

#### **CBS** Corporation

Environmental Remediation 11 Stanwix Street Pittsburgh, PA 15222

August 16, 2006

Thomas J. Biel Geologist New York State Department of Environmental Conservation Division of Environmental 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. Biel:

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 under the Order. This report covers activities during the period of July 1 through July 31, 2006 and transmits the discharge monitoring report for this reporting period.

#### 1. Site Activities and Status

- A. On July 19, 2006, CBS submitted to NYSDEC a monthly report on the status of both routine and non-routine O&M activities at the Site for the June 2006 operating period. That status report also transmitted the discharge monitoring data for June 2006.
- B. The recovery and treatment system operated throughout the July 2006 reporting period.
- C. Conestoga-Rovers & Associates (CRA) conducted routine O&M on behalf of CBS.
- D. Severn Trent Laboratories, Inc. (STL) provided analytical laboratory services, as required.

- E. Pursuant to the meeting discussions of June 26, 2006, CBS prepared a work plan for phased shut-down of the recovery and treatment system operating in the central and southern portion of the Site.<sup>1</sup>
- F. Also as a follow-up to the June 26, 2006 meeting, CBS prepared a letter to NYSDEC laying out its understanding of the agreed-upon actions to be undertaken with respect to the Flying Tigers Area (Area P) at the northern end of the Site.<sup>2</sup> CBS understands that NYSDEC will work directly with representatives of the Niagara Frontier Transportation Authority (NFTA) and Mercy Flight of Western New York, Inc. (Mercy Flight) regarding vapor intrusion controls for the new Mercy Flight operations centers and that NFTA will coordinate directly with NYSDEC regarding the environmental restrictive covenants to be applied to and the delineation of Area P.

#### 2. **Sampling Results and Other Site Data**

- In July 2006, the groundwater system recovered an estimated 402,000 gallons. A.
- B. Attachment A provides the discharge monitoring report for July 2006 based on effluent samples collected on July 27 and July 31, 2006.<sup>3</sup> Attachment B includes the analytical laboratory reports for the effluent samples collected on July 27 and July 31, 2006.
- 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.

CBS submitted this work plan to NYSDEC on August 3, 2006.

<sup>&</sup>lt;sup>2</sup> CBS submitted this letter to NYSDEC on August 8, 2006.

<sup>&</sup>lt;sup>3</sup> As a result of a problem encountered while shipping the July 27, 2006 from the STL laboratory in Pittsburgh to the STL laboratory in North Canton, Ohio for volatile organic compound (VOC) analyses, the VOC samples arrived in North Canton with a cooler temperature well above 4° Celsius. General chemistry and metals analyses, which were analyzed at the STL Pittsburgh laboratory, were not affected by this shipping problem. The July 27 sample was not analyzed for VOCs, and the effluent was re-sampled on July 31, 2006 for VOC analysis.

- 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 July 2006 reporting period, the effluent complied with all discharge limitations, except for pH. The minimum observed pH in the discharge was 6.40, compared to the minimum specified in the discharge authorization of 6.5. The average pH of the system discharge in July 2006 (i.e., geometric mean of 11 readings) was 6.73.

# 3. Upcoming Activities

- A. CRA will continue routine operation of the recovery and treatment system until NYSDEC pending NYSDEC review and approval of the termination work plan.
- B. As needed, Encotech, Inc. will conduct supplemental maintenance of the treatment facility focused on issues related to system sustainability and treatment efficiency.
- C. Upon NYSDEC approval, CBS will implement the termination work plan in accordance with the schedule provided therein.
- D. CBS will work to support NFTA and Mercy Flight as needed to implement the actions agreed upon at the June 26, 2006 meeting to address NYSDEC concerns regarding potential vapor intrusion in Area P of the Site.

#### 4. **Operational Problems**

- A. In various areas, the collected groundwater exhibits a high hardness and pH that are likely related to the use of crushed concrete as fill in site redevelopment. The hardness precipitates as calcium and magnesium carbonate. This fine precipitate rapidly plugs pumps, piping, filters, and activated carbon adsorbers, greatly increasing the level of effort required to operate the treatment system. CBS has been unable to implement effective measures to address this high solids loading.
- B. The inflow to the collection system exceeds the routine withdrawal rate from the three collection sumps. This imbalance is caused, in part, by downtime for sump pump maintenance due to clogging with precipitate. It is also suspected that surface water inflows continue to occur.

Thomas J. Biel August 16, 2006 Page 4

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 JULY 2006

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

Reporting Month & Year J

Jul-06

Parame	ter	Daily Minimum	Daily Maximum	Units	Daily Maximum (Ibs/day)	Measurement Frequency	Sample Type
Flow	Monitoring Result		23,250	gpd		Continuous	Meter
	Discharge Limitation		28,800	gpd		Continuous	Meter
рН	Monitoring Result	6.40	7.09	s.u.		11	Grab
	Discharge Limitation	6.5	8.5	s.u.		Weekly	Grab
Total suspended solids	Monitoring Result		< 4.0	mg/L	< 0.78	1	Grab
	Discharge Limitation		20	mg/L		Monthly	Grab
Toluene	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
Methylene chloride	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
1,2-dichlorobenzene	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		5	ug/L		Monthly	Grab
cis-1,2-dichloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Trichloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		10	ug/L		Monthly	Grab
Tetrachloroethylene	Monitoring Result		< 1.0	ug/L	< 0.00019	1	Grab
	Discharge Limitation		50	ug/L		Monthly	Grab
Cadmium	Monitoring Result		0.64	ug/L	0.00012	1	Grab
	Discharge Limitation		3	ug/L		Monthly	Grab
Chromium	Monitoring Result		< 5.0	ug/L	< 0.00097	1	Grab
	Discharge Limitation		99	ug/L		Monthly	Grab

8/16/2006 Page 1 of 1

# ATTACHMENT B LABORATORY ANALYSIS REPORT JULY 2006 EFFLUENT SAMPLES



STL Pittsburgh 301 Alpha Drive Pittsburgh, PA 15238

Tel: 412 963 7058 Fax: 412 963 2468 www.stl-inc.com

# ANALYTICAL REPORT

PROJECT NO. VIACOM

Viacom Buffalo Airport

Lot #: C6G280343

Leo Brausch

Leo Brausch Consulting

SEVERN TRENT LABORATORIES, INC.

Carrie L. Gamber

Project Manager

August 3, 2006

# SEVERN STL



# **NELAC REPORTING:**

The format and content of the attached report meets NELAC standards and guidelines except as noted in the narrative. The table below presents a summary of the certifications held by STL 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	STL Pittsburgh
NFESC	NA	NAVY	Х
USACE	NA	Corps of Engineers	X
US Dept of Agriculture	(#\$-46425)	Foreign Soil Import Permit	X
Arkansas	(#03-022-1)	WW HW	X X
Califomia – nelac	04224CA	WW HW	X
Connecticut	(#PH-0688)	WW HW	X
Florida – nelac	(#E87660)	ww	X
Illinois – nelac	(#200005)	HW WW HW	X X
Kansas – nelac	(#E-10350)	WW HW	X
Louisiana nelac	(#93200)	WW HW	X
New Hampshire – nelac	(#203002)	ww	X
New Jersey - nelac	(PA-005)	WW HW	
New York – nelac	(#11182)	WW HW	X
North Carolina	(#434)	WW HW	×
Ohio Vap	(#CL0063)	WW HW	X X
Pennsylvania - nelac	(#02-00416)	WW HW	×
South Carolina	(#89014001)	WW HW	X
Utah – nelac	(STLP)	WW HW	X
West Virginia	(#142)	WW HW	X
Wisconsin	998027800	WW HW	X X X

The codes utilized for program types are described below:

HW Hazardous Waste certification

WW Non-potable Water and/or Wastewater certification

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: 04/27/06

#### CASE NARRATIVE

# Leo Brausch Consulting

Viacom Buffalo Airport

STL Lot # C6G280343

# Sample Receiving:

STL Pittsburgh received one sample on July 28, 2006. The cooler was received within the proper temperature range.

Sample volume was received for volatile analysis; however, when the sample was received at STL-North Canton it was received outside of proper temperature. Per Leo Brausch, the sample volume for voas will be retaken and submitted. This lot number is C6H010293.

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.

#### 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.

# **METHODS SUMMARY**

#### C6G280343

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH (Electrometric)	MCAWW 150.1	MCAWW 150.1
Non-Filterable Residue (TSS)	MCAWW 160.2	MCAWW 160.2
Trace Inductively Coupled Plasma (ICP) Metals	MCAWW 200.7	MCAWW 200.7

#### References:

MCAWW

"Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

# **SAMPLE SUMMARY**

#### C6G280343

WO # S	AMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME	
H98V1	001	EFF0706	07/27/06	15:50	
370mm (a)		•			

#### 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.

# CHAIN OF CUSTODY RECORD

				T															
	REMARKS													SC		DATE: TIME:	DATE:		No CRA 01218
														ALTH/CHEMICAL HAZARD					FOR LABBARATORY BY: 28/06 TIME: 0950
	No. of Contair	3 / /												HE	RECEIVED BY:	RECEIVED BY:	RECEIVED BY:	WAY BILL No.	CENTEL ALA TE: 71
TED AME:														ITAINERS	DATE: 7-27-00	DATE: TIME:	DATE: TIME:		SAMPLE TEAM:
	SAMPLE	2010 117												TOTAL NUMBER OF CON	Jan			ENT: Frader	-Fully Executed Copy -Receiving Laboratory Copy -Shipper Copy -Sampler Copy
SAMPLER'S SIGNATURE:	SEQ. DATE TIME	7-27-6 350													RELINQUISHED BY	RELINQUISHED BY	RELINQUISHED BY	METHOD OF SHIPM	White Yellow Pink Goldenrod
	PRINTED E JUNK RS NAME:	PRINTED NAME: SAMPLE No.  PRINTED SAMPLE SAMPLE No.	TIME SAMPLE No. TYPE 20 APPLE	TIME SAMPLE NO. TYPE 20 OF TYPE 2	PRINTED NAME: SAMPLE SAMPLE SC APPLE SC ST	TIME SAMPLE SO SA SAMPLE SO SAMPLE S	TIME SAMPLE NO. TYPE 200 ATT 2 1 1 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2	TIME SAMPLE NO.  350 LFL 020Z  350 LFL 020Z	TIME SAMPLE NO. TYPE ZOO CONTROL OF THE ZOO CONTROL	TIME SAMPLE NO. TYPE 20 ATTHE	TIME SAMPLE SOMPLE SOMP	TIME SAMPLE No. TYPE 20 CONTRIBUTION OF THE SAMPLE NO. TY	TIME SAMPLE No. TYPE ZOONES 3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TIME SAMPLE NO. TYPE ZONIBINES  320 LLL 070Z  320 LLL 070Z	TIME SAMPLE NO. SAMPLE NO. TYPE 20 APPLICATION OF A	TIME SAMPLE NO.  TYPE SEAMONE	TIME SAMPLE NO. TYPE 20 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time   Sample   Sam	TIME   SAMPLE NO.   SAMPLE   SO.   SAMPLE   SAMPLE   SAMPLE   SAMPLE   SAMPLE   SAMPLE   SAMPLE   SAMPLE   SA

1001 (D) APR 28/97(NF) REV. 0 (F-15)

#### Leo Brausch Consulting

# Client Sample ID: EFF0706

#### TOTAL Metals

Lot-Sample #...: C6G280343-001

Date Sampled...: 07/27/06

Date Received..: 07/28/06

Matrix....: WATER

PARAMETER	RESULT	REPORTI	NG UNITS	METHOI	<b>.</b>	PREPARATION- ANALYSIS DATE	WORK ORDER #
						THE DATE DATE	ONDER #
Prep Batch #	: 6213345						
Cadmium	0.64 B	5.0	ug/L	MCAWW	200.7	08/01-08/02/06	H98V11A
		Dilution Fa	ctor: 1	Analysis	Time: 16:10	MS Run #	
		MDL	: 0.31				
Chromium	ND	5.0	ug/L	MCAWW	200.7	08/01-08/02/06	H98V11A
		Dilution Fac	ctor: 1	Analysis	Time: 16:10	MS Run #	: 6213187
		MDL	: 0.80			•	

B Estimated result. Result is less than RL.

# Leo Brausch Consulting

# Client Sample ID: EFF0706

#### General Chemistry

Lot-Sample #...: C6G280343-001 Work Order #...: H98V1

Matrix..... WATER

Date Sampled...: 07/27/06

Date Received..: 07/28/06

PARAMETER	RESULT	<u>RL</u>	UNITS	METHO		PREPARATION- ANALYSIS DATE	PREP BATCH #
pН	6.8		No Units	MCAWW	150.1	07/29/06	6210128
	Di	lution Fa	ctor: 1	Analysis	Time: 15:01	MS Run #	.: 6210112
	ME	L	:				
Total Suspended Solids	ND	4.0	mg/L	MCAWW	160.2	08/01/06	6213050
		lution Fa		Analysis	Time: 00:00	MS Run #	.: 6213027

#### METHOD BLANK REPORT

#### TOTAL Metals

Client Lot #...: C6G280343

Matrix..... WATER

PARAMETER	RESULT	REPORTIN	NG UNITS	METHOL	)	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample	#: C6H01000	0-345 <b>Prep</b> B	Batch #:	6213345		,	
Cadmium	ND	5.0 Dilution Fac Analysis Tim	ug/L tor: 1	MCAWW	200.7	08/01-08/02/06	JAENV1AH
Chromium	ND	5.0 Dilution Fac Analysis Tim		MCAWW	200.7	08/01-08/02/06	JAENVIAJ
NOTE (S):							

#### METHOD BLANK REPORT

# General Chemistry

Client Lot #...: C6G280343

Matrix....: WATER

PARAMETER Total Suspended Solids	RESULT	REPORTING LIMIT Work Order	UNITS	METHOD  MB Lot-Sample #:	PREPARATION- ANALYSIS DATE C6H010000-050	PREP BATCH #
	ND	4.0 Dilution Fact Analysis Time		MCAWW 160.2	08/01/06	6213050
NOTE(S):						

# LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### TOTAL Metals

Client Lot #:	C6G280343			Matrix	WATER
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: Cadmium	C6H010000-	(85 - 115)		08/01-08/02/06	JAENV1AM
Chromium	107	(85 - 115) Dilution Facto		08/01-08/02/06	JAENVIAN

NOTE(S):

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

# General Chemistry

Client Lot #...: C6G280343

Matrix....: WATER

PARAMETER PH	PERCENT RECOVERY	RECOVERY LIMITS Work Order	METHOD #: JAATD1AA LCS Lot-	PREPARATION- ANALYSIS DATE Sample#: C6G290000	PREP BATCH #
-	100	(99 - 101) Dilution Fact	MCAWW 150.1	07/29/06	6210128
Total Suspended Solids		Work Order	#: JADF41AC LCS Lot-	Sample#: C6H010000	-050
	101	(80 - 120) Dilution Fact	MCAWW 160.2 or: 1 Analysis Time	08/01/06 e: 00:00	6213050

NOTE(S):

#### TOTAL Metals

	Client Lot #: C6G280343 Matrix: WATER  Date Sampled: 08/01/06 Date Received: 08/01/06									
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #				
MS Lot-Samp	le #: C6H0]	0119-004 Prep B	atch #	: 6213345						
Cadmium	96	(70 - 130)		MCAWW 200.7	08/01-08/02/06	JADPC1A2				
	97	(70 - 130) 1.0	(0-20)	MCAWW 200.7	08/01-08/02/06	JADPC1A3				
		Dilution Fact	tor: 1							
		Analysis Time	e: 16:27	•	•					
		MS Run #	: 62131	.87						
Chromium	98	(70 - 130)		MCAWW 200.7	08/01-08/02/06	JADPC1A5				
	99	(70 - 130) 0.43	(0-20)	MCAWW 200.7	08/01-08/02/06					
•		Dilution Fact	or: 1							
		Analysis Time	2: 16:27	•						
		MS Run #	: 62131	87						
NOTE(S):										

#### SAMPLE DUPLICATE EVALUATION REPORT

#### General Chemistry

Client Lot #...: C6G280343 Work Order #...: H98V1-SMP Matrix.....: WATER

H98V1-DUP

PARAM pH	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD SD Lot-Sample #:	PREPARATION- ANALYSIS DATE C6G280343-001	PREP BATCH #	
	6.8	6.8	No Units	0.15	(0-2.0)	MCAWW 150.1	07/29/06	6210128	
			Dilution Fact	or: 1	Ana	lysis Time: 15:01	MS Run Number:	6210112	
Total Solid	Suspended s					SD Lot-Sample #:	C6G280343-001		
	ND	ND	mg/L Dilution Fact	0 or: 1	(0-20) Ana	MCAWW 160.2 lysis Time: 00:00	08/01/06 MS Run Number:	6213050 6213027	



STL Pittsburgh 301 Alpha Drive Pittsburgh, PA 15238

Tel: 412 963 7058 Fax: 412 963 2468 www.stl-inc.com

# **ANALYTICAL REPORT**

PROJECT NO. VIACOM

Viacom Buffalo Airport

Lot #: C6H010293

Leo Brausch

Leo Brausch Consulting

SEVERN TRENT LABORATORIES, INC.

Carrie L. Gamber

Project Manager

August 16, 2006

Tamber





#### **NELAC REPORTING:**

The format and content of the attached report meets NELAC standards and guidelines except as noted in the narrative. The table below presents a summary of the certifications held by STL 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	Confidence	Program types	A PL D'A
NFESC	110	·	STL Pittsburgh
USACE	NA NA	NAVY	X
US Dept of Agriculture	(#S-46425)	Corps of Engineers	X
Arkansas	(#03-022-1)	Foreign Soil Import Permit	X
, and the second	(#03-022-1)	ww	X
California – nelac	04224CA	HW	X
Gamorina - Holac	04224CA	ww	Х
Connecticut	(#PH-0688)	HW	X
- Commodicate	(#FП-0000)	ww	X
Florida – nelac	(#E87660)	HW	X
1 101104 1 110120	(#E6766U)	ww	Х
Illinois – nelac	(#200005)	HW	X
marolo nolad	(#200005)	ww	. X
Kansas – nelac	(#E-10350)	HW	X
, Kanoda – Holac	(#E-10350)	ww	X
Louisiana – nelac	(#93200)	HW	X
200000110 110120	(#93200)	ww.	
New Hampshire - nelac	(#203002)	· HW	X
The state of the s	(#203002)	WW	X
New Jersey nelac	(PA-005)		-
110100	(FA-005)	ww	X
New York nelac	(#11182)	HW	X X
TOWN TOTAL THORSE	(#11102)	WW	
North Carolina	(#434)	HW	X
	(#-04)	WW HW	X
Ohio Vap	(#CL0063)		X
	(#020003)	WW HW	X
Pennsylvania - nelac	(#02-00416)	WW	X
	(,,52 55+15)	HW	X
South Carolina	(#89014001)	WW	X
	(	HW	X
Utah - nelac	(STLP)	ww	X
	(-1/	HW	X
West Virginia	(#142)	WW	X X
•	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	HW	
Wisconsin	998027800	WW	X
	3333.000	HW	×

The codes utilized for program types are described below:

HW Hazardous Waste certification
WW Non-potable Water and/or Was

Non-potable Water and/or Wastewater certification

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: 04/27/06

#### **CASE NARRATIVE**

# Leo Brausch Consulting Viacom

Buffalo Airport

#### STL Lot # C6H010293

# Sample Receiving:

STL Pittsburgh received one sample on August 1, 2006. 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(624):

The matrix spike and matrix spike duplicate recovered outside the control limits for 2-chloroethyl vinyl ether. 2-chloroethyl vinyl ether does not recover well in an acid preserved sample.

# **METHODS SUMMARY**

#### C6H010293

PARAMETER ANALYTICAL PREPARATION METHOD METHOD

Purgeables CFR136A 624 CFR136A 624

#### References:

CFR136A

"Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

# SAMPLE SUMMARY

#### C6H010293

<u>wo # s</u>	AMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JAE47	001	EFF0706-R	07/31/06	14:05

#### 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.

# CHAIN OF CUSTODY RECORD

REFERENCE NUMBER: 1803 C	VACON. BUFELL AIMIT	3/1000000	HEMARKS								HEALTH/CHEMICAL HAZARDS	DATE: TIME:	DATE: TIME:	DATE: TIMF:	Commence of the control of the contr	ABORATORY RV:	No CRA 01219	ME: 0930
SHIPPED TO (Laboratory Name): REFER			SAMPLE SO TYPE ZO TYPE	Late- 3 3							HEALTH/CHE	DC RECEIVED BY:	RECEIVED BY:	RECEIVED BY:	WAY BILL No.	OEIVED FOR		PATE: 08-01-00 TIME:
	2371 George Culan Stud Pottes Sura	PRINTED O Solle	SAMPLE No.	EFF 0706-R							TOTAL NUMBER OF CONTAINERS	DATE: 7-3/-	DATE:	DATE:	Tuday	Lider Expended Com.   CAMPIE TEAM.	oratory Copy	-Sampler Copy
	CONFESION OF STATE OF	SAMPLER'S SIGNATURE:	SEQ. DATE TIME	7-3/02 205								RELINGUISMED BY	RELINQUISHED BY:	RELINQUISHED BY:	METHOD OF SHIPMENT:		Yellow	enrod

#### Leo Brausch Consulting

# Client Sample ID: RFF0706-R

#### GC/MS Volatiles

Lot-Sample #...: C6H010293-001 Work Order #...: JAE471AA Matrix.....: WATER

Date Sampled...: 07/31/06 Date Received..: 08/01/06 MS Run #....: 6226297

 Prep Date....:
 08/14/06
 Analysis Date..:
 08/14/06

 Prep Batch #...:
 6226084
 Analysis Time..:
 15:28

Dilution Factor: 1

Method....: CFR136A 624

70.7	\ <b>*</b> ~   <b>*</b> ~	'ING
W M	 314 1	* I NI:

PARAMETER	RESULT	LIMIT	UNITS	MDL	
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.27	
1,2-Dichlorobenzene	ND	1.0	ug/L	0.20	
Methylene chloride	ND	1.0	ug/L	0.40	•
Tetrachloroethene	ND	1.0	ug/L	0.21	
Toluene	ND	1.0	ug/L	0.18	
Trichloroethene	ND	1.0	ug/L	0.22	

	PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS
4-Bromofluorobenzene	96	(70 - 118)
1,2-Dichloroethane-d4	99	(64 - 135)
Toluene-d8	100	(71 - 118)
Dibromofluoromethane	100	(64 - 128)

#### METHOD BLANK REPORT

#### GC/MS Volatiles

Client Lot #...: C6H010293 Work Order #...: JA9T01AA Matrix.....: WATER

MB Lot-Sample #: C6H140000-084

Prep Date....: 08/14/06 Analysis Time..: 11:07

Dilution Factor: 1

NOTE(S):

		REPORTII	NG	
PARAMETER	RESULT	LIMIT	UNITS	METHOD
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 624
cis-1,2-Dichloroethene	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
	PERCENT	RECOVER	Y	
SURROGATE	RECOVERY	LIMITS		
4-Bromofluorobenzene	96	(70 - 13	18)	
1,2-Dichloroethane-d4	100	(64 - 13	35)	
Toluene-d8	102	(71 - 13	18)	
Dibromofluoromethane	103	(64 - 12	28)	

#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: C6H010293 Work Order #...: JA9T01AC Matrix...... WATER

LCS Lot-Sample#: C6H140000-084

 Prep Date....:
 08/14/06
 Analysis Date..:
 08/14/06

 Prep Batch #...:
 6226084
 Analysis Time..:
 10:18

Dilution Factor: 1

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
1,2-Dichlorobenzene	97	(63 - 137)	CFR136A 624
Benzene	98	(64 - 136)	CFR136A 624
Bromodichloromethane	106	(65 - 135)	CFR136A 624
Bromoform	115	(71 - 129)	CFR136A 624
Bromomethane	90	(14 - 186)	CFR136A 624
Carbon tetrachloride	106	(73 - 127)	CFR136A 624
Chloroethane	90	(38 - 162)	CFR136A 624
Chloroform	94	(67 - 133)	CFR136A 624
Chloromethane	84	(1.0- 204)	CFR136A 624
1,1-Dichloroethene	101	(50 - 150)	CFR136A 624
1,1-Dichloroethane	99	(72 - 128)	CFR136A 624
trans-1,2-Dichloroethene	99	(69 - 131)	CFR136A 624
1,2-Dichloroethene	98	(69 - 131)	CFR136A 624
(total)			
1,2-Dichloroethane	98	(68 - 132)	CFR136A 624
Methylene chloride	97	(60 <b>- 14</b> 0)	CFR136A 624
1,1,1-Trichloroethane	102	(75 - 125)	CFR136A 624
1,2-Dichloropropane	100	(34 - 166)	CFR136A 624
Tetrachloroethene	97	(73 - 127)	CFR136A 624
Toluene	99	(74 - 126)	CFR136A 624
cis-1,3-Dichloropropene	105	(24 - 176)	CFR136A 624
Trichloroethene	99	(66 - 134)	CFR136A 624
Dibromochloromethane	112	(67 - 133)	CFR136A 624
1,1,2-Trichloroethane	100	(71 - 129)	CFR136A 624
trans-1,3-Dichloropropene	103	(50 - 150)	CFR136A 624
1,1,2,2-Tetrachloroethane	99	(60 - 140)	CFR136A 624
Chlorobenzene	96	(66 - 134)	CFR136A 624
Ethylbenzene	98	(59 - 141)	CFR136A 624
2-Chloroethyl vinyl ether	101	(1.0- 224)	CFR136A 624
Acrylonitrile	106	(10 - 200)	CFR136A 624
Xylenes (total)	97	(37 - 162)	CFR136A 624
Acrolein	105	(10 - 200)	CFR136A 624
Dichlorodifluoromethane	75	(10 - 200)	CFR136A 624
Carbon disulfide	93	(35 - 150)	CFR136A 624

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#### LABORATORY CONTROL SAMPLE EVALUATION REPORT

#### GC/MS Volatiles

Client Lot #...: C6H010293 Work Order #...: JA9T01AC Matrix.....: WATER

LCS Lot-Sample#: C6H140000-084

	PERCENT	RECOVERY	
PARAMETER	RECOVERY	LIMITS	METHOD
Naphthalene	104	(50 - 150)	CFR136A 624
Vinyl chloride	86	(4.0- 196)	CFR136A 624
Styrene	99	(70 - 130)	CFR136A 624
Trichlorofluoromethane	81	(48 - 152)	CFR136A 624
1,3-Dichlorobenzene	96	(73 - 127)	CFR136A 624
1,4-Dichlorobenzene	95	(63 - 137)	CFR136A 624
		PERCENT	RECOVERY
SURROGATE		RECOVERY	LIMITS
4-Bromofluorobenzene		95	(70 - 118)
1,2-Dichloroethane-d4		96	(64 - 135)
Toluene-d8		94	(71 - 118)
Dibromofluoromethane		96	(64 - 128)

NOTE(S):

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

Bold print denotes control parameters

#### GC/MS Volatiles

Client Lot #...: C6H010293 Work Order #...: JAE471AC-MS Matrix..... WATER

MS Lot-Sample #: C6H010293-001 JAE471AD-MSD

Date Sampled...: 07/31/06 Date Received..: 08/01/06 MS Run #.....: 6226297

 Prep Date....:
 08/14/06
 Analysis Date..:
 08/14/06

 Prep Batch #...:
 6226084
 Analysis Time..:
 17:11

Dilution Factor: 1

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
1,2-Dichlorobenzene	92	(18 - 190)			CFR136A 624
	94	(18 - 190)	2.2	(0-40)	CFR136A 624
Benzene	103	(37 - 151)			CFR136A 624
	105	(37 - 151)	2.2	(0-40)	CFR136A 624
Bromodichloromethane	115	(35 - 155)			CFR136A 624
	124	(35 - 155)	7.4	(0-40)	CFR136A 624
Bromoform	124	(45 - 169)			CFR136A 624
	138	(45 - 169)	11	(0-43)	CFR136A 624
Bromomethane	102	(1.0- 242)			CFR136A 624
	79	(1.0- 242)	25	(0-40)	CFR136A 624
Carbon tetrachloride	108	(70 - 140)			CFR136A 624
	104	<b>(70 - 140)</b>	3.4	(0-40)	CFR136A 624
Chloroethane	96	(14 - 230)			CFR136A 624
	84	(14 - 230)	13	(0-40)	CFR136A 624
Chloroform	102	(51 - 138)			CFR136A 624
	103	(51 - 138)	0.68	(0-40)	CFR136A 624
Chloromethane	90	(1.0- 273)			CFR136A 624
	83	(1.0- 273)	8.6	(0-40)	CFR136A 624
1,1-Dichloroethene	105	(1.0- 234)			CFR136A 624
	96	(1.0-234)	8.8	(0-40)	CFR136A 624
1,1-Dichloroethane	102	(59 - 155)			CFR136A 624
	102	(59 - 155)	0.53	(0-40)	CFR136A 624
trans-1,2-Dichloroethene	102	(69 - 138)			CFR136A 624
	96	(69 - 138)	6.4	(0-40)	CFR136A 624
1,2-Dichloroethene	103	(69 - 138)			CFR136A 624
(total)					
	100	(69 - 138)	3.1	(0-40)	CFR136A 624
1,2-Dichloroethane	112	(49 - 155)			CFR136A 624
	121	(49 - 155)	7.7	(0-40)	CFR136A 624
Methylene chloride	103	(1.0- 221)			CFR136A 624
	110	(1.0- 221)	6.1	(0-40)	CFR136A 624
1,1,1-Trichloroethane	105	(52 - 162)			CFR136A 624
	98	(52 - 162)	6.2	(0-40)	CFR136A 624
1,2-Dichloropropane	107	(1.0- 210)			CFR136A 624
	114	(1.0- 210)	5.7	(0-40)	CFR136A 624
Tetrachloroethene	89	(64 - 148)			CFR136A 624
	90	(64 - 148)	1.2	(0-40)	CFR136A 624
Toluene	92	<b>(47 - 150)</b>	•		CFR136A 624
	93	(47 - 150)	0.32	(0-40)	CFR136A 624

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#### GC/MS Volatiles

Client Lot #...: C6H010293 Work Order #...: JAE471AC-MS Matrix....: WATER

	PERCENT	RECOVERY		RPD	
PARAMETER	RECOVERY	LIMITS	RPD	LIMITS	METHOD
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cis-1,3-Dichloropropene	112	(1.0- 227)			CFR136A 624
	123	(1.0-227)	9.0	(0-40)	CFR136A 624
Trichloroethene	104	(71 - 157)			CFR136A 624
	102	(71 - 157)	2.0	(0-40)	CFR136A 624
Dibromochloromethane	117	(53 - 149)			CFR136A 624
	126	(53 - 149)	6.8	(0-40)	CFR136A 624
1,1,2-Trichloroethane	104	(52 - 150)			CFR136A 624
	114	(52 - 150)	9.5	(0-40)	CFR136A 624
trans-1,3-Dichloropropene	104	(17 - 183)			CFR136A 624
	115	(17 - 183)	10	(0-40)	CFR136A 624
1,1,2,2-Tetrachloroethane	98	(46 - 157)			CFR136A 624
	105	(46 - 157)	6.1	(0-40)	CFR136A 624
Chlorobenzene	91	(37 - 160)			CFR136A 624
	94	(37 - 160)	4.2	(0-40)	CFR136A 624
<b>Ethylbenzene</b>	92	(37 - 162)			CFR136A 624
	90	(37 - 162)	2.7	(0-40)	CFR136A 624
2-Chloroethyl vinyl ether	0.0 a	(1.0- 305)			CFR136A 624
	0.0 a	(1.0- 305)	0.0	(0-40)	CFR136A 624
Acrylonitrile	125	(10 - 200)			CFR136A 624
	132	(10 - 200)	5.8	(0-40)	CFR136A 624
Xylenes (total)	90	(37 - 162)			CFR136A 624
	92	(37 - 162)	1.3	(0-40)	CFR136A 624
Acrolein	138	(10 - 200)			CFR136A 624
	156	(10 - 200)	12	(0-40)	CFR136A 624
Dichlorodifluoromethane	80	(10 - 200)			CFR136A 624
	70	(10 - 200)	13	(0-40)	CFR136A 624
Carbon disulfide	96	(35 - 150)			CFR136A 624
	87	(35 - 150)	9.8	(0-40)	CFR136A 624
Naphthalene	110	(50 - 150)			CFR136A 624
	113	(50 - 150)	2.6	(0-50)	CFR136A 624
Vinyl chloride	88	(1.0- 251)			CFR136A 624
	79	(1.0- 251)	10	(0-50)	CFR136A 624
Styrene	93	(70 - 130)			CFR136A 624
	99	(70 - 130)	5.4	(0-30)	CFR136A 624
Trichlorofluoromethane	85	(17 - 181)			CFR136A 624
	76	(17 - 181)	12	(0-40)	CFR136A 624
1,3-Dichlorobenzene	88	(59 - 156)			CFR136A 624
	86	(59 - 156)	2.1	(0-40)	CFR136A 624
1,4-Dichlorobenzene	89	(18 - 190)			CFR136A 624
	89	(18 - 190)	0.05	(0-40)	CFR136A 624

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#### GC/MS Volatiles

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	86	(70 - 118)
1,2-Dichloroethane-d4	104	(64 - 135)
	118	(64 - 135)
Toluene-d8	88	(71 - 118)
	89	(71 - 118)
Dibromofluoromethane	103	(64 - 128)
	107	(64 - 128)

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.