

32N03. 6W66

MTH



UCAR CARBON COMPANY INC.

P.O. Box 513, Columbia, TN 38402-0513

RECEIVED

MM

(931) 388-1410

June 14, 2004

JUN 16 2004

Ms. Mary F. McIntosh
Engineering Geologist II
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
270 Michigan Avenue
Buffalo, NY 14203-2999

NYSDEC REG 9
FOIL
REL UNREL

32N03

fold for rest of lab notes

Dear Ms. McIntosh:

Re: Annual Monitoring Event
UCAR Republic SWMF #32N03

The annual monitoring event for the above-referenced Site was conducted between March 23, 2004 and April 28, 2004. The sampling period for this event was extended due to wet ground conditions which restricted access to some of the monitoring points. Monitoring well MW-2 was purged to dryness and did not recover sufficient volume for sampling; therefore, no analytical results were obtained for this well during this monitoring period. The sample collection and analyses were performed in accordance with the program outlined in the letters from M. McIntosh (New York State Department of Environmental Conservation) to R. Bucci (UCAR), dated January 18, 2000 and February 23, 2000. A sample collection and analysis summary is presented in Table 1 and water level elevations measured prior to well purging are presented in Table 2. The analytical laboratory report for this sampling event is enclosed and the data are summarized in Table 3.

The analytical data from this monitoring event are consistent with the historical data.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned. Just to remind you the UCAR location in Niagara Falls has closed it's office, I am still be responsible for the landfill, you may contact me at (716) 297-6772 or by mail at 3344 Wildwood Dr Niagara Falls, New York 14304.

Yours truly,

Robert Bucci
Consultant

Encl.

c.c.: M. Hans
M. Hinton

TABLE 1
 SAMPLE COLLECTION AND ANALYSIS SUMMARY
 POST-CLOSURE MONITORING PROGRAM
 UCAR REPUBLIC SWMU #32NO3
 NIAGARA FALLS, NEW YORK
 APRIL 2004

Well I.D.	Purge Date	Sample Date	Sample Number	One Well Volume (Gallons)	Total Volume Purged (Gallons)	Turbidity (NTU)	Analytical Parameters			Misc. ⁽¹⁾ Parameters	Comments
							VOCs	Total Metals	Dissolved Metals		
MW-1 ✓	04/28/04	04/28/04	GW-5513-0404 011	2.2	2.2	20	x	x		x	
MW-2	04/28/04	-	-	0.6	0.6	>999					(2)
MW-3 ✓	03/23/04	03/23/04	GW-5513-0304 001	1.9	7.6	15	x	x		x	
BW-1 ✓	04/28/04	04/28/04	GW-5513-0404 005	12.5	37.5	48	x	x		x	
BW-2	04/28/04	04/28/04	GW-5513-0404 007	13.4	40.2	32	x	x		x	Blind Duplicate
BW-3 ✓	03/23/04	03/23/04	GW-5513-0304 003	8.7	26.1	0	x	x		x	
BW-4 ✓	04/28/04	04/28/04	GW-5513-0404 006	10.1	30.3	12	x	x		x	
BW-5 ✓	03/23/04	03/23/04	GW-5513-0304 002	14.1	42.3	0	x	x		x	
BW-6 ✓	04/28/04	04/28/04	GW-5513-0404 009	16.4	49.2	140	x	x	x	x	
GW-8B ✓	04/28/04	04/28/04	GW-5513-0404 004	7.8	31.2	13	x	x		x	MS/MSD
GW-9B ✓	04/28/04	04/28/04	GW-5513-0404 010	8.0	32.0	14	x	x		x	

Notes:
 (1) Nitrite, nitrogen, NO₂, ammonia, total kjeldahl nitrogen
 (2) Not sampled, insufficient volume.
 MS Matrix Spike
 MSD Matrix Spike Duplicate
 NM Not Measured.
 NTU Nephelometric Turbidity Unit
 VOCs Volatile Organic Compounds

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TABLE 2
HYDRAULIC MONITORING
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK
APRIL 2004

<i>Well I.D.</i>	<i>TOC Elevation (Ft. AMSL)</i>	<i>Depth to Water (Ft. BTOC)</i>	<i>Water Level Elevation (Ft. AMSL)</i>
MW-1	612.00	7.50	604.50
MW-2	608.17	23.93	584.24
MW-3	601.89	3.10	598.79
BW-1	610.72	13.25	597.47
BW-2	608.43	8.29	600.14
BW-3	604.72	4.16	600.56
BW-4	607.08	5.02	602.06
BW-5	603.33	0.08	603.25
BW-6	607.04	14.02	593.02
GW-8B	603.90	7.00	596.90
GW-9B	603.40	10.16	593.24

Notes:
 AMSL Above Mean Sea Level
 BTOC Below Top of Casing
 Ft. Feet

**ANALYTICAL RESULTS SUMMARY - MARCH/APRIL 2004
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK**

	Sample ID:	GW-5513-0404-005	GW-5513-0404-007	GW-5513-0404-008	GW-5513-0304-003	GW-5513-0404-006	GW-5513-
	Location ID:	BW-1	BW-2	BW-2	BW-3	BW-4	BW-
	Collection Date:	04/28/04	04/28/04	04/28/04 (field duplicate)	03/23/04	04/28/04	03/2:
Parameters	Units						
TCL Volatiles							
Acetone	µg/L	20 U	20 U	20 U	20 U	40 U	20
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Bromomethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
2-Butanone	µg/L	10 U	10 U	10 U	10 U	20 U	10
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	20 U	10
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Chloroethane	µg/L	11 ✓	5.0 U	5.0 U	5.0 U	10 U	5.0
Chloroform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Chloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	660	5.0
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Ethyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	20 U	10
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
4-Methyl-2-pentanone	µg/L	10 U	10 U	10 U	10 U	20 U	10
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	110	5.0
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0

ANALYTICAL RESULTS SUMMARY - MARCH/APRIL 2004
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK

	Sample ID:	GW-5513-0404-005	GW-5513-0404-007	GW-5513-0404-008	GW-5513-0304-003	GW-5513-0404-006	GW-5513-
	Location ID:	BW-1	BW-2	BW-2	BW-3	BW-4	BW-
	Collection Date:	04/28/04	04/28/04	04/28/04 (field duplicate)	03/23/04	04/28/04	03/28/04
Parameters	Units						
TCL Volatiles (Cont'd.)							
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	230	5.0
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	180	5.0
o-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
m/p-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0
Metals							
Iron (total)	mg/L	6.65	2.60	2.20	1.70	8.47	1.43
Potassium (total)	mg/L	8.87	7.75	7.79	2.00 U	17.4	2.04
Zinc (total)	mg/L	2.73	0.359	0.247	0.849	0.493	0.0691
Iron (dissolved)	mg/L	-	-	-	0.100 U	-	0.100
Potassium (dissolved)	mg/L	-	-	-	2.00 U	-	2.00
Zinc (dissolved)	mg/L	-	-	-	0.665	-	0.0616
General Chemistry							
Ammonia	mg/L	0.907	0.634	0.510	0.0500 U	3.05	0.0701
Nitrite	mg/L	0.0101	0.0100 U	0.0100 U	0.0100 U	0.0222	0.0100
Total Kjeldahl Nitrogen	mg/L	1.45	0.942	0.864	0.200 U	3.18	0.289

Notes:

- Not applicable.
- TCL Target Compound List
- U Non-detect at associated value.

**ANALYTICAL RESULTS SUMMARY - MARCH/APRIL 2004
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK**

Sample ID: 0304-002	GW-5513-0404-009	GW-5513-0404-004	GW-5513-0404-010	GW-5513-0404-011	GW-5513-0304-001
Location ID: 1-5	BW-6	GW-8B	GW-9B	MW-1	MW-3
Collection Date: 3/04	04/28/04	04/28/04	04/28/04	04/28/04	03/23/04

<i>Parameters</i>	<i>Units</i>					
TCL Volatiles						
Acetone	µg/L	U	20 U	20 U	20 U	20 U
Benzene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	µg/L	U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	U	5.0 U	21 ✓	5.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl benzene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	µg/L	U	10 U	10 U	10 U	10 U
Styrene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U

**ANALYTICAL RESULTS SUMMARY - MARCH/APRIL 2004
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK**

	<i>Sample ID:</i> 0304-002		GW-5513-0404-009	GW-5513-0404-004	GW-5513-0404-010	GW-5513-0404-011	GW-5513-0304-001
	<i>Location ID:</i> 1-5		BW-6	GW-8B	GW-9B	MW-1	MW-3
	<i>Collection Date:</i> 3/04		04/28/04	04/28/04	04/28/04	04/28/04	03/23/04
<i>Parameters</i>	<i>Units</i>						
TCL Volatiles (Cont'd.)							
Trichloroethene	µg/L	U	5.0 U	8.3	5.0 U	5.0 U	5.0 U
Vinyl chloride	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylenes	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
m/p-Xylenes	µg/L	U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Metals							
Iron (total)	mg/L		14.1	0.428	0.436	3.17	1.74
Potassium (total)	mg/L		2.97	6.66	5.10	4.13	2.56
Zinc (total)	mg/L		0.0612	0.634	0.0200 U	0.0522	0.0200 U
Iron (dissolved)	mg/L	U	-	-	-	6.12	0.100 U
Potassium (dissolved)	mg/L	U	-	-	-	2.00 U	2.00 U
Zinc (dissolved)	mg/L		-	-	-	0.0200 U	0.0200 U
General Chemistry							
Ammonia	mg/L		0.171	0.0500 U	0.462	0.195	0.0500 U
Nitrite	mg/L	U	0.0150	0.0100 U	0.0100 U	0.0165	0.0163
Total Kjeldahl Nitrogen	mg/L		0.544	0.200 U	0.820	0.757	0.353

Notes:

- Not applicable.

TCL Target Compound List

U Non-detect at associated value.



A FULL SERVICE ENVIRONMENTAL LABORATORY

April 12, 2004

Ms. Susan Scrocchi
Conestoga Rovers & Associates
2055 Niagara Falls Blvd.
Suite Three
Niagara Falls, NY 14304

PROJECT:UCAR SEMIANNUAL GW #5513
Submission #:R2420384

Dear Ms. Scrocchi

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

A handwritten signature in cursive script that reads "Karen Bunker". The signature is written in black ink and is positioned above the typed name and title.

Karen Bunker
Project Manager

Enc.



1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Lab Submission # : R2420384
Project Manager : Karen Bunker
Reported : 04/12/04

Report Contains a total of 36 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. *Michael K. Perry*



CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2420384

<u>Lab ID</u>	<u>Client ID</u>
710113	GW-5513-0304-001
710114	GW-5513-0304-002
710115	GW-5513-0304-003
710125	TRIP BLANK 032304
710126	GW-5513-0304-001 DISSOLVED
710127	GW-5513-0304-002 DISSOLVED
710128	GW-5513-0304-003 DISSOLVED

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.



INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL).
- U - if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D - Spike was diluted out
- E - The reported value is estimated because of the presence of interference.
- J - Estimated Value
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
NELAP Accredited

New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292



ORGANIC QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- X - As specified in Case Narrative.
- * - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited

NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-001

M/L 3

Date Sampled : 03/23/04 12:00 Order #: 710113 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.0500 U	MG/L	04/02/04	11:59	1.0
NITRITE NITROGEN	353.2	0.0100	0.0163	MG/L	03/24/04	14:08	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.353	MG/L	03/30/04	10:30	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-001

Date Sampled : 03/23/04 12:00 Order #: 710113 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	1.74	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.56	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.0200 U	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-001 DISSOLVED

Date Sampled : 03/23/04 12:00 Order #: 710126 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.100 U	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.0200 U	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-001

Date Sampled : 03/23/04 12:00 Order #: 710113 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-001

Date Sampled : 03/23/04 12:00 Order #: 710113 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/31/04		
ANALYTICAL DILUTION:	1.00		
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

BROMOFLUOROBENZENE	(83 - 118 %)	93	%
TOLUENE-d8	(88 - 124 %)	101	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	96	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-002

P. 5

Date Sampled : 03/23/04 11:30 Order #: 710114 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.0701	MG/L	04/02/04	11:59	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/24/04	14:08	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.289	MG/L	03/30/04	10:30	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-002

Date Sampled : 03/23/04 11:30 Order #: 710114 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	-1.43	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.04	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.0691	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-002 DISSOLVED

Date Sampled : 03/23/04 11:30 Order #: 710127 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.100 U	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.0616	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-002

Date Sampled : 03/23/04 11:30 Order #: 710114 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/31/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-002

Date Sampled : 03/23/04 11:30 Order #: 710114 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 118 %)	91	%
TOLUENE-d8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	96	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-003

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Date Sampled : 03/23/04 12:15 Order #: 710115 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	1.70	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.849	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-003 DISSOLVED

Date Sampled : 03/23/04 12:15 Order #: 710128 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.100 U	MG/L	04/01/04	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	04/01/04	1.0
ZINC	6010B	0.0200	0.665	MG/L	04/01/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-003

Date Sampled : 03/23/04 12:15 Order #: 710115 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0304-003

Date Sampled : 03/23/04 12:15 Order #: 710115 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 118 %)	89	%
TOLUENE-d8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	94	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
 METHOD 8260B 360 BASELINE
 Reported: 04/12/04

Conestoga Rovers & Associates
 Project Reference: UCAR SEMIANNUAL GW #5513
 Client Sample ID : TRIP BLANK 032304

Date Sampled : 03/23/04 Order #: 710125 Sample Matrix: WATER
 Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : TRIP BLANK 032304

Date Sampled : 03/23/04 Order #: 710125 Sample Matrix: WATER
Date Received: 03/24/04 Submission #: R2420384 Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED		: 03/31/04	
ANALYTICAL DILUTION:		1.00	
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 118 %)	84	%
TOLUENE-d8	(88 - 124 %)	97	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 717848 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2 - BUTANONE (MEK)	10	10 U	UG/L
TRANS - 1 , 4 - DICHLORO - 2 - BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLORO BENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1 , 2 - DIBROMO - 3 - CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1 , 2 - DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1 , 4 - DICHLOROBENZENE	5.0	5.0 U	UG/L
1 , 2 - DICHLOROBENZENE	5.0	5.0 U	UG/L
1 , 1 - DICHLOROETHANE	5.0	5.0 U	UG/L
1 , 2 - DICHLOROETHANE	5.0	5.0 U	UG/L
1 , 1 - DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS - 1 , 2 - DICHLOROETHENE	5.0	5.0 U	UG/L
CIS - 1 , 2 - DICHLOROETHENE	5.0	5.0 U	UG/L
1 , 2 - DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS - 1 , 3 - DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS - 1 , 3 - DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2 - HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4 - METHYL - 2 - PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1 , 1 , 2 , 2 - TETRACHLOROETHANE	5.0	5.0 U	UG/L
1 , 1 , 1 , 2 - TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1 , 1 , 1 - TRICHLOROETHANE	5.0	5.0 U	UG/L
1 , 1 , 2 - TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1 , 2 , 3 - TRICHLOROPROPANE	5.0	5.0 U	UG/L
VINYL ACETATE	10	10 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 04/12/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 717848 Sample Matrix: WATER
Date Received: Submission #: Analytical Run 102031

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/31/04			
ANALYTICAL DILUTION: 1.00			
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 118 %)	95	%
TOLUENE-d8	(88 - 124 %)	103	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	95	%

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/12/04
CAS Order # : 710114 - GW-5513-0304-002
Client : Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513
Reported Units: MG/L
Run # : 101742

PRECISION

ACCURACY

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
0.0701	0.0692	1	0.486	0.500	83	65 - 127

AMMONIA

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/12/04
CAS Order # : 710114 - GW-5513-0304-002
Client : Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513
Reported Units: MG/L
Run # : 101534

PRECISION

ACCURACY

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
0.0100 U	0.0100 U	NC	0.246	0.250	98	45 - 148

NITRITE NITROGEN

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/12/04
CAS Order # : 710114 - GW-5513-0304-002
Client : Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513
Reported Units: MG/L
Run # : 101566

PRECISION

ACCURACY

TOTAL KJELDAHL NITROGEN

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
0.289	0.270	7	2.44	2.50	86	55 - 128

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/12/04
CAS Order # : 710114 - GW-5513-0304-002
Client : Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513
Reported Units: MG/L
Run # : 101737

PRECISION

ACCURACY

IRON

POTASSIUM

ZINC

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
1.43	1.46	2	2.53	1.00	110	75 - 125
2.04	2.05	0	23.0	20.0	105	75 - 125
0.0691	0.0703	2	0.604	0.500	107	75 - 125

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/12/04
CAS Order # : 710127 - GW-5513-0304-002 DISSOLVED
Client : Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513
Reported Units: MG/L
Run # : 101737

PRECISION

ACCURACY

	ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
IRON	0.100 U	0.100 U	NC	1.18	1.00	118	75 - 125
POTASSIUM	2.00 U	2.00 U	NC	22.9	20.0	115	75 - 125
ZINC	0.0616	0.0637	3	0.590	0.500	106	75 - 125

COLUMBIA ANALYTICAL SERVICES

INORGANIC BLANK SPIKE SUMMARY

CAS Submission #: R2420384
Client: Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513

BLANK SPIKES

	BLANK	FOUND	ADDED	% REC	LIMITS	RUN	UNITS
IRON	0.100 U	1.12	1.00	112	80 - 120	101737	MG/L
POTASSIUM	2.00 U	20.3	20.0	102	80 - 120	101737	MG/L
ZINC	0.0200 U	0.573	0.500	115	80 - 120	101737	MG/L
NITRITE NITROGEN	0.0100 U	0.251	0.250	100	90 - 110	101534	MG/L
TOTAL KJELDAHL NITROGEN	0.200 U	2.20	2.50	88	63 - 116	101566	MG/L
AMMONIA	0.0500 U	0.501	0.500	100	90 - 110	101742	MG/L

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
WATER

Spiked Order No. : 710114 Conestoga Rovers & Associates

Client ID: GW-5513-0304-002

Test: 8260B 360 BASELINE

Analytical Units: UG/L

Run Number : 102031

ANALYTE	SPIKE ADDED	CONCENT. SAMPLE	MATRIX SPIKE		MATRIX SPIKE DUP.			QC LIMITS	
			FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.
BENZENE	50.0	0	51.0	102	51.0	102	0	30	62 - 122
CHLOROBENZENE	50.0	0	50.0	100	49.0	98	2	30	70 - 130
1,1-DICHLOROETHENE	50.0	0	46.0	92	46.0	92	0	30	68 - 114
TOLUENE	50.0	0	52.0	104	50.0	100	4	30	70 - 130
TRICHLOROETHENE	50.0	0	50.0	100	50.0	100	0	30	68 - 114

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 717849 ANALYTICAL RUN #: 102031

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED	: 03/31/04		
ANALYTICAL DILUTION:	1.0		
ACETONE	20.0	98	50 - 150
ACRYLONITRILE	100	102	50 - 150
BENZENE	20.0	100	70 - 130
BROMOCHLOROMETHANE	20.0	99	70 - 130
BROMODICHLOROMETHANE	20.0	97	70 - 130
BROMOFORM	20.0	95	70 - 130
BROMOMETHANE	20.0	87	50 - 150
2-BUTANONE (MEK)	20.0	102	50 - 150
TRANS-1,4-DICHLORO-2-BUTENE	20.0	107	50 - 150
CARBON DISULFIDE	20.0	93	70 - 130
CARBON TETRACHLORIDE	20.0	91	70 - 130
CHLOROBENZENE	20.0	100	70 - 130
CHLOROETHANE	20.0	90	70 - 130
CHLOROFORM	20.0	92	70 - 130
CHLOROMETHANE	20.0	87	70 - 130
1,2-DIBROMO-3-CHLOROPROPANE	20.0	110	50 - 150
DIBROMOCHLOROMETHANE	20.0	94	70 - 130
1,2-DIBROMOETHANE	20.0	99	70 - 130
DIBROMOMETHANE	20.0	98	70 - 130
1,4-DICHLOROBENZENE	20.0	101	70 - 130
1,2-DICHLOROBENZENE	20.0	102	70 - 130
1,1-DICHLOROETHANE	20.0	92	70 - 130
1,2-DICHLOROETHANE	20.0	89	70 - 130
1,1-DICHLOROETHENE	20.0	92	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	90	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	97	70 - 130
1,2-DICHLOROPROPANE	20.0	98	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	100	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	99	70 - 130
ETHYLBENZENE	20.0	100	70 - 130
2-HEXANONE	20.0	110	70 - 130
IODOMETHANE	20.0	95	50 - 150
METHYLENE CHLORIDE	20.0	98	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	113	70 - 130
STYRENE	20.0	97	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	110	70 - 130
1,1,1,2-TETRACHLOROETHANE	20.0	101	70 - 130
TETRACHLOROETHENE	20.0	104	70 - 130
TOLUENE	20.0	103	70 - 130
1,1,1-TRICHLOROETHANE	20.0	92	70 - 130
1,1,2-TRICHLOROETHANE	20.0	102	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 717849 ANALYTICAL RUN #: 102031

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED	: 03/31/04		
ANALYTICAL DILUTION:	1.0		
TRICHLOROETHENE	20.0	96	70 - 130
TRICHLOROFLUOROMETHANE	20.0	82	70 - 130
1,2,3-TRICHLOROPROPANE	20.0	110	70 - 130
VINYL ACETATE	20.0	113	50 - 150
VINYL CHLORIDE	20.0	89	70 - 130
M+P-XYLENE	40.0	100	70 - 130
O-XYLENE	20.0	97	70 - 130

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROC Contract: CRA
 Lab Code: 10145 Case No.: R4-20384 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): Z3392.D Date Analyzed: 03/31/04
 Instrument ID: GCMS#2 Time Analyzed: 12:48
 GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	645276	11.97	1098583	13.41	1012513	19.18
UPPER LIMIT	1290552	11.47	2197166	12.91	2025026	18.68
LOWER LIMIT	322638	12.47	549292	13.91	506257	19.68
EPA SAMPLE NO.						
01 LCS	648518	11.97	1165169	13.41	1057344	19.18
02 MET BLK	612629	11.97	1068836	13.41	984564	19.19
03 0304-001	562980	11.97	1012700	13.41	903106	19.18
04 0304-002	563621	11.97	1019834	13.41	905365	19.18
05 0304-003	565243	11.96	1010102	13.41	890895	19.19
06 TRIP BLK 032304	527392	11.97	969925	13.41	832527	19.19
07 0304-002MS	531404	11.97	959878	13.40	885039	19.18
08 0304-002MSD	555696	11.98	992971	13.41	902245	19.19

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROC Contract: CRA
 Lab Code: 10145 Case No.: R4-20384 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): Z3392.D Date Analyzed: 03/31/04
 Instrument ID: GCMS#2 Time Analyzed: 12:48
 GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	467609	24.01				
UPPER LIMIT	935218	23.51				
LOWER LIMIT	233805	24.51				
EPA SAMPLE NO.						
01 LCS	458785	24.02				
02 MET BLK	395591	24.01				
03 0304-001	352958	24.01				
04 0304-002	353863	24.01				
05 0304-003	351220	24.01				
06 TRIP BLK 032304	322928	24.01				
07 0304-002MS	392610	24.01				
08 0304-002MSD	396355	24.01				

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
 * Values outside of contract required QC limits

CHAIN OF CU, ODY RECORD



CONESTOGA-ROVERS & ASSOCIATES
 2055 Niagara Falls Blvd., Suite 3
 Niagara Falls, N.Y. 14304 (716) 297-6150

SHIPPED TO (Laboratory Name):

Columbia

REFERENCE NUMBER: *5513*

*UCAR - Semi Annual
 Gw Sampling*

SAMPLER'S SIGNATURE:

David Tyran

PRINTED NAME:

David Tyran

SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	PARAMETERS							REMARKS	
						VOLs w/ HCL	Metals w/ HNO ₃	Nitrite/Nitrogen	Ammonia	H ₂ O ₂				
	<i>3/23/04</i>	<i>1200</i>	<i>Gw-5513-0304-001</i>	<i>water</i>	<i>6</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>				<i>710113, 710126</i>
	<i>↓</i>	<i>1130</i>	<i>Gw-5513-0304-002</i>	<i>↓</i>	<i>6</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>				<i>710114, 710127</i>
	<i>↓</i>	<i>1215</i>	<i>Gw-5513-0304-003</i>	<i>↓</i>	<i>6</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>				<i>710115, 710128</i>
			<i>Trip Blank 032304</i>	<i>Lab water</i>	<i>3</i>	<i>3</i>								<i>710125</i>
<i>Note: Matrix Spike/Matrix Spike Duplicate Volume taken for Sample 002</i>														
					<i>24</i>									

TOTAL NUMBER OF CONTAINERS

24

HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY:

①

David Tyran

DATE: *3/23/04*

TIME: *1810*

RECEIVED BY:

①

J. Hirth CAS

DATE: *3/24/04*

TIME: *1100*

RELINQUISHED BY:

②

J. Hirth CAS

DATE: *3/24/04*

TIME: *1340*

RECEIVED BY:

②

DATE:

TIME:

RELINQUISHED BY:

③

DATE:

TIME:

RECEIVED BY:

③

DATE:

TIME:

METHOD OF SHIPMENT:

Courier

WAY BILL No.

- White
- Yellow
- Pink
- Goldenrod

- Fully Executed Copy
- Receiving Laboratory Copy
- Shipper Copy
- Sampler Copy

SAMPLE TEAM:

D. Tyran

RECEIVED FOR LABORATORY BY:

David Tyran

NO **N** 3086

DATE: *3/24/04* TIME: *1340*

Cooler Receipt And Preservation Check Form

Project/Client CRA Submission Number R2420384

Cooler received on 3/24/04 by NO COURIER: CAS UPS FEDEX CD&L CLIENT

- | | | | |
|---|----------------|-----------|-----|
| 1. Were custody seals on outside of cooler? | YES | NO | |
| 2. Were custody papers properly filled out (ink, signed, etc.)? | <u>YES</u> | NO | |
| 3. Did all bottles arrive in good condition (unbroken)? | <u>YES</u> | NO | |
| 4. Did any VOA vials have significant air bubbles? | YES | <u>NO</u> | N/A |
| 5. Were Ice or Ice packs present? | <u>YES</u> | NO | |
| 6. Where did the bottles originate? | <u>CAS/ROC</u> | CLIENT | |
| 7. Temperature of cooler(s) upon receipt: <u>1°</u> | | | |

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes

If No, Explain Below No No No No No

Date/Time Temperatures Taken: 3/24/04 1355

Thermometer ID: 161 or IR GUN Reading From: Temp Blank or Sample Bottle

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 3/24/04 by: BC

- | | | | |
|--|------------|----|------------|
| 1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? | <u>YES</u> | NO | |
| 2. Did all bottle labels and tags agree with custody papers? | <u>YES</u> | NO | |
| 3. Were correct containers used for the tests indicated? | <u>YES</u> | NO | |
| 4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated | | | <u>N/A</u> |

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO ₃	<input checked="" type="checkbox"/>				
2	H ₂ SO ₄	<input checked="" type="checkbox"/>				
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H₂SO₄

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2	
<u>2</u>	

Other Comments:

GRAF

UCAR CARBON COMPANY INC.
a GrafTech International Ltd. Company

Advanced Carbon Materials
791 Sante Fe Pike, Columbia, TN 38401

MTF
MM

February 18, 2005

Ms. Mary F. McIntosh
Engineering Geologist II
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
270 Michigan Avenue
Buffalo, NY 14203-2999

RECEIVED

FEB 25 2005

NYSDEC REG 9
FOIL
 REL UNREL

32N03

Dear Ms. McIntosh:

SUBJECT: UCAR Republic SWMF #32N03 2004 Sampling Results

I have enclosed the documents you requested for the March-April sampling event, the laboratory report for the missing samples. I have also included the missing pages of (Table 3). I have also included the field data sheets when they were purging and sampling the wells. I am sorry for the inconvenience

Should you have any questions or require additional information, please do not hesitate to contact the undersigned. at (716) 297-6772 or by mail at 3344 Wildwood Dr Niagara Falls, New York 14304.

Yours truly,



Robert Bucci
Consultant

R. Bucci
Encl.



**CONESTOGA-ROVERS
& ASSOCIATES**

2371 George Urban Blvd, Depew, NY 14043
Telephone: (716) 206-0202 Fax: (716) 206-0201
www.CRAworld.com

TRANSMITTAL

DATE: February 15, 2005 REFERENCE NO.: 005513

PROJECT NAME: UCAR Carbon

TO: Bob Bucci
3344 Wildwood Drive
Niagara Falls, NY 14304

Handwritten initials/signature

Please find enclosed: Draft Final
 Originals Other
 Prints

Sent via: Mail Same Day Courier
 Overnight Courier Other

QUANTITY	DESCRIPTION
1	Analytical data package from Columbia Analytical Services for semi-annual groundwater samples collected March 2004.

As Requested For Review and Comment
 For Your Use

COMMENTS:

Copy to: C. Barron (w/o attachment)
Completed by: S. Scrocchi Signed: *S. Scrocchi*
[Please Print]

Filing: **Correspondence File**



5513
UCAR
Semi-Annual
Mar, Apr 2004

A FULL SERVICE ENVIRONMENTAL LABORATORY

May 20, 2004

Ms. Susan Scrocchi
Conestoga Rovers & Associates
2055 Niagara Falls Blvd.
Suite Three
Niagara Falls, NY 14304

PROJECT:UCAR SEMIANNUAL GW #5513
Submission #:R2420684

Dear Ms. Scrocchi

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

A handwritten signature in cursive script that reads "Karen Bunker".

Karen Bunker
Project Manager

Enc.



1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Lab Submission # : R2420684
Project Manager : Karen Bunker
Reported : 05/20/04

Report Contains a total of 58 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. *Michael K. Perry*



This report contains analytical results for the following samples:

Submission #: R2420684

<u>Lab ID</u>	<u>Client ID</u>
710116	GW-5513-0404-004
710117	GW-5513-0404-005
710118	GW-5513-0404-006
710119	GW-5513-0404-007
710120	GW-5513-0404-008
710121	GW-5513-0404-009
710122	GW-5513-0404-010
710123	GW-5513-0404-011
710124	TB-042804-DMC
710129	GW-5513-0404-009-DISSOLVED

Case Narrative

Company: Conestoga Rovers & Associates, Inc.
Project: UCAR Semiannual GW #5513
Submission #: R2420684

CRA collected UCAR water samples on 4/28/04. Samples were submitted to the laboratory via CAS Courier on 4/29/04, unbroken, on ice at a cooler temperature of 4°C.

VOLATILE ORGANICS

Nine (9) water groundwater samples were analyzed for the Part 360 Baseline List of Volatile Organics, by Method 8260B from SW-846.

All Tuning criteria for BFB were within limits.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits.

Run QC is provided in the report package. All Laboratory Control Sample recoveries were within limits.

Hits above the calibration range of the standards are flagged as "E". The sample is then repeated at the appropriate dilution for the compound. Both sets of data are included in the package.

The Trip Blank and Laboratory Method Blanks associated with this analysis were free from contamination.

The Volatile Internal Standard Area and RT Summary Form 8A's are included in the report.

The sample vials were checked for preservation after analysis so as to maintain the integrity of the sample. All were found to be properly preserved to a pH of <2.

No other analytical or QC problems were encountered.

Inorganics

Eight (8) water samples were submitted for analysis of TKN by method 351.2, Nitrite by method 353.2, Ammonia by method 350.1, and ICP metals- Iron, Potassium, and Zinc by method 6010B. One location was also analyzed for Soluble metals, the aliquot was field filtered.

All initial and continuing calibration criteria was met.

All analyses were completed within the appropriate holding time for the method.

Batch QC is included in the report package. All Blank Spike Recoveries were within QC acceptance limits.

No problems were encountered during the analysis of these samples.



ORGANIC QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- X - As specified in Case Narrative.
- * - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited

NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292



INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL).
- U - if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D - Spike was diluted out
- E - The reported value is estimated because of the presence of interference.
- J - Estimated Value
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

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Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.0500 U	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.200 U	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.428	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	6.66	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.634	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B 360 BASELINE

Reported: 05/20/04

Conestoga Rovers & Associates

Project Reference: UCAR SEMIANNUAL GW #5513

Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116
 Date Received: 04/29/04 Submission #: R2420684

Sample Matrix: WATER
 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	21	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	8.3	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L



**CONESTOGA-ROVERS
& ASSOCIATES**

2371 George Urban Blvd, Depew, NY 14043
Telephone: (716) 206-0202 Fax: (716) 206-0201
www.CRAworld.com

TRANSMITTAL

DATE: February 15, 2005 REFERENCE NO.: 005513

PROJECT NAME: UCAR Carbon

TO: Bob Bucci

3344 Wildwood Drive

Niagara Falls, NY 14304

Please find enclosed: Draft Final
 Originals Other
 Prints

Sent via: Mail Same Day Courier
 Overnight Courier Other

QUANTITY	DESCRIPTION
1	Analytical data package from Columbia Analytical Services for semi-annual groundwater samples collected March 2004.

As Requested For Review and Comment
 For Your Use _____

COMMENTS:

Copy to: C. Barron (w/o attachment)

Completed by: S. Scrocchi

[Please Print]

Signed: *S. Scrocchi*

Filing: **Correspondence File**



5513
UCAR
Semi-Annual
Mar, Apr 2004

A FULL SERVICE ENVIRONMENTAL LABORATORY

May 20, 2004

Ms. Susan Scrocchi
Conestoga Rovers & Associates
2055 Niagara Falls Blvd.
Suite Three
Niagara Falls, NY 14304

PROJECT:UCAR SEMIANNUAL GW #5513
Submission #:R2420684

Dear Ms. Scrocchi

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

A handwritten signature in cursive script that reads 'Karen Bunker'.

Karen Bunker
Project Manager

Enc.



1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Lab Submission # : R2420684
Project Manager : Karen Bunker
Reported : 05/20/04

Report Contains a total of 58 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

Michael K. Perry



This report contains analytical results for the following samples:

Submission #: R2420684

<u>Lab ID</u>	<u>Client ID</u>
710116	GW-5513-0404-004
710117	GW-5513-0404-005
710118	GW-5513-0404-006
710119	GW-5513-0404-007
710120	GW-5513-0404-008
710121	GW-5513-0404-009
710122	GW-5513-0404-010
710123	GW-5513-0404-011
710124	TB-042804-DMC
710129	GW-5513-0404-009-DISSOLVED

Case Narrative

Company: Conestoga Rovers & Associates, Inc.
Project: UCAR Semiannual GW #5513
Submission #: R2420684

CRA collected UCAR water samples on 4/28/04. Samples were submitted to the laboratory via CAS Courier on 4/29/04, unbroken, on ice at a cooler temperature of 4°C.

VOLATILE ORGANICS

Nine (9) water groundwater samples were analyzed for the Part 360 Baseline List of Volatile Organics, by Method 8260B from SW-846.

All Tuning criteria for BFB were within limits.

The initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits.

Run QC is provided in the report package. All Laboratory Control Sample recoveries were within limits.

Hits above the calibration range of the standards are flagged as "E". The sample is then repeated at the appropriate dilution for the compound. Both sets of data are included in the package.

The Trip Blank and Laboratory Method Blanks associated with this analysis were free from contamination.

The Volatile Internal Standard Area and RT Summary Form 8A's are included in the report.

The sample vials were checked for preservation after analysis so as to maintain the integrity of the sample. All were found to be properly preserved to a pH of <2.

No other analytical or QC problems were encountered.

Inorganics

Eight (8) water samples were submitted for analysis of TKN by method 351.2, Nitrite by method 353.2, Ammonia by method 350.1, and ICP metals- Iron, Potassium, and Zinc by method 6010B. One location was also analyzed for Soluble metals, the aliquot was field filtered.

All initial and continuing calibration criteria was met.

All analyses were completed within the appropriate holding time for the method.

Batch QC is included in the report package. All Blank Spike Recoveries were within QC acceptance limits.

No problems were encountered during the analysis of these samples.



ORGANIC QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- X - As specified in Case Narrative.
- * - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

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New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292



INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL).
- U - if the analyte was analyzed for, but not detected

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- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

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West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.0500 U	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.200 U	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.428	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	6.66	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.634	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B 360 BASELINE

Reported: 05/20/04

Conestoga Rovers & Associates

Project Reference: UCAR SEMIANNUAL GW #5513

Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	21	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	8.3	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-004

Date Sampled : 04/28/04 09:30 Order #: 710116 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	93	%
TOLUENE-d8	(88 - 124 %)	97	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	109	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-005

Date Sampled : 04/28/04 10:30 Order #: 710117 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.907	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0101	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	1.45	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-005

Date Sampled : 04/28/04 10:30 Order #: 710117 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	6.65	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	8.87	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	2.73	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
 METHOD 8260B 360 BASELINE
 Reported: 05/20/04

Conestoga Rovers & Associates
 Project Reference: UCAR SEMIANNUAL GW #5513
 Client Sample ID : GW-5513-0404-005

Date Sampled : 04/28/04 10:30 Order #: 710117 Sample Matrix: WATER
 Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/05/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLORO BENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	11	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-005

Date Sampled : 04/28/04 10:30 Order #: 710117 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED		: 05/05/04	
ANALYTICAL DILUTION:		1.00	
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	94	%
TOLUENE-d8	(88 - 124 %)	98	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	110	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	3.05	MG/L	05/07/04	12:45	2.0
NITRITE NITROGEN	353.2	0.0100	0.0222	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	3.18	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	8.47	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	17.4	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.493	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/05/04			
ANALYTICAL DILUTION: 2.00			
ACETONE	20	40 U	UG/L
ACRYLONITRILE	100	200 U	UG/L
BENZENE	5.0	10 U	UG/L
BROMOCHLOROMETHANE	5.0	10 U	UG/L
BROMODICHLOROMETHANE	5.0	10 U	UG/L
BROMOFORM	5.0	10 U	UG/L
BROMOMETHANE	5.0	10 U	UG/L
2-BUTANONE (MEK)	10	20 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	10 U	UG/L
CARBON DISULFIDE	10	20 U	UG/L
CARBON TETRACHLORIDE	5.0	10 U	UG/L
CHLOROBENZENE	5.0	10 U	UG/L
CHLOROETHANE	5.0	10 U	UG/L
CHLOROFORM	5.0	10 U	UG/L
CHLOROMETHANE	5.0	10 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	10 U	UG/L
DIBROMOCHLOROMETHANE	5.0	10 U	UG/L
1,2-DIBROMOETHANE	5.0	10 U	UG/L
DIBROMOMETHANE	5.0	10 U	UG/L
1,4-DICHLOROBENZENE	5.0	10 U	UG/L
1,2-DICHLOROBENZENE	5.0	10 U	UG/L
1,1-DICHLOROETHANE	5.0	10 U	UG/L
1,2-DICHLOROETHANE	5.0	10 U	UG/L
1,1-DICHLOROETHENE	5.0	10 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	10 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	650 E	UG/L
1,2-DICHLOROPROPANE	5.0	10 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	10 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	10 U	UG/L
ETHYLBENZENE	5.0	10 U	UG/L
2-HEXANONE	10	20 U	UG/L
IODOMETHANE	10	20 U	UG/L
METHYLENE CHLORIDE	5.0	10 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	20 U	UG/L
STYRENE	5.0	10 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	10 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	10 U	UG/L
TETRACHLOROETHENE	5.0	110	UG/L
TOLUENE	5.0	10 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	10 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	10 U	UG/L
TRICHLOROETHENE	5.0	230	UG/L
TRICHLOROFLUOROMETHANE	5.0	10 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	10 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	2.00		
VINYL ACETATE	10	20 U	UG/L
VINYL CHLORIDE	5.0	180	UG/L
M+P-XYLENE	5.0	10 U	UG/L
O-XYLENE	5.0	10 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	95	%
TOLUENE-d8	(88 - 124 %)	97	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	108	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/07/04		
ANALYTICAL DILUTION:	5.00		
ACETONE	20	100 U	UG/L
ACRYLONITRILE	100	500 U	UG/L
BENZENE	5.0	25 U	UG/L
BROMOCHLOROMETHANE	5.0	25 U	UG/L
BROMODICHLOROMETHANE	5.0	25 U	UG/L
BROMOFORM	5.0	25 U	UG/L
BROMOMETHANE	5.0	25 U	UG/L
2-BUTANONE (MEK)	10	50 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	25 U	UG/L
CARBON DISULFIDE	10	50 U	UG/L
CARBON TETRACHLORIDE	5.0	25 U	UG/L
CHLOROBENZENE	5.0	25 U	UG/L
CHLOROETHANE	5.0	25 U	UG/L
CHLOROFORM	5.0	25 U	UG/L
CHLOROMETHANE	5.0	25 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	25 U	UG/L
DIBROMOCHLOROMETHANE	5.0	25 U	UG/L
1,2-DIBROMOETHANE	5.0	25 U	UG/L
DIBROMOMETHANE	5.0	25 U	UG/L
1,4-DICHLOROBENZENE	5.0	25 U	UG/L
1,2-DICHLOROBENZENE	5.0	25 U	UG/L
1,1-DICHLOROETHANE	5.0	25 U	UG/L
1,2-DICHLOROETHANE	5.0	25 U	UG/L
1,1-DICHLOROETHENE	5.0	25 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	25 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	660	UG/L
1,2-DICHLOROPROPANE	5.0	25 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	25 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	25 U	UG/L
ETHYLBENZENE	5.0	25 U	UG/L
2-HEXANONE	10	50 U	UG/L
IODOMETHANE	10	50 U	UG/L
METHYLENE CHLORIDE	5.0	25 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	50 U	UG/L
STYRENE	5.0	25 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	25 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	25 U	UG/L
TETRACHLOROETHENE	5.0	100	UG/L
TOLUENE	5.0	25 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	25 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	25 U	UG/L
TRICHLOROETHENE	5.0	230	UG/L
TRICHLOROFLUOROMETHANE	5.0	25 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	25 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-006

Date Sampled : 04/28/04 11:15 Order #: 710118 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED		: 05/07/04	
ANALYTICAL DILUTION:		5.00	
VINYL ACETATE	10	50 U	UG/L
VINYL CHLORIDE	5.0	180	UG/L
M+P-XYLENE	5.0	25 U	UG/L
O-XYLENE	5.0	25 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	97	%
TOLUENE-d8	(88 - 124 %)	100	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	112	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-007

Date Sampled : 04/28/04 12:00 Order #: 710119 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.634	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.942	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-007

Date Sampled : 04/28/04 12:00 Order #: 710119 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	2.60	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	7.75	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.359	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
 METHOD 8260B 360 BASELINE
 Reported: 05/20/04

Conestoga Rovers & Associates
 Project Reference: UCAR SEMIANNUAL GW #5513
 Client Sample ID : GW-5513-0404-007

Date Sampled : 04/28/04 12:00 Order #: 710119 Sample Matrix: WATER
 Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-007

Date Sampled : 04/28/04 12:00 Order #: 710119 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED		: 05/05/04	
ANALYTICAL DILUTION:		1.00	
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	94	%
TOLUENE-d8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	112	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-008

Date Sampled : 04/28/04 12:30 Order #: 710120 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.510	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.864	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-008

Date Sampled : 04/28/04 12:30 Order #: 710120 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	2.20	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	7.79	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.247	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-008

Date Sampled : 04/28/04 12:30 Order #: 710120 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-008

Date Sampled : 04/28/04 12:30 Order #: 710120 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	93	%
TOLUENE-d8	(88 - 124 %)	96	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	108	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-009

Date Sampled : 04/28/04 13:30 Order #: 710121 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.171	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0150	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.544	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-009

Date Sampled : 04/28/04 13:30 Order #: 710121 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	14.1	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	2.97	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.0612	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-009

Date Sampled : 04/28/04 13:30 **Order #:** 710121 **Sample Matrix:** WATER
Date Received: 04/29/04 **Submission #:** R2420684 **Analytical Run** 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-010

Date Sampled : 04/28/04 14:45 Order #: 710122 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.436	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	5.10	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.0200 U	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-010

Date Sampled : 04/28/04 14:45 Order #: 710122 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-010

Date Sampled : 04/28/04 14:45 Order #: 710122 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	94	%
TOLUENE-d8	(88 - 124 %)	97	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	106	%

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-011

Date Sampled : 04/28/04 15:00 Order #: 710123 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.195	MG/L	05/07/04	12:45	1.0
NITRITE NITROGEN	353.2	0.0100	0.0165	MG/L	04/29/04	16:44	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.757	MG/L	05/04/04	10:15	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-009-DISSOLVED

Date Sampled : 04/28/04 13:30 Order #: 710129 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	6.12	MG/L	05/13/04	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	05/13/04	1.0
ZINC	6010B	0.0200	0.0200 U	MG/L	05/13/04	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
 METHOD 8260B 360 BASELINE
 Reported: 05/20/04

Conestoga Rovers & Associates
 Project Reference: UCAR SEMIANNUAL GW #5513
 Client Sample ID : GW-5513-0404-011

Date Sampled : 04/28/04 15:00 Order #: 710123 Sample Matrix: WATER
 Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/05/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : GW-5513-0404-011

Date Sampled : 04/28/04 15:00 Order #: 710123 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	94	%
TOLUENE-d8	(88 - 124 %)	98	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	110	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : TB-042804-DMC

Date Sampled : 04/28/04 Order #: 710124 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Conestoga Rovers & Associates
Project Reference: UCAR SEMIANNUAL GW #5513
Client Sample ID : TB-042804-DMC

Date Sampled : 04/28/04 Order #: 710124 Sample Matrix: WATER
Date Received: 04/29/04 Submission #: R2420684 Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
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DATE ANALYZED : 05/05/04
ANALYTICAL DILUTION: 1.00

VINYL ACETATE	10	10 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

BROMOFLUOROBENZENE	(83 - 119 %)	97	%
TOLUENE-d8	(88 - 124 %)	98	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	109	%

COLUMBIA ANALYTICAL SERVICES

INORGANIC BLANK SPIKE SUMMARY

CAS Submission #: R2420684
Client: Conestoga Rovers & Associates
UCAR SEMIANNUAL GW #5513

BLANK SPIKES

	BLANK	FOUND	ADDED	% REC	LIMITS	RUN	UNITS
IRON	0.100 U	1.13	1.00	113	80 - 120	103578	MG/L
POTASSIUM	2.00 U	21.9	20.0	109	80 - 120	103578	MG/L
ZINC	0.0200 U	0.576	0.500	115	80 - 120	103578	MG/L
NITRITE NITROGEN	0.0100 U	0.246	0.250	98	90 - 110	102898	MG/L
TOTAL KJELDAHL NITROGEN	0.200 U	2.10	2.50	84	63 - 117	102934	MG/L
AMMONIA	0.0500 U	0.514	0.500	103	90 - 110	103192	MG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 728331 ANALYTICAL RUN #: 103706

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.0		
ACETONE	20.0	101	50 - 150
ACRYLONITRILE	100	95	50 - 150
BENZENE	20.0	94	70 - 130
BROMOCHLOROMETHANE	20.0	95	70 - 130
BROMODICHLOROMETHANE	20.0	109	70 - 130
BROMOFORM	20.0	114	70 - 130
BROMOMETHANE	20.0	109	50 - 150
2-BUTANONE (MEK)	20.0	96	50 - 150
TRANS-1,4-DICHLORO-2-BUTENE	20.0	119	50 - 150
CARBON DISULFIDE	20.0	105	70 - 130
CARBON TETRACHLORIDE	20.0	96	70 - 130
CHLOROETHANE	20.0	98	70 - 130
1,1-DICHLOROETHANE	20.0	85	70 - 130
CHLOROFORM	20.0	98	70 - 130
CHLOROMETHANE	20.0	80	70 - 130
1,2-DIBROMO-3-CHLOROPROPANE	20.0	106	50 - 150
DIBROMOCHLOROMETHANE	20.0	110	70 - 130
1,2-DIBROMOETHANE	20.0	104	70 - 130
DIBROMOMETHANE	20.0	98	70 - 130
1,4-DICHLOROBENZENE	20.0	108	70 - 130
1,2-DICHLOROBENZENE	20.0	112	70 - 130
1,1-DICHLOROETHANE	20.0	88	70 - 130
1,2-DICHLOROETHANE	20.0	111	70 - 130
1,1-DICHLOROETHENE	20.0	85	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	84	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	90	70 - 130
1,2-DICHLOROPROPANE	20.0	92	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	99	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	101	70 - 130
ETHYLBENZENE	20.0	97	70 - 130
2-HEXANONE	20.0	102	70 - 130
IODOMETHANE	20.0	99	50 - 150
METHYLENE CHLORIDE	20.0	93	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	100	70 - 130
STYRENE	20.0	96	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	117	70 - 130
1,1,1,2-TETRACHLOROETHANE	20.0	107	70 - 130
TETRACHLOROETHENE	20.0	99	70 - 130
TOLUENE	20.0	91	70 - 130
1,1,1-TRICHLOROETHANE	20.0	89	70 - 130
1,1,2-TRICHLOROETHANE	20.0	98	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 728331 ANALYTICAL RUN #: 103706

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.0		
TRICHLOROETHENE	20.0	89	70 - 130
TRICHLOROFLUOROMETHANE	20.0	89	70 - 130
1,2,3-TRICHLOROPROPANE	20.0	111	70 - 130
VINYL ACETATE	20.0	137	50 - 150
VINYL CHLORIDE	20.0	84	70 - 130
M+P-XYLENE	40.0	99	70 - 130
O-XYLENE	20.0	99	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 728335 ANALYTICAL RUN #: 103706

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED	: 05/07/04		
ANALYTICAL DILUTION:	1.0		
ACETONE	20.0	87	50 - 150
ACRYLONITRILE	100	108	50 - 150
BENZENE	20.0	107	70 - 130
BROMOCHLOROMETHANE	20.0	103	70 - 130
BROMODICHLOROMETHANE	20.0	121	70 - 130
BROMOFORM	20.0	124	70 - 130
BROMOMETHANE	20.0	98	50 - 150
2-BUTANONE (MEK)	20.0	89	50 - 150
TRANS-1,4-DICHLORO-2-BUTENE	20.0	144	50 - 150
CARBON DISULFIDE	20.0	81	70 - 130
CARBON TETRACHLORIDE	20.0	110	70 - 130
CHLOROBENZENE	20.0	112	70 - 130
1,1-DICHLOROETHANE	20.0	100	70 - 130
CHLOROFORM	20.0	112	70 - 130
CHLOROMETHANE	20.0	99	70 - 130
1,2-DIBROMO-3-CHLOROPROPANE	20.0	118	50 - 150
DIBROMOCHLOROMETHANE	20.0	121	70 - 130
1,2-DIBROMOETHANE	20.0	120	70 - 130
DIBROMOMETHANE	20.0	113	70 - 130
1,4-DICHLOROBENZENE	20.0	116	70 - 130
1,2-DICHLOROBENZENE	20.0	120	70 - 130
1,1-DICHLOROETHANE	20.0	98	70 - 130
1,2-DICHLOROETHANE	20.0	120	70 - 130
1,1-DICHLOROETHENE	20.0	94	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	91	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	103	70 - 130
1,2-DICHLOROPROPANE	20.0	103	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	111	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	114	70 - 130
ETHYLBENZENE	20.0	111	70 - 130
2-HEXANONE	20.0	97	70 - 130
IODOMETHANE	20.0	75	50 - 150
METHYLENE CHLORIDE	20.0	104	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	93	70 - 130
STYRENE	20.0	108	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	122	70 - 130
1,1,1,2-TETRACHLOROETHANE	20.0	115	70 - 130
1,1,1,2-TETRACHLOROETHENE	20.0	111	70 - 130
1,1,1,2-TETRACHLOROETHANE	20.0	111	70 - 130
TOLUENE	20.0	104	70 - 130
1,1,1-TRICHLOROETHANE	20.0	100	70 - 130
1,1,2-TRICHLOROETHANE	20.0	114	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B 360 BASELINE

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 728335 ANALYTICAL RUN #: 103706

<u>ANALYTE</u>	<u>TRUE VALUE</u>	<u>% RECOVERY</u>	<u>QC LIMITS</u>
DATE ANALYZED : 05/07/04			
ANALYTICAL DILUTION: 1.0			
TRICHLOROETHENE	20.0	98	70 - 130
TRICHLOROFLUOROMETHANE	20.0	104	70 - 130
1,2,3-TRICHLOROPROPANE	20.0	116	70 - 130
VINYL ACETATE	20.0	141	50 - 150
VINYL CHLORIDE	20.0	98	70 - 130
M+P-XYLENE	40.0	114	70 - 130
O-XYLENE	20.0	115	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 728330 Sample Matrix: WATER
Date Received: Submission #: Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/05/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L
VINYL ACETATE	10	10 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B 360 BASELINE
Reported: 05/20/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 728330	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 05/05/04		
ANALYTICAL DILUTION:	1.00		
VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
BROMOFLUOROBENZENE	(83 - 119 %)	93	%
TOLUENE-d8	(88 - 124 %)	97	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	107	%

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: 10145 Contract: CRA
 Lab Code: CAS/ROC Case No.: R4-20684 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): B5252.D Date Analyzed: 05/05/04
 Instrument ID: MSVOA5 Time Analyzed: 11:24
 GC Column: db-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	305658	9.97	542154	11.32	547835	16.84
UPPER LIMIT	611316	9.47	1084308	10.82	1095670	16.34
LOWER LIMIT	152829	10.47	271077	11.82	273918	17.34
EPA SAMPLE NO.						
01 LCS1	314430	9.98	565442	11.31	569840	16.84
02 MET BLK1	305877	9.97	552522	11.31	540248	16.84
03 TB-042804	286490	9.96	500421	11.30	505507	16.83
04 004	278744	9.96	501710	11.30	502674	16.83
05 005	279006	9.96	495735	11.30	497268	16.83
06 006	273076	9.96	492110	11.30	482735	16.83
07 007	272142	9.96	481875	11.30	487935	16.83
08 008	268044	9.96	487416	11.29	478488	16.82
09 009	264925	9.96	478089	11.30	473575	16.83
10 010	267509	9.96	476126	11.29	468755	16.82
11 011	261436	9.96	468049	11.29	466957	16.82
12 004MS	263608	9.96	475151	11.29	480795	16.82
13 004MSD	275521	9.96	505556	11.29	502982	16.82

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: 10145 Contract: CRA
 Lab Code: CAS/ROC Case No.: R4-20684 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): B5252.D Date Analyzed: 05/05/04
 Instrument ID: MSVOA5 Time Analyzed: 11:24
 GC Column: db-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	306391	21.55				
UPPER LIMIT	612782	21.05				
LOWER LIMIT	153196	22.05				
EPA SAMPLE NO.						
01 LCS1	301594	21.55				
02 MET BLK1	279798	21.54				
03 TB-042804	263081	21.54				
04 004	249937	21.53				
05 005	253162	21.53				
06 006	253998	21.53				
07 007	252325	21.53				
08 008	249453	21.52				
09 009	248843	21.53				
10 010	241579	21.53				
11 011	241273	21.52				
12 004MS	274169	21.52				
13 004MSD	275331	21.53				

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
 * Values outside of contract required QC limits

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
 METHOD 8260B 360 BASELINE
 Reported: 05/20/04

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 728334 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 103706

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/07/04			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
ACRYLONITRILE	100	100 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
TRANS-1,4-DICHLORO-2-BUTENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMO-3-CHLOROPROPANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,2-DIBROMOETHANE	5.0	5.0 U	UG/L
DIBROMOMETHANE	5.0	5.0 U	UG/L
1,4-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
IODOMETHANE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
1,1,1,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHENE	5.0	5.0 U	UG/L
TRICHLOROFLUOROMETHANE	5.0	5.0 U	UG/L
1,2,3-TRICHLOROPROPANE	5.0	5.0 U	UG/L
VINYL ACETATE	10	10 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B 360 BASELINE

Reported: 05/20/04

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 728334	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 103706

<u>ANALYTE</u>	<u>PQL</u>	<u>RESULT</u>	<u>UNITS</u>
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DATE ANALYZED : 05/07/04
ANALYTICAL DILUTION: 1.00

VINYL CHLORIDE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

BROMOFLUOROBENZENE	(83 - 119 %)	96	%
TOLUENE-d8	(88 - 124 %)	99	%
DIBROMOFLUOROMETHANE	(91 - 113 %)	108	%

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: 10145 Contract: CRA
 Lab Code: CAS/ROC Case No.: R4-20684 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): B5312.D Date Analyzed: 05/07/04
 Instrument ID: MSVOA5 Time Analyzed: 13:15
 GC Column: db-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	309379	9.94	569926	11.27	572161	16.80
UPPER LIMIT	618758	9.44	1139852	10.77	1144322	16.30
LOWER LIMIT	154690	10.44	284963	11.77	286081	17.30
EPA SAMPLE NO.						
01 LCS2	310007	9.93	562959	11.27	567212	16.80
02 MET BLK2	293293	9.93	526811	11.28	527607	16.80
03 006DL	284614	9.93	502139	11.27	511328	16.81

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: 10145 Contract: CRA
 Lab Code: CAS/ROC Case No.: R4-20684 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): B5312.D Date Analyzed: 05/07/04
 Instrument ID: MSVOA5 Time Analyzed: 13:15
 GC Column: db-624 ID: 0.32 (mm) Heated Purge (Y/N): N

	IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	307889	21.50				
UPPER LIMIT	615778	21.00				
LOWER LIMIT	153945	22.00				
EPA SAMPLE NO.						
01 LCS2	308882	21.50				
02 MET BLK2	272357	21.50				
03 006DL	261942	21.50				

IS1 = Pentafluorobenzene
 IS2 = 1,4-Difluorobenzene
 IS3 = d5-Chlorobenze
 IS4 = d4-1,4-Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = +0.50 minutes of internal standard RT
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
 * Values outside of contract required QC limits

R2420684

CHAIN OF C' 'STUDY RECORD



CONESTOGA-ROVERS & ASSOCIATES
 2055 Niagara Falls Blvd., Suite 3
 Niagara Falls, N.Y. 14304 (716) 297-6150

SHIPPED TO (Laboratory Name):

Columbia

REFERENCE NUMBER:

5513-02

SAMPLER'S SIGNATURE:

[Signature]

PRINTED NAME:

Danielle Carrin

SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	PARAMETERS							REMARKS	
						VOC w/HR1	Total Metals w/HR1	Nitrate Nitrogen	Ammonia w/HR1	Dissolved Metals				
	4/29/04	1200	GW-5513-0	Water										
116		0930	GW-5513-0404-004	1	6	3	1	1	1					
117		1030	GW-5513-0404-005		6	3	1	1	1					
118		1115	GW-5513-0404-006		6	3	1	1	1					
119		1200	GW-5513-0404-007		6	3	1	1	1					
120		1230	GW-5513-0404-008		6	3	1	1	1					
121, 129		1330	GW-5513-0404-009		76	3	1	1	1	1				
122		1445	GW-5513-0404-010		6	3	1	1	1					
123		1500	GW-5513-0404-011		6	3	1	1	1					
124			TB-042804-DMC		2	2								

TOTAL NUMBER OF CONTAINERS

51

HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY:

①

[Signature]

DATE:

1545

TIME:

04/29/04

RECEIVED BY:

①

[Signature] CAS

DATE: 4/29/03

TIME: 1030

RELINQUISHED BY:

②

[Signature] CAS

DATE: 4/29/04

TIME: 1300

RECEIVED BY:

②

[Signature]

DATE: 4-29-04

TIME: 1300

RELINQUISHED BY:

③

DATE:

TIME:

RECEIVED BY:

③

DATE:

TIME:

METHOD OF SHIPMENT:

WAY BILL No.

- White -Fully Executed Copy
- Yellow -Receiving Laboratory Copy
- Pink -Shipper Copy
- Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY:

NO N 3210

DATE: _____ TIME: _____

Cooler Receipt And Preservation Check Form

Project/Client CRA Submission Number R2420684

Cooler received on 4/29/04 by: cmk **COURIER** CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? CAS/ROC, CLIENT
7. Temperature of cooler(s) upon receipt: 4°C

Is the temperature within 0° - 6° C?: Yes Yes Yes Yes Yes
 If No, Explain Below No No No No No

Date/Time Temperatures Taken: 4/29/04 1300
 Thermometer ID: 161 or IR GUN Reading From: Temp Blank or Sample Bottle

If out of Temperature, Client Approval to Run Samples

Cooler Breakdown: Date: 4/29/04 by: cmk

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO ₃	X				
2	H ₂ SO ₄	X				
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____
 **If pH adjustment is required, use NaOH and/or H₂SO₄

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2		
<u><2</u>		

Other Comments: