



32NO3.GW64

NOT
MAY 13
32NO3

UCAR CARBON COMPANY INC.

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

(931) 388-1410

May 12, 2003

RECEIVED

MAY 13

32NO3

NYSDEC - R/L
FOIL
REL UNREL

Mr. Mark Hans, PE
Regional Solid Materials Engineer
NYS Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: UCAR Republic Landfill #32NO3

Dear Mr. Hans,

Please find enclosed a copy of the sampling results that were sent to Mary E. McIntosh, Engineering Geologist II of the New York State Department of Environmental Conservation Region 9 Office.

If you have any questions please feel free to call me at (716 (297-6772).

Very truly yours,

Robert Bucci
Consultant

R. Bucci

nm
enc.

cc: Mr. Jim Devald, Dir. of Environmental Health
Niagara County Health Department
Environmental Division
5467 Upper Mountain Road
Lockport, New York 14094-1899



UCAR CARBON COMPANY INC.

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

(931) 388-1410

May 12, 2003

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

RECEIVED

MAY 13 2003

NYSDEC REC. 8
FOIL
REL. UNREL

Dear Ms. McIntosh:

Re: Semi-Annual Monitoring Event UCAR Republic SWMF #32N03

The annual monitoring event for the above-referenced Site was conducted March 17 and 18, 2003. 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. Due to insufficient well recovery volume, no sample was collected from monitoring well MW-2. 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 let remind you that the UCAR location in Niagara Falls has closed, I will still be responsible for the landfill, please 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

NYSDCS
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 REL UNREI

TABLE 1
SAMPLE COLLECTION AND ANALYSIS SUMMARY
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK
MARCH 2003

Well I.D.	Purge Date	Sample Date	One Well Volume (Gallons)	Total Volume Purged (Gallons)	Turbidity (NTU)	Analytical Parameters			Misc. ⁽¹⁾ Parameters	Comments
						VOCs	Total Metals	Dissolved Metals		
MW-1	03/18/03	03/18/03	2.1	2.5	45	x	x		x	
MW-2	03/18/03	03/18/03	0.5	0.5	472					(2)
MW-3	03/18/03	03/18/03	1.8	5.5	18	x	x		x	
BW-1	03/18/03	03/18/03	10.0	30.0	0	x	x		x	
BW-2	03/18/03	03/18/03	13.4	41.0	0	x	x		x	MS/MSD
BW-3	03/18/03	03/18/03	9.0	45.0	0	x	x		x	
BW-4	03/18/03	03/18/03	10.5	42.0	0	x	x		x	
BW-5	03/18/03	03/18/03	13.6	41.0	0	x	x		x	
BW-6	03/18/03	03/18/03	9.8	29.5	6	x	x		x	
GW-8B	03/18/03	03/18/03	7.4	22.5	0	x	x		x	
GW-9B	03/18/03	03/18/03	7.7	23.5	0	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.

TABLE 2
SUMMARY OF WATER LEVEL ELEVATIONS
POST-CLOSURE MONITORING PROGRAM
UCAR REPUBLIC SWMU #32NO3
NIAGARA FALLS, NEW YORK

<i>Well No.</i>	<i>TOC Elevation (ft. AMSL)</i>	<i>Water Level Elevation (ft. AMSL)</i>					
		<i>Sep-00</i>	<i>Mar-01</i>	<i>Sep-01</i>	<i>Mar-02</i>	<i>Sep-02</i>	<i>Mar-03</i>
MW-1	612.00	603.77	601.80	603.10	604.40	602.48	604.32
MW-2	608.17	585.27	584.57	584.63	584.14	584.41	584.34
MW-3	601.89	591.19	599.27	587.50	598.32	587.58	597.95
BW-1	610.72	593.02	596.64	593.77	596.72	593.66	596.63
BW-2	608.43	595.00	597.18	592.98	599.22	592.73	598.89
BW-3	604.72	590.32	598.52	589.72	600.11	589.58	600.98
BW-4	607.08	594.83	600.19	592.26	601.47	591.95	601.62
BW-5	603.33	590.93	599.21	590.97	601.75	590.86	602.43
BW-6	607.04	594.54	595.47	593.49	592.88	588.13	592.17
GW-8B	603.90	574.40	596.64	591.62	596.70	590.09	594.53
GW-9B	603.40	589.83	591.73	587.64	592.54	587.09	592.54

Notes:

ft. AMSL Feet Above Mean Sea Level.

TOC Top of Casing

TABLE 3

ANALYTICAL RESULTS SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NY

		Sample ID: GW-5513-01	GW-5513-02	GW-5513-03	GW-5513-04	GW-5513-05	GW-5513-06
		Location ID: BW-1	BW-2	GW-9B	MW-3	BW-5	GW-8B
		Collection Date: 03/18/03	03/18/03	03/18/03	03/18/03	03/18/03	03/18/03
Parameters	Units						
TCL Volatiles							
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	22 ✓
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NY

		Sample ID: GW-5513-01	GW-5513-02	GW-5513-03	GW-5513-04	GW-5513-05	GW-5513-06
		Location ID: BW-1	BW-2	GW-9B	MW-3	BW-5	GW-8B
		Collection Date: 03/18/03	03/18/03	03/18/03	03/18/03	03/18/03	03/18/03
Parameters	Units						
TCL Volatiles (Cont'd.)							
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	13 ✓
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
m/p-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Metals							
Iron (total)	mg/L	1.80	3.68	0.47	0.810	1.04	0.290
Potassium (total)	mg/L	3.82	6.60	4.70	2.24	2.15	6.57
Zinc (total)	mg/L	0.430	0.633	0.0666	0.0200 U	0.0899	0.491
General Chemistry							
Ammonia	mg/L	0.499	0.578	0.411	0.0500 U	0.0831	0.0722
Nitrite	mg/L	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Total Kjeldahl Nitrogen	mg/L	0.949	1.21	0.952	0.200 U	0.200 U	0.200 U

Notes:

- Not applicable.

TCL Target Compound List

U Non-detect at associated value.

TABLE 3

ANALYTICAL RESULTS SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NY

		Sample ID: GW-5513-07	GW-5513-08	GW-5513-09	GW-5513-10	GW-5513-11
		Location ID: BW-6	MW-1	BW-3	BW-4	BW-4
		Collection Date: 03/18/03	03/18/03	03/18/03	03/18/03	03/18/03
Parameters	Units					(field duplicate)
TCL Volatiles						
Acetone	µg/L	20 U	20 U	20 U	20 U	20 U
Benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	µg/L	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	µg/L	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	230 ✓	240 ✓
trans-1,2-Dichloroethene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U	10 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	µg/L	10 U	10 U	10 U	10 U	10 U
Styrene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	5.0 U	5.0 U	5.0 U	29 ✓	30 ✓
1,1,1-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING
UCAR CARBON COMPANY, INC.
NIAGARA FALLS, NY

		Sample ID: GW-5513-07	GW-5513-08	GW-5513-09	GW-5513-10	GW-5513-11
		Location ID: BW-6	MW-1	BW-3	BW-4	BW-4
		Collection Date: 03/18/03	03/18/03	03/18/03	03/18/03	03/18/03
		(field duplicate)				
Parameters	Units					
TCL Volatiles (Cont'd.)						
Trichloroethene	µg/L	5.0 U	5.0 U	5.0 U	170 ✓	170
Vinyl chloride	µg/L	5.0 U	5.0 U	5.0 U	41 ✓	41
o-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
m/p-Xylenes	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Metals						
Iron (total)	mg/L	11.0	4.06	0.385	4.67	5.42
Potassium (total)	mg/L	2.00 U	3.88	2.00 U	12.7	12.8
Zinc (total)	mg/L	0.0239	0.0285	0.414	0.529	0.626
General Chemistry						
Ammonia	mg/L	0.130	2.28	0.133	2.44	1.76
Nitrite	mg/L	0.0100 U	0.0197	0.0100 U	0.0100 U	0.0100 U
Total Kjeldahl Nitrogen	mg/L	0.501	8.92	0.290	2.69	2.67

Notes:

- Not applicable.

TCL Target Compound List

U Non-detect at associated value.



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

32103.6264

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FEB 18 2004

NYSDEC REG 9
FOIL
REL UNREL

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Lab Submission # : R2316106
Project Manager : Mark Wilson
Reported : 04/11/03

Report Contains a total of 52 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. mp/les 4/14/03



CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2316106

<u>Lab ID</u>	<u>Client ID</u>
626905	GW-5513-0303-001
626907	GW-5513-0303-002
626908	GW-5513-0303-003
626909	GW-5513-0303-004
626910	GW-5513-0303-005
626911	GW-5513-0303-006
626912	GW-5513-0303-007
626913	GW-5513-0303-008
626914	GW-5513-0303-009
626915	GW-5513-0303-010
626917	GW-5513-0303-011
626919	TRIP BLANK

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.



Effective 11/4/2002

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
 Rhode Island ID # 158
 South Carolina ID #91012
 West Virginia ID # 292



Effective 11/4/2002

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.

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
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-001

Date Sampled : 03/18/03 09:25 Order #: 626905 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.499	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.949	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-001

Date Sampled : 03/18/03 09:25 Order #: 626905 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	1.80	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	3.82	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.430	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-001

Date Sampled : 03/18/03 09:25 Order #: 626905 Sample Matrix: WATER
 Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

ND

4-BROMOFLUOROBENZENE	(83 - 118 %)	102	%
TOLUENE-D8	(91 - 113 %)	110	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	102	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-002

Date Sampled : 03/18/03 10:20 Order #: 626907 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.578	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	1.21	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-002

Date Sampled : 03/18/03 10:20 Order #: 626907 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	3.68	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	6.60	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.633	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-002

Date Sampled : 03/18/03 10:20 Order #: 626907 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	103	%
TOLUENE-D8	(91 - 113 %)	110	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	105	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-003

Date Sampled : 03/18/03 10:55 Order #: 626908 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.411	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.952	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-003

Date Sampled : 03/18/03 10:55 Order #: 626908 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.472	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	4.70	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.0666	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES**VOLATILE ORGANICS**

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-003

Date Sampled : 03/18/03 10:55 Order #: 626908 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES**QC LIMITS**

4-BROMOFLUOROBENZENE	(83 - 118 %)	103	%
TOLUENE-D8	(91 - 113 %)	109	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	102	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-004

Date Sampled : 03/18/03 11:35	Order #: 626909	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.0500 U	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.200 U	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-004

Date Sampled : 03/18/03 11:35	Order #: 626909	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.810	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	2.24	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.0200 U	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-004

Date Sampled : 03/18/03 11:35 Order #: 626909 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/22/03		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(91 - 113 %)	108	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-005

Date Sampled : 03/18/03 11:55 Order #: 626910 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE	TIME	DILUTION
					ANALYZED	ANALYZED	
AMMONIA	350.1	0.0500	0.0831	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.200 U	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-005

Date Sampled : 03/18/03 11:55 Order #: 626910 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	1.04	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	2.15	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.0899	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-005

Date Sampled : 03/18/03 11:55 Order #: 626910 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/22/03		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS
4-BROMOFLUOROBENZENE	(83 - 118 %)
TOLUENE-D8	(91 - 113 %)
DIBROMOFLUOROMETHANE	(87 - 115 %)

98	%
108	%
103	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-006

Date Sampled : 03/18/03 13:00	Order #: 626911	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.0722	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.200 U	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-006

Date Sampled : 03/18/03 13:00	Order #: 626911	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.290	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	6.57	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.491	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-006

Date Sampled : 03/18/03 13:00 Order #: 626911 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/22/03		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	22	UG/L
TRANS-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
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
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	13	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS
4-BROMOFLUOROBENZENE	(83 - 118 %)
TOLUENE-D8	(91 - 113 %)
1-BROMOFLUOROMETHANE	(87 - 115 %)

104	%
109	%
106	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-007

Date Sampled : 03/18/03 13:30	Order #: 626912	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.130	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.501	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-007

Date Sampled : 03/18/03 13:30	Order #: 626912	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	11.0	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.0239	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES**VOLATILE ORGANICS**

METHOD 8260B TCL

Reported: 04/11/03

Conestoga Rovers & Associates

Project Reference: UCAR-5513 SEMIANNUAL

Client Sample ID : GW-5513-0303-007

Date Sampled : 03/18/03 13:30 Order #: 626912 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS
4-BROMOFLUOROBENZENE	(83 - 118 %)
TOLUENE-D8	(91 - 113 %)
DIBROMOFLUOROMETHANE	(87 - 115 %)

104	%
108	%
102	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-008

Date Sampled : 03/18/03 13:30	Order #: 626913	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	2.28	MG/L	03/25/03	13:25	2.0
NITRITE NITROGEN	353.2	0.0100	0.0197	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	8.92	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-008

Date Sampled : 03/18/03 13:30	Order #: 626913	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	4.06	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	3.88	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.0285	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-008

Date Sampled : 03/18/03 13:30 Order #: 626913 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/24/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	102	%
TOLUENE-D8	(91 - 113 %)	108	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-009

Date Sampled : 03/18/03 14:30	Order #: 626914	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	0.133	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	0.290	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-009

Date Sampled : 03/18/03 14:30	Order #: 626914	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	0.385	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	2.00 U	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.414	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-009

Date Sampled : 03/18/03 14:30 Order #: 626914 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	103	%
TOLUENE-D8	(91 - 113 %)	108	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-010

Date Sampled : 03/18/03 14:00 Order #: 626915 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	2.44	MG/L	03/25/03	13:25	2.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	2.69	MG/L	03/25/03	09:53	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-010

Date Sampled : 03/18/03 14:00	Order #: 626915	Sample Matrix: WATER
Date Received: 03/19/03	Submission #: R2316106	

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	4.67	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	12.7	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.529	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMI-ANNUAL
Client Sample ID : GW-5513-0303-010

Date Sampled : 03/18/03 14:00 Order #: 626915 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	260 E	UG/L
TRANS-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
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
TETRACHLOROETHENE	5.0	29	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	170	UG/L
VINYL CHLORIDE	5.0	41	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	102	%
TOLUENE-D8	(91 - 113 %)	109	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-010Date Sampled : 03/18/03 14:00 Order #: 626915 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/24/03			
ANALYTICAL DILUTION: 2.00			
ACETONE	20	40 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	230	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	10 U	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
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
TETRACHLOROETHENE	5.0	27	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	150	UG/L
VINYL CHLORIDE	5.0	36	UG/L
O-XYLENE	5.0	10 U	UG/L
M+P-XYLENE	5.0	10 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(91 - 113 %)	108	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-011

Date Sampled : 03/18/03 15:00 Order #: 626917 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
AMMONIA	350.1	0.0500	1.76	MG/L	03/25/03	13:25	1.0
NITRITE NITROGEN	353.2	0.0100	0.0100 U	MG/L	03/19/03	16:00	1.0
TOTAL KJELDAHL NITROGEN	351.2	0.200	2.67	MG/L	04/01/03	10:22	1.0

COLUMBIA ANALYTICAL SERVICES

Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-011

Date Sampled : 03/18/03 15:00 Order #: 626917 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106

ANALYTE	METHOD	PQL	RESULT	UNITS	DATE ANALYZED	DILUTION
IRON	6010B	0.100	5.42	MG/L	03/31/03	1.0
POTASSIUM	6010B	2.00	12.8	MG/L	03/31/03	1.0
ZINC	6010B	0.0200	0.626	MG/L	03/31/03	1.0

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-011Date Sampled : 03/18/03 15:00 Order #: 626917 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	260 E	UG/L
TRANS-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
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
TETRACHLOROETHENE	5.0	30	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	170	UG/L
VINYL CHLORIDE	5.0	41	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	104	%
TOLUENE-D8	(91 - 113 %)	110	%
1-BROMOFLUOROMETHANE	(87 - 115 %)	102	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03

Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : GW-5513-0303-011

Date Sampled : 03/18/03 15:00 Order #: 626917 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/24/03			
ANALYTICAL DILUTION: 2.00			
ACETONE	20	40 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	240	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	10 U	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
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
TETRACHLOROETHENE	5.0	29	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	160	UG/L
VINYL CHLORIDE	5.0	37	UG/L
O-XYLENE	5.0	10 U	UG/L
M+P-XYLENE	5.0	10 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(91 - 113 %)	109	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD 8260B TCL
Reported: 04/11/03Conestoga Rovers & Associates
Project Reference: UCAR-5513 SEMIANNUAL
Client Sample ID : TRIP BLANK

Date Sampled : 03/18/03 Order #: 626919 Sample Matrix: WATER
Date Received: 03/19/03 Submission #: R2316106 Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 03/22/03		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

<u>SURROGATE RECOVERIES</u>	<u>QC LIMITS</u>		
4-BROMOFLUOROBENZENE	(83 - 118 %)	104	%
TOLUENE-D8	(91 - 113 %)	107	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	104	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 627682	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
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DATE ANALYZED : 03/22/03

ANALYTICAL DILUTION: 1.00

ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(91 - 113 %)	107	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 04/11/03

Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled :	Order #: 627701	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run 88847

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 03/24/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	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
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
DIBROMOCHLOROMETHANE	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
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-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
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
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
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(83 - 118 %)	100	%
TOLUENE-D8	(91 - 113 %)	107	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	103	%

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/11/03
CAS Order # : 626907 - GW-5513-0303-002
Client : Conestoga Rovers & Associates
UCAR-5513 SEMIANNUAL
Reported Units: MG/L
Run # : 88852

PRECISION

ACCURACY

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
0.578	0.581	1	0.919	0.500	68	65 - 127

AMMONIA

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/11/03
CAS Order # : 626907 - GW-5513-0303-002
Client : Conestoga Rovers & Associates
UCAR-5513 SEMIANNUAL
Reported Units: MG/L
Run # : 88774

PRECISION

ACCURACY

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
0.0100 U	0.0100 U	NC	0.247	0.250	99	45 - 148

NITRITE NITROGEN

COLUMBIA ANALYTICAL SERVICES

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 04/11/03
CAS Order # : 626907 - GW-5513-0303-002
Client : Conestoga Rovers & Associates
UCAR-5513 SEMIANNUAL
Reported Units: MG/L
Run # : 88822

PRECISION

ACCURACY

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
1.21	1.14	6	3.80	2.50	104	55 - 128

TOTAL KJELDAHL NITROGEN

COLUMBIA ANALYTICAL SERVICES**INORGANIC QUALITY CONTROL SUMMARY**

Report Date : 04/11/03
CAS Order # : 626907 - GW-5513-0303-002
Client : Conestoga Rovers & Associates
UCAR-5513 SEMIANNUAL
Reported Units: MG/L
Run # : 89065

PRECISION**ACCURACY**

ORIGINAL	DUPLICATE	RPD	FOUND	ADDED	% REC.	LIMITS
3.68	3.58	3	4.78	1.00	110	75 - 125
6.60	6.49	2	28.4	20.0	109	75 - 125
0.633	0.612	3	1.13	0.500	99	75 - 125

IRON

POTASSIUM

ZINC

COLUMBIA ANALYTICAL SERVICES**INORGANIC BLANK SPIKE SUMMARY**

CAS Submission #: R2316106

Client: Conestoga Rovers & Associates

UCAR-5513 SEMIANNUAL

BLANK SPIKES

	BLANK	FOUND	ADDED	% REC	LIMITS	RUN	UNITS
IRON	0.100 U	0.983	1.00	98	80 - 120	89065	MG/L
POTASSIUM	2.00 U	20.4	20.0	102	80 - 120	89065	MG/L
ZINC	0.0200 U	0.510	0.500	102	80 - 120	89065	MG/L
NITRITE NITROGEN	0.0100 U	0.247	0.250	99	90 - 110	88774	MG/L
TOTAL KJELDAHL NITROGEN	0.200 U	2.37	2.50	95	63 - 116	88822	MG/L
AMMONIA	0.0500 U	0.523	0.500	105	90 - 110	88852	MG/L
TOTAL KJELDAHL NITROGEN	0.200 U	2.30	2.50	92	63 - 116	89009	MG/L

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
WATER

Spiked Order No. : 626907 Conestoga Rovers & Associates

Client ID: GW-5513-0303-002

Test: 8260B TCL

Analytical Units: UG/L

Run Number : 88847

ANALYTE	SPIKE ADDED	CONCENT. SAMPLE	MATRIX SPIKE		MATRIX SPIKE DUP.				QC LIMITS	
			FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.	
BENZENE	50.0	0	48.0	96	50.0	100	4	30	62 - 122	
CHLOROBENZENE	50.0	0	48.0	96	50.0	100	4	30	70 - 130	
1,1-DICHLOROETHENE	50.0	0	50.0	100	50.0	100	0	30	68 - 114	
TOLUENE	50.0	0	51.0	102	53.0	106	4	30	70 - 130	
TRICHLOROETHENE	50.0	0	49.0	98	51.0	102	4	30	68 - 114	

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD: 8260B TCL**LABORATORY CONTROL SAMPLE SUMMARY**

REFERENCE ORDER #: 627683

ANALYTICAL RUN #: 88847

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 03/22/03			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	107	50 - 150
BENZENE	20.0	82	70 - 130
BROMODICHLOROMETHANE	20.0	83	70 - 130
BROMOFORM	20.0	98	70 - 130
BROMOMETHANE	20.0	91	50 - 150
2-BUTANONE (MEK)	20.0	98	50 - 150
CARBON DISULFIDE	20.0	89	70 - 130
CARBON TETRACHLORIDE	20.0	73	70 - 130
CHLOROBENZENE	20.0	86	70 - 130
CHLOROETHANE	20.0	75	70 - 130
CHLOROFORM	20.0	78	70 - 130
CHLOROMETHANE	20.0	75	70 - 130
DIBROMOCHLOROMETHANE	20.0	90	70 - 130
1,1-DICHLOROETHANE	20.0	75	70 - 130
1,2-DICHLOROETHANE	20.0	75	70 - 130
1,1-DICHLOROETHENE	20.0	75	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	79	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	76	70 - 130
1,2-DICHLOROPROPANE	20.0	81	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	82	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	87	70 - 130
ETHYLBENZENE	20.0	84	70 - 130
2-HEXANONE	20.0	107	70 - 130
METHYLENE CHLORIDE	20.0	80	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	106	70 - 130
STYRENE	20.0	88	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	79	70 - 130
TETRACHLOROETHENE	20.0	83	70 - 130
TOLUENE	20.0	87	70 - 130
1,1,1-TRICHLOROETHANE	20.0	72	70 - 130
1,1,2-TRICHLOROETHANE	20.0	96	70 - 130
TRICHLOROETHENE	20.0	97	70 - 130
VINYL CHLORIDE	20.0	71	70 - 130
O-XYLENE	20.0	82	70 - 130
M+P-XYLENE	40.0	80	70 - 130

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS
METHOD: 8260B TCLLABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 627703

ANALYTICAL RUN #: 88847

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 03/24/03			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	96	50 - 150
BENZENE	20.0	100	70 - 130
BROMODICHLOROMETHANE	20.0	102	70 - 130
BROMOFORM	20.0	105	70 - 130
BROMOMETHANE	20.0	105	50 - 150
2-BUTANONE (MEK)	20.0	99	50 - 150
CARBON DISULFIDE	20.0	94	70 - 130
CARBON TETRACHLORIDE	20.0	100	70 - 130
CHLOROBENZENE	20.0	101	70 - 130
CHLOROETHANE	20.0	97	70 - 130
CHLOROFORM	20.0	100	70 - 130
CHLOROMETHANE	20.0	105	70 - 130
DIBROMOCHLOROMETHANE	20.0	99	70 - 130
1,1-DICHLOROETHANE	20.0	100	70 - 130
1,2-DICHLOROETHANE	20.0	83	70 - 130
1,1-DICHLOROETHENE	20.0	110	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	97	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	100	70 - 130
1,2-DICHLOROPROPANE	20.0	95	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	101	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	100	70 - 130
ETHYLBENZENE	20.0	108	70 - 130
2-HEXANONE	20.0	108	70 - 130
METHYLENE CHLORIDE	20.0	101	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	103	70 - 130
STYRENE	20.0	104	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	108	70 - 130
TETRACHLOROETHENE	20.0	105	70 - 130
TOLUENE	20.0	108	70 - 130
1,1,1-TRICHLOROETHANE	20.0	95	70 - 130
1,1,2-TRICHLOROETHANE	20.0	99	70 - 130
TRICHLOROETHENE	20.0	101	70 - 130
VINYL CHLORIDE	20.0	97	70 - 130
O-XYLENE	20.0	101	70 - 130
M+P-XYLENE	40.0	105	70 - 130

CHAIN OF CUSTODY RECORD

R23/6/06



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 - Sem. 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
	3-18-03	0925	Gw 5513-0303-001	Water	6	3 1 1 1	626905
		1020	Gw 5513-0303-002		18	3 3 3	07
		1055	Gw 5513-0303-003		6	3 1 1 1	08
		1135	Gw 5513-0303-004		6	3 1 1 1	09
		1155	Gw 5513-0303-005		6	3 1 1 1	10
		1300	Gw 5513-0303-006		6	3 1 1 1	11
		1330	Gw 5513-0303-007		6	3 1 1 1	12
		1330	Gw 5513-0303-008		5	1 1 1 2	13
		1430	Gw 5513-0303-009		6	3 1 1 1	14
		1400	Gw 5513-0303-010		6	3 1 1 1	15
		1500	Gw 5513-0303-011		6	3 1 1 1	17
			TRIP BLANK	Lab Water	3	3	19
			Note: Matrix Spike / Matrix Spike Duplicate Volume taken for Sample 002				

TOTAL NUMBER OF CONTAINERS

80

HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY:

① David Tyran

DATE: 3-19-03

TIME: 1000

RECEIVED BY:

① J. Burt CAS

DATE: 3/19/03

TIME: 1/203

RELINQUISHED BY:

② J. Burt CAS

DATE: 3/19/03

TIME: 1350

RECEIVED BY:

②

DATE:

TIME:

RELINQUISHED BY:

③

DATE:

TIME:

RECEIVED BY:

③

DATE:

TIME:

METHOD OF SHIPMENT: Carrier

WAY BILL No.

White
Yellow
Pink
Goldenrod

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

SAMPLE TEAM:

P. Kryger
D. Tyran

RECEIVED FOR LABORATORY BY:

Kelly M. Cook
DATE: 3/19/03 TIME: 1350

NO N 1452

Cooler Receipt And Preservation Check Form

Project/Client CRA Submission Number R2-16106

Cooler received on 3/19/03 by: ume 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? 4°C 6°C CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 4°C 6°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: 3/19/03 1415

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: 3-20-03 by: ME

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	☒				
2	H ₂ SO ₄	☒				
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					

Other Comments: