra	ation (ug/L)		
Date of Sampling	Outfall	cis-1,2- dichloroethylene	Toluene	1,1,1- trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
08/21/00	Composite	200 U	200 U	200 U	3,100	200 U	1.5	NA
08/29/00	Composite	200 U	200 U	200 U	8,500	200 U	0.7	NA
09/06/00	Composite	200 U	200 U	200 U	4,100	200 U	0.7 U	NA
09/13/00	Composite	400 U	400 U	400 U	9,600	400 U	1.6	NA
09/20/00	Composite	54 J	100 U	100 U	2,500	100 U	0.6 U	NA
09/27/00	Composite	100 U	100 U	100 U	2,200	100 U	0.68 B	NA
10/04/00	Composite	60 J	100 U	100 U	2,500	100 U	0.69 B	NA
10/10/00	Composite	23 J	25 U	25 U	430	25 U	0.5 U	NA
03/29/01	Composite	9.1 J	10 U	1.4 J	16	10 U	1.5	2.47 U
06/26/01	001	25	5 U	0.9 J	37	5 U	448	NA
06/26/01	002	16	5 U	2.3 J	280	5 U	3.0 U	NA
06/26/01	003	510	5 U	4.5 J	1,700	5 U	3.0 U	NA
09/29/01	Comp - Perm	18	25 U	4 J	8.3 J	10 U	0.25 U	7.4
09/29/01	Comp - Temp	14 J	25 U	25 U	350	25 U	0.25 U	8.7
12/21/01	Composite	14	10 U	10 U	130	10 U	1.7	4.1 U
03/14/02	Composite	18	10 U	10 U	130	10 U	0.29	4.5
10/15/02	Composite	11.3	530	9.0	990	16	5 U	NA
12/15/02	Composite	7.3	19	0.16	46	1.3	8.4	50 U
03/15/03	Composite	7.8	14	1.0	29	NA	21	3 U
06/11/03	Composite	11.0	130	64	570	25 U	4.2	5.5
09/09/03	Composite	8.6	290	25 U	620	15	3.0	3.5
12/10/03	Composite	8.6	54	25 U	430	25 U	2.5	3.0
03/12/04	Composite	7.7	51	2 U	3.9	2 U	1.4	1.6
06/09/04	Composite	8.3	54	40 U	650	40 U	1.8	6.8
09/13/04	Composite	10.3	98	10 U	250	10 U	1.8	2.2
12/13/04	Composite	140	4.4 J	20 U	470	20 U	0.81 B	1.6 B

Table 1
<b>Summary of Treatment System</b>
Influent Monitoring Data

				Constituen	t Concentra	ation (ug/L)		
Date of Sampling	Outfall	cis-1,2- dichloroethylene	Toluene	1,1,1- trichloroethane	Trichloroethylene	Vinyl Chloride	Cadmium	Lead
03/23/05	Composite	46	15 U	15 U	250	15 U	2.1 B	1.5 U
06/09/05	Composite	100	15 U	15 U	1,200	5.4 J	1.2 B	3.0 U
10/03/05	Composite	26	1 U	2.0	8.6	11	5.0 U	3.0 U
12/16/05	Composite	34	5 U	5 U	140	3.5 J	0.68 B	3.0 U
03/13/06	Composite	36	10 U	10 U	190	2.6 J	0.95 B	2.0 B
05/09/06	Composite	87	10 U	10 U	710	5.6 J	1.0 B	3.0 U
06/12/06	Composite	72	3.3 U	3.3 U	190	4.0 J	0.72 B	3.0 U
09/11/06	Composite	16	5 U	5 U	85	5 U	0.47 B	2.0 B
12/11/06	Composite	14	5 U	5 U	71	1.8 J	5.0 U	3.0 U
03/22/07	Composite	32	5 U	2.7 J	130	4.6 J	1.2 B	3.0 U
06/20/07	Composite	31	0.45 J	0.76 J	210	1.7 J	0.44 B	3.0 U
09/17/07	Composite	89	20 U	20 U	730	7.0 J	5.0 U	3.0 U
12/18/07	Composite	18	2 U	2 U	90	1.5 J	5.0 U	3.0 U
03/19/08	Composite	12	0.38 J	1.0 J	120	1.2 J	5.0 U	3.0 U
06/17/08	Composite	20	4 U	4 U	190	2.3 J	5.0 U	3.0 U
09/18/08	Composite	20	2 U	2 U	180	4.4	5.0 U	3.0 U

Data Legend:

"NA" - indicates not analyzed

Detections and estimated values are in **bold-face** type.

Organic data qualifiers:

U - not detected at indicated detection limit

J - estimated concentration below reporting limit but above minimum detection limit.

Inorganic data qualifiers:

U - not detected at indicated detection limit

B - detected concentration below contract required detection limit but above instrument detection limit.

# ATTACHMENT A

# DISCHARGE MONITORING REPORT SEPTEMBER 2008

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

# Reporting Month & Year Sep-08

Paramet	er	Daily Minimum	Daily Maximum	Units	Daily Maximum (Ibs/day)	Measurement Frequency	Sample Type
Flow	Monitoring Result		9,497	gpd		Continuous	Meter
	Discharge Limitation		28,800	gpd		Continuous	Meter
рН	Monitoring Result	6.73	7.40	s.u.		9	Grab
	Discharge Limitation	6.5	8.5	s.u.		Weekly	Grab
Total suspended solids	Monitoring Result		5.2	mg/L	0.46	1	Grab
	Discharge Limitation		20	mg/L		Monthly	Grab
Toluene	Monitoring Result		< 1.0	ug/L	< 0.00008	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
Methylene chloride	Monitoring Result		< 1.0	ug/L	< 0.00008	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
1,2-dichlorobenzene	Monitoring Result		< 1.0	ug/L	< 0.00008	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
cis-1,2-dichloroethylene	Monitoring Result		0.62	ug/L	0.000049	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Trichloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00008	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Tetrachloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00008	1	Grab
	Discharge Limitation		50	ug/L		Monthly	Grab
Cadmium	Monitoring Result		< 0.43	ug/L	< 0.000034	1	Grab
	Discharge Limitation		3	ug/L		Monthly	Grab
Chromium	Monitoring Result		3.1	ug/L	0.00025	1	Grab
	Discharge Limitation		99	ug/L		Monthly	Grab

# ATTACHMENT B

# LABORATORY ANALYSIS REPORT SEPTEMBER 2008 INFLUENT AND EFFLUENT SAMPLES



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

# ANALYTICAL REPORT

PROJECT NO. LEO BRAUSCH BUF Leo Brausch Buffalo Airport

Lot #: C8I190135

Leo Brausch

Leo Brausch Consulting 131 Wedgewood Drive Gibsonia, PA 15044

TESTAMERICA LABORATORIES, INC.

Samly

Carrie L. Gamber Project Manager

September 29, 2008

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

C8I190135



# **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	X
US Dept of Agriculture	(#P330-07-00101)	Foreign Soil Import Permit	Х
Arkansas	(#03-022-1)	WW	. X
		HW	X
California – NELAC	04224CA	ŴŴ	X
	· · · · · · · · · · · · · · · · · · ·	HW I	X
Connecticut	(#PH-0688)	WW	X
		HW	X
Florida – NELAC	(#E87660)	WW	X
		HW	X
Illinois – NELAC	(#200005)	WW	X
		HW	X
Kansas – NELAC	(#E-10350)	WW	
		HW	Х
Louisiana – NELAC	(#93200)	WW	Х
		HW	X
New Hampshire - NELAC	(#203002)	ww	× _
New Jersey – NELAC	(PA-005)	WW	X
	(	HW	X
New York – NELAC	(#11182)	ww	X
		HW	X
North Carolina	(#434)	WW	×
		HW	X
Pennsylvania - NELAC	(#02-00416)	WW	Х
		HW	X
South Carolina	(#89014001)	WW	X
		HW	X
Utah – NELAC	(STLP)	WW	X
		HW	X
West Virginia	(#142)	WW	X
	, , ,	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 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 # C8I190135

# **Sample Receiving:**

TestAmerica's Pittsburgh laboratory received samples on September 19, 2008. The cooler was received within the proper temperature range.

# GC/MS Volatiles (624):

TestAmerica's North Canton laboratory performed the analysis for volatiles. All data is included in the package.

Sample 0908-IFF was analyzed at a dilution due to target compounds being over the instrument's calibration range.

The method blank had methylene chloride detected between the MDL and the reporting limit. The result was flagged with a "J" qualifier. Any sample that had this compound detected had the result flagged with a "B" qualifier.

# 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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# **METHODS SUMMARY**

#### C81190135

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH (Electrometric)	SM20 4500-H+B	
Purgeables	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

#### C8I190135

WO # SAMPLE# CLIENT SAMPLE ID	SAMPLED SAMP DATE TIME
KW7FV 001 0908-EFF	09/18/08 09:00
KW7F1 002 0908-IFF	09/18/08 09:00
NOTE (S) :	

- 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: 0908-EFF

# GC/MS Volatiles

Lot-Sample #: C8I190135-001	Work Order #: KW7FV1AD	Matrix WATER
Date Sampled: 09/18/08	Date Received: 09/19/08	MS Run #: 8268236
Prep Date: 09/24/08	Analysis Date: 09/24/08	
Prep Batch #: 8268441	Analysis Time: 01:46	
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	0.62 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	110	(80 - 12	5)	
Toluene-d8	93	(84 - 11	0)	
Bromofluorobenzene	. 86	(81 - 11	2)	

#### NOTE (S) :

J Estimated result. Result is less than RL.

# Leo Brausch Consulting

# Client Sample ID: 0908-IFF

# GC/MS Volatiles

Lot-Sample #: C8I190135-002	Work Order #: KW7F11AE	Matrix WATER
Date Sampled: 09/18/08	Date Received: 09/19/08	MS Run #: 8268236
Prep Date: 09/24/08	Analysis Date: 09/24/08	
Prep Batch #: 8268441	Analysis Time: 16:19	
Dilution Factor: 2		
	Method: CFR136A 624	

		REPORTIN	G		
PARAMETER	RESULT	LIMIT	UNITS	MDL	
1,2-Dichlorobenzene	ND	2.0	ug/L	0.26	
cis-1,2-Dichloroethene	20	2.0	ug/L	0.34	
Methylene chloride	1.2 J,B	2.0	ug/L	0.66	
Tetrachloroethene	ND	2.0	ug/L	0.58	
Toluène	ND	2.0	ug/L	0.26	
1,1,1-Trichloroethane	ND	2.0	ug/L	0.44	
Trichloroethene	180	2.0	ug/L	0.34	
Vinyl chloride	4.4	2.0	ug/L	0.44	
	PERCENT	RECOVERY			
SURROGATE	RECOVERY	LIMITS			
1,2-Dichloroethane-d4	112	(80 - 12	5)		
Toluene-d8	93	(84 - 11	0)		
Bromofluorobenzene	87	(81 - 11)	2)		

#### NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

# METHOD BLANK REPORT

# GC/MS Volatiles

Client Lot #: C8I190135 MB Lot-Sample #: A8I240000-441	Work Order #: KXH8L1AA	Matrix WATER
Analysis Date: 09/23/08 Dilution Factor: 1	Prep Date: 09/23/08 Prep Batch #: 8268441	Analysis Time: 20:01

		REPORTIN		
PARAMETER	RESULT	LIMIT	UNITS	METHOD
Toluene	ND	1.0	ug/L	CFR136A 624
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 624
1,1,1-Trichloroethane	ND	1.0	ug/L	CFR136A 624
Methylene chloride	0.33 J	1.0	ug/L	CFR136A 624
Tetrachloroethene	ND	1.0	ug/L	CFR136A 624
Trichloroethene	ND	1.0	ug/L	CFR136A 624
Vinyl chlorid <b>e</b>	ND	1.0	ug/L	CFR136A 624
cis-1,2-Dichloroethene	ND	1.0	ug/L	CFR136A 624
	PERCENT	RECOVERY	Z.	
SURROGATE	RECOVERY	LIMITS		•
1,2-Dichloroethane-d4	113	(80 - 12	25)	
Toluene-d8	95	(84 - 11	LO)	
Bromofluorobenzene	90	(81 - 11	-	

#### NOTE (S) :

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

J Estimated result. Result is less than RL.

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

 Client Lot #...: C8I190135
 Work Order #...: KXH8L1AC
 Matrix.....: WATER

 LCS Lot-Sample#: A8I240000-441
 Prep Date....: 09/23/08
 Matrix.....: WATER

 Prep Date.....: 09/23/08
 Analysis Date..: 09/23/08
 Prep Batch #...: 8268441
 Analysis Time..: 18:47

 Dilution Factor: 1
 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Benzene	87	(37 - 151)	CFR136A 624
Bromodichloromethane	86	(35 - 155)	CFR136A 624
Bromoform	63	(45 - 169)	CFR136A 624
Bromomethane	100	(10 - 242)	CFR136A 624
Carbon tetrachloride	84	(70 - 140)	CFR136A 624
Chlorobenzene	86	(37 - 160)	CFR136A 624
Chloroethane	91	(14 - 230)	CFR136A 624
2-Chloroethyl vinyl ether	92	(10 - 305)	CFR136A 624
Chloroform	95	(51 - 138)	CFR136A 624
Chloromethane	77	(10 - 273)	CFR136A 624
Dibromochloromethane	77 .	(53 - 149)	CFR136A 624
1,3-Dichlorobenzene	79	(59 - 156)	CFR136A 624
1,4-Dichlorobenzene	77	(18 - 190)	CFR136A 624
1,1-Dichloroethane	. 94	(59 - 155)	CFR136A 624
1,2-Dichloroethane	111	(49 - 155)	CFR136A 624
1,1-Dichloroethene	127	(10 - 234)	CFR136A 624
trans-1,2-Dichloroethene	101	(54 - 156)	CFR136A 624
1,2-Dichloropropane	88	(10 - 210)	CFR136A 624
cis-1,3-Dichloropropene	76	(10 - 227)	CFR136A 624
trans-1,3-Dichloropropene	70	(17 - 183)	CFR136A 624
Ethylbenzene	82	(37 - 162)	CFR136A 624
1,1,2,2-Tetrachloroethane	87	(46 - 157)	CFR136A 624
1,1,2-Trichloroethane	89	(52 - 150)	CFR136A 624
Trichlorofluoromethane	1 <b>26</b>	(17 - 181)	CFR136A 624
1,2-Dichlorobenzene	84	(18 - 190)	CFR136A 624
Methylene chloride	93	(10 - 221)	CFR136A 624
Tetrachloroethene	76	(64 - 148)	CFR136A 624
Toluene	82	(47 - 150)	CFR136A 624
1,1,1-Trichloroethane	97	(52 - 162)	CFR136A 624
Trichloroethene	90	(71 - 157)	CFR136A 624
Vinyl chloride	83	(10 - 251)	CFR136A 624

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

# GC/MS Volatiles

Client Lot #: C8I190135 LCS Lot-Sample#: A8I240000-441	Work Order #: KXH8L1AC	Matrix: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	117	(80 - 125)
Toluene-d8	94	(84 - 110)
Bromofluorobenzene	96	(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 #: C8	8I190135	Work Order #:	KXDQ11AC	Matrix	WATER
MS Lot-Sample #: A8	81220171-002				
Date Sampled: 09	9/22/08	Date Received:	09/22/08		
Prep Date: 09	9/24/08	Analysis Date:	09/24/08		
Prep Batch #: 82	268441	MS Run #:	8268236		
Dilution Factor: 1					

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
	86 a	(90 - 114)	CFR136A 624
Bromodichloromethane	78	(78 - 123)	CFR136A 624
Bromoform	50	(40 - 141)	CFR136A 624
Bromomethane	101	(42 - 160)	CFR136A 624
Carbon tetrachloride	72	(61 - 129)	CFR136A 624
Chlorobenzene	89 a	(90 - 113)	CFR136A 624
Chloroethane	89	(56 - 133)	CFR136A 624
2-Chloroethyl vinyl ether	0.0 a	(10 - 185)	CFR136A 624
Chloroform	98	(90 - 118)	CFR136A 624
Chloromethane	75	(37 - 127)	CFR136A 624
Dibromochloromethane	66	(65 - 123)	CFR136A 624
1,3-Dichlorobenzene	79 a	(90 - 111)	CFR136A 624
1,4-Dichlorobenzene	74 a	(90 - 112)	CFR136A 624
1,1-Dichloroethane	94	(90 - 114)	CFR136A 624
1,2-Dichloroethane	111	(90 - 123)	CFR136A 624
1,1-Dichloroethene	121	(83 - 129)	CFR136A 624
trans-1,2-Dichloroethene	98	(85 - 116)	CFR136A 624
1,2-Dichloropropane	86 a	(87 - 119)	CFR136A 624
cis-1,3-Dichloropropene	64 a	(77 - 115)	CFR136A 624
trans-1,3-Dichloropropene	59 a	(71 - 114)	CFR136A 624
Ethylbenzene	80 a	(88 - 111)	CFR136A 624
1,1,2,2-Tetrachloroethane	91	(77 - 133)	CFR136A 624
1,1,2-Trichloroethane	91	(89 - 123)	CFR136A 624
Trichlorofluoromethane	124 a	(62 - 110)	CFR136A 624
1,2-Dichlorobenzene	83 a	(90 - 115)	CFR136A 624
Methylene chloride	91	(78 - 131)	CFR136A 624
Tetrachloroethene	78 a	(81 - 112)	CFR136A 624
Toluene	83 a	(87 - 112)	CFR136A 624
1,1,1-Trichloroethane	87	(82 - 119)	CFR136A 624
Trichloroethene	89	(85 - 114)	CFR136A 624
Vinyl chloride	80	(50 - 119)	CFR136A 624
	2		
		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
1,2-Dichloroethane-d4		113	(80 - 125)
Toluene-d8		96	(84 - 110)
Bromofluorobenzene		96	(81 - 112)
·	(Cont	inued on next page)	

C8I190135

# MATRIX SPIKE SAMPLE EVALUATION REPORT

# GC/MS Volatiles

Lot-Sample #...: C8I190135 Work Order #...: KXDQ11AC MS Lot-Sample #: A8I220171-002 Matrix.....: WATER

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.

# Client Sample ID: 0908-EFF

## TOTAL Metals

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-	: C8I190135 : 09/18/08		Received.	.: 09/19/08	Matrix: WATER
PARAMETER	RESULT	REPORTI	NG <u>UNITS</u>	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
Prep Batch #	: 8266261	• •			
Cadmium	ND	5.0	ug/L	MCAWW 200.7	09/22-09/24/08 KW7FV1AA
		Dilution Fac	ctor: 1	Analysis Time: 18:50	MS Run #: 8270213
		MDL	: 0.43		
Chromium	3.1 B	5.0	ug/L	MCAWW 200.7	09/22-09/24/08 KW7FV1AC
		Dilution Fac	ctor: 1	Analysis Time: 18:50	MS Run # 8270213
		MDL	: 0.59		

NOTE (S) :

B Estimated result. Result is less than RL.

# Client Sample ID: 0908-IFF

#### TOTAL Metals

Lot-Sample #...: C8I190135-002 Date Sampled...: 09/18/08

Date Received..: 09/19/08

Matrix....: WATER

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- WORK ANALYSIS DATE ORDER #
Prep Batch #.	: 8266261			
Cadmium	ND	5.0 ug/L Dilution Factor: 1 MDL 0.43	MCAWW 200.7 Analysis Time: 18:45	09/22-09/24/08 KW7F11AA MS Run #: 8270213
Chromium	5.9	5.0 ug/L Dilution Factor: 1 MDL 0.59	MCANW 200.7 Analysis Time: 18:45	<b>09/22-09/24/08 KW7F11AD</b> MS Run #: 8270213
Lead	ND	3.0 ug/L Dilution Factor: 1 MDL 2.4	MCAWW 200.7 Analysis Time: 18:45	09/22-09/24/08 KW7F11AC MS Run #: 8270213

#### METHOD BLANK REPORT

#### TOTAL Metals

#### **Client Lot #...:** C8I190135

Matrix....: WATER

PARAMETER	RESULT	REPORTING LIMIT UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample	#: C8122000	0-261 Prep Batch #.	: 8266261		
Cadmium	ND	5.0 ug/L	MCAWW 200.7	09/22-09/24/08	KXDC81A0
		Dilution Factor: 1			
		Analysis Time: 17:2	2		
Chromium	ND	5.0 ug/L	MCAWW 200.7	09/22-09/24/08	KXDC81AC
		Dilution Factor: 1			
		Analysis Time: 17:2	2		
Lead	ND	3.0 ug/L	MCAWW 200.7	09/22-09/24/08	KXDC81CE
		Dilution Factor: 1			
		Analysis Time: 17:2	2		-
		-			

NOTE (S) :

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

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

## **Client Lot #...:** C8I190135

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	C81220000-	261 Prep Ba	tch #: 8266261		
Chromium	97		MCAWW 200.7	09/22-09/24/08	KXDC81AK
		Dilution Facto	or: 1 Analysis	Time: 17:28	
Cadmium	98		MCAWW 200.7		KXDC81A4
		Dilution Facto	or: 1 Analysis	Time: 17:28	
Lead	98	(85 - 115) Dilution Facto		09/22-09/24/08 Time: 17:28	KXDC81CF

#### NOTE (S) :

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

# Leo Brausch Consulting

# Client Sample ID: 0908-EFF

# General Chemistry

Lot-Sample #: C8I190135-001	Work Order #: KW7FV	Matrix: WATER
Date Sampled: 09/18/08	Date Received: 09/19/08	· · · · · · · · · · · · · · · · · · ·

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.4		No Units	SM20 4500-H+B	09/20/08	8264109
	D	ilution Fa	ctor: 1	Analysis Time: 14:01	MS Run #	.: 8264056
	м	DL	:			
Total Suspended Solids	ND	4.0	mg/L	SM20 2540D	09/19-09/20/08	8263248
	D	ilution Fa	ctor: 1	Analysis Time: 00:00	MS Run #	.: 8263145
	м	DL	: 2.0			

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# Leo Brausch Consulting

# Client Sample ID: 0908-IFF

# General Chemistry

Lot-Sample #: Date Sampled:			order #: Received:		Matrix:	WATER
PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #

Dilution Factor: 1

MDL....: --

-- No Units SM20 4500-H+B

Analysis Time..: 14:03

09/20/08

MS Run #.....: 8264056

8264109

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#### METHOD BLANK REPORT

#### General Chemistry

## **Client Lot #...:** C8I190135

# Matrix....: WATER

		REPORTING	3		PREPARATION-	PREP
PARAMETER	RESULT	LIMIT	UNITS	METHOD	ANALYSIS DATE	BATCH #
Total Suspended Solids		Work Order	#: KW7VN1AA	MB Lot-Sample #	: C8I190000-248	
	ND	4.0	mg/L	SM20 2540D	09/19-09/20/08	8263248
		Dilution Fact	or: 1			
		Analysis Time	00:00			

#### NOTE (S) :

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

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

# General Chemistry

# **Client Lot #...:** C8I190135

Matrix....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS METHOD Work Order #: KXATH1AA LC	PREPARATION- ANALYSIS DATE	PREP BATCH #
-	101	(99 - 101) SM20 4500-H+B	09/20/08 rsis Time: 00:00	8264109
Total Suspended Solids		Work Order #: KW7VN1AC LC	S Lot-Sample#: C8I190000	-248
	96	(80 - 120) SM20 2540D Dilution Factor: 1 Analy	09/19-09/20/08 sis Time: 00:00	8263248

#### NOTE (S) :

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

#### SAMPLE DUPLICATE EVALUATION REPORT

# General Chemistry

Client Lot #:	C8I190135	Work Or	der #:	KW4XM-SMP MA	atrix: WATER
Date Sampled:	09/17/08	Date Re	ceived:		
<u>PARAM</u> <u>RESULT</u> Total Suspended Solids	DUPLICATE RESULT	<u>UNITS R</u>	RPD LIMIT		PREPARATION- PREP ANALYSIS DATE BATCH # #: C8I180175-001
3.2 B	2.0 B	mg/L 4 Dilution Factor	6 (0-20 r:1	)) SM20 2540D Analysis Time: 00:0	09/19-09/20/08 8263248 00 MS Run Number: 8263145

#### NOTE(S):

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

B Estimated result. Result is less than RL.

# SAMPLE DUPLICATE EVALUATION REPORT

# General Chemistry

Client Lot #: C8I190135	Work Order #: KW7FV-SMP	Matrix: WATER
	KW7FV-DUP	
Date Sampled: 09/18/08	Date Received: 09/19/08	

		DUPLICATE			RPD		PREPARATION-	PREP
	RESULT	RESULT	UNITS	<u>RPD</u>	LIMIT	METHOD	ANALYSIS DATE	BATCH #
рН						SD Lot-Sample #:	C8I190135-001	
	7.4	7.4	No Units	0.13	(0-2.0)	SM20 4500-H+B	09/20/08	8264109
		· D	ilution Fact	or: 1	Ana	lysis Time: 14:01	MS Run Number:	8264056