

1R – 254

**2008 AGWMR
Vol 2 of 2**

10/12/2009

LABORATORY TEST RESULTS											
Job Number: 358781						Date:08/22/2008					
CUSTOMER: Conestoga-Rovers and Associates						PROJECT: G.L ERWIN					
ATTN: Todd Wells											
Customer Sample ID: MW-13 81308											
Date Sampled.....: 08/13/2008											
Time Sampled.....: 11:50											
Sample Matrix.....: Water											
Laboratory Sample ID: 358781-6											
Date Received.....: 08/14/2008											
Time Received.....: 09:27											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	389		0.02185	2.000	1	mg/L	403717		08/15/08 1214	srp
	Magnesium (Mg), Diss.	155		0.01604	2.000	1	mg/L	403717		08/15/08 1214	srp
	Potassium (K), Diss.	20.1		0.08121	2.000	1	mg/L	403717		08/15/08 1214	srp
SM 2320 B	Sodium (Na), Diss.	176		0.2000	20.00	10	mg/L	403881		08/19/08 1046	srp
	Alkalinity, Total as CaCO3, Water	141		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	141		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	4940		1.533	20	1	mg/L	403921		08/19/08 1015	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	1410		23.1	50	100	mg/L	403662		08/15/08 0152	sur
	Fluoride (F), Water	2.33		0.141	0.30	1	mg/L	403662		08/15/08 0121	sur
	Sulfate (SO4), Water	154		3.50	5.0	10	mg/L	403662		08/15/08 0137	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	1.53		0.084	0.20	1	mg/L	403662		08/15/08 0121	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U, Z	1.72	2.0	10	mg/L	403662		08/15/08 0137	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS											
Job Number: 358781						Date:08/22/2008					
CUSTOMER: Conestoga-Rovers and Associates						PROJECT: G.L ERWIN					
ATTN: Todd Wells											
Customer Sample ID: MW-SOUTHWEST 81308											
Date Sampled.....: 08/13/2008											
Time Sampled.....: 12:25											
Sample Matrix.....: Water											
Laboratory Sample ID: 358781-7											
Date Received.....: 08/14/2008											
Time Received.....: 09:27											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	934		0.2185	20.00	10	mg/L	403795		08/18/08 1723	srp
	Magnesium (Mg), Diss.	237		0.01604	2.000	1	mg/L	403717		08/15/08 1217	srp
	Potassium (K), Diss.	112		0.8121	20.00	10	mg/L	403795		08/18/08 1723	srp
	Sodium (Na), Diss.	2110		2.000	200.0	100	mg/L	403795		08/18/08 1727	srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	268		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	268		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	13700		1.533	40	1	mg/L	403921		08/19/08 1015	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	5670		46.2	100	200	mg/L	403816		08/18/08 1703	sur
	Fluoride (F), Water	4.18		0.705	1.5	5	mg/L	403662		08/15/08 0208	sur
	Sulfate (SO4), Water	775		35.0	50	100	mg/L	403662		08/15/08 0239	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	8.14	Z	0.84	2.0	10	mg/L	403662		08/15/08 0224	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U, Z	1.72	2.0	10	mg/L	403662		08/15/08 0224	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:08/22/2008						
Job Number: 358781											
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: G.L ERWIN						
ATTN: Todd Wells											
Customer Sample ID: MW-WEST 81308					Laboratory Sample ID: 358781-8						
Date Sampled.....: 08/13/2008					Date Received.....: 08/14/2008						
Time Sampled.....: 12:40					Time Received.....: 09:27						
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	387		0.02185	2.000	1	mg/L	403717		08/15/08 1221	srp
	Magnesium (Mg), Diss.	119		0.01604	2.000	1	mg/L	403717		08/15/08 1221	srp
	Potassium (K), Diss.	61.8		0.8121	20.00	10	mg/L	403795		08/18/08 1730	srp
	Sodium (Na), Diss.	588		2.000	200.0	100	mg/L	403795		08/18/08 1734	srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	175		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	175		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	5570		1.533	20	1	mg/L	403921		08/19/08 1015	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	1940		23.1	50	100	mg/L	403662		08/15/08 0326	sur
	Fluoride (F), Water	1.57		0.141	0.30	1	mg/L	403662		08/15/08 0255	sur
	Sulfate (SO4), Water	227		3.50	5.0	10	mg/L	403662		08/15/08 0311	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.89	Z	0.84	2.0	10	mg/L	403662		08/15/08 0311	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U Z	1.72	2.0	10	mg/L	403662		08/15/08 0311	sur

* In Description = Dry Wgt.

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 358781

Report Date.: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Alkalinity, Total as CaCO3

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: ALK

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
LCS	403565--21	WC4232	938.62		1000.0		93.9	90.0-110.		08/14/2008	1200
DU	358699-6		77.91			76.97	1.2	20		08/14/2008	1200
LCS	403565--21	WC4232	943.62		1000.0		94.4	90.0-110.		08/14/2008	1200
MS	358781-6	WC4247	375.45		250.000000	140.79	93.9	75-125		08/14/2008	1200
DU	358815-1		148.30			148.30	0.0	20		08/14/2008	1200
MS	358699-6	WC4247	194.29		125.000000	76.97	93.9	75-125		08/14/2008	1200
DU	358699-11		79.78			79.78	0.0	20		08/14/2008	1200
MB	403565--21		4.72							08/14/2008	1200
DU	358820-1		148.30			146.42	1.3	20		08/14/2008	1200
MS	358820-1	WC4247	379.20		250.000000	146.42	93.1	75-125		08/14/2008	1200
MS	358699-11	WC4247	196.17		125.000000	79.78	93.1	75-125		08/14/2008	1200
MB	403565--21		1.88							08/14/2008	1200
LCS	403565--21	WC4232	938.62		1000.0		93.9	90.0-110.		08/14/2008	1200
DU	358781-6		142.67			140.79	1.3	20		08/14/2008	1200
MB	403565--21		1.88							08/14/2008	1200
MS	358815-1	WC4247	381.08		250.000000	148.30	93.1	75-125		08/14/2008	1200
MS	358698-14	WC4247	3774.49		2500.000000	1415.43	94.4	75-125		08/14/2008	1200
DU	358698-14		1321.07			1415.43	6.9	20		08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Bicarbonate (HCO3)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: HCO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-6		77.91			76.97	1.2	20		08/14/2008	1200
DU	358781-6		142.67			140.79	1.3	20		08/14/2008	1200
DU	358699-11		79.78			79.78	0.0	20		08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Carbonate (CO3)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: CO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-6		0			0	0	5		08/14/2008	1200
DU	358699-11		0			0	0	5		08/14/2008	1200
DU	358781-6		0			0	0	5		08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Hydroxide (OH)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-6		0			0	0	5		08/14/2008	1200
DU	358781-6		0			0	0	5		08/14/2008	1200
DU	358699-11		0			0	0	5		08/14/2008	1200

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN: Todd Wells		

Test Method.....: SM 2540C	Units.....: mg/L	Analyst...: daw
Method Description.: Solids, Total Dissolved (TDS)	Batch(s)...: 403921	Test Code.: TDS
Parameter.....: Solids, Total Dissolved (TDS)		

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	403921--21		1.00							08/19/2008	1015
LCS	403921--21	WCS50727	1767.00		1800		98.2	90.0-110.		08/19/2008	1015
DU	358841-14		4856.00			4728.00	2.7	10.0		08/19/2008	1015
DU	358781-1		2676.00			2702.00	1.0	10.0		08/19/2008	1015

Job Number.: 358781												QUALITY CONTROL RESULTS												Report Date.: 08/22/2008											
CUSTOMER: Conestoga-Rovers and Associates												PROJECT: G.L ERWIN												ATTN: Todd Wells											
QC Type				Description								Reag. Code				Lab ID				Dilution Factor				Date				Time							

Test Method.....: EPA 300.0						Units.....: mg/L						Analyst....: sur					
Method Description.: Ion Chromatography Analysis						Batch(s)....: 403816											

600				566-A-4						08/19/2008	0620						
Parameter/Test Description		QC Result		QC Result		True Value		Orig. Value		Calc. Result		* Limits		F			
Bromide (Br)		0															
Chloride		0															
Fluoride (F)		0															
Nitrogen, Nitrate as N (NO3-N)		4.3098															
Sulfate (SO4)		0															
Nitrogen, Nitrite as N (NO2-N)		0															

600				566-A-4@10						08/19/2008	0635						
Parameter/Test Description		QC Result		QC Result		True Value		Orig. Value		Calc. Result		* Limits		F			
Bromide (Br)		0															
Chloride		0															
Fluoride (F)		0.6949															
Nitrogen, Nitrate as N (NO3-N)		0.4268															
Sulfate (SO4)		85.292															
Nitrogen, Nitrite as N (NO2-N)		0															

600				566-A-4@10						08/19/2008	0651						
Parameter/Test Description		QC Result		QC Result		True Value		Orig. Value		Calc. Result		* Limits		F			
Bromide (Br)		0															
Chloride		50.293															
Fluoride (F)		0															
Nitrogen, Nitrate as N (NO3-N)		0.1217															
Sulfate (SO4)		4.5401															
Nitrogen, Nitrite as N (NO2-N)		0															

600				566-A-5						08/19/2008	0707						
Parameter/Test Description		QC Result		QC Result		True Value		Orig. Value		Calc. Result		* Limits		F			
Bromide (Br)		0															
Chloride		0															
Fluoride (F)		1.6546															
Nitrogen, Nitrate as N (NO3-N)		3.2178															
Sulfate (SO4)		91.262															
Nitrogen, Nitrite as N (NO2-N)		0															

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
---------------------	--	---	--	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

600		566-A-5@10			08/19/2008	0722
-----	--	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0.1328							
Nitrogen, Nitrate as N (NO3-N)	0.3808							
Sulfate (SO4)	11.072							
Nitrogen, Nitrite as N (NO2-N)	0							

600		566-A-5@10			08/19/2008	0738
-----	--	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	17.105							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0.1133							
Sulfate (SO4)	1.0278							
Nitrogen, Nitrite as N (NO2-N)	0							

600		566-A-5 DU			08/19/2008	0753
-----	--	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	17.113							
Fluoride (F)	0.1171							
Nitrogen, Nitrate as N (NO3-N)	0.1131							
Sulfate (SO4)	0.9436							
Nitrogen, Nitrite as N (NO2-N)	0							

600		566-A-5 MS			08/19/2008	0809
-----	--	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	10.049		0.000000					
Chloride	26.135		0.000000					
Fluoride (F)	1.5242		0.000000					
Nitrogen, Nitrate as N (NO3-N)	1.9974		0.000000					
Sulfate (SO4)	10.785		0.000000					
Nitrogen, Nitrite as N (NO2-N)	1.9896		0.000000					

600		566-A-6			08/19/2008	0825
-----	--	---------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	3.7807							
Chloride	0							
Fluoride (F)	2.0703							
Nitrogen, Nitrate as N (NO3-N)	3.8407							
Sulfate (SO4)	78.856							
Nitrogen, Nitrite as N (NO2-N)	0							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-6@10			08/19/2008	0840

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0.2513							
Chloride	0							
Fluoride (F)	0.1435							
Nitrogen, Nitrate as N (NO3-N)	0.4103							
Sulfate (SO4)	7.7461							
Nitrogen, Nitrite as N (NO2-N)	0							

600		566-A-6@10					08/19/2008	0856
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	21.175							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0.1214							
Sulfate (SO4)	0.7627							
Nitrogen, Nitrite as N (NO2-N)	0							

BK							08/19/2008	0359
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

BK							08/19/2008	0430
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

BK							08/19/2008	0502
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	6.5145							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
BK					08/19/2008	0533

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/18/2008	1600
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.2091							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/18/2008	1908
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/18/2008	2200
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/19/2008	0107
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.1971							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/19/2008	0328

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.1987							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/19/2008	0604	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.1994							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/19/2008	0927	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.2273							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0.1501							
Nitrogen, Nitrite as N (NO2-N)	0							

CCV	Continuing Calibration Verification	WCS50535				08/18/2008	1544
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	20.048		20.00		100.2	90.0-110.0	
Chloride	19.511		20.00		97.6	90.0-110.0	
Fluoride (F)	8.9779		10.00		89.8	90.0-110.0	G
Nitrogen, Nitrate as N (NO3-N)	10.405		10.0		104.0	90.0-110.0	
Sulfate (SO4)	19.546		20.00		97.7	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.8643		10.0		98.6	90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/18/2008	1852
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	19.820		20.00		99.1	90.0-110.0	
Chloride	19.332		20.00		96.7	90.0-110.0	
Fluoride (F)	9.0038		10.00		90.0	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.323		10.0		103.2	90.0-110.0	
Sulfate (SO4)	19.296		20.00		96.5	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7604		10.0		97.6	90.0-110.0	

Job Number.: 358781						QUALITY CONTROL RESULTS		Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN: Todd Wells			
QC Type	Description		Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification		WCS50535			08/18/2008	2144		

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	20.181		20.00		100.9		90.0-110.0	
Fluoride (F)	8.9819		10.00		89.8		90.0-110.0	G
Nitrogen, Nitrate as N (NO3-N)	10.197		10.0		102.0		90.0-110.0	
Sulfate (SO4)	19.599		20.00		98.0		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	10.121		10.0		101.2		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/19/2008	0052	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.745		20.00		98.7		90.0-110.0	
Fluoride (F)	9.0126		10.00		90.1		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.232		10.0		102.3		90.0-110.0	
Sulfate (SO4)	19.429		20.00		97.1		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7194		10.0		97.2		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/19/2008	0312	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.757		20.00		98.8		90.0-110.0	
Chloride	19.209		20.00		96.0		90.0-110.0	
Fluoride (F)	9.1420		10.00		91.4		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.176		10.0		101.8		90.0-110.0	
Sulfate (SO4)	19.635		20.00		98.2		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7300		10.0		97.3		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/19/2008	0548	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.724		20.00		98.6		90.0-110.0	
Chloride	19.224		20.00		96.1		90.0-110.0	
Fluoride (F)	9.0272		10.00		90.3		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.218		10.0		102.2		90.0-110.0	
Sulfate (SO4)	19.562		20.00		97.8		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7293		10.0		97.3		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/19/2008	0912	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.844		20.00		99.2		90.0-110.0	
Chloride	19.377		20.00		96.9		90.0-110.0	
Fluoride (F)	9.3124		10.00		93.1		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.257		10.0		102.6		90.0-110.0	
Sulfate (SO4)	19.533		20.00		97.7		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7916		10.0		97.9		90.0-110.0	

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN			ATTN: Todd Wells		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
DU	Method Duplicate		358757-1	10	08/18/2008	1411		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	0.0715			0.0642	0.0073		0.6000	
Chloride, Water	13.619			13.569	0.4		20	
Fluoride (F), Water	0.1153			0.1172	0.0019		0.3000	
Nitrogen, Nitrate as N (NO3-N), Water	0			0	0		0	
Sulfate (SO4), Water	3.0614			3.0457	0.5		20	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0	
DU	Method Duplicate		358841-4	10	08/18/2008	1821		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	0			0	0		1	
Chloride, Water	2.7097			2.6877	0.8		20	
Fluoride (F), Water	0.1257			0.1260	0.0003		0.3000	
Nitrogen, Nitrate as N (NO3-N), Water	0			0	0		0	
Sulfate (SO4), Water	3.2373			3.2432	0.2		20	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0	
DU	Method Duplicate		358841-13	100	08/18/2008	2215		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	0.0932			0	0.0932		0.6000	
Fluoride (F), Water	0			0	0		0	
Nitrogen, Nitrate as N (NO3-N), Water	0.1115			0	0.1115		0.2500	
Sulfate (SO4), Water	0.2353			0	0.2353		0.5000	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0	
DU	Method Duplicate		358627-3	10	08/19/2008	0020		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Soil	0			0	0		1	
Fluoride (F), Soil	0			0	0		0	
Nitrogen, Nitrate as N (NO3-N), Soil	0			0	0		0	
Sulfate (SO4), Soil	0			0	0		0	
Nitrogen, Nitrite as N (NO2-N), Soil	0			0	0		0	
ICB	Initial Calibration Blank				08/18/2008	1308		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

Job Number.: 358781						QUALITY CONTROL RESULTS				Report Date.: 08/22/2008			
CUSTOMER: Conestoga-Rovers and Associates						PROJECT: G.L ERWIN				ATTN:			
QC Type	Description			Reag. Code	Lab ID	Dilution Factor		Date		Time			
ICV	Initial Calibration Verification			WCS50535				08/18/2008		1253			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.829		20.00		99.1		90.0-110.0	
Chloride	19.340		20.00		96.7		90.0-110.0	
Fluoride (F)	8.9691		10.00		89.7		90.0-110.0	G
Nitrogen, Nitrate as N (NO3-N)	10.202		10.0		102.0		90.0-110.0	
Sulfate (SO4)	19.124		20.00		95.6		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6931		10.0		96.9		90.0-110.0	

LCS	Laboratory Control Sample			WCS50535				08/18/2008		1339			
-----	---------------------------	--	--	----------	--	--	--	------------	--	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	20.513		20.00		102.6		90.0-110.0	
Chloride	19.698		20.00		98.5		90.0-110.0	
Fluoride (F)	9.0772		10.00		90.8		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.516		10.0		105.2		90.0-110.0	
Sulfate (SO4)	19.425		20.00		97.1		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9410		10.0		99.4		90.0-110.0	

LCS	Laboratory Control Sample			WCS50535				08/19/2008		0138			
-----	---------------------------	--	--	----------	--	--	--	------------	--	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.617		20.00		98.1		90.0-110.0	
Chloride	19.092		20.00		95.5		90.0-110.0	
Fluoride (F)	9.0204		10.00		90.2		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.201		10.0		102.0		90.0-110.0	
Sulfate (SO4)	19.455		20.00		97.3		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6895		10.0		96.9		90.0-110.0	

MB	Method Blank							08/18/2008		1324			
----	--------------	--	--	--	--	--	--	------------	--	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

MB	Method Blank							08/19/2008		0123			
----	--------------	--	--	--	--	--	--	------------	--	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0.2112							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

MS	Matrix Spike	WCS50358	358757-1	10	08/18/2008	1426
----	--------------	----------	----------	----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	10.077		10.000000	0.0642	100.1		90-110	
Chloride, Water	23.169		10.000000	13.569	96.0		90-110	
Fluoride (F), Water	1.5017		2.000000	0.1172	69.2		90-110	A
Nitrogen, Nitrate as N (NO3-N), Water	1.9678		2.000000	0	98.4		90-110	
Sulfate (SO4), Water	12.728		10.000000	3.0457	96.8		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	2.0527		2.000000	0	102.6		90-110	

MS	Matrix Spike	WCS50358	358841-4	10	08/18/2008	1836
----	--------------	----------	----------	----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	9.7779		10.000000	0	97.8		90-110	
Chloride, Water	11.838		10.000000	2.6877	91.5		90-110	
Fluoride (F), Water	1.4325		2.000000	0.1260	65.3		90-110	A
Nitrogen, Nitrate as N (NO3-N), Water	1.9165		2.000000	0	95.8		90-110	
Sulfate (SO4), Water	12.851		10.000000	3.2432	96.1		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	1.8265		2.000000	0	91.3		90-110	

MS	Matrix Spike	WCS50358	358841-13	100	08/18/2008	2231
----	--------------	----------	-----------	-----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	10.126		10.000000	0	101.3		90-110	
Nitrogen, Nitrate as N (NO3-N), Water	1.9453		2.000000	0	97.3		90-110	
Sulfate (SO4), Water	9.7651		10.000000	0	97.7		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	2.1076		2.000000	0	105.4		90-110	

MS	Matrix Spike	WCS50358	358627-3	10	08/19/2008	0036
----	--------------	----------	----------	----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Soil	9.9790		10.000000	0	99.8		90-110	
Nitrogen, Nitrate as N (NO3-N), Soil	1.9045		2.000000	0	95.2		90-110	
Nitrogen, Nitrite as N (NO2-N), Soil	2.1264		2.000000	0	106.3		90-110	

Test Method.....: EPA300.0 Rev2.1	Units.....: mg/L	Analyst....: sur
Method Description.: Ion Chromatography Analysis - Short Hold Batch(s)....: 403662		

CCB	Continuing Calibration Blank				08/14/2008	2214
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sulfate (SO4)	0							
Bromide (Br)	0							
Fluoride (F)	0							
Chloride	0.2212							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
---------------------	--	---	--	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCB	Continuing Calibration Blank				08/15/2008	0106
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Sulfate (SO4)	0							
Chloride	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank				08/15/2008	0358
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F)	0							
Sulfate (SO4)	0							
Bromide (Br)	0							
Chloride	0.1978							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank				08/15/2008	0650
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F)	0							
Chloride	0							
Bromide (Br)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank				08/15/2008	0941
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Chloride	0							
Fluoride (F)	0							
Sulfate (SO4)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCV	Continuing Calibration Verification	WCS50535			08/14/2008	2158
-----	-------------------------------------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.889		20.00		99.4		90.0-110.0	
Sulfate (SO4)	19.616		20.00		98.1		90.0-110.0	
Fluoride (F)	10.050		10.00		100.5		90.0-110.0	
Chloride	19.772		20.00		98.9		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.394		10.0		103.9		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6927		10.0		96.9		90.0-110.0	

Job Number.: 358781						QUALITY CONTROL RESULTS		Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCV	Continuing Calibration Verification	WCS50535			08/15/2008	0050			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	19.893		20.00		99.5		90.0-110.0	
Fluoride (F)	10.024		10.00		100.2		90.0-110.0	
Chloride	19.742		20.00		98.7		90.0-110.0	
Sulfate (SO4)	19.817		20.00		99.1		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.359		10.0		103.6		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6795		10.0		96.8		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535			08/15/2008	0342			
-----	-------------------------------------	----------	--	--	------------	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sulfate (SO4)	19.443		20.00		97.2		90.0-110.0	
Bromide (Br)	20.030		20.00		100.2		90.0-110.0	
Fluoride (F)	10.122		10.00		101.2		90.0-110.0	
Chloride	19.660		20.00		98.3		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.327		10.0		103.3		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6323		10.0		96.3		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535			08/15/2008	0634			
-----	-------------------------------------	----------	--	--	------------	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F)	9.9177		10.00		99.2		90.0-110.0	
Chloride	19.707		20.00		98.5		90.0-110.0	
Sulfate (SO4)	19.528		20.00		97.6		90.0-110.0	
Bromide (Br)	19.828		20.00		99.1		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.335		10.0		103.3		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6635		10.0		96.6		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535			08/15/2008	0926			
-----	-------------------------------------	----------	--	--	------------	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F)	9.9892		10.00		99.9		90.0-110.0	
Chloride	19.702		20.00		98.5		90.0-110.0	
Bromide (Br)	19.806		20.00		99.0		90.0-110.0	
Sulfate (SO4)	19.845		20.00		99.2		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.322		10.0		103.2		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6594		10.0		96.6		90.0-110.0	

DU	Method Duplicate		358781-5	10	08/15/2008	0019			
----	------------------	--	----------	----	------------	------	--	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	25.289			25.066	0.9		20	
Sulfate (SO4), Water	11.748			12.069	2.7		20	
Fluoride (F), Water	0.2153			0.2084	0.0069		0.3000	
Bromide (Br), Water	0.1190			0.1117	0.0073		0.6000	
Nitrogen, Nitrate as N (NO3-N), Water	0.3826			0.3778	0.0048		0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0	

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

DU	Method Duplicate		358761-1	10	08/15/2008	0444
----	------------------	--	----------	----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F), Water	0			0	0	0	
Sulfate (SO4), Water	14.126			14.003	0.9	20	
Chloride, Water	13.645			13.490	1.1	20	
Bromide (Br), Water	0			0	0	1	
Nitrogen, Nitrate as N (NO3-N), Water	0.3551			0.3525	0.0026	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	

DU	Method Duplicate		358690-1		08/15/2008	0855
----	------------------	--	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F), Solid	0.1751			0.1880	0.0129	0.3000	

ICB	Initial Calibration Blank				08/14/2008	1922
-----	---------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	0						
Chloride	0						
Sulfate (SO4)	0						
Bromide (Br)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						

ICV	Initial Calibration Verification	WCS50535			08/14/2008	1906
-----	----------------------------------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	19.803		20.00		99.0	90.0-110.0	
Sulfate (SO4)	19.573		20.00		97.9	90.0-110.0	
Fluoride (F)	9.3821		10.00		93.8	90.0-110.0	
Chloride	19.718		20.00		98.6	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.282		10.0		102.8	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6195		10.0		96.2	90.0-110.0	

LCS	Laboratory Control Sample	WCS50535			08/14/2008	1953
-----	---------------------------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride	19.825		20.00		99.1	90.0-110.0	
Fluoride (F)	9.8644		10.00		98.6	90.0-110.0	
Sulfate (SO4)	19.699		20.00		98.5	90.0-110.0	
Bromide (Br)	19.993		20.00		100.0	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.406		10.0		104.1	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7092		10.0		97.1	90.0-110.0	

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

MB	Method Blank				08/14/2008	1937
----	--------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F)	0							
Sulfate (SO4)	0							
Chloride	0							
Bromide (Br)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

MS	Matrix Spike	WCS50358	358781-5	10		08/15/2008	0034
----	--------------	----------	----------	----	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F), Water	1.7644		2.000000	0.2084				
Sulfate (SO4), Water	21.055		10.000000	12.069				
Bromide (Br), Water	9.9774		10.000000	0.1117				
Chloride, Water	33.528		10.000000	25.066				
Nitrogen, Nitrate as N (NO3-N), Water	2.2402		2.000000	0.3778				
Nitrogen, Nitrite as N (NO2-N), Water	2.0324		2.000000	0				

MS	Matrix Spike	WCS50358	358761-1	10		08/15/2008	0500
----	--------------	----------	----------	----	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	9.6289		10.000000	0	96.3		90-110	
Sulfate (SO4), Water	23.404		10.000000	14.003	94.0		90-110	
Chloride, Water	23.176		10.000000	13.490	96.9		90-110	
Fluoride (F), Water	1.5349		2.000000	0	76.7		90-110	A
Nitrogen, Nitrate as N (NO3-N), Water	2.1753		2.000000	0.3525	91.1		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	1.9067		2.000000	0	95.3		90-110	

MS	Matrix Spike	WCS50358	358690-1			08/15/2008	0910
----	--------------	----------	----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F), Solid	1.7853		2.000000	0.1880	79.9		90-110	A

Test Method.....: SW-846 6010B	Units.....: mg/L	Analyst....: srp
Method Description.: Metals Analysis (ICAP Trace)	Batch(s)....: 403656 403668 403717 403795 403881	

CCB	Continuing Calibration Blank					08/15/2008	0802
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00407							
Magnesium (Mg)	-0.00286							
Potassium (K)	-0.01039							
Sodium (Na)	-0.00471							

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCB	Continuing Calibration Blank				08/15/2008	0853
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00013							
Magnesium (Mg)	-0.01782							
Potassium (K)	-0.10690							
Sodium (Na)	-0.01121							

CCB	Continuing Calibration Blank				08/15/2008	0937
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00072							
Magnesium (Mg)	-0.02890							
Potassium (K)	-0.19738							
Sodium (Na)	-0.00027							

CCB	Continuing Calibration Blank				08/15/2008	1021
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00414							
Magnesium (Mg)	-0.02016							
Potassium (K)	-0.13322							
Sodium (Na)	0.04853							

CCB	Continuing Calibration Blank				08/15/2008	1043
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00215							
Magnesium (Mg)	-0.02521							
Potassium (K)	-0.18083							
Sodium (Na)	0.03046							

CCB	Continuing Calibration Blank				08/15/2008	1118
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00351							
Magnesium (Mg)	-0.02804							
Potassium (K)	-0.19118							
Sodium (Na)	0.07797							

CCB	Continuing Calibration Blank				08/15/2008	1206
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00355							
Magnesium (Mg)	-0.04737							
Potassium (K)	-0.33812							
Sodium (Na)	0.08739							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	1239
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00331				
Magnesium (Mg)		-0.04515				
Potassium (K)		-0.30120				
Sodium (Na)		0.05954				
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0758
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.32384		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.88669		5.000		97.7 90.0-110.0
Potassium (K)		11.88997		12.50		95.1 90.0-110.0
Sodium (Na)		11.84877		12.50		94.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0849
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.31978		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.83612		5.000		96.7 90.0-110.0
Potassium (K)		11.90456		12.50		95.2 90.0-110.0
Sodium (Na)		11.88772		12.50		95.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0933
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.23468		12.50		97.9 90.0-110.0
Magnesium (Mg)		4.78622		5.000		95.7 90.0-110.0
Potassium (K)		11.77882		12.50		94.2 90.0-110.0
Sodium (Na)		11.90269		12.50		95.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1017
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.21523		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.76773		5.000		95.4 90.0-110.0
Potassium (K)		12.17707		12.50		97.4 90.0-110.0
Sodium (Na)		12.26535		12.50		98.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1039
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.20914		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.75003		5.000		95.0 90.0-110.0
Potassium (K)		12.13523		12.50		97.1 90.0-110.0
Sodium (Na)		12.23811		12.50		97.9 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.I. ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1114
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.17220		12.50		97.4 90.0-110.0
Magnesium (Mg)		4.73301		5.000		94.7 90.0-110.0
Potassium (K)		11.96227		12.50		95.7 90.0-110.0
Sodium (Na)		12.15187		12.50		97.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.09606		12.50		96.8 90.0-110.0
Magnesium (Mg)		4.68594		5.000		93.7 90.0-110.0
Potassium (K)		11.91689		12.50		95.3 90.0-110.0
Sodium (Na)		12.24954		12.50		98.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1236
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.10824		12.50		96.9 90.0-110.0
Magnesium (Mg)		4.70060		5.000		94.0 90.0-110.0
Potassium (K)		11.97837		12.50		95.8 90.0-110.0
Sodium (Na)		12.25246		12.50		98.0 90.0-110.0
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0747
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.11708		0.1000		117.1 80.0-120.0
Magnesium (Mg)		0.11986		0.1000		119.9 80.0-120.0
Potassium (K)		0.70730		0.60000		117.9 80.0-120.0
Sodium (Na)		0.56815		0.60000		94.7 80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0736
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		19.98698		20.00		99.9 95.0-105.0
Magnesium (Mg)		19.99118		20.00		100.0 95.0-105.0
Potassium (K)		20.16103		20.00		100.8 95.0-105.0
Sodium (Na)		20.15169		20.00		100.8 95.0-105.0
EB	Extraction Blank			403616		08/15/2008 1133
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		0.02394				
Magnesium (Mg), Diss.		-0.03999				
Potassium (K), Diss.		-0.31374				
Sodium (Na), Diss.		0.04285				

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/15/2008	0743
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00323				
Magnesium (Mg)		0.01089				
Potassium (K)		0.09126				
Sodium (Na)		0.00955				
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0740
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.51920		12.50		100.2 90.0-110.0
Magnesium (Mg)		4.96451		5.000		99.3 90.0-110.0
Potassium (K)		12.07108		12.50		96.6 90.0-110.0
Sodium (Na)		11.94190		12.50		95.5 90.0-110.0
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0751
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		442.58947		500.0		88.5 80-120
Magnesium (Mg)		505.11251		500.0		101.0 80-120
Potassium (K)		0.12779		0.0		
Sodium (Na)		0.19126		0.0		
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0754
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		442.45367		510.0		86.8 80.0-120.0
Magnesium (Mg)		507.84594		510.0		99.6 80.0-120.0
LCS	Laboratory Control Sample	MSPIKEW	403616		08/15/2008	1129
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		9.83619		10.00		98.4 80.0-120.0
Magnesium (Mg), Water		9.62344		10.00		96.2 80.0-120.0
Potassium (K), Water		9.58531		10.00		95.9 80.0-120.0
Sodium (Na), Water		9.87802		10.00		98.8 80.0-120.0
MB	Method Blank		403616		08/15/2008	1125
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		0.00547				
Magnesium (Mg), Water		-0.03600				
Potassium (K), Water		-0.31011				
Sodium (Na), Water		0.04682				

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MD	Method Duplicate		358781-1		08/15/2008	1140		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		46.80125	46.76205		46.76205	0.1	20	
Magnesium (Mg), Diss.		14.31618	14.30331		14.30331	0.1	20	
Potassium (K), Diss.		17.48444	17.45208		17.45208	0.2	20	
MS	Matrix Spike	MSPIKEW	358781-1		08/15/2008	1144		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		56.18157		10.00	46.76205	94.2	75-125	
Magnesium (Mg), Diss.		23.70441		10.00	14.30331	94.0	75-125	
Potassium (K), Diss.		33.82741		10.00	17.45208	163.8	75-125 a	
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	1147		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		56.02812	56.18157	10.00	46.76205	92.7	75-125	
						1.6	20	
Magnesium (Mg), Diss.		23.69364	23.70441	10.00	14.30331	93.9	75-125	
						0.1	20	
Potassium (K), Diss.		33.93544	33.82741	10.00	17.45208	164.8	75-125 a	
						0.6	20	
PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	1225		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		54.87019		10.00	46.76205	81.1	75-125	
Magnesium (Mg), Diss.		23.18997		10.00	14.30331	88.9	75-125	
Potassium (K), Diss.		33.67564		10.00	17.45208	162.2	75-125 A	
S0	Calibration Blank				08/15/2008	0728		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00613						
Magnesium (Mg)		0.03077						
Potassium (K)		0.45221						
Sodium (Na)		0.23306						
SD	Serial Dilution		358781-1	5	08/15/2008	1228		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		9.80251			46.76205	4.8	10.0	
Magnesium (Mg), Diss.		2.95093			14.30331	3.2	10.0	
Potassium (K), Diss.		2.36260			17.45208	32.3	10.0	

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.L ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				08/15/2008	0732
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		2.95376				
Magnesium (Mg)		1.23946				
Potassium (K)		2.80953				
Sodium (Na)		16.09711				
CCB	Continuing Calibration Blank				08/15/2008	0802
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00407				
Magnesium (Mg)		-0.00286				
Potassium (K)		-0.01039				
Sodium (Na)		-0.00471				
CCB	Continuing Calibration Blank				08/15/2008	0853
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00013				
Magnesium (Mg)		-0.01782				
Potassium (K)		-0.10690				
Sodium (Na)		-0.01121				
CCB	Continuing Calibration Blank				08/15/2008	0937
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00072				
Magnesium (Mg)		-0.02890				
Potassium (K)		-0.19738				
Sodium (Na)		-0.00027				
CCB	Continuing Calibration Blank				08/15/2008	1021
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00414				
Magnesium (Mg)		-0.02016				
Potassium (K)		-0.13322				
Sodium (Na)		0.04853				
CCB	Continuing Calibration Blank				08/15/2008	1043
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00215				
Magnesium (Mg)		-0.02521				
Potassium (K)		-0.18083				
Sodium (Na)		0.03046				

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	1118
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00351				
Magnesium (Mg)		-0.02804				
Potassium (K)		-0.19118				
Sodium (Na)		0.07797				
CCB	Continuing Calibration Blank				08/15/2008	1206
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00355				
Magnesium (Mg)		-0.04737				
Potassium (K)		-0.33812				
Sodium (Na)		0.08739				
CCB	Continuing Calibration Blank				08/15/2008	1239
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00331				
Magnesium (Mg)		-0.04515				
Potassium (K)		-0.30120				
Sodium (Na)		0.05954				
CCB	Continuing Calibration Blank				08/15/2008	1421
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00432				
Magnesium (Mg)		-0.03707				
Potassium (K)		-0.25963				
Sodium (Na)		0.02268				
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0758
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.32384		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.88669		5.000		97.7 90.0-110.0
Potassium (K)		11.88997		12.50		95.1 90.0-110.0
Sodium (Na)		11.84877		12.50		94.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0849
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.31978		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.83612		5.000		96.7 90.0-110.0
Potassium (K)		11.90456		12.50		95.2 90.0-110.0
Sodium (Na)		11.88772		12.50		95.1 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0933
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.23468		12.50		97.9 90.0-110.0
Magnesium (Mg)		4.78622		5.000		95.7 90.0-110.0
Potassium (K)		11.77882		12.50		94.2 90.0-110.0
Sodium (Na)		11.90269		12.50		95.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1017
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.21523		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.76773		5.000		95.4 90.0-110.0
Potassium (K)		12.17707		12.50		97.4 90.0-110.0
Sodium (Na)		12.26535		12.50		98.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1039
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.20914		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.75003		5.000		95.0 90.0-110.0
Potassium (K)		12.13523		12.50		97.1 90.0-110.0
Sodium (Na)		12.23811		12.50		97.9 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1114
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.17220		12.50		97.4 90.0-110.0
Magnesium (Mg)		4.73301		5.000		94.7 90.0-110.0
Potassium (K)		11.96227		12.50		95.7 90.0-110.0
Sodium (Na)		12.15187		12.50		97.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.09606		12.50		96.8 90.0-110.0
Magnesium (Mg)		4.68594		5.000		93.7 90.0-110.0
Potassium (K)		11.91689		12.50		95.3 90.0-110.0
Sodium (Na)		12.24954		12.50		98.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1236
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.10824		12.50		96.9 90.0-110.0
Magnesium (Mg)		4.70060		5.000		94.0 90.0-110.0
Potassium (K)		11.97837		12.50		95.8 90.0-110.0
Sodium (Na)		12.25246		12.50		98.0 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.L ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1417
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	12.27155		12.50		98.2	90.0-110.0
Magnesium (Mg)	4.73513		5.000		94.7	90.0-110.0
Potassium (K)	12.00165		12.50		96.0	90.0-110.0
Sodium (Na)	12.21047		12.50		97.7	90.0-110.0
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0747
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	0.11708		0.1000		117.1	80.0-120.0
Magnesium (Mg)	0.11986		0.1000		119.9	80.0-120.0
Potassium (K)	0.70730		0.60000		117.9	80.0-120.0
Sodium (Na)	0.56815		0.60000		94.7	80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0736
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	19.98698		20.00		99.9	95.0-105.0
Magnesium (Mg)	19.99118		20.00		100.0	95.0-105.0
Potassium (K)	20.16103		20.00		100.8	95.0-105.0
Sodium (Na)	20.15169		20.00		100.8	95.0-105.0
ICB	Initial Calibration Blank				08/15/2008	0743
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0740
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	12.51920		12.50		100.2	90.0-110.0
Magnesium (Mg)	4.96451		5.000		99.3	90.0-110.0
Potassium (K)	12.07108		12.50		96.6	90.0-110.0
Sodium (Na)	11.94190		12.50		95.5	90.0-110.0
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0751
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	442.58947		500.0		88.5	80-120
Magnesium (Mg)	505.11251		500.0		101.0	80-120
Potassium (K)	0.12779		0.0			
Sodium (Na)	0.19126		0.0			

Job Number.: 358781		QUALITY CONTROL RESULTS				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.L ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0754		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		442.45367		510.0		86.8	80.0-120.0	
Magnesium (Mg)		507.84594		510.0		99.6	80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403616		08/15/2008	1129		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		9.83619		10.00		98.4	80.0-120.0	
Magnesium (Mg), Water		9.62344		10.00		96.2	80.0-120.0	
Potassium (K), Water		9.58531		10.00		95.9	80.0-120.0	
Sodium (Na), Water		9.87802		10.00		98.8	80.0-120.0	
MB	Method Blank		403616		08/15/2008	1125		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		0.00547						
Magnesium (Mg), Water		-0.03600						
Potassium (K), Water		-0.31011						
Sodium (Na), Water		0.04682						
MD	Method Duplicate		358781-1		08/15/2008	1140		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		46.80125	46.76205		46.76205	0.1	20	
Magnesium (Mg), Diss.		14.31618	14.30331		14.30331	0.1	20	
Potassium (K), Diss.		17.48444	17.45208		17.45208	0.2	20	
MS	Matrix Spike	MSPIKEW	358781-1		08/15/2008	1144		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		56.18157		10.00	46.76205	94.2	75-125	
Magnesium (Mg), Diss.		23.70441		10.00	14.30331	94.0	75-125	
Potassium (K), Diss.		33.82741		10.00	17.45208	163.8	75-125 a	
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	1147		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		56.02812	56.18157	10.00	46.76205	92.7	75-125	
						1.6	20	
Magnesium (Mg), Diss.		23.69364	23.70441	10.00	14.30331	93.9	75-125	
						0.1	20	
Potassium (K), Diss.		33.93544	33.82741	10.00	17.45208	164.8	75-125 a	
						0.6	20	

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	1225		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		54.87019		10.00	46.76205	81.1	75-125	
Magnesium (Mg), Diss.		23.18997		10.00	14.30331	88.9	75-125	
Potassium (K), Diss.		33.67564		10.00	17.45208	162.2	75-125 A	
S0	Calibration Blank				08/15/2008	0728		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00613						
Magnesium (Mg)		0.03077						
Potassium (K)		0.45221						
Sodium (Na)		0.23306						
SD	Serial Dilution		358781-1	5	08/15/2008	1228		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		9.80251			46.76205	4.8	10.0	
Magnesium (Mg), Diss.		2.95093			14.30331	3.2	10.0	
Potassium (K), Diss.		2.36260			17.45208	32.3	10.0 e	
STD	Spiked Blank Duplicate				08/15/2008	0732		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		2.95376						
Magnesium (Mg)		1.23946						
Potassium (K)		2.80953						
Sodium (Na)		16.09711						
CCB	Continuing Calibration Blank				08/15/2008	0802		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00407						
Magnesium (Mg)		-0.00286						
Potassium (K)		-0.01039						
Sodium (Na)		-0.00471						
CCB	Continuing Calibration Blank				08/15/2008	0853		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00013						
Magnesium (Mg)		-0.01782						
Potassium (K)		-0.10690						
Sodium (Na)		-0.01121						

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCB	Continuing Calibration Blank				08/15/2008	0937
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00072							
Magnesium (Mg)	-0.02890							
Potassium (K)	-0.19738							
Sodium (Na)	-0.00027							

CCB	Continuing Calibration Blank				08/15/2008	1021
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00414							
Magnesium (Mg)	-0.02016							
Potassium (K)	-0.13322							
Sodium (Na)	0.04853							

CCB	Continuing Calibration Blank				08/15/2008	1043
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00215							
Magnesium (Mg)	-0.02521							
Potassium (K)	-0.18083							
Sodium (Na)	0.03046							

CCB	Continuing Calibration Blank				08/15/2008	1118
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00351							
Magnesium (Mg)	-0.02804							
Potassium (K)	-0.19118							
Sodium (Na)	0.07797							

CCB	Continuing Calibration Blank				08/15/2008	1206
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00355							
Magnesium (Mg)	-0.04737							
Potassium (K)	-0.33812							
Sodium (Na)	0.08739							

CCB	Continuing Calibration Blank				08/15/2008	1239
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00331							
Magnesium (Mg)	-0.04515							
Potassium (K)	-0.30120							
Sodium (Na)	0.05954							

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	1421
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00432				
Magnesium (Mg)		-0.03707				
Potassium (K)		-0.25963				
Sodium (Na)		0.02268				
CCB	Continuing Calibration Blank				08/15/2008	1451
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00426				
Magnesium (Mg)		-0.03558				
Potassium (K)		-0.25449				
Sodium (Na)		0.01447				
CCB	Continuing Calibration Blank				08/15/2008	1509
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00006				
Magnesium (Mg)		-0.03947				
Potassium (K)		-0.27834				
Sodium (Na)		0.00641				
CCB	Continuing Calibration Blank				08/15/2008	1604
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00221				
Magnesium (Mg)		-0.03163				
Potassium (K)		-0.22128				
Sodium (Na)		-0.01100				
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0758
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.32384		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.88669		5.000		97.7 90.0-110.0
Potassium (K)		11.88997		12.50		95.1 90.0-110.0
Sodium (Na)		11.84877		12.50		94.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0849
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.31978		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.83612		5.000		96.7 90.0-110.0
Potassium (K)		11.90456		12.50		95.2 90.0-110.0
Sodium (Na)		11.88772		12.50		95.1 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0933		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.23468		12.50		97.9		90.0-110.0	
Magnesium (Mg)	4.78622		5.000		95.7		90.0-110.0	
Potassium (K)	11.77882		12.50		94.2		90.0-110.0	
Sodium (Na)	11.90269		12.50		95.2		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1017		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.21523		12.50		97.7		90.0-110.0	
Magnesium (Mg)	4.76773		5.000		95.4		90.0-110.0	
Potassium (K)	12.17707		12.50		97.4		90.0-110.0	
Sodium (Na)	12.26535		12.50		98.1		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1039		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.20914		12.50		97.7		90.0-110.0	
Magnesium (Mg)	4.75003		5.000		95.0		90.0-110.0	
Potassium (K)	12.13523		12.50		97.1		90.0-110.0	
Sodium (Na)	12.23811		12.50		97.9		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1114		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.17220		12.50		97.4		90.0-110.0	
Magnesium (Mg)	4.73301		5.000		94.7		90.0-110.0	
Potassium (K)	11.96227		12.50		95.7		90.0-110.0	
Sodium (Na)	12.15187		12.50		97.2		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1203		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.09606		12.50		96.8		90.0-110.0	
Magnesium (Mg)	4.68594		5.000		93.7		90.0-110.0	
Potassium (K)	11.91689		12.50		95.3		90.0-110.0	
Sodium (Na)	12.24954		12.50		98.0		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1236		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.10824		12.50		96.9		90.0-110.0	
Magnesium (Mg)	4.70060		5.000		94.0		90.0-110.0	
Potassium (K)	11.97837		12.50		95.8		90.0-110.0	
Sodium (Na)	12.25246		12.50		98.0		90.0-110.0	

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1417
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.27155		12.50		98.2 90.0-110.0
Magnesium (Mg)		4.73513		5.000		94.7 90.0-110.0
Potassium (K)		12.00165		12.50		96.0 90.0-110.0
Sodium (Na)		12.21047		12.50		97.7 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1448
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.18646		12.50		97.5 90.0-110.0
Magnesium (Mg)		4.72229		5.000		94.4 90.0-110.0
Potassium (K)		11.91028		12.50		95.3 90.0-110.0
Sodium (Na)		12.13027		12.50		97.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1506
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.15331		12.50		97.2 90.0-110.0
Magnesium (Mg)		4.70680		5.000		94.1 90.0-110.0
Potassium (K)		11.93742		12.50		95.5 90.0-110.0
Sodium (Na)		12.12071		12.50		97.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1600
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.03710		12.50		96.3 90.0-110.0
Magnesium (Mg)		4.69382		5.000		93.9 90.0-110.0
Potassium (K)		11.88182		12.50		95.1 90.0-110.0
Sodium (Na)		12.02755		12.50		96.2 90.0-110.0
CHI	Calibration check standard 1	MS073008T1			08/15/2008	0747
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.11708		0.1000		117.1 80.0-120.0
Magnesium (Mg)		0.11986		0.1000		119.9 80.0-120.0
Potassium (K)		0.70730		0.60000		117.9 80.0-120.0
Sodium (Na)		0.56815		0.60000		94.7 80.0-120.0
CHI	Calibration check standard 1	MS073008T1			08/15/2008	1549
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.10961		0.1000		109.6 80.0-120.0
Sodium (Na)		0.55802		0.60000		93.0 80.0-120.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0736	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		19.98698		20.00		99.9 95.0-105.0	
Magnesium (Mg)		19.99118		20.00		100.0 95.0-105.0	
Potassium (K)		20.16103		20.00		100.8 95.0-105.0	
Sodium (Na)		20.15169		20.00		100.8 95.0-105.0	
EB	Extraction Blank		403616		08/15/2008	1133	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca), Diss.		0.02394					
Magnesium (Mg), Diss.		-0.03999					
Potassium (K), Diss.		-0.31374					
Sodium (Na), Diss.		0.04285					
ICB	Initial Calibration Blank				08/15/2008	0743	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		0.00323					
Magnesium (Mg)		0.01089					
Potassium (K)		0.09126					
Sodium (Na)		0.00955					
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0740	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		12.51920		12.50		100.2 90.0-110.0	
Magnesium (Mg)		4.96451		5.000		99.3 90.0-110.0	
Potassium (K)		12.07108		12.50		96.6 90.0-110.0	
Sodium (Na)		11.94190		12.50		95.5 90.0-110.0	
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0751	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		442.58947		500.0		88.5 80-120	
Magnesium (Mg)		505.11251		500.0		101.0 80-120	
Potassium (K)		0.12779		0.0			
Sodium (Na)		0.19126		0.0			
ISA	Interference Check Sample A	MS073008IA			08/15/2008	1553	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		426.16760		500.0		85.2 80-120	
Magnesium (Mg)		486.19921		500.0		97.2 80-120	
Potassium (K)		-0.17352		0.0			
Sodium (Na)		0.17633		0.0			

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0754
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		442.45367		510.0		86.8 80.0-120.0
Magnesium (Mg)		507.84594		510.0		99.6 80.0-120.0
ISB	Interference Check Sample B	MS073008IB			08/15/2008	1556
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		433.39959		510.0		85.0 80.0-120.0
Magnesium (Mg)		496.83996		510.0		97.4 80.0-120.0
LCS	Laboratory Control Sample	MSPIKEW	403616		08/15/2008	1129
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		9.83619		10.00		98.4 80.0-120.0
Magnesium (Mg), Water		9.62344		10.00		96.2 80.0-120.0
Potassium (K), Water		9.58531		10.00		95.9 80.0-120.0
Sodium (Na), Water		9.87802		10.00		98.8 80.0-120.0
MB	Method Blank		403616		08/15/2008	1125
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		0.00547				
Magnesium (Mg), Water		-0.03600				
Potassium (K), Water		-0.31011				
Sodium (Na), Water		0.04682				
MD	Method Duplicate		358781-1		08/15/2008	1140
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		46.80125	46.76205		46.76205	0.1 20
Magnesium (Mg), Diss.		14.31618	14.30331		14.30331	0.1 20
Potassium (K), Diss.		17.48444	17.45208		17.45208	0.2 20
MS	Matrix Spike	MSPIKEW	358781-1		08/15/2008	1144
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		56.18157		10.00	46.76205	94.2 75-125
Magnesium (Mg), Diss.		23.70441		10.00	14.30331	94.0 75-125
Potassium (K), Diss.		33.82741		10.00	17.45208	163.8 75-125 a

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	1147		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		56.02812	56.18157	10.00	46.76205	92.7	75-125	
						1.6	20	
Magnesium (Mg), Diss.		23.69364	23.70441	10.00	14.30331	93.9	75-125	
						0.1	20	
Potassium (K), Diss.		33.93544	33.82741	10.00	17.45208	164.8	75-125 a	
						0.6	20	
PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	1225		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		54.87019		10.00	46.76205	81.1	75-125	
Magnesium (Mg), Diss.		23.18997		10.00	14.30331	88.9	75-125	
Potassium (K), Diss.		33.67564		10.00	17.45208	162.2	75-125 A	
S0	Calibration Blank				08/15/2008	0728		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00613						
Magnesium (Mg)		0.03077						
Potassium (K)		0.45221						
Sodium (Na)		0.23306						
SD	Serial Dilution		358781-1	5	08/15/2008	1228		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		9.80251			46.76205	4.8	10.0	
Magnesium (Mg), Diss.		2.95093			14.30331	3.2	10.0	
Potassium (K), Diss.		2.36260			17.45208	32.3	10.0 e	
STD	Spiked Blank Duplicate				08/15/2008	0732		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		2.95376						
Magnesium (Mg)		1.23946						
Potassium (K)		2.80953						
Sodium (Na)		16.09711						

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	0903
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00322				
Magnesium (Mg)		-0.01181				
Potassium (K)		-0.17158				
Sodium (Na)		0.00070				
CCB	Continuing Calibration Blank				08/18/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00025				
Magnesium (Mg)		-0.04626				
Sodium (Na)		0.04200				
CCB	Continuing Calibration Blank				08/18/2008	1111
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01464				
Magnesium (Mg)		-0.05017				
Sodium (Na)		0.03835				
CCB	Continuing Calibration Blank				08/18/2008	1207
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00340				
Magnesium (Mg)		-0.05970				
Sodium (Na)		0.01012				
CCB	Continuing Calibration Blank				08/18/2008	1254
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.01529				
Magnesium (Mg)		-0.04509				
Potassium (K)		-0.40361				
Sodium (Na)		0.00344				
CCB	Continuing Calibration Blank				08/18/2008	1310
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00998				
Magnesium (Mg)		-0.06228				
Potassium (K)		-0.52573				
Sodium (Na)		0.00882				

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	1407
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01939				
Magnesium (Mg)		-0.07749				
Potassium (K)		-0.65722				
Sodium (Na)		-0.00509				
CCB	Continuing Calibration Blank				08/18/2008	1505
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01477				
Magnesium (Mg)		-0.06635				
Potassium (K)		-0.55357				
Sodium (Na)		-0.00210				
CCB	Continuing Calibration Blank				08/18/2008	1613
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00908				
Magnesium (Mg)		-0.05251				
Potassium (K)		-0.41409				
Sodium (Na)		-0.00378				
CCB	Continuing Calibration Blank				08/18/2008	1707
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01763				
Magnesium (Mg)		-0.06248				
Potassium (K)		-0.63380				
Sodium (Na)		-0.00524				
CCB	Continuing Calibration Blank				08/18/2008	1754
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02168				
Magnesium (Mg)		-0.07384				
Potassium (K)		-0.52539				
Sodium (Na)		-0.00633				
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	0900
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.22350		12.50		97.8 90.0-110.0
Magnesium (Mg)		4.78892		5.000		95.8 90.0-110.0
Potassium (K)		11.70432		12.50		93.6 90.0-110.0
Sodium (Na)		12.14704		12.50		97.2 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1051
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.21539		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.71945		5.000		94.4 90.0-110.0
Potassium (K)		11.94939		12.50		95.6 90.0-110.0
Sodium (Na)		12.35400		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1107
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.09743		12.50		96.8 90.0-110.0
Magnesium (Mg)		4.69949		5.000		94.0 90.0-110.0
Sodium (Na)		12.34457		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.01819		12.50		96.1 90.0-110.0
Magnesium (Mg)		4.63364		5.000		92.7 90.0-110.0
Sodium (Na)		12.34790		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1250
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.14906		12.50		97.2 90.0-110.0
Magnesium (Mg)		4.67948		5.000		93.6 90.0-110.0
Potassium (K)		11.78927		12.50		94.3 90.0-110.0
Sodium (Na)		12.36862		12.50		98.9 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1306
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.02917		12.50		96.2 90.0-110.0
Magnesium (Mg)		4.62974		5.000		92.6 90.0-110.0
Potassium (K)		11.76218		12.50		94.1 90.0-110.0
Sodium (Na)		12.43138		12.50		99.5 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1403
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.89792		12.50		95.2 90.0-110.0
Magnesium (Mg)		4.59510		5.000		91.9 90.0-110.0
Potassium (K)		11.66019		12.50		93.3 90.0-110.0
Sodium (Na)		12.56487		12.50		100.5 90.0-110.0

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1501
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.95067		12.50		95.6 90.0-110.0
Magnesium (Mg)		4.62518		5.000		92.5 90.0-110.0
Potassium (K)		11.70715		12.50		93.7 90.0-110.0
Sodium (Na)		12.42121		12.50		99.4 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1609
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.15966		12.50		97.3 90.0-110.0
Magnesium (Mg)		4.65454		5.000		93.1 90.0-110.0
Potassium (K)		12.08889		12.50		96.7 90.0-110.0
Sodium (Na)		12.59885		12.50		100.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1703
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.10694		12.50		96.9 90.0-110.0
Magnesium (Mg)		4.70127		5.000		94.0 90.0-110.0
Potassium (K)		11.80085		12.50		94.4 90.0-110.0
Sodium (Na)		12.62287		12.50		101.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1750
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.91434		12.50		95.3 90.0-110.0
Magnesium (Mg)		4.52269		5.000		90.5 90.0-110.0
Potassium (K)		11.95544		12.50		95.6 90.0-110.0
Sodium (Na)		12.69158		12.50		101.5 90.0-110.0
CHI	Calibration check standard 1	MS073008T1			08/18/2008	0848
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.10864		0.1000		108.6 80.0-120.0
Sodium (Na)		0.62762		0.60000		104.6 80.0-120.0
CHI	Calibration check standard 1	MS073008T1			08/18/2008	1557
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.10640		0.1000		106.4 80.0-120.0
Sodium (Na)		0.65120		0.60000		108.5 80.0-120.0

QUALITY CONTROL RESULTS									
Job Number.: 358781					Report Date.: 08/22/2008				
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.I. ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CH1	Calibration check standard 1	MS073008T1			08/18/2008	1738			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	0.09826		0.1000		98.3		80.0-120.0		
Sodium (Na)	0.65638		0.60000		109.4		80.0-120.0		
CH3	Standard check for ICAP	MS073008T3			08/18/2008	0836			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	19.96181		20.00		99.8		95.0-105.0		
Magnesium (Mg)	19.98410		20.00		99.9		95.0-105.0		
Potassium (K)	19.92924		20.00		99.6		95.0-105.0		
Sodium (Na)	19.90965		20.00		99.5		95.0-105.0		
ICB	Initial Calibration Blank				08/18/2008	0844			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	-0.00255								
Magnesium (Mg)	-0.00706								
Potassium (K)	-0.18349								
Sodium (Na)	0.00310								
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	0840			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	12.30537		12.50		98.4		90.0-110.0		
Magnesium (Mg)	4.85777		5.000		97.2		90.0-110.0		
Potassium (K)	11.76057		12.50		94.1		90.0-110.0		
Sodium (Na)	12.22992		12.50		97.8		90.0-110.0		
ISA	Interference Check Sample A	MS073008IA			08/18/2008	0852			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	485.05847		500.0		97.0		80-120		
Magnesium (Mg)	544.90545		500.0		109.0		80-120		
Potassium (K)	0.05409		0.0						
Sodium (Na)	0.03831		0.0						
ISA	Interference Check Sample A	MS073008IA			08/18/2008	1601			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	472.63363		500.0		94.5		80-120		
Magnesium (Mg)	523.46191		500.0		104.7		80-120		
Potassium (K)	-0.32830		0.0						
Sodium (Na)	0.02817		0.0						

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
ISA	Interference Check Sample A	MS073008IA			08/18/2008	1742	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		463.58325		500.0		92.7 80-120	
Magnesium (Mg)		511.31225		500.0		102.3 80-120	
Potassium (K)		-0.47760		0.0			
Sodium (Na)		0.02874		0.0			
ISB	Interference Check Sample B	MS073008IB			08/18/2008	0856	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		496.11413		510.0		97.3 80.0-120.0	
Magnesium (Mg)		556.62023		510.0		109.1 80.0-120.0	
ISB	Interference Check Sample B	MS073008IB			08/18/2008	1605	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		480.06036		510.0		94.1 80.0-120.0	
Magnesium (Mg)		530.67895		510.0		104.1 80.0-120.0	
Potassium (K)		14.01167					
ISB	Interference Check Sample B	MS073008IB			08/18/2008	1746	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		473.08453		510.0		92.8 80.0-120.0	
Magnesium (Mg)		519.55932		510.0		101.9 80.0-120.0	
Potassium (K)		13.93035					
LCS	Laboratory Control Sample	MSPIKEW	403616		08/18/2008	1628	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca), Water		9.78092		10.00		97.8 80.0-120.0	
Magnesium (Mg), Water		9.71558		10.00		97.2 80.0-120.0	
Potassium (K), Water		9.52595		10.00		95.3 80.0-120.0	
Sodium (Na), Water		10.55109		10.00		105.5 80.0-120.0	
MB	Method Blank		403616		08/18/2008	1624	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca), Water		-0.00869					
Magnesium (Mg), Water		-0.06748					
Potassium (K), Water		-0.62845					
Sodium (Na), Water		-0.00500					

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MD	Method Duplicate		358781-1	100	08/18/2008	1640		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		0.48683	0.50515		0.50515	0.01832	2.00000	
Magnesium (Mg), Diss.		0.06326	0.08727		0.08727	0.02401	2.00000	
Potassium (K), Diss.		-0.63515	-0.55191		-0.55191	0.08324	2.00000	
Sodium (Na), Diss.		8.77198	8.96426		8.96426	0.19228	2.00000	
MS	Matrix Spike	MSPIKEW	358781-1	100	08/18/2008	1644		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		0.78266		0.100000	0.50515	277.5	75-125	
Magnesium (Mg), Diss.		0.19170		0.100000	0.08727	104.4	75-125	
Potassium (K), Diss.		-0.29505		0.100000	-0.55191	256.9	75-125 a	
Sodium (Na), Diss.		8.97347		0.100000	8.96426	9.2	75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1	100	08/18/2008	1647		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		1.26790	0.78266	0.100000	0.50515	762.8	75-125	
						93.3	20 C	
Magnesium (Mg), Diss.		0.18114	0.19170	0.100000	0.08727	93.9	75-125	
						10.6	20	
Potassium (K), Diss.		-0.37039	-0.29505	0.100000	-0.55191	181.5	75-125 a	
						34.4	20 C	
Sodium (Na), Diss.		8.85389	8.97347	0.100000	8.96426	-110.4	75-125	
						236.4	20 C	
S0	Calibration Blank					08/18/2008	0828	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00334						
Magnesium (Mg)		0.00672						
Potassium (K)		0.36252						
Sodium (Na)		0.02040						
STD	Spiked Blank Duplicate					08/18/2008	0832	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.28337						
Magnesium (Mg)		0.21195						
Potassium (K)		1.52170						
Sodium (Na)		4.11051						

Job Number.: 358781			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 08/22/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCB	Continuing Calibration Blank				08/19/2008	0822
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00030							
Magnesium (Mg)	-0.00065							
Potassium (K)	-0.04004							
Sodium (Na)	-0.01045							

CCB	Continuing Calibration Blank				08/19/2008	0903
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00787							
Magnesium (Mg)	-0.01036							
Potassium (K)	-0.08424							
Sodium (Na)	-0.01792							

CCB	Continuing Calibration Blank				08/19/2008	0917
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.00696							
Magnesium (Mg)	-0.01460							
Potassium (K)	-0.12055							
Sodium (Na)	-0.02039							

CCB	Continuing Calibration Blank				08/19/2008	1004
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00414							
Magnesium (Mg)	-0.01423							
Potassium (K)	-0.11919							
Sodium (Na)	-0.01614							

CCB	Continuing Calibration Blank				08/19/2008	1053
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00310							
Magnesium (Mg)	-0.01782							
Potassium (K)	-0.15424							
Sodium (Na)	-0.02181							

CCB	Continuing Calibration Blank				08/19/2008	1248
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00277							
Magnesium (Mg)	-0.01080							
Potassium (K)	-0.09142							
Sodium (Na)	-0.02294							

Job Number.: 358781		QUALITY CONTROL RESULTS				Report Date.: 08/22/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCB	Continuing Calibration Blank				08/19/2008	1639			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.00830							
Magnesium (Mg)		-0.02026							
Potassium (K)		-0.12861							
Sodium (Na)		-0.00110							
CCB	Continuing Calibration Blank				08/19/2008	1716			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.00200							
Magnesium (Mg)		-0.02001							
Potassium (K)		-0.14386							
Sodium (Na)		0.02713							
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	0818			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.53262		12.50		100.3		90.0-110.0	
Magnesium (Mg)		4.96203		5.000		99.2		90.0-110.0	
Potassium (K)		11.86767		12.50		94.9		90.0-110.0	
Sodium (Na)		11.82065		12.50		94.6		90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	0859			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.57349		12.50		100.6		90.0-110.0	
Magnesium (Mg)		4.95914		5.000		99.2		90.0-110.0	
Potassium (K)		11.80571		12.50		94.4		90.0-110.0	
Sodium (Na)		11.74134		12.50		93.9		90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	0914			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.51060		12.50		100.1		90.0-110.0	
Magnesium (Mg)		4.92046		5.000		98.4		90.0-110.0	
Potassium (K)		11.78795		12.50		94.3		90.0-110.0	
Sodium (Na)		11.75531		12.50		94.0		90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	1000			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.53689		12.50		100.3		90.0-110.0	
Magnesium (Mg)		4.91976		5.000		98.4		90.0-110.0	
Potassium (K)		11.86143		12.50		94.9		90.0-110.0	
Sodium (Na)		11.83747		12.50		94.7		90.0-110.0	

Job Number.: 358781		QUALITY CONTROL RESULTS				Report Date.: 08/22/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	1050		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.48994		12.50		99.9	90.0-110.0	
Magnesium (Mg)		4.90269		5.000		98.1	90.0-110.0	
Potassium (K)		11.89580		12.50		95.2	90.0-110.0	
Sodium (Na)		11.83590		12.50		94.7	90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	1245		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.50876		12.50		100.1	90.0-110.0	
Magnesium (Mg)		4.92482		5.000		98.5	90.0-110.0	
Potassium (K)		12.03686		12.50		96.3	90.0-110.0	
Sodium (Na)		11.91688		12.50		95.3	90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	1636		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.50247		12.50		100.0	90.0-110.0	
Magnesium (Mg)		4.94723		5.000		98.9	90.0-110.0	
Potassium (K)		11.96192		12.50		95.7	90.0-110.0	
Sodium (Na)		11.83055		12.50		94.6	90.0-110.0	
CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	1713		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.54386		12.50		100.4	90.0-110.0	
Magnesium (Mg)		4.95783		5.000		99.2	90.0-110.0	
Potassium (K)		11.88438		12.50		95.1	90.0-110.0	
Sodium (Na)		11.82204		12.50		94.6	90.0-110.0	
CH1	Calibration check standard 1	MS073008T1			08/19/2008	0805		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.11031		0.1000		110.3	80.0-120.0	
Magnesium (Mg)		0.09663		0.1000		96.6	80.0-120.0	
Potassium (K)		0.51667		0.60000		86.1	80.0-120.0	
Sodium (Na)		0.54798		0.60000		91.3	80.0-120.0	
CH1	Calibration check standard 1	MS073008T1			08/19/2008	1234		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.11225		0.1000		112.2	80.0-120.0	
Sodium (Na)		0.53287		0.60000		88.8	80.0-120.0	

QUALITY CONTROL RESULTS									
Job Number.: 358781					Report Date.: 08/22/2008				
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CH1	Calibration check standard 1	MS073008T1			08/19/2008	1702			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	0.11282		0.1000		112.8		80.0-120.0		
Magnesium (Mg)	0.08352		0.1000		83.5		80.0-120.0		
CH3	Standard check for ICAP	MS073008T3			08/19/2008	0754			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	20.13669		20.00		100.7		95.0-105.0		
Magnesium (Mg)	20.11421		20.00		100.6		95.0-105.0		
Potassium (K)	19.88510		20.00		99.4		95.0-105.0		
Sodium (Na)	19.92223		20.00		99.6		95.0-105.0		
ICB	Initial Calibration Blank				08/19/2008	0801			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	0.00056								
Magnesium (Mg)	0.00081								
Potassium (K)	-0.00662								
Sodium (Na)	-0.00106								
ICV	Initial Calibration Verification	MS081508CC			08/19/2008	0757			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	12.54821		12.50		100.4		90.0-110.0		
Magnesium (Mg)	4.96594		5.000		99.3		90.0-110.0		
Potassium (K)	11.80046		12.50		94.4		90.0-110.0		
Sodium (Na)	11.72453		12.50		93.8		90.0-110.0		
ISA	Interference Check Sample A	MS073008IA			08/19/2008	0808			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	445.60687		500.0		89.1		80-120		
Magnesium (Mg)	509.56884		500.0		101.9		80-120		
Potassium (K)	0.01146		0.0						
Sodium (Na)	0.17832		0.0						
ISA	Interference Check Sample A	MS073008IA			08/19/2008	1237			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Calcium (Ca)	436.85226		500.0		87.4		80-120		
Magnesium (Mg)	499.59219		500.0		99.9		80-120		
Potassium (K)	-0.12592		0.0						
Sodium (Na)	0.15250		0.0						

Job Number.: 358781		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/22/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: G.L ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/19/2008	1705
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		437.94311		500.0		87.6 80-120
Magnesium (Mg)		504.82476		500.0		101.0 80-120
Potassium (K)		-0.11310		0.0		
Sodium (Na)		0.49776		0.0		
ISB	Interference Check Sample B	MS073008IB			08/19/2008	0815
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		451.74597		510.0		88.6 80.0-120.0
Magnesium (Mg)		519.11096		510.0		101.8 80.0-120.0
ISB	Interference Check Sample B	MS073008IB			08/19/2008	1241
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		446.64959		510.0		87.6 80.0-120.0
Magnesium (Mg)		512.40270		510.0		100.5 80.0-120.0
ISB	Interference Check Sample B	MS073008IB			08/19/2008	1709
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		445.72625		510.0		87.4 80.0-120.0
Magnesium (Mg)		516.60327		510.0		101.3 80.0-120.0
S0	Calibration Blank				08/19/2008	0746
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00704				
Magnesium (Mg)		0.03016				
Potassium (K)		0.44312				
Sodium (Na)		0.23759				
STD	Spiked Blank Duplicate				08/19/2008	0749
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		2.74848				
Magnesium (Mg)		1.13482				
Potassium (K)		2.73523				
Sodium (Na)		15.56459				

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/22/2008

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field, (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
- 4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reported as the final result.
- m-Cresol (3-Methylphenol) and p-Cresol (4-methylphenol) co-elute. The result of the two is reported as either m&p-cresol or as 4-methylphenol (p-cresol).
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming dipheylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethylsilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MQL/PQL.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, multiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The 8260 and 1006 results will not require correction. The only corection required for water analysis is for method 1006 where the reported concentraiton must be multiplied by 0.1.
- Due to limitation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound reveiwed.
- The dilution factor listed on the report represents only the analytical dilutions necessary for the target compounds to be within the calibration range of the instrument. It does not include any preparation factors, dry weight or any other adjustment.

Explanation of Qualifiers:

- U - This qualifier indicates that the analyte was analyzed but not detected.
- J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic charachterization of a TIC, such as "chlorinated hydrocarbon", the "N" flag is not used.

Explanation of General QC Outliers:

- A - Matrix interference present in sample.
- a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
- b - Target analyte was found in the method blank.
- M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
- L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/22/2008

observed above the RL in the associated samples.

G - Marginal outlier within 1% of acceptance criteria.

r - RPD value is outside method acceptance criteria.

C - Poor RPD values observed due to the non-homogenous nature of the sample.

O - Sample required dilution due to matrix interference.

D - Sample reported from a dilution.

d - Spike and/or surrogate diluted.

E - The reported concentration exceeds the instrument calibration.

F - The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.

H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.

q - See the subcontract final report for qualifier explanation.

W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.

K - High recovery will not affect the quality of reported results.

Z - See case narrative.

Explanation of Organic QC Outliers:

e - Method blank analysis yielded phthalate concentrations above the RL. Phthalates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.

S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.

T - Sample analysis yielded poor surrogate recovery.

R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.

I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.

X - Gaseous compound. In-house QC limits are advisory.

Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.

f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.

V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.

e - Serial dilution failed due to matrix interference.

g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is greater than or equal to 0.995.

s - BOD/CBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.

l - BOD/CBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.

N - Spiked sample recovery is not within control limits.

n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.

* - Duplicate analysis is not within control limits.

Abbreviations:

Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.

CCV - Continuing Calibration Verification

CRA - Low level standard check - GEAA, Mercury

CRI - Low level standard check - ICP

Dil Fac - Dilution Factor - Secondary dilution analysis

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/22/2008

DLFac - Detection Limit Factor
DU - Duplicate
EB - Extraction Blank (TCLP, SPLP, etc.)
ICAL - Initial Calibration
ICB - Initial Calibration Blank
ICV - Initial Calibration Verification
ISA - Interference Check Sample A - ICP
ISB - Interference Check Sample B - ICP
LCD - Laboratory Control Duplicate
LCS - Laboratory Control Sample
MB - Method Blank
MD - Method Duplicate
MDL - Method Detection Limit
MQL - Method Quantitation Limit (TRRP)
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ND - Not Detected
PB - Preparation Blank
PREPF - Preparation Factor
RL - Reporting Limit
RPD - Relative Percent Difference
RRF - Relative Response Factor
RT - Retention Time
SQL - Sample Quantitation Limit (TRRP)
TIC - Tentatively Identified Compound

Method References:

- (1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-94-111 Methods for the Determination of Metals in Environmental Samples, Supplement I, May 1994.
- (3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
- (4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
- (5) HACH Water Analysis Handbook 3rd Edition (1997).
- (6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
- (7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.
- (9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

LABORATORY CHRONICLE

Job Number: 358781

Date: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Lab ID: 358781-1	Client ID: MW-3 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008
METHOD	DESCRIPTION	RUN#	BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616 08/14/2008 1715
SM 2320 B	Alkalinity	1	403565 08/14/2008 1200
	Electronic Data Deliverables	1	
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2009
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2024 10
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2040 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2024 10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717 403616 08/15/2008 1136
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795 403616 08/18/2008 1636 100
N/A	Sample Filtration	1	403608 08/14/2008 1600
SM 2540C	Solids, Total Dissolved (TDS)	1	403921 08/19/2008 1015

Lab ID: 358781-2	Client ID: MW-4 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008
METHOD	DESCRIPTION	RUN#	BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616 08/14/2008 1715
SM 2320 B	Alkalinity	1	403565 08/14/2008 1200
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2055 5
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2127 100
EPA 300.0	Ion Chromatography Analysis	1	403816 08/18/2008 1647 200
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2055 5
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2111 10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717 403616 08/15/2008 1152
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795 403616 08/18/2008 1651 10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795 403616 08/18/2008 1655 100
N/A	Sample Filtration	1	403608 08/14/2008 1600
SM 2540C	Solids, Total Dissolved (TDS)	1	403921 08/19/2008 1015

Lab ID: 358781-3	Client ID: MW-5 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008
METHOD	DESCRIPTION	RUN#	BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616 08/14/2008 1715
SM 2320 B	Alkalinity	1	403565 08/14/2008 1200
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2142
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2229 10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2142
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2229 10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717 403616 08/15/2008 1155
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795 403616 08/18/2008 1659 100
N/A	Sample Filtration	1	403608 08/14/2008 1600
SM 2540C	Solids, Total Dissolved (TDS)	1	403921 08/19/2008 1015

Lab ID: 358781-4	Client ID: MW-6 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008
METHOD	DESCRIPTION	RUN#	BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616 08/14/2008 1715
SM 2320 B	Alkalinity	1	403565 08/14/2008 1200
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2300
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2316 10
EPA 300.0	Ion Chromatography Analysis	1	403662 08/14/2008 2332 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662 08/14/2008 2316 10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717 403616 08/15/2008 1159
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795 403616 08/18/2008 1711 100
N/A	Sample Filtration	1	403608 08/14/2008 1600
SM 2540C	Solids, Total Dissolved (TDS)	1	403921 08/19/2008 1015

Lab ID: 358781-5	Client ID: MW-7 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008
METHOD	DESCRIPTION	RUN#	BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616 08/14/2008 1715

LABORATORY CHRONICLE

Job Number: 358781

Date: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Lab ID: 358781-5	Client ID: MW-7 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/14/2008 2347		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0003	10	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/14/2008 2347		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/15/2008 0003	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717	403616		08/15/2008 1210		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403616		08/18/2008 1715	100	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403921			08/19/2008 1015		
Lab ID: 358781-6	Client ID: MW-13 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0121		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0137	10	
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0152	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/15/2008 0121		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/15/2008 0137	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717	403616		08/15/2008 1214		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403881	403616		08/19/2008 1046	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403921			08/19/2008 1015		
Lab ID: 358781-7	Client ID: MW-SOUTHWEST 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0208	5	
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0239	100	
EPA 300.0	Ion Chromatography Analysis	1	403816			08/18/2008 1703	200	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/15/2008 0224	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717	403616		08/15/2008 1217		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403616		08/18/2008 1723	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403616		08/18/2008 1727	100	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403921			08/19/2008 1015		
Lab ID: 358781-8	Client ID: MW-WEST 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403616			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0255		
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0311	10	
EPA 300.0	Ion Chromatography Analysis	1	403662			08/15/2008 0326	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403662			08/15/2008 0311	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403717	403616		08/15/2008 1221		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403616		08/18/2008 1730	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403616		08/18/2008 1734	100	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403921			08/19/2008 1015		

$$0 \rightarrow \pi_1(X) \xrightarrow{\alpha} \pi_1(Y) \xrightarrow{\beta} \pi_1(Z) \rightarrow 0$$

55039124
CEML G.L. EDWIN

Date: 09/04/2008

TOTAL NO. OF PAGES.

S A M P L E I N F O R M A T I O N

Date: 09/04/2008

Job Number.: 358699

Customer....: Conestoga-Rovers and Associates

Attn.....: Todd Wells

Project Number.....: 99007835

Customer Project ID....: GL ERWIN

Project Description.....: Analytical

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
358699-1	MW-1 81208	Water	08/12/2008	16:35	08/13/2008	09:37
358699-2	MW-2 81208	Water	08/12/2008	16:50	08/13/2008	09:37
358699-3	MW-8 81208	Water	08/12/2008	14:40	08/13/2008	09:37
358699-4	MW-9 81208	Water	08/12/2008	16:20	08/13/2008	09:37
358699-5	MW-10 81208	Water	08/12/2008	15:45	08/13/2008	09:37
358699-6	MW-12 81208	Water	08/12/2008	14:10	08/13/2008	09:37
358699-7	MW-14 81208	Water	08/12/2008	15:15	08/13/2008	09:37
358699-8	MW-15 81208	Water	08/12/2008	13:50	08/13/2008	09:37
358699-9	MW-16 81208	Water	08/12/2008	14:25	08/13/2008	09:37
358699-10	MW-17 81208	Water	08/12/2008	15:00	08/13/2008	09:37
358699-11	MW-19 81208	Water	08/12/2008	15:30	08/13/2008	09:37
358699-12	MW-20 81208	Water	08/12/2008	13:35	08/13/2008	09:37
358699-13	MW-21 81208	Water	08/12/2008	13:20	08/13/2008	09:37
358699-14	MW-22 81208	Water	08/12/2008	16:05	08/13/2008	09:37
358699-15	RW-1 81208	Water	08/12/2008	13:10	08/13/2008	09:37
358699-16	DUP 81208	Water	08/12/2008	00:00	08/13/2008	09:37

LABORATORY TEST RESULTS									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-1 81208									
Laboratory Sample ID: 358699-1									
Date Sampled.....: 08/12/2008									
Date Received.....: 08/13/2008									
Time Sampled.....: 16:35									
Time Received.....: 09:37									
Sample Matrix.....: Water									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	57.8		0.02185	2.000	1	mg/L	403716	08/15/08 1116 srp
	Magnesium (Mg), Diss.	19.5		0.01604	2.000	1	mg/L	403716	08/15/08 1116 srp
	Potassium (K), Diss.	5.20		0.08121	2.000	1	mg/L	403716	08/15/08 1116 srp
	Sodium (Na), Diss.	114		0.2000	20.00	10	mg/L	403795	08/18/08 1136 srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	212		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	212		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	692		1.533	10	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	217		2.31	5.0	10	mg/L	403577	08/13/08 1334 sur
	Fluoride (F), Water	1.48		0.141	0.30	1	mg/L	403577	08/13/08 1318 sur
	Sulfate (SO4), Water	79.6		3.50	5.0	10	mg/L	403577	08/13/08 1334 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	3.06		0.084	0.20	1	mg/L	403577	08/13/08 1318 sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.172	U Z	0.172	0.20	1	mg/L	403577	08/13/08 1318 sur

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-2 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 16:50									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-2									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	20.6		0.02185	2.000	1	mg/L	403716	08/15/08 1131 srp
	Magnesium (Mg), Diss.	5.84		0.01604	2.000	1	mg/L	403716	08/15/08 1131 srp
	Potassium (K), Diss.	6.53		0.08121	2.000	1	mg/L	403716	08/15/08 1131 srp
	Sodium (Na), Diss.	308		0.2000	20.00	10	mg/L	403795	08/18/08 1151 srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	287		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	287		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	1080		1.533	10	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	331		2.31	5.0	10	mg/L	403577	08/13/08 1436 sur
	Fluoride (F), Water	1.54		0.141	0.30	1	mg/L	403577	08/13/08 1421 sur
	Sulfate (SO4), Water	144		3.50	5.0	10	mg/L	403577	08/13/08 1436 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	5.39		0.084	0.20	1	mg/L	403577	08/13/08 1421 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/13/08 1436 sur

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-8 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 14:40									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-3									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	64.1		0.02185	2.000	1	mg/L	403716	08/15/08 1135 srp
	Magnesium (Mg), Diss.	19.7		0.01604	2.000	1	mg/L	403716	08/15/08 1135 srp
	Potassium (K), Diss.	8.49		0.08121	2.000	1	mg/L	403716	08/15/08 1135 srp
	Sodium (Na), Diss.	541		2.000	200.0	100	mg/L	403795	08/18/08 1340 srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	357		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	357		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	1750		1.533	10	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	668		23.1	50	100	mg/L	403577	08/13/08 1610 sur
	Fluoride (F), Water	2.99		0.141	0.30	1	mg/L	403577	08/13/08 1539 sur
	Sulfate (SO4), Water	171		3.50	5.0	10	mg/L	403577	08/13/08 1555 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	6.74		0.084	0.20	1	mg/L	403577	08/13/08 1539 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/13/08 1555 sur

* In Description = Dry Wgt.

Job Number: 358699			L A B O R A T O R Y T E S T R E S U L T S									Date:09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN									ATTN: Todd Wells	
Customer Sample ID: MW-9 81208 Date Sampled.....: 08/12/2008 Time Sampled.....: 16:20 Sample Matrix.....: Water			Laboratory Sample ID: 358699-4 Date Received.....: 08/13/2008 Time Received.....: 09:37										
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH		
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl		
SW-846 6010B	Metals Analysis (ICAP Trace)												
	Calcium (Ca), Diss.	720		0.2185	20.00	10	mg/L	403795		08/18/08 1159	srp		
	Magnesium (Mg), Diss.	236		0.1604	20.00	10	mg/L	403795		08/18/08 1159	srp		
	Potassium (K), Diss.	36.2		0.08121	2.000	1	mg/L	403716		08/15/08 1139	srp		
SM 2320 B	Sodium (Na), Diss.	1760		2.000	200.0	100	mg/L	403795		08/18/08 1344	srp		
	Alkalinity, Total as CaCO3, Water	257		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng		
SM 2320 B	Bicarbonate (HCO3), Water	257		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng		
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng		
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng		
SM 2540C	Solids, Total Dissolved (TDS), Water	11400		1.533	40	1	mg/L	403559		08/13/08 1500	daw		
EPA 300.0	Ion Chromatography Analysis												
	Chloride, Water	4910		23.1	50	100	mg/L	403577		08/13/08 1657	sur		
	Fluoride (F), Water	1.19	B	0.705	1.5	5	mg/L	403577		08/13/08 1626	sur		
	Sulfate (SO4), Water	443		3.50	5.0	10	mg/L	403577		08/13/08 1641	sur		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold												
	Nitrogen, Nitrate as N (NO3-N), Water	3.74		0.42	1.0	5	mg/L	403577		08/13/08 1626	sur		
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/13/08 1641	sur		

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-10 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 15:45									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-5									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	430		0.02185	2.000	1	mg/L	403716	08/15/08 1151 srp
	Magnesium (Mg), Diss.	154		0.1604	20.00	10	mg/L	403795	08/18/08 1211 srp
	Potassium (K), Diss.	15.4		0.08121	2.000	1	mg/L	403716	08/15/08 1151 srp
SM 2320 B	Sodium (Na), Diss.	271		0.2000	20.00	10	mg/L	403795	08/18/08 1211 srp
	Alkalinity, Total as CaCO3, Water	800		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	800		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	4540		1.533	20	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	1700		23.1	50	100	mg/L	403577	08/13/08 1744 sur
	Fluoride (F), Water	1.75		0.141	0.30	1	mg/L	403577	08/13/08 1713 sur
	Sulfate (SO4), Water	108		3.50	5.0	10	mg/L	403577	08/13/08 1728 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	3.16		0.084	0.20	1	mg/L	403577	08/13/08 1713 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/13/08 1728 sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS											
Job Number: 358699			Date:09/04/2008								
CUSTOMER: Conestoga-Rovers and Associates			ATTN: Todd Wells								
Customer Sample ID: MW-12 81208			Laboratory Sample ID: 358699-6								
Date Sampled.....: 08/12/2008			Date Received.....: 08/13/2008								
Time Sampled.....: 14:10			Time Received.....: 09:37								
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	647		0.2185	20.00	10	mg/L	403795		08/18/08 1215	srp
	Magnesium (Mg), Diss.	221		0.1604	20.00	10	mg/L	403795		08/18/08 1215	srp
	Potassium (K), Diss.	17.9		0.08121	2.000	1	mg/L	403716		08/15/08 1155	srp
SM 2320 B	Sodium (Na), Diss.	212		0.2000	20.00	10	mg/L	403795		08/18/08 1215	srp
	Alkalinity, Total as CaCO3, Water	77.0		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	77.0		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	5160		1.533	20	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	2140		23.1	50	100	mg/L	403577		08/13/08 1902	sur
	Fluoride (F), Water	1.68		0.705	1.5	5	mg/L	403577		08/13/08 1831	sur
	Sulfate (SO4), Water	86.1		1.75	2.5	5	mg/L	403577		08/13/08 1831	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.84		0.42	1.0	5	mg/L	403577		08/13/08 1831	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/13/08 1847	sur

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-14 81208									
Laboratory Sample ID: 358699-7									
Date Sampled.....: 08/12/2008									
Date Received.....: 08/13/2008									
Time Sampled.....: 15:15									
Time Received.....: 09:37									
Sample Matrix.....: Water									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	781		0.2185	20.00	10	mg/L	403795	08/18/08 1219 srp
	Magnesium (Mg), Diss.	237		0.1604	20.00	10	mg/L	403795	08/18/08 1219 srp
	Potassium (K), Diss.	38.2		0.08121	2.000	1	mg/L	403716	08/15/08 1159 srp
SM 2320 B	Sodium (Na), Diss.	1650		2.000	200.0	100	mg/L	403795	08/18/08 1348 srp
	Alkalinity, Total as CaCO3, Water	101		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	101		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	10300		1.533	40	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	4400		23.1	50	100	mg/L	403577	08/13/08 1949 sur
	Fluoride (F), Water	1.32	B	0.705	1.5	5	mg/L	403577	08/13/08 1918 sur
	Sulfate (SO4), Water	668		35.0	50	100	mg/L	403577	08/13/08 1949 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	3.50		0.42	1.0	5	mg/L	403577	08/13/08 1918 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/13/08 1933 sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:09/04/2008						
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN						
Customer Sample ID: MW-15 81208					Laboratory Sample ID: 358699-8						
Date Sampled.....: 08/12/2008					Date Received.....: 08/13/2008						
Time Sampled.....: 13:50					Time Received.....: 09:37						
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	238		0.02185	2.000	1	mg/L	403716		08/15/08 1203	srp
	Magnesium (Mg), Diss.	92.0		0.1604	20.00	10	mg/L	403795		08/18/08 1223	srp
	Potassium (K), Diss.	13.3		0.08121	2.000	1	mg/L	403716		08/15/08 1203	srp
SM 2320 B	Sodium (Na), Diss.	120		0.2000	20.00	10	mg/L	403795		08/18/08 1223	srp
	Alkalinity, Total as CaCO3, Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	2370		1.533	10	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	792		23.1	50	100	mg/L	403577		08/13/08 2036	sur
	Fluoride (F), Water	1.81		0.141	0.30	1	mg/L	403577		08/13/08 2005	sur
	Sulfate (SO4), Water	68.3		3.50	5.0	10	mg/L	403577		08/13/08 2020	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	2.38		0.084	0.20	1	mg/L	403577		08/13/08 2005	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/13/08 2020	sur

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S											
Job Number: 358699			Date:09/04/2008								
CUSTOMER: Conestoga-Rovers and Associates											
PROJECT: GL ERWIN											
ATTN: Todd Wells											
Customer Sample ID: MW-16 81208											
Date Sampled.....: 08/12/2008											
Time Sampled.....: 14:25											
Sample Matrix.....: Water											
Laboratory Sample ID: 358699-9											
Date Received.....: 08/13/2008											
Time Received.....: 09:37											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	112		0.02185	2.000	1	mg/L	403716		08/15/08 1206	srp
	Magnesium (Mg), Diss.	37.4		0.1604	20.00	10	mg/L	403795		08/18/08 1227	srp
	Potassium (K), Diss.	6.75		0.08121	2.000	1	mg/L	403716		08/15/08 1206	srp
SM 2320 B	Sodium (Na), Diss.	221		0.2000	20.00	10	mg/L	403795		08/18/08 1227	srp
	Alkalinity, Total as CaCO3, Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	1660		1.533	10	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	536		23.1	50	100	mg/L	403577		08/13/08 2154	sur
	Fluoride (F), Water	1.36		0.141	0.30	1	mg/L	403577		08/13/08 2123	sur
	Sulfate (SO4), Water	86.2		3.50	5.0	10	mg/L	403577		08/13/08 2138	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.34		0.084	0.20	1	mg/L	403577		08/13/08 2123	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/13/08 2138	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:09/04/2008						
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN						
ATTN: Todd Wells											
Customer Sample ID: MW-17 81208					Laboratory Sample ID: 358699-10						
Date Sampled.....: 08/12/2008					Date Received.....: 08/13/2008						
Time Sampled.....: 15:00					Time Received.....: 09:37						
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	124		0.02185	2.000	1	mg/L	403716		08/15/08 1210	srp
	Magnesium (Mg), Diss.	43.0		0.1604	20.00	10	mg/L	403795		08/18/08 1231	srp
	Potassium (K), Diss.	7.92		0.08121	2.000	1	mg/L	403716		08/15/08 1210	srp
SM 2320 B	Sodium (Na), Diss.	222		0.2000	20.00	10	mg/L	403795		08/18/08 1231	srp
	Alkalinity, Total as CaCO3, Water	173		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	173		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	1660		1.533	10	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	519		23.1	50	100	mg/L	403577		08/13/08 2312	sur
	Fluoride (F), Water	1.86		0.141	0.30	1	mg/L	403577		08/13/08 2241	sur
	Sulfate (SO4), Water	125		3.50	5.0	10	mg/L	403577		08/13/08 2257	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.37		0.084	0.20	1	mg/L	403577		08/13/08 2241	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/13/08 2257	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN				
ATTN: Todd Wells									
Customer Sample ID: MW-19 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 15:30									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-11									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SM-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SM-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	1080		0.2185	20.00	10	mg/L	403795	08/18/08 1234 srp
	Magnesium (Mg), Diss.	399		0.1604	20.00	10	mg/L	403795	08/18/08 1234 srp
	Potassium (K), Diss.	26.7		0.8121	20.00	10	mg/L	403795	08/18/08 1234 srp
SM 2320 B	Sodium (Na), Diss.	739		2.000	200.0	100	mg/L	403795	08/18/08 1352 srp
	Alkalinity, Total as CaCO3, Water	79.8		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	79.8		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	9600		1.533	40	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	4240		23.1	50	100	mg/L	403577	08/14/08 0030 sur
	Fluoride (F), Water	2.94		0.705	1.5	5	mg/L	403577	08/13/08 2328 sur
	Sulfate (SO4), Water	429		3.50	5.0	10	mg/L	403577	08/13/08 2343 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	3.27		0.42	1.0	5	mg/L	403577	08/13/08 2328 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/13/08 2343 sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:09/04/2008						
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN						
ATTN: Todd Wells											
Customer Sample ID: MW-20 81208					Laboratory Sample ID: 358699-12						
Date Sampled.....: 08/12/2008					Date Received.....: 08/13/2008						
Time Sampled.....: 13:35					Time Received.....: 09:37						
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	392		0.02185	2.000	1	mg/L	403716		08/15/08 1218	srp
	Magnesium (Mg), Diss.	154		0.1604	20.00	10	mg/L	403795		08/18/08 1238	srp
	Potassium (K), Diss.	18.5		0.08121	2.000	1	mg/L	403716		08/15/08 1218	srp
SM 2320 B	Sodium (Na), Diss.	249		0.2000	20.00	10	mg/L	403795		08/18/08 1238	srp
	Alkalinity, Total as CaCO3, Water	135		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	135		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	4290		1.533	20	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	1570		23.1	50	100	mg/L	403577		08/14/08 0117	sur
	Fluoride (F), Water	2.02		0.141	0.30	1	mg/L	403577		08/14/08 0046	sur
	Sulfate (SO4), Water	113		3.50	5.0	10	mg/L	403577		08/14/08 0102	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.73		0.084	0.20	1	mg/L	403577		08/14/08 0046	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/14/08 0102	sur

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: MW-21 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 13:20									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-13									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	193		0.02185	2.000	1	mg/L	403716	08/15/08 1222 srp
	Magnesium (Mg), Diss.	64.7		0.1604	20.00	10	mg/L	403795	08/18/08 1242 srp
	Potassium (K), Diss.	12.5		0.08121	2.000	1	mg/L	403716	08/15/08 1222 srp
SM 2320 B	Sodium (Na), Diss.	116		0.2000	20.00	10	mg/L	403795	08/18/08 1242 srp
	Alkalinity, Total as CaCO3, Water	126		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
	Bicarbonate (HCO3), Water	126		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	2060		1.533	10	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	544		23.1	50	100	mg/L	403577	08/14/08 0204 sur
	Fluoride (F), Water	2.00		0.141	0.30	1	mg/L	403577	08/14/08 0133 sur
	Sulfate (SO4), Water	147		3.50	5.0	10	mg/L	403577	08/14/08 0149 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	4.68		0.084	0.20	1	mg/L	403577	08/14/08 0133 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/14/08 0149 sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:09/04/2008						
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN						
ATTN: Todd Wells											
Customer Sample ID: MW-22 81208					Laboratory Sample ID: 358699-14						
Date Sampled.....: 08/12/2008					Date Received.....: 08/13/2008						
Time Sampled.....: 16:05					Time Received.....: 09:37						
Sample Matrix.....: Water											
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	359		0.02185	2.000	1	mg/L	403716		08/15/08 1226	srp
	Magnesium (Mg), Diss.	129		0.1604	20.00	10	mg/L	403795		08/18/08 1246	srp
	Potassium (K), Diss.	12.9		0.08121	2.000	1	mg/L	403716		08/15/08 1226	srp
SM 2320 B	Sodium (Na), Diss.	272		0.2000	20.00	10	mg/L	403795		08/18/08 1246	srp
	Alkalinity, Total as CaCO3, Water	143		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	143		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	3670		1.533	10	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	1370		23.1	50	100	mg/L	403577		08/14/08 0251	sur
	Fluoride (F), Water	1.70		0.141	0.30	1	mg/L	403577		08/14/08 0220	sur
	Sulfate (SO4), Water	167		3.50	5.0	10	mg/L	403577		08/14/08 0235	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	2.73		0.084	0.20	1	mg/L	403577		08/14/08 0220	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/14/08 0235	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS									
Job Number: 358699					Date:09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates									
PROJECT: GL ERWIN									
ATTN: Todd Wells									
Customer Sample ID: RW-1 81208									
Date Sampled.....: 08/12/2008									
Time Sampled.....: 13:10									
Sample Matrix.....: Water									
Laboratory Sample ID: 358699-15									
Date Received.....: 08/13/2008									
Time Received.....: 09:37									
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DATE/TIME TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614	08/14/08 1715 dcl
SW-846 6010B	Metals Analysis (ICAP Trace)								
	Calcium (Ca), Diss.	816		0.2185	20.00	10	mg/L	403795	08/18/08 1258 srp
	Magnesium (Mg), Diss.	232		0.1604	20.00	10	mg/L	403795	08/18/08 1258 srp
	Potassium (K), Diss.	107		0.8121	20.00	10	mg/L	403795	08/18/08 1258 srp
SM 2320 B	Sodium (Na), Diss.	1770		2.000	200.0	100	mg/L	403795	08/18/08 1356 srp
	Alkalinity, Total as CaCO3, Water	255		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Bicarbonate (HCO3), Water	255		1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565	08/14/08 1200 sng
SM 2540C	Solids, Total Dissolved (TDS), Water	11000		1.533	40	1	mg/L	403559	08/13/08 1500 daw
EPA 300.0	Ion Chromatography Analysis								
	Chloride, Water	4650		23.1	50	100	mg/L	403577	08/14/08 0440 sur
	Fluoride (F), Water	1.06	B	0.705	1.5	5	mg/L	403577	08/14/08 0409 sur
	Sulfate (SO4), Water	628		35.0	50	100	mg/L	403577	08/14/08 0440 sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold								
	Nitrogen, Nitrate as N (NO3-N), Water	6.43		0.42	1.0	5	mg/L	403577	08/14/08 0409 sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577	08/14/08 0425 sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS					Date:09/04/2008						
CUSTOMER: Conestoga-Rovers and Associates					PROJECT: GL ERWIN		ATTN: Todd Wells				
Customer Sample ID: DUP 81208 Date Sampled.....: 08/12/2008 Time Sampled.....: 00:00 Sample Matrix.....: Water					Laboratory Sample ID: 358699-16 Date Received.....: 08/13/2008 Time Received.....: 09:37						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
SW-846 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	778		0.2185	20.00	10	mg/L	403795		08/18/08 1302	srp
	Magnesium (Mg), Diss.	222		0.1604	20.00	10	mg/L	403795		08/18/08 1302	srp
	Potassium (K), Diss.	105		0.8121	20.00	10	mg/L	403795		08/18/08 1302	srp
SM 2320 B	Sodium (Na), Diss.	1740		2.000	200.0	100	mg/L	403795		08/18/08 1400	srp
	Alkalinity, Total as CaCO3, Water	229		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Bicarbonate (HCO3), Water	229		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2320 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
SM 2540C	Solids, Total Dissolved (TDS), Water	10900		1.533	40	1	mg/L	403559		08/13/08 1500	daw
EPA 300.0	Ion Chromatography Analysis										
	Chloride, Water	4600		23.1	50	100	mg/L	403577		08/14/08 0527	sur
	Fluoride (F), Water	1.05	B	0.705	1.5	5	mg/L	403577		08/14/08 0456	sur
	Sulfate (SO4), Water	612		35.0	50	100	mg/L	403577		08/14/08 0527	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	6.37		0.42	1.0	5	mg/L	403577		08/14/08 0456	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403577		08/14/08 0512	sur

* In Description = Dry Wgt.

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 358699

Report Date.: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Alkalinity, Total as CaCO3

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: ALK

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
LCS	403565--21	WC4232	938.62		1000.0		93.9	90.0-110.		08/14/2008	1200
DU	358781-6		142.67			140.79	1.3	20		08/14/2008	1200
DU	358698-14		1321.07			1415.43	6.9	20		08/14/2008	1200
MB	403565--21		1.88							08/14/2008	1200
LCS	403565--21	WC4232	938.62		1000.0		93.9	90.0-110.		08/14/2008	1200
DU	358699-6		77.91			76.97	1.2	20		08/14/2008	1200
LCS	403565--21	WC4232	943.62		1000.0		94.4	90.0-110.		08/14/2008	1200
MB	403565--21		4.72							08/14/2008	1200
MS	358781-6	WC4247	375.45		250.000000	140.79	93.9	75-125		08/14/2008	1200
MS	358699-6	WC4247	194.29		125.000000	76.97	93.9	75-125		08/14/2008	1200
DU	358699-11		79.78			79.78	0.0	20		08/14/2008	1200
DU	358815-1		148.30			148.30	0.0	20		08/14/2008	1200
MS	358815-1	WC4247	381.08		250.000000	148.30	93.1	75-125		08/14/2008	1200
DU	358820-1		148.30			146.42	1.3	20		08/14/2008	1200
MS	358820-1	WC4247	379.20		250.000000	146.42	93.1	75-125		08/14/2008	1200
MS	358699-11	WC4247	196.17		125.000000	79.78	93.1	75-125		08/14/2008	1200
MS	358698-14	WC4247	3774.49		2500.000000	1415.43	94.4	75-125		08/14/2008	1200
MB	403565--21		1.88							08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Bicarbonate (HCO3)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: HCO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358781-6		142.67			140.79	1.3	20		08/14/2008	1200
DU	358699-11		79.78			79.78	0.0	20		08/14/2008	1200
DU	358699-6		77.91			76.97	1.2	20		08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Carbonate (CO3)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: CO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-6		0			0	0	5		08/14/2008	1200
DU	358781-6		0			0	0	5		08/14/2008	1200
DU	358699-11		0			0	0	5		08/14/2008	1200

Test Method.....: SM 2320 B

Method Description.: Alkalinity

Parameter.....: Hydroxide (OH)

Units.....: mg/L CaCO3

Batch(s)....: 403565

Analyst....: sng

Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-6		0			0	0	5		08/14/2008	1200
DU	358781-6		0			0	0	5		08/14/2008	1200
DU	358699-11		0			0	0	5		08/14/2008	1200

Job Number.: 358699	Q U A L I T Y C O N T R O L R E S U L T S	Report Date.: 09/04/2008
CUSTOMER: Conestoga-Rovers and Associates	PROJECT: GL ERWIN	ATTN: Todd Wells

Test Method.....: SM 2540C	Units.....: mg/L	Analyst....: daw
Method Description.: Solids, Total Dissolved (TDS)	Batch(s)....: 403559	Test Code.: TDS
Parameter.....: Solids, Total Dissolved (TDS)		

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	358699-1		711.00			692.00	2.7	10.0		08/13/2008	1500
MB	403559--21		1.00							08/13/2008	1500
LCS	403559--21	WCS50006	1751.00		1800		97.3	90.0-110.		08/13/2008	1500
DU	358699-11		9700.00			9600.00	1.0	10.0		08/13/2008	1500

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/14/2008	0322

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br)	0							
Fluoride (F)	0							
Chloride	0.2027							
Sulfate (SO4)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCB	Continuing Calibration Blank					08/14/2008	0630
-----	------------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0.2213							
Bromide (Br)	0							
Sulfate (SO4)	0							
Fluoride (F)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

CCV	Continuing Calibration Verification	WCS50535				08/13/2008	1508
-----	-------------------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.650		20.00		98.2		90.0-110.0	
Fluoride (F)	9.6619		10.00		96.6		90.0-110.0	
Bromide (Br)	19.964		20.00		99.8		90.0-110.0	
Sulfate (SO4)	19.547		20.00		97.7		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.314		10.0		103.1		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6609		10.0		96.6		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/13/2008	1800
-----	-------------------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.601		20.00		98.0		90.0-110.0	
Fluoride (F)	9.7770		10.00		97.8		90.0-110.0	
Bromide (Br)	19.751		20.00		98.8		90.0-110.0	
Sulfate (SO4)	19.546		20.00		97.7		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.315		10.0		103.2		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6184		10.0		96.2		90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/13/2008	2052
-----	-------------------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.568		20.00		97.8		90.0-110.0	
Fluoride (F)	9.8217		10.00		98.2		90.0-110.0	
Sulfate (SO4)	19.401		20.00		97.0		90.0-110.0	
Bromide (Br)	19.640		20.00		98.2		90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.264		10.0		102.6		90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6150		10.0		96.2		90.0-110.0	

Q U A L I T Y C O N T R O L R E S U L T S					
Job Number.: 358699			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN		ATTN: Todd Wells	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time
CCV	Continuing Calibration Verification	WCS50535			08/13/2008 2359

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	19.879		20.00		99.4	90.0-110.0	
Sulfate (SO4)	19.717		20.00		98.6	90.0-110.0	
Fluoride (F)	10.073		10.00		100.7	90.0-110.0	
Chloride	19.806		20.00		99.0	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.311		10.0		103.1	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.7114		10.0		97.1	90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/14/2008 0307
-----	-------------------------------------	----------	--	--	--	-------------------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride	19.543		20.00		97.7	90.0-110.0	
Fluoride (F)	9.7530		10.00		97.5	90.0-110.0	
Sulfate (SO4)	19.522		20.00		97.6	90.0-110.0	
Bromide (Br)	19.744		20.00		98.7	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.228		10.0		102.3	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6211		10.0		96.2	90.0-110.0	

CCV	Continuing Calibration Verification	WCS50535				08/14/2008 0614
-----	-------------------------------------	----------	--	--	--	-------------------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.561		20.00		97.8	90.0-110.0	
Fluoride (F)	9.7249		10.00		97.2	90.0-110.0	
Bromide (Br)	19.576		20.00		97.9	90.0-110.0	
Chloride	19.352		20.00		96.8	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.144		10.0		101.4	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.5487		10.0		95.5	90.0-110.0	

DU	Method Duplicate		358699-1	10		08/13/2008 1350
----	------------------	--	----------	----	--	-------------------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4), Water	7.9629			7.9638	0.0	20	
Bromide (Br), Water	0.0825			0.1317	0.0492	0.6000	
Fluoride (F), Water	0.1536			0.1611	0.0075	0.3000	
Chloride, Water	21.618			21.699	0.4	20	
Nitrogen, Nitrate as N (NO3-N), Water	0.3600			0.3547	0.0053	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	

DU	Method Duplicate		358699-9	100		08/13/2008 2210
----	------------------	--	----------	-----	--	-------------------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride, Water	5.3592			5.3642	0.1	20	
Fluoride (F), Water	0			0	0	0	
Sulfate (SO4), Water	0.7735			0.7741	0.0006	0.5000	
Bromide (Br), Water	0			0	0	1	
Nitrogen, Nitrate as N (NO3-N), Water	0.1161			0.1046	0.0115	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/13/2008	1231

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	0						
Sulfate (SO4)	0						
Chloride	0.2133						
Fluoride (F)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						

ICV	Initial Calibration Verification	WCS50535				08/13/2008	1216
-----	----------------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	9.4399		10.00		94.4	90.0-110.0	
Sulfate (SO4)	19.111		20.00		95.6	90.0-110.0	
Chloride	19.380		20.00		96.9	90.0-110.0	
Bromide (Br)	19.374		20.00		96.9	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.054		10.0		100.5	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.4275		10.0		94.3	90.0-110.0	

LCS	Laboratory Control Sample	WCS50535				08/13/2008	1303
-----	---------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.156		20.00		95.8	90.0-110.0	
Fluoride (F)	9.6058		10.00		96.1	90.0-110.0	
Bromide (Br)	19.686		20.00		98.4	90.0-110.0	
Chloride	19.626		20.00		98.1	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.280		10.0		102.8	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6312		10.0		96.3	90.0-110.0	

LCS	Laboratory Control Sample	WCS50535				08/14/2008	0353
-----	---------------------------	----------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	19.545		20.00		97.7	90.0-110.0	
Chloride	19.349		20.00		96.7	90.0-110.0	
Sulfate (SO4)	19.334		20.00		96.7	90.0-110.0	
Fluoride (F)	9.6858		10.00		96.9	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.130		10.0		101.3	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.6477		10.0		96.5	90.0-110.0	

MB	Method Blank					08/13/2008	1247
----	--------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Bromide (Br)	0						
Sulfate (SO4)	0						
Chloride	0.2038						
Fluoride (F)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
---------------------	--	--	---	--	--	--------------------------	--	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		

MB	Method Blank				08/14/2008	0338		
----	--------------	--	--	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sulfate (SO4)	0							
Fluoride (F)	0							
Chloride	0.2082							
Bromide (Br)	0							
Nitrogen, Nitrate as N (NO3-N)	0							
Nitrogen, Nitrite as N (NO2-N)	0							

MS	Matrix Spike	WCS50358	358699-1	10	08/13/2008	1405		
----	--------------	----------	----------	----	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoride (F), Water	1.5474		2.000000	0.1611	69.3		90-110	A
Bromide (Br), Water	9.8353		10.000000	0.1317	97.0		90-110	
Chloride, Water	30.318		10.000000	21.699	86.2		90-110	A
Sulfate (SO4), Water	17.219		10.000000	7.9638	92.6		90-110	
Nitrogen, Nitrate as N (NO3-N), Water	2.1890		2.000000	0.3547	91.7		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	2.0103		2.000000	0	100.5		90-110	

MS	Matrix Spike	WCS50358	358699-9	100	08/13/2008	2225		
----	--------------	----------	----------	-----	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bromide (Br), Water	9.6828		10.000000	0	96.8		90-110	
Fluoride (F), Water	1.5130		2.000000	0	75.7		90-110	A
Chloride, Water	14.947		10.000000	5.3642	95.8		90-110	
Sulfate (SO4), Water	10.365		10.000000	0.7741	95.9		90-110	
Nitrogen, Nitrate as N (NO3-N), Water	1.9415		2.000000	0.1046	91.8		90-110	
Nitrogen, Nitrite as N (NO2-N), Water	1.8430		2.000000	0	92.2		90-110	

Test Method.....: SW-846 6010B	Units.....: mg/L	Analyst....: srp
Method Description.: Metals Analysis (ICAP Trace)	Batch(s)....: 403663 403668 403686 403716 403717 403740 403746 403795	

CCB	Continuing Calibration Blank				08/15/2008	0814		
-----	------------------------------	--	--	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00114							
Magnesium (Mg)	-0.00865							
Potassium (K)	-0.08294							
Sodium (Na)	0.00261							

CCB	Continuing Calibration Blank				08/15/2008	0925		
-----	------------------------------	--	--	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	-0.01481							
Magnesium (Mg)	-0.05001							
Potassium (K)	-0.40687							
Sodium (Na)	0.08314							

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	1012
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01590				
Magnesium (Mg)		-0.04452				
Potassium (K)		-0.25373				
Sodium (Na)		0.14642				
CCB	Continuing Calibration Blank				08/15/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01989				
Potassium (K)		-0.36716				
Sodium (Na)		0.32666				
CCB	Continuing Calibration Blank				08/15/2008	1147
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01939				
Potassium (K)		-0.31181				
Sodium (Na)		0.17276				
CCB	Continuing Calibration Blank				08/15/2008	1234
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02531				
Potassium (K)		-0.40637				
Sodium (Na)		0.07417				
CCB	Continuing Calibration Blank				08/15/2008	1321
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02654				
Potassium (K)		-0.44085				
Sodium (Na)		0.04488				
CCB	Continuing Calibration Blank				08/15/2008	1334
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02140				
Magnesium (Mg)		-0.06908				
Potassium (K)		-0.31023				
Sodium (Na)		0.03770				

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0810
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.23240		12.50		97.9 90.0-110.0
Magnesium (Mg)		4.82444		5.000		96.5 90.0-110.0
Potassium (K)		12.00026		12.50		96.0 90.0-110.0
Sodium (Na)		12.39037		12.50		99.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0921
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.82871		12.50		94.6 90.0-110.0
Magnesium (Mg)		4.54536		5.000		90.9 90.0-110.0
Potassium (K)		12.06107		12.50		96.5 90.0-110.0
Sodium (Na)		12.20845		12.50		97.7 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1008
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.77765		12.50		94.2 90.0-110.0
Magnesium (Mg)		4.54255		5.000		90.9 90.0-110.0
Potassium (K)		12.06009		12.50		96.5 90.0-110.0
Sodium (Na)		11.88538		12.50		95.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1051
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.00270		12.50		96.0 90.0-110.0
Potassium (K)		12.45140		12.50		99.6 90.0-110.0
Sodium (Na)		11.95494		12.50		95.6 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1143
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.60482		12.50		92.8 90.0-110.0
Potassium (K)		12.06612		12.50		96.5 90.0-110.0
Sodium (Na)		12.07742		12.50		96.6 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1230
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.39002		12.50		91.1 90.0-110.0
Potassium (K)		11.85393		12.50		94.8 90.0-110.0
Sodium (Na)		12.36960		12.50		99.0 90.0-110.0

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1317		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.26366		12.50		90.1	90.0-110.0	
Potassium (K)		11.75172		12.50		94.0	90.0-110.0	
Sodium (Na)		12.40163		12.50		99.2	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1330		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.63030		12.50		93.0	90.0-110.0	
Potassium (K)		12.22006		12.50		97.8	90.0-110.0	
Sodium (Na)		12.73427		12.50		101.9	90.0-110.0	
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0758		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.11539		0.1000		115.4	80.0-120.0	
Magnesium (Mg)		0.11342		0.1000		113.4	80.0-120.0	
Potassium (K)		0.49862		0.60000		83.1	80.0-120.0	
Sodium (Na)		0.64349		0.60000		107.2	80.0-120.0	
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0747		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		19.94995		20.00		99.7	95.0-105.0	
Magnesium (Mg)		19.91933		20.00		99.6	95.0-105.0	
Potassium (K)		20.00058		20.00		100.0	95.0-105.0	
Sodium (Na)		19.97645		20.00		99.9	95.0-105.0	
EB	Extraction Blank			403614		08/15/2008	1112	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		0.00130						
Potassium (K), Diss.		-0.27515						
Sodium (Na), Diss.		0.15394						
ICB	Initial Calibration Blank					08/15/2008	0754	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00049						
Magnesium (Mg)		-0.00008						
Potassium (K)		0.05823						
Sodium (Na)		0.00558						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0750
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	12.35031		12.50		98.8	90.0-110.0
Magnesium (Mg)	4.85591		5.000		97.1	90.0-110.0
Potassium (K)	12.14282		12.50		97.1	90.0-110.0
Sodium (Na)	12.46402		12.50		99.7	90.0-110.0
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0802
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	470.04394		500.0		94.0	80-120
Magnesium (Mg)	531.16772		500.0		106.2	80-120
Potassium (K)	0.05340		0.0			
Sodium (Na)	0.03732		0.0			
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0806
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca)	480.84558		510.0		94.3	80.0-120.0
Magnesium (Mg)	539.72991		510.0		105.8	80.0-120.0
LCS	Laboratory Control Sample	MSPIKEW			08/15/2008	1108
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca), Water	9.41306		10.00		94.1	80.0-120.0
Potassium (K), Water	9.62645		10.00		96.3	80.0-120.0
Sodium (Na), Water	10.16343		10.00		101.6	80.0-120.0
MB	Method Blank				08/15/2008	1104
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca), Water	-0.03190					
Potassium (K), Water	-0.55840					
Sodium (Na), Water	0.21101					
MD	Method Duplicate		358699-1		08/15/2008	1119
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Calcium (Ca), Diss.	59.12904	57.84768		57.84768	2.2	20
Potassium (K), Diss.	5.33958	5.19646		5.19646	0.14312	2.00000

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MD	Method Duplicate		358829-1		08/15/2008	1250		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		203.33483	194.54071		194.54071	4.4	20	
MS	Matrix Spike	MSPIKEW	358699-1		08/15/2008	1123		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		69.09146		10.00	57.84768	112.4	75-125	
Potassium (K), Diss.		17.08377		10.00	5.19646	118.9	75-125	
MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	1253		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		202.34506		10.00	194.54071	78.0	75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1		08/15/2008	1127		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		68.12551	69.09146	10.00	57.84768	102.8	75-125	
						8.9	20	
Potassium (K), Diss.		17.05924	17.08377	10.00	5.19646	118.6	75-125	
						0.3	20	
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	1257		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		202.47694	202.34506	10.00	194.54071	79.4	75-125	
						1.8	20	
PDS	Post Digestion Spike	MSPIKE3	358699-1		08/15/2008	1309		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		65.65254		10.00	57.84768	78.0	75-125	
Potassium (K), Diss.		16.97202		10.00	5.19646	117.8	75-125	
S0	Calibration Blank				08/15/2008	0736		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00325						
Magnesium (Mg)		0.00628						
Potassium (K)		0.34017						
Sodium (Na)		0.02027						

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
SD	Serial Dilution		358699-1	5	08/15/2008	1313			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca), Diss.		11.58772			57.84768	0.2		10.0	
Potassium (K), Diss.		0.58664			5.19646	43.6		10.0	
Sodium (Na), Diss.		22.25878			81.79277	36.1		10.0	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca)		0.28730							
Magnesium (Mg)		0.20832							
Potassium (K)		1.59922							
Sodium (Na)		4.32485							
STD	Spiked Blank Duplicate					08/15/2008	0742		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca)		0.00407							
Magnesium (Mg)		-0.00286							
Potassium (K)		-0.01039							
Sodium (Na)		-0.00471							
CCB	Continuing Calibration Blank					08/15/2008	0802		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca)		-0.00013							
Magnesium (Mg)		-0.01782							
Potassium (K)		-0.10690							
Sodium (Na)		-0.01121							
CCB	Continuing Calibration Blank					08/15/2008	0853		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca)		-0.00072							
Magnesium (Mg)		-0.02890							
Potassium (K)		-0.19738							
Sodium (Na)		-0.00027							
CCB	Continuing Calibration Blank					08/15/2008	0937		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	
Calcium (Ca)		0.00414							
Magnesium (Mg)		-0.02016							
Potassium (K)		-0.13322							
Sodium (Na)		0.04853							

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCB	Continuing Calibration Blank				08/15/2008	1043		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00215						
Magnesium (Mg)		-0.02521						
Potassium (K)		-0.18083						
Sodium (Na)		0.03046						
CCB	Continuing Calibration Blank				08/15/2008	1118		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00351						
Magnesium (Mg)		-0.02804						
Potassium (K)		-0.19118						
Sodium (Na)		0.07797						
CCB	Continuing Calibration Blank				08/15/2008	1206		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00355						
Magnesium (Mg)		-0.04737						
Potassium (K)		-0.33812						
Sodium (Na)		0.08739						
CCB	Continuing Calibration Blank				08/15/2008	1239		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00331						
Magnesium (Mg)		-0.04515						
Potassium (K)		-0.30120						
Sodium (Na)		0.05954						
CCB	Continuing Calibration Blank				08/15/2008	1421		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00432						
Magnesium (Mg)		-0.03707						
Potassium (K)		-0.25963						
Sodium (Na)		0.02268						
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0758		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.32384		12.50		98.6	90.0-110.0	
Magnesium (Mg)		4.88669		5.000		97.7	90.0-110.0	
Potassium (K)		11.88997		12.50		95.1	90.0-110.0	
Sodium (Na)		11.84877		12.50		94.8	90.0-110.0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0849
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.31978		12.50		98.6 90.0-110.0
Magnesium (Mg)		4.83612		5.000		96.7 90.0-110.0
Potassium (K)		11.90456		12.50		95.2 90.0-110.0
Sodium (Na)		11.88772		12.50		95.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0933
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.23468		12.50		97.9 90.0-110.0
Magnesium (Mg)		4.78622		5.000		95.7 90.0-110.0
Potassium (K)		11.77882		12.50		94.2 90.0-110.0
Sodium (Na)		11.90269		12.50		95.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1017
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.21523		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.76773		5.000		95.4 90.0-110.0
Potassium (K)		12.17707		12.50		97.4 90.0-110.0
Sodium (Na)		12.26535		12.50		98.1 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1039
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.20914		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.75003		5.000		95.0 90.0-110.0
Potassium (K)		12.13523		12.50		97.1 90.0-110.0
Sodium (Na)		12.23811		12.50		97.9 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1114
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.17220		12.50		97.4 90.0-110.0
Magnesium (Mg)		4.73301		5.000		94.7 90.0-110.0
Potassium (K)		11.96227		12.50		95.7 90.0-110.0
Sodium (Na)		12.15187		12.50		97.2 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.09606		12.50		96.8 90.0-110.0
Magnesium (Mg)		4.68594		5.000		93.7 90.0-110.0
Potassium (K)		11.91689		12.50		95.3 90.0-110.0
Sodium (Na)		12.24954		12.50		98.0 90.0-110.0

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1236
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.10824		12.50		96.9 90.0-110.0
Magnesium (Mg)		4.70060		5.000		94.0 90.0-110.0
Potassium (K)		11.97837		12.50		95.8 90.0-110.0
Sodium (Na)		12.25246		12.50		98.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1417
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.27155		12.50		98.2 90.0-110.0
Magnesium (Mg)		4.73513		5.000		94.7 90.0-110.0
Potassium (K)		12.00165		12.50		96.0 90.0-110.0
Sodium (Na)		12.21047		12.50		97.7 90.0-110.0
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0747
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.11708		0.1000		117.1 80.0-120.0
Magnesium (Mg)		0.11986		0.1000		119.9 80.0-120.0
Potassium (K)		0.70730		0.60000		117.9 80.0-120.0
Sodium (Na)		0.56815		0.60000		94.7 80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0736
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		19.98698		20.00		99.9 95.0-105.0
Magnesium (Mg)		19.99118		20.00		100.0 95.0-105.0
Potassium (K)		20.16103		20.00		100.8 95.0-105.0
Sodium (Na)		20.15169		20.00		100.8 95.0-105.0
EB	Extraction Blank			403614		08/15/2008 1133
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		0.02394				
Magnesium (Mg), Diss.		-0.03999				
Potassium (K), Diss.		-0.31374				
Sodium (Na), Diss.		0.04285				
ICB	Initial Calibration Blank					08/15/2008 0743
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00323				
Magnesium (Mg)		0.01089				
Potassium (K)		0.09126				
Sodium (Na)		0.00955				

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0740			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.51920		12.50		100.2		90.0-110.0	
Magnesium (Mg)		4.96451		5.000		99.3		90.0-110.0	
Potassium (K)		12.07108		12.50		96.6		90.0-110.0	
Sodium (Na)		11.94190		12.50		95.5		90.0-110.0	
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0751			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		442.58947		500.0		88.5		80-120	
Magnesium (Mg)		505.11251		500.0		101.0		80-120	
Potassium (K)		0.12779		0.0					
Sodium (Na)		0.19126		0.0					
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0754			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		442.45367		510.0		86.8		80.0-120.0	
Magnesium (Mg)		507.84594		510.0		99.6		80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403614		08/15/2008	1359			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		9.82980		10.00		98.3		80.0-120.0	
Magnesium (Mg), Water		9.60702		10.00		96.1		80.0-120.0	
Potassium (K), Water		9.70651		10.00		97.1		80.0-120.0	
Sodium (Na), Water		9.95115		10.00		99.5		80.0-120.0	
MB	Method Blank		403614		08/15/2008	1355			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		-0.00432							
Magnesium (Mg), Water		-0.02748							
Potassium (K), Water		-0.19242							
Sodium (Na), Water		0.01502							
MD	Method Duplicate		358829-1		08/15/2008	1406			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		200.52148	200.39595		200.39595	0.1		20	
Magnesium (Mg), Water		2.07315	2.08547		2.08547	0.01232		2.00000	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	1410		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		207.47729		10.00	200.39595	70.8	75-125	
Magnesium (Mg), Water		11.49378		10.00	2.08547	94.1	75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	1413		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		205.54167	207.47729	10.00	200.39595	51.5	75-125	
Magnesium (Mg), Water		11.46903	11.49378	10.00	2.08547	31.6	20 C	
						93.8	75-125	
						0.3	20	
S0	Calibration Blank				08/15/2008	0728		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00613						
Magnesium (Mg)		0.03077						
Potassium (K)		0.45221						
Sodium (Na)		0.23306						
STD	Spiked Blank Duplicate				08/15/2008	0732		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		2.95376						
Magnesium (Mg)		1.23946						
Potassium (K)		2.80953						
Sodium (Na)		16.09711						
CCB	Continuing Calibration Blank				08/15/2008	0814		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00114						
Magnesium (Mg)		-0.00865						
Potassium (K)		-0.08294						
Sodium (Na)		0.00261						
CCB	Continuing Calibration Blank				08/15/2008	0925		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.01481						
Magnesium (Mg)		-0.05001						
Potassium (K)		-0.40687						
Sodium (Na)		0.08314						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	1012
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01590				
Magnesium (Mg)		-0.04452				
Potassium (K)		-0.25373				
Sodium (Na)		0.14642				
CCB	Continuing Calibration Blank				08/15/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01989				
Potassium (K)		-0.36716				
Sodium (Na)		0.32666				
CCB	Continuing Calibration Blank				08/15/2008	1147
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01939				
Potassium (K)		-0.31181				
Sodium (Na)		0.17276				
CCB	Continuing Calibration Blank				08/15/2008	1234
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02531				
Potassium (K)		-0.40637				
Sodium (Na)		0.07417				
CCB	Continuing Calibration Blank				08/15/2008	1321
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02654				
Potassium (K)		-0.44085				
Sodium (Na)		0.04488				
CCB	Continuing Calibration Blank				08/15/2008	1334
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02140				
Magnesium (Mg)		-0.06908				
Potassium (K)		-0.31023				
Sodium (Na)		0.03770				

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCB	Continuing Calibration Blank				08/15/2008	1534			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02419							
Magnesium (Mg)		-0.07148							
Potassium (K)		-0.47648							
Sodium (Na)		0.12426							
CCB	Continuing Calibration Blank				08/15/2008	1550			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02091							
Magnesium (Mg)		-0.04952							
Potassium (K)		-0.34895							
Sodium (Na)		0.08803							
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0810			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.23240		12.50		97.9		90.0-110.0	
Magnesium (Mg)		4.82444		5.000		96.5		90.0-110.0	
Potassium (K)		12.00026		12.50		96.0		90.0-110.0	
Sodium (Na)		12.39037		12.50		99.1		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0921			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.82871		12.50		94.6		90.0-110.0	
Magnesium (Mg)		4.54536		5.000		90.9		90.0-110.0	
Potassium (K)		12.06107		12.50		96.5		90.0-110.0	
Sodium (Na)		12.20845		12.50		97.7		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1008			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.77765		12.50		94.2		90.0-110.0	
Magnesium (Mg)		4.54255		5.000		90.9		90.0-110.0	
Potassium (K)		12.06009		12.50		96.5		90.0-110.0	
Sodium (Na)		11.88538		12.50		95.1		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1051			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.00270		12.50		96.0		90.0-110.0	
Potassium (K)		12.45140		12.50		99.6		90.0-110.0	
Sodium (Na)		11.95494		12.50		95.6		90.0-110.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1143			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.60482		12.50		92.8		90.0-110.0	
Potassium (K)		12.06612		12.50		96.5		90.0-110.0	
Sodium (Na)		12.07742		12.50		96.6		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1230			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.39002		12.50		91.1		90.0-110.0	
Potassium (K)		11.85393		12.50		94.8		90.0-110.0	
Sodium (Na)		12.36960		12.50		99.0		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1317			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.26366		12.50		90.1		90.0-110.0	
Potassium (K)		11.75172		12.50		94.0		90.0-110.0	
Sodium (Na)		12.40163		12.50		99.2		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1330			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.63030		12.50		93.0		90.0-110.0	
Potassium (K)		12.22006		12.50		97.8		90.0-110.0	
Sodium (Na)		12.73427		12.50		101.9		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1531			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.04450		12.50		96.4		90.0-110.0	
Magnesium (Mg)		4.57346		5.000		91.5		90.0-110.0	
Potassium (K)		12.23749		12.50		97.9		90.0-110.0	
Sodium (Na)		12.24831		12.50		98.0		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1546			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.86323		12.50		94.9		90.0-110.0	
Magnesium (Mg)		4.51196		5.000		90.2		90.0-110.0	
Potassium (K)		12.10931		12.50		96.9		90.0-110.0	
Sodium (Na)		12.33552		12.50		98.7		90.0-110.0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0758
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.11539		0.1000		115.4 80.0-120.0
Magnesium (Mg)		0.11342		0.1000		113.4 80.0-120.0
Potassium (K)		0.49862		0.60000		83.1 80.0-120.0
Sodium (Na)		0.64349		0.60000		107.2 80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0747
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		19.94995		20.00		99.7 95.0-105.0
Magnesium (Mg)		19.91933		20.00		99.6 95.0-105.0
Potassium (K)		20.00058		20.00		100.0 95.0-105.0
Sodium (Na)		19.97645		20.00		99.9 95.0-105.0
EB	Extraction Blank			403614		08/15/2008 1112
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		0.00130				
Potassium (K), Diss.		-0.27515				
Sodium (Na), Diss.		0.15394				
ICB	Initial Calibration Blank					08/15/2008 0754
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00049				
Magnesium (Mg)		-0.00008				
Potassium (K)		0.05823				
Sodium (Na)		0.00558				
ICV	Initial Calibration Verification	MS081308CC				08/15/2008 0750
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.35031		12.50		98.8 90.0-110.0
Magnesium (Mg)		4.85591		5.000		97.1 90.0-110.0
Potassium (K)		12.14282		12.50		97.1 90.0-110.0
Sodium (Na)		12.46402		12.50		99.7 90.0-110.0
ISA	Interference Check Sample A	MS073008IA				08/15/2008 0802
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		470.04394		500.0		94.0 80-120
Magnesium (Mg)		531.16772		500.0		106.2 80-120
Potassium (K)		0.05340		0.0		
Sodium (Na)		0.03732		0.0		

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0806		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		480.84558		510.0		94.3	80.0-120.0	
Magnesium (Mg)		539.72991		510.0		105.8	80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403614				08/15/2008	1108
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		9.41306		10.00		94.1	80.0-120.0	
Potassium (K), Water		9.62645		10.00		96.3	80.0-120.0	
Sodium (Na), Water		10.16343		10.00		101.6	80.0-120.0	
MB	Method Blank		403614				08/15/2008	1104
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		-0.03190						
Potassium (K), Water		-0.55840						
Sodium (Na), Water		0.21101						
MD	Method Duplicate		358699-1				08/15/2008	1119
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		59.12904	57.84768		57.84768	2.2	20	
Potassium (K), Diss.		5.33958	5.19646		5.19646	0.14312	2.00000	
MD	Method Duplicate		358829-1				08/15/2008	1250
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		203.33483	194.54071		194.54071	4.4	20	
MS	Matrix Spike	MSPIKEW	358699-1				08/15/2008	1123
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		69.09146		10.00	57.84768	112.4	75-125	
Potassium (K), Diss.		17.08377		10.00	5.19646	118.9	75-125	
MS	Matrix Spike	MSPIKEW	358829-1				08/15/2008	1253
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		202.34506		10.00	194.54071	78.0	75-125	

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1		08/15/2008	1127		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		68.12551	69.09146	10.00	57.84768	102.8	75-125	
Potassium (K), Diss.		17.05924	17.08377	10.00	5.19646	8.9	20	
						118.6	75-125	
						0.3	20	
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1				08/15/2008	1257
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		202.47694	202.34506	10.00	194.54071	79.4	75-125	
						1.8	20	
PDS	Post Digestion Spike	MSPIKE3	358699-1				08/15/2008	1309
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		65.65254		10.00	57.84768	78.0	75-125	
Potassium (K), Diss.		16.97202		10.00	5.19646	117.8	75-125	
S0	Calibration Blank						08/15/2008	0736
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		0.00325						
Magnesium (Mg)		0.00628						
Potassium (K)		0.34017						
Sodium (Na)		0.02027						
SD	Serial Dilution			358699-1	5		08/15/2008	1313
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		11.58772			57.84768	0.2	10.0	
Potassium (K), Diss.		0.58664			5.19646	43.6	10.0	e
Sodium (Na), Diss.		22.25878			81.79277	36.1	10.0	e
STD	Spiked Blank Duplicate						08/15/2008	0742
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		0.28730						
Magnesium (Mg)		0.20832						
Potassium (K)		1.59922						
Sodium (Na)		4.32485						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	0814
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00114				
Magnesium (Mg)		-0.00865				
Potassium (K)		-0.08294				
Sodium (Na)		0.00261				
CCB	Continuing Calibration Blank				08/15/2008	0925
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01481				
Magnesium (Mg)		-0.05001				
Potassium (K)		-0.40687				
Sodium (Na)		0.08314				
CCB	Continuing Calibration Blank				08/15/2008	1012
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01590				
Magnesium (Mg)		-0.04452				
Potassium (K)		-0.25373				
Sodium (Na)		0.14642				
CCB	Continuing Calibration Blank				08/15/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01989				
Magnesium (Mg)		-0.06735				
Potassium (K)		-0.36716				
Sodium (Na)		0.32666				
CCB	Continuing Calibration Blank				08/15/2008	1147
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01939				
Magnesium (Mg)		-0.05589				
Potassium (K)		-0.31181				
Sodium (Na)		0.17276				
CCB	Continuing Calibration Blank				08/15/2008	1234
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.02531				
Potassium (K)		-0.40637				
Sodium (Na)		0.07417				

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCB	Continuing Calibration Blank				08/15/2008	1321			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02654							
Potassium (K)		-0.44085							
Sodium (Na)		0.04488							
CCB	Continuing Calibration Blank				08/15/2008	1334			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02140							
Potassium (K)		-0.31023							
Sodium (Na)		0.03770							
CCB	Continuing Calibration Blank				08/15/2008	1534			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02419							
Magnesium (Mg)		-0.07148							
Potassium (K)		-0.47648							
Sodium (Na)		0.12426							
CCB	Continuing Calibration Blank				08/15/2008	1550			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.02091							
Magnesium (Mg)		-0.04952							
Potassium (K)		-0.34895							
Sodium (Na)		0.08803							
CCB	Continuing Calibration Blank				08/15/2008	1611			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.01447							
Magnesium (Mg)		-0.04496							
Potassium (K)		-0.11968							
Sodium (Na)		0.08721							
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0810			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.23240		12.50		97.9		90.0-110.0	
Magnesium (Mg)		4.82444		5.000		96.5		90.0-110.0	
Potassium (K)		12.00026		12.50		96.0		90.0-110.0	
Sodium (Na)		12.39037		12.50		99.1		90.0-110.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0921		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.82871		12.50		94.6	90.0-110.0	
Magnesium (Mg)		4.54536		5.000		90.9	90.0-110.0	
Potassium (K)		12.06107		12.50		96.5	90.0-110.0	
Sodium (Na)		12.20845		12.50		97.7	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1008		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.77765		12.50		94.2	90.0-110.0	
Magnesium (Mg)		4.54255		5.000		90.9	90.0-110.0	
Potassium (K)		12.06009		12.50		96.5	90.0-110.0	
Sodium (Na)		11.88538		12.50		95.1	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1051		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.00270		12.50		96.0	90.0-110.0	
Magnesium (Mg)		4.60355		5.000		92.1	90.0-110.0	
Potassium (K)		12.45140		12.50		99.6	90.0-110.0	
Sodium (Na)		11.95494		12.50		95.6	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1143		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.60482		12.50		92.8	90.0-110.0	
Magnesium (Mg)		4.45383		5.000		89.1	90.0-110.0	
Potassium (K)		12.06612		12.50		96.5	90.0-110.0	
Sodium (Na)		12.07742		12.50		96.6	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1230		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.39002		12.50		91.1	90.0-110.0	
Potassium (K)		11.85393		12.50		94.8	90.0-110.0	
Sodium (Na)		12.36960		12.50		99.0	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1317		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		11.26366		12.50		90.1	90.0-110.0	
Potassium (K)		11.75172		12.50		94.0	90.0-110.0	
Sodium (Na)		12.40163		12.50		99.2	90.0-110.0	

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 09/04/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1330
-----	-------------------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	11.63030		12.50		93.0	90.0-110.0	
Potassium (K)	12.22006		12.50		97.8	90.0-110.0	
Sodium (Na)	12.73427		12.50		101.9	90.0-110.0	

CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1531
-----	-------------------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.04450		12.50		96.4	90.0-110.0	
Magnesium (Mg)	4.57346		5.000		91.5	90.0-110.0	
Potassium (K)	12.23749		12.50		97.9	90.0-110.0	
Sodium (Na)	12.24831		12.50		98.0	90.0-110.0	

CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1546
-----	-------------------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	11.86323		12.50		94.9	90.0-110.0	
Magnesium (Mg)	4.51196		5.000		90.2	90.0-110.0	
Potassium (K)	12.10931		12.50		96.9	90.0-110.0	
Sodium (Na)	12.33552		12.50		98.7	90.0-110.0	

CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1607
-----	-------------------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	11.91366		12.50		95.3	90.0-110.0	
Magnesium (Mg)	4.53303		5.000		90.7	90.0-110.0	
Potassium (K)	12.21820		12.50		97.7	90.0-110.0	
Sodium (Na)	12.47509		12.50		99.8	90.0-110.0	

CH1	Calibration check standard 1	MS073008T1			08/15/2008	0758
-----	------------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.11539		0.1000		115.4	80.0-120.0	
Magnesium (Mg)	0.11342		0.1000		113.4	80.0-120.0	
Potassium (K)	0.49862		0.60000		83.1	80.0-120.0	
Sodium (Na)	0.64349		0.60000		107.2	80.0-120.0	

CH3	Standard check for ICAP	MS073008T3			08/15/2008	0747
-----	-------------------------	------------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	19.94995		20.00		99.7	95.0-105.0	
Magnesium (Mg)	19.91933		20.00		99.6	95.0-105.0	
Potassium (K)	20.00058		20.00		100.0	95.0-105.0	
Sodium (Na)	19.97645		20.00		99.9	95.0-105.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
EB	Extraction Blank		403614		08/15/2008	1112			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		0.00130							
Magnesium (Mg), Diss.		-0.04444							
Potassium (K), Diss.		-0.27515							
Sodium (Na), Diss.		0.15394							
ICB	Initial Calibration Blank				08/15/2008	0754			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.00049							
Magnesium (Mg)		-0.00008							
Potassium (K)		0.05823							
Sodium (Na)		0.00558							
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	0750			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.35031		12.50		98.8		90.0-110.0	
Magnesium (Mg)		4.85591		5.000		97.1		90.0-110.0	
Potassium (K)		12.14282		12.50		97.1		90.0-110.0	
Sodium (Na)		12.46402		12.50		99.7		90.0-110.0	
ISA	Interference Check Sample A	MS073008IA			08/15/2008	0802			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		470.04394		500.0		94.0		80-120	
Magnesium (Mg)		531.16772		500.0		106.2		80-120	
Potassium (K)		0.05340		0.0					
Sodium (Na)		0.03732		0.0					
ISA	Interference Check Sample A	MS073008IA			08/15/2008	1559			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		449.21899		500.0		89.8		80-120	
Magnesium (Mg)		491.51071		500.0		98.3		80-120	
Potassium (K)		-0.24393		0.0					
Sodium (Na)		0.25721		0.0					
ISB	Interference Check Sample B	MS073008IB			08/15/2008	0806			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		480.84558		510.0		94.3		80.0-120.0	
Magnesium (Mg)		539.72991		510.0		105.8		80.0-120.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
ISB	Interference Check Sample B	MS073008IB			08/15/2008	1603			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		467.37603		510.0		91.6		80.0-120.0	
Magnesium (Mg)		511.54443		510.0		100.3		80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403614		08/15/2008	1108			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		9.41306		10.00		94.1		80.0-120.0	
Magnesium (Mg), Water		9.08919		10.00		90.9		80.0-120.0	
Potassium (K), Water		9.62645		10.00		96.3		80.0-120.0	
Sodium (Na), Water		10.16343		10.00		101.6		80.0-120.0	
MB	Method Blank		403614		08/15/2008	1104			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		-0.03190							
Magnesium (Mg), Water		-0.07912							
Potassium (K), Water		-0.55840							
Sodium (Na), Water		0.21101							
MD	Method Duplicate		358699-1		08/15/2008	1119			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		59.12904	57.84768		57.84768	2.2		20	
Magnesium (Mg), Diss.		19.91360	19.53488		19.53488	1.9		20	
Potassium (K), Diss.		5.33958	5.19646		5.19646	0.14312		2.00000	
Sodium (Na), Diss.		82.82523	81.79277		81.79277	1.3		20	
MD	Method Duplicate		358829-1		08/15/2008	1250			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water		203.33483	194.54071		194.54071	4.4		20	
Potassium (K), Water		107.45516	103.82865		103.82865	3.4		20	
Sodium (Na), Water		184.24493	175.67666		175.67666	4.8		20	
MS	Matrix Spike	MSPIKEW	358699-1		08/15/2008	1123			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		69.09146		10.00	57.84768	112.4		75-125	
Magnesium (Mg), Diss.		29.56161		10.00	19.53488	100.3		75-125	
Potassium (K), Diss.		17.08377		10.00	5.19646	118.9		75-125	
Sodium (Na), Diss.		89.55017		10.00	81.79277	77.6		75-125	

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	1253		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water	202.34506		10.00	194.54071	78.0		75-125	
Potassium (K), Water	112.68194		10.00	103.82865	88.5		75-125	
Sodium (Na), Water	181.66133		10.00	175.67666	59.8		75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1		08/15/2008	1127		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	68.12551	69.09146	10.00	57.84768	102.8		75-125	
					8.9		20	
Magnesium (Mg), Diss.	29.22079	29.56161	10.00	19.53488	96.9		75-125	
					3.4		20	
Potassium (K), Diss.	17.05924	17.08377	10.00	5.19646	118.6		75-125	
					0.3		20	
Sodium (Na), Diss.	89.21484	89.55017	10.00	81.79277	74.2		75-125	
					4.5		20	
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	1257		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water	202.47694	202.34506	10.00	194.54071	79.4		75-125	
					1.8		20	
Potassium (K), Water	113.41035	112.68194	10.00	103.82865	95.8		75-125	
					7.9		20	
Sodium (Na), Water	183.78099	181.66133	10.00	175.67666	81.0		75-125	
					30.1		20	C
PDS	Post Digestion Spike	MSPIKE3	358699-1		08/15/2008	1309		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	65.65254		10.00	57.84768	78.0		75-125	
Potassium (K), Diss.	16.97202		10.00	5.19646	117.8		75-125	
S0	Calibration Blank				08/15/2008	0736		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00325							
Magnesium (Mg)	0.00628							
Potassium (K)	0.34017							
Sodium (Na)	0.02027							

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
SD	Serial Dilution		358699-1	5	08/15/2008	1313	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca), Diss.		11.58772			57.84768	0.2 10.0	
Potassium (K), Diss.		0.58664			5.19646	43.6 10.0 e	
Sodium (Na), Diss.		22.25878			81.79277	36.1 10.0 e	
STD	Spiked Blank Duplicate				08/15/2008	0742	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		0.28730					
Magnesium (Mg)		0.20832					
Potassium (K)		1.59922					
Sodium (Na)		4.32485					
CCB	Continuing Calibration Blank				08/15/2008	0802	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		0.00407					
Magnesium (Mg)		-0.00286					
Potassium (K)		-0.01039					
Sodium (Na)		-0.00471					
CCB	Continuing Calibration Blank				08/15/2008	0853	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		-0.00013					
Magnesium (Mg)		-0.01782					
Potassium (K)		-0.10690					
Sodium (Na)		-0.01121					
CCB	Continuing Calibration Blank				08/15/2008	0937	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		-0.00072					
Magnesium (Mg)		-0.02890					
Potassium (K)		-0.19738					
Sodium (Na)		-0.00027					
CCB	Continuing Calibration Blank				08/15/2008	1021	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Calcium (Ca)		0.00414					
Magnesium (Mg)		-0.02016					
Potassium (K)		-0.13322					
Sodium (Na)		0.04853					

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S		Report Date.: 09/04/2008	
---------------------	--	--	---	--	--------------------------	--

CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

CCB	Continuing Calibration Blank				08/15/2008	1043
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00215						
Magnesium (Mg)	-0.02521						
Potassium (K)	-0.18083						
Sodium (Na)	0.03046						

CCB	Continuing Calibration Blank				08/15/2008	1118
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	-0.00351						
Magnesium (Mg)	-0.02804						
Potassium (K)	-0.19118						
Sodium (Na)	0.07797						

CCB	Continuing Calibration Blank				08/15/2008	1206
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	-0.00355						
Magnesium (Mg)	-0.04737						
Potassium (K)	-0.33812						
Sodium (Na)	0.08739						

CCB	Continuing Calibration Blank				08/15/2008	1239
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	-0.00331						
Magnesium (Mg)	-0.04515						
Potassium (K)	-0.30120						
Sodium (Na)	0.05954						

CCB	Continuing Calibration Blank				08/15/2008	1421
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	-0.00432						
Magnesium (Mg)	-0.03707						
Potassium (K)	-0.25963						
Sodium (Na)	0.02268						

CCB	Continuing Calibration Blank				08/15/2008	1451
-----	------------------------------	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	-0.00426						
Magnesium (Mg)	-0.03558						
Potassium (K)	-0.25449						
Sodium (Na)	0.01447						

Job Number.: 358699						QUALITY CONTROL RESULTS				Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:					
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time					
CCB	Continuing Calibration Blank				08/15/2008	1509					
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		0.00006									
Magnesium (Mg)		-0.03947									
Potassium (K)		-0.27834									
Sodium (Na)		0.00641									
CCB	Continuing Calibration Blank							08/15/2008	1604		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		-0.00221									
Magnesium (Mg)		-0.03163									
Potassium (K)		-0.22128									
Sodium (Na)		-0.01100									
CCV	Continuing Calibration Verification	MS081308CC						08/15/2008	0758		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		12.32384		12.50		98.6		90.0-110.0			
Magnesium (Mg)		4.88669		5.000		97.7		90.0-110.0			
Potassium (K)		11.88997		12.50		95.1		90.0-110.0			
Sodium (Na)		11.84877		12.50		94.8		90.0-110.0			
CCV	Continuing Calibration Verification	MS081308CC						08/15/2008	0849		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		12.31978		12.50		98.6		90.0-110.0			
Magnesium (Mg)		4.83612		5.000		96.7		90.0-110.0			
Potassium (K)		11.90456		12.50		95.2		90.0-110.0			
Sodium (Na)		11.88772		12.50		95.1		90.0-110.0			
CCV	Continuing Calibration Verification	MS081308CC						08/15/2008	0933		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		12.23468		12.50		97.9		90.0-110.0			
Magnesium (Mg)		4.78622		5.000		95.7		90.0-110.0			
Potassium (K)		11.77882		12.50		94.2		90.0-110.0			
Sodium (Na)		11.90269		12.50		95.2		90.0-110.0			
CCV	Continuing Calibration Verification	MS081308CC						08/15/2008	1017		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F		
Calcium (Ca)		12.21523		12.50		97.7		90.0-110.0			
Magnesium (Mg)		4.76773		5.000		95.4		90.0-110.0			
Potassium (K)		12.17707		12.50		97.4		90.0-110.0			
Sodium (Na)		12.26535		12.50		98.1		90.0-110.0			

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1039		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.20914		12.50		97.7	90.0-110.0	
Magnesium (Mg)		4.75003		5.000		95.0	90.0-110.0	
Potassium (K)		12.13523		12.50		97.1	90.0-110.0	
Sodium (Na)		12.23811		12.50		97.9	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1114		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.17220		12.50		97.4	90.0-110.0	
Magnesium (Mg)		4.73301		5.000		94.7	90.0-110.0	
Potassium (K)		11.96227		12.50		95.7	90.0-110.0	
Sodium (Na)		12.15187		12.50		97.2	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1203		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.09606		12.50		96.8	90.0-110.0	
Magnesium (Mg)		4.68594		5.000		93.7	90.0-110.0	
Potassium (K)		11.91689		12.50		95.3	90.0-110.0	
Sodium (Na)		12.24954		12.50		98.0	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1236		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.10824		12.50		96.9	90.0-110.0	
Magnesium (Mg)		4.70060		5.000		94.0	90.0-110.0	
Potassium (K)		11.97837		12.50		95.8	90.0-110.0	
Sodium (Na)		12.25246		12.50		98.0	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1417		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.27155		12.50		98.2	90.0-110.0	
Magnesium (Mg)		4.73513		5.000		94.7	90.0-110.0	
Potassium (K)		12.00165		12.50		96.0	90.0-110.0	
Sodium (Na)		12.21047		12.50		97.7	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1448		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.18646		12.50		97.5	90.0-110.0	
Magnesium (Mg)		4.72229		5.000		94.4	90.0-110.0	
Potassium (K)		11.91028		12.50		95.3	90.0-110.0	
Sodium (Na)		12.13027		12.50		97.0	90.0-110.0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1506
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.15331		12.50		97.2 90.0-110.0
Magnesium (Mg)		4.70680		5.000		94.1 90.0-110.0
Potassium (K)		11.93742		12.50		95.5 90.0-110.0
Sodium (Na)		12.12071		12.50		97.0 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	1600
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.03710		12.50		96.3 90.0-110.0
Magnesium (Mg)		4.69382		5.000		93.9 90.0-110.0
Potassium (K)		11.88182		12.50		95.1 90.0-110.0
Sodium (Na)		12.02755		12.50		96.2 90.0-110.0
CH1	Calibration check standard 1	MS073008T1			08/15/2008	0747
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.11708		0.1000		117.1 80.0-120.0
Magnesium (Mg)		0.11986		0.1000		119.9 80.0-120.0
Potassium (K)		0.70730		0.60000		117.9 80.0-120.0
Sodium (Na)		0.56815		0.60000		94.7 80.0-120.0
CH1	Calibration check standard 1	MS073008T1			08/15/2008	1549
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.10961		0.1000		109.6 80.0-120.0
Sodium (Na)		0.55802		0.60000		93.0 80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/15/2008	0736
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		19.98698		20.00		99.9 95.0-105.0
Magnesium (Mg)		19.99118		20.00		100.0 95.0-105.0
Potassium (K)		20.16103		20.00		100.8 95.0-105.0
Sodium (Na)		20.15169		20.00		100.8 95.0-105.0
ICB	Initial Calibration Blank				08/15/2008	0743
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00323				
Magnesium (Mg)		0.01089				
Potassium (K)		0.09126				
Sodium (Na)		0.00955				

Job Number.: 358699			QUALITY CONTROL RESULTS			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
ICV	Initial Calibration Verification	MS081308CC			08/15/2008		0740	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.51920		12.50		100.2	90.0-110.0	
Magnesium (Mg)		4.96451		5.000		99.3	90.0-110.0	
Potassium (K)		12.07108		12.50		96.6	90.0-110.0	
Sodium (Na)		11.94190		12.50		95.5	90.0-110.0	
ISA	Interference Check Sample A	MS073008IA			08/15/2008		0751	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		442.58947		500.0		88.5	80-120	
Magnesium (Mg)		505.11251		500.0		101.0	80-120	
Potassium (K)		0.12779		0.0				
Sodium (Na)		0.19126		0.0				
ISA	Interference Check Sample A	MS073008IA			08/15/2008		1553	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		426.16760		500.0		85.2	80-120	
Magnesium (Mg)		486.19921		500.0		97.2	80-120	
Potassium (K)		-0.17352		0.0				
Sodium (Na)		0.17633		0.0				
ISB	Interference Check Sample B	MS073008IB			08/15/2008		0754	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		442.45367		510.0		86.8	80.0-120.0	
Magnesium (Mg)		507.84594		510.0		99.6	80.0-120.0	
ISB	Interference Check Sample B	MS073008IB			08/15/2008		1556	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		433.39959		510.0		85.0	80.0-120.0	
Magnesium (Mg)		496.83996		510.0		97.4	80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403614		08/15/2008		1359	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		9.82980		10.00		98.3	80.0-120.0	
Magnesium (Mg), Water		9.60702		10.00		96.1	80.0-120.0	
Potassium (K), Water		9.70651		10.00		97.1	80.0-120.0	
Sodium (Na), Water		9.95115		10.00		99.5	80.0-120.0	

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MB	Method Blank		403614		08/15/2008	1355		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		-0.00432						
Magnesium (Mg), Water		-0.02748						
Potassium (K), Water		-0.19242						
Sodium (Na), Water		0.01502						
MD	Method Duplicate		358829-1		08/15/2008	1406		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		200.52148	200.39595		200.39595	0.1	20	
Magnesium (Mg), Water		2.07315	2.08547		2.08547	0.01232	2.00000	
MS	Matrix Spike		MSPIKEW	358829-1		08/15/2008	1410	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		207.47729		10.00	200.39595	70.8	75-125	
Magnesium (Mg), Water		11.49378		10.00	2.08547	94.1	75-125	
MSD	Matrix Spike Duplicate		MSPIKEW	358829-1		08/15/2008	1413	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		205.54167	207.47729	10.00	200.39595	51.5	75-125	
Magnesium (Mg), Water		11.46903	11.49378	10.00	2.08547	31.6	20	C
						93.8	75-125	
						0.3	20	
S0	Calibration Blank					08/15/2008	0728	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		0.00613						
Magnesium (Mg)		0.03077						
Potassium (K)		0.45221						
Sodium (Na)		0.23306						
STD	Spiked Blank Duplicate					08/15/2008	0732	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		2.95376						
Magnesium (Mg)		1.23946						
Potassium (K)		2.80953						
Sodium (Na)		16.09711						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	0903
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00322				
Magnesium (Mg)		-0.01181				
Potassium (K)		-0.17158				
Sodium (Na)		0.00070				
CCB	Continuing Calibration Blank				08/18/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00025				
Magnesium (Mg)		-0.04626				
Sodium (Na)		0.04200				
CCB	Continuing Calibration Blank				08/18/2008	1111
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01464				
Magnesium (Mg)		-0.05017				
Sodium (Na)		0.03835				
CCB	Continuing Calibration Blank				08/18/2008	1207
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00340				
Magnesium (Mg)		-0.05970				
Sodium (Na)		0.01012				
CCB	Continuing Calibration Blank				08/18/2008	1254
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.01529				
Magnesium (Mg)		-0.04509				
Potassium (K)		-0.40361				
Sodium (Na)		0.00344				
CCB	Continuing Calibration Blank				08/18/2008	1310
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00998				
Magnesium (Mg)		-0.06228				
Potassium (K)		-0.52573				
Sodium (Na)		0.00882				

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	0900		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.22350		12.50		97.8	90.0-110.0	
Magnesium (Mg)		4.78892		5.000		95.8	90.0-110.0	
Potassium (K)		11.70432		12.50		93.6	90.0-110.0	
Sodium (Na)		12.14704		12.50		97.2	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1051		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.21539		12.50		97.7	90.0-110.0	
Magnesium (Mg)		4.71945		5.000		94.4	90.0-110.0	
Potassium (K)		11.94939		12.50		95.6	90.0-110.0	
Sodium (Na)		12.35400		12.50		98.8	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1107		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.09743		12.50		96.8	90.0-110.0	
Magnesium (Mg)		4.69949		5.000		94.0	90.0-110.0	
Sodium (Na)		12.34457		12.50		98.8	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1203		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.01819		12.50		96.1	90.0-110.0	
Magnesium (Mg)		4.63364		5.000		92.7	90.0-110.0	
Sodium (Na)		12.34790		12.50		98.8	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1250		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.14906		12.50		97.2	90.0-110.0	
Magnesium (Mg)		4.67948		5.000		93.6	90.0-110.0	
Potassium (K)		11.78927		12.50		94.3	90.0-110.0	
Sodium (Na)		12.36862		12.50		98.9	90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1306		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.02917		12.50		96.2	90.0-110.0	
Magnesium (Mg)		4.62974		5.000		92.6	90.0-110.0	
Potassium (K)		11.76218		12.50		94.1	90.0-110.0	
Sodium (Na)		12.43138		12.50		99.5	90.0-110.0	

QUALITY CONTROL RESULTS									
Job Number.: 358699					Report Date.: 09/04/2008				
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CH1	Calibration check standard 1	MS073008T1			08/18/2008	0848			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.10864		0.1000		108.6		80.0-120.0	
Sodium (Na)		0.62762		0.60000		104.6		80.0-120.0	
CH3	Standard check for ICAP	MS073008T3			08/18/2008	0836			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		19.96181		20.00		99.8		95.0-105.0	
Magnesium (Mg)		19.98410		20.00		99.9		95.0-105.0	
Potassium (K)		19.92924		20.00		99.6		95.0-105.0	
Sodium (Na)		19.90965		20.00		99.5		95.0-105.0	
EB	Extraction Blank			403614		08/18/2008	1132		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		0.02108							
Magnesium (Mg), Diss.		-0.06764							
Sodium (Na), Diss.		0.02178							
ICB	Initial Calibration Blank					08/18/2008	0844		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.00255							
Magnesium (Mg)		-0.00706							
Potassium (K)		-0.18349							
Sodium (Na)		0.00310							
ICV	Initial Calibration Verification	MS081308CC				08/18/2008	0840		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.30537		12.50		98.4		90.0-110.0	
Magnesium (Mg)		4.85777		5.000		97.2		90.0-110.0	
Potassium (K)		11.76057		12.50		94.1		90.0-110.0	
Sodium (Na)		12.22992		12.50		97.8		90.0-110.0	
ISA	Interference Check Sample A	MS073008IA				08/18/2008	0852		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		485.05847		500.0		97.0		80-120	
Magnesium (Mg)		544.90545		500.0		109.0		80-120	
Potassium (K)		0.05409		0.0					
Sodium (Na)		0.03831		0.0					

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/18/2008	0856
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		496.11413		510.0		97.3 80.0-120.0
Magnesium (Mg)		556.62023		510.0		109.1 80.0-120.0
LCS	Laboratory Control Sample	MSPIKEW	403614			08/18/2008 1128
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		9.77750		10.00		97.8 80.0-120.0
Magnesium (Mg), Water		9.59702		10.00		96.0 80.0-120.0
Sodium (Na), Water		10.24513		10.00		102.5 80.0-120.0
MB	Method Blank		403614			08/18/2008 1124
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Water		-0.01663				
Magnesium (Mg), Water		-0.07431				
Sodium (Na), Water		0.01258				
MD	Method Duplicate		358699-1	10		08/18/2008 1140
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		6.06906	5.93093		5.93093	0.13813 2.00000
Sodium (Na), Diss.		11.69064	11.40290		11.40290	2.5 20
MS	Matrix Spike	MSPIKEW	358699-1	10		08/18/2008 1144
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		7.14679		1.000000	5.93093	121.6 75-125
Sodium (Na), Diss.		12.67862		1.000000	11.40290	127.6 75-125
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1	10		08/18/2008 1148
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca), Diss.		7.01182	7.14679	1.000000	5.93093	108.1 75-125
						11.8 20
Sodium (Na), Diss.		12.57971	12.67862	1.000000	11.40290	117.7 75-125
						8.1 20

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				08/18/2008	0828
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00334				
Magnesium (Mg)		0.00672				
Potassium (K)		0.36252				
Sodium (Na)		0.02040				
STD	Spiked Blank Duplicate				08/18/2008	0832
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.28337				
Magnesium (Mg)		0.21195				
Potassium (K)		1.52170				
Sodium (Na)		4.11051				
CCB	Continuing Calibration Blank				08/18/2008	0903
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00322				
Magnesium (Mg)		-0.01181				
Potassium (K)		-0.17158				
Sodium (Na)		0.00070				
CCB	Continuing Calibration Blank				08/18/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00025				
Magnesium (Mg)		-0.04626				
Sodium (Na)		0.04200				
CCB	Continuing Calibration Blank				08/18/2008	1111
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01464				
Magnesium (Mg)		-0.05017				
Sodium (Na)		0.03835				
CCB	Continuing Calibration Blank				08/18/2008	1207
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00340				
Magnesium (Mg)		-0.05970				
Sodium (Na)		0.01012				

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCB	Continuing Calibration Blank				08/18/2008	1254			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.01529							
Magnesium (Mg)		-0.04509							
Sodium (Na)		0.00344							
CCB	Continuing Calibration Blank				08/18/2008	1310			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.00998							
Magnesium (Mg)		-0.06228							
Sodium (Na)		0.00882							
CCB	Continuing Calibration Blank				08/18/2008	1407			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.01939							
Magnesium (Mg)		-0.07749							
Sodium (Na)		-0.00509							
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	0900			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.22350		12.50		97.8		90.0-110.0	
Magnesium (Mg)		4.78892		5.000		95.8		90.0-110.0	
Potassium (K)		11.70432		12.50		93.6		90.0-110.0	
Sodium (Na)		12.14704		12.50		97.2		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1051			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.21539		12.50		97.7		90.0-110.0	
Magnesium (Mg)		4.71945		5.000		94.4		90.0-110.0	
Potassium (K)		11.94939		12.50		95.6		90.0-110.0	
Sodium (Na)		12.35400		12.50		98.8		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1107			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.09743		12.50		96.8		90.0-110.0	
Magnesium (Mg)		4.69949		5.000		94.0		90.0-110.0	
Sodium (Na)		12.34457		12.50		98.8		90.0-110.0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.01819		12.50		96.1 90.0-110.0
Magnesium (Mg)		4.63364		5.000		92.7 90.0-110.0
Sodium (Na)		12.34790		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1250
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.14906		12.50		97.2 90.0-110.0
Magnesium (Mg)		4.67948		5.000		93.6 90.0-110.0
Potassium (K)		11.78927		12.50		94.3 90.0-110.0
Sodium (Na)		12.36862		12.50		98.9 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1306
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.02917		12.50		96.2 90.0-110.0
Magnesium (Mg)		4.62974		5.000		92.6 90.0-110.0
Sodium (Na)		12.43138		12.50		99.5 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1403
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.89792		12.50		95.2 90.0-110.0
Magnesium (Mg)		4.59510		5.000		91.9 90.0-110.0
Sodium (Na)		12.56487		12.50		100.5 90.0-110.0
CH1	Calibration check standard 1	MS073008T1			08/18/2008	0848
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.10864		0.1000		108.6 80.0-120.0
Sodium (Na)		0.62762		0.60000		104.6 80.0-120.0
CH3	Standard check for ICAP	MS073008T3			08/18/2008	0836
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		19.96181		20.00		99.8 95.0-105.0
Magnesium (Mg)		19.98410		20.00		99.9 95.0-105.0
Potassium (K)		19.92924		20.00		99.6 95.0-105.0
Sodium (Na)		19.90965		20.00		99.5 95.0-105.0

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
EB	Extraction Blank		403614		08/18/2008	1132		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		0.02108						
Magnesium (Mg), Diss.		-0.06764						
Sodium (Na), Diss.		0.02178						
ICB	Initial Calibration Blank				08/18/2008	0844		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		-0.00255						
Magnesium (Mg)		-0.00706						
Potassium (K)		-0.18349						
Sodium (Na)		0.00310						
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	0840		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		12.30537		12.50		98.4	90.0-110.0	
Magnesium (Mg)		4.85777		5.000		97.2	90.0-110.0	
Potassium (K)		11.76057		12.50		94.1	90.0-110.0	
Sodium (Na)		12.22992		12.50		97.8	90.0-110.0	
ISA	Interference Check Sample A	MS073008IA			08/18/2008	0852		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		485.05847		500.0		97.0	80-120	
Magnesium (Mg)		544.90545		500.0		109.0	80-120	
Potassium (K)		0.05409		0.0				
Sodium (Na)		0.03831		0.0				
ISB	Interference Check Sample B	MS073008IB			08/18/2008	0856		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		496.11413		510.0		97.3	80.0-120.0	
Magnesium (Mg)		556.62023		510.0		109.1	80.0-120.0	
LCS	Laboratory Control Sample	MSPIKEW	403614		08/18/2008	1128		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		9.77750		10.00		97.8	80.0-120.0	
Magnesium (Mg), Water		9.59702		10.00		96.0	80.0-120.0	
Sodium (Na), Water		10.24513		10.00		102.5	80.0-120.0	

Job Number.: 358699			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
MB	Method Blank		403614		08/18/2008	1124		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water		-0.01663						
Magnesium (Mg), Water		-0.07431						
Sodium (Na), Water		0.01258						
MD	Method Duplicate		358699-1	10	08/18/2008	1140		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		6.06906	5.93093		5.93093	0.13813	2.00000	
Magnesium (Mg), Diss.		1.97813	1.92688		1.92688	0.05125	2.00000	
Sodium (Na), Diss.		11.69064	11.40290		11.40290	2.5	20	
MS	Matrix Spike	MSPIKEW	358699-1	10	08/18/2008	1144		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		7.14679		1.000000	5.93093	121.6	75-125	
Magnesium (Mg), Diss.		2.95179		1.000000	1.92688	102.5	75-125	
Sodium (Na), Diss.		12.67862		1.000000	11.40290	127.6	75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1	10	08/18/2008	1148		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.		7.01182	7.14679	1.000000	5.93093	108.1	75-125	
						11.8	20	
Magnesium (Mg), Diss.		2.89842	2.95179	1.000000	1.92688	97.2	75-125	
						5.3	20	
Sodium (Na), Diss.		12.57971	12.67862	1.000000	11.40290	117.7	75-125	
						8.1	20	
S0	Calibration Blank					08/18/2008	0828	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		0.00334						
Magnesium (Mg)		0.00672						
Potassium (K)		0.36252						
Sodium (Na)		0.02040						
STD	Spiked Blank Duplicate					08/18/2008	0832	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)		0.28337						
Magnesium (Mg)		0.21195						
Potassium (K)		1.52170						
Sodium (Na)		4.11051						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	0903
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00322				
Magnesium (Mg)		-0.01181				
Potassium (K)		-0.17158				
Sodium (Na)		0.00070				
CCB	Continuing Calibration Blank				08/18/2008	1055
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.00025				
Magnesium (Mg)		-0.04626				
Sodium (Na)		0.04200				
CCB	Continuing Calibration Blank				08/18/2008	1111
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.01464				
Magnesium (Mg)		-0.05017				
Sodium (Na)		0.03835				
CCB	Continuing Calibration Blank				08/18/2008	1207
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00340				
Magnesium (Mg)		-0.05970				
Sodium (Na)		0.01012				
CCB	Continuing Calibration Blank				08/18/2008	1254
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		0.01529				
Magnesium (Mg)		-0.04509				
Potassium (K)		-0.40361				
Sodium (Na)		0.00344				
CCB	Continuing Calibration Blank				08/18/2008	1310
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		-0.00998				
Magnesium (Mg)		-0.06228				
Potassium (K)		-0.52573				
Sodium (Na)		0.00882				

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCB	Continuing Calibration Blank				08/18/2008	1407			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		-0.01939							
Magnesium (Mg)		-0.07749							
Potassium (K)		-0.65722							
Sodium (Na)		-0.00509							
CCB	Continuing Calibration Blank				08/18/2008	1505			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		-0.01477							
Magnesium (Mg)		-0.06635							
Potassium (K)		-0.55357							
Sodium (Na)		-0.00210							
CCB	Continuing Calibration Blank				08/18/2008	1613			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		-0.00908							
Magnesium (Mg)		-0.05251							
Potassium (K)		-0.41409							
Sodium (Na)		-0.00378							
CCB	Continuing Calibration Blank				08/18/2008	1707			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		-0.01763							
Magnesium (Mg)		-0.06248							
Potassium (K)		-0.63380							
Sodium (Na)		-0.00524							
CCB	Continuing Calibration Blank				08/18/2008	1754			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		-0.02168							
Magnesium (Mg)		-0.07384							
Potassium (K)		-0.52539							
Sodium (Na)		-0.00633							
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	0900			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F	
Calcium (Ca)		12.22350		12.50		97.8		90.0-110.0	
Magnesium (Mg)		4.78892		5.000		95.8		90.0-110.0	
Potassium (K)		11.70432		12.50		93.6		90.0-110.0	
Sodium (Na)		12.14704		12.50		97.2		90.0-110.0	

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates		PROJECT: GL ERWIN			ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1051
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.21539		12.50		97.7 90.0-110.0
Magnesium (Mg)		4.71945		5.000		94.4 90.0-110.0
Potassium (K)		11.94939		12.50		95.6 90.0-110.0
Sodium (Na)		12.35400		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1107
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.09743		12.50		96.8 90.0-110.0
Magnesium (Mg)		4.69949		5.000		94.0 90.0-110.0
Sodium (Na)		12.34457		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1203
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.01819		12.50		96.1 90.0-110.0
Magnesium (Mg)		4.63364		5.000		92.7 90.0-110.0
Sodium (Na)		12.34790		12.50		98.8 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1250
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.14906		12.50		97.2 90.0-110.0
Magnesium (Mg)		4.67948		5.000		93.6 90.0-110.0
Potassium (K)		11.78927		12.50		94.3 90.0-110.0
Sodium (Na)		12.36862		12.50		98.9 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1306
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		12.02917		12.50		96.2 90.0-110.0
Magnesium (Mg)		4.62974		5.000		92.6 90.0-110.0
Potassium (K)		11.76218		12.50		94.1 90.0-110.0
Sodium (Na)		12.43138		12.50		99.5 90.0-110.0
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1403
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Calcium (Ca)		11.89792		12.50		95.2 90.0-110.0
Magnesium (Mg)		4.59510		5.000		91.9 90.0-110.0
Potassium (K)		11.66019		12.50		93.3 90.0-110.0
Sodium (Na)		12.56487		12.50		100.5 90.0-110.0

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1501			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.95067		12.50		95.6		90.0-110.0	
Magnesium (Mg)		4.62518		5.000		92.5		90.0-110.0	
Potassium (K)		11.70715		12.50		93.7		90.0-110.0	
Sodium (Na)		12.42121		12.50		99.4		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1609			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.15966		12.50		97.3		90.0-110.0	
Magnesium (Mg)		4.65454		5.000		93.1		90.0-110.0	
Potassium (K)		12.08889		12.50		96.7		90.0-110.0	
Sodium (Na)		12.59885		12.50		100.8		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1703			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.10694		12.50		96.9		90.0-110.0	
Magnesium (Mg)		4.70127		5.000		94.0		90.0-110.0	
Potassium (K)		11.80085		12.50		94.4		90.0-110.0	
Sodium (Na)		12.62287		12.50		101.0		90.0-110.0	
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	1750			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		11.91434		12.50		95.3		90.0-110.0	
Magnesium (Mg)		4.52269		5.000		90.5		90.0-110.0	
Potassium (K)		11.95544		12.50		95.6		90.0-110.0	
Sodium (Na)		12.69158		12.50		101.5		90.0-110.0	
CH1	Calibration check standard 1	MS073008T1			08/18/2008	0848			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.10864		0.1000		108.6		80.0-120.0	
Sodium (Na)		0.62762		0.60000		104.6		80.0-120.0	
CH1	Calibration check standard 1	MS073008T1			08/18/2008	1557			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.10640		0.1000		106.4		80.0-120.0	
Sodium (Na)		0.65120		0.60000		108.5		80.0-120.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
CH1	Calibration check standard 1	MS073008T1			08/18/2008	1738			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		0.09826		0.1000		98.3		80.0-120.0	
Sodium (Na)		0.65638		0.60000		109.4		80.0-120.0	
CH3	Standard check for ICAP	MS073008T3			08/18/2008	0836			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		19.96181		20.00		99.8		95.0-105.0	
Magnesium (Mg)		19.98410		20.00		99.9		95.0-105.0	
Potassium (K)		19.92924		20.00		99.6		95.0-105.0	
Sodium (Na)		19.90965		20.00		99.5		95.0-105.0	
EB	Extraction Blank			403614		08/18/2008	1132		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		0.02108							
Magnesium (Mg), Diss.		-0.06764							
Sodium (Na), Diss.		0.02178							
EB	Extraction Blank			403614		08/18/2008	1632		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.		0.01031							
Magnesium (Mg), Diss.		-0.06137							
Potassium (K), Diss.		-0.72774							
Sodium (Na), Diss.		0.00460							
ICB	Initial Calibration Blank					08/18/2008	0844		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		-0.00255							
Magnesium (Mg)		-0.00706							
Potassium (K)		-0.18349							
Sodium (Na)		0.00310							
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	0840			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		12.30537		12.50		98.4		90.0-110.0	
Magnesium (Mg)		4.85777		5.000		97.2		90.0-110.0	
Potassium (K)		11.76057		12.50		94.1		90.0-110.0	
Sodium (Na)		12.22992		12.50		97.8		90.0-110.0	

Job Number.: 358699		QUALITY CONTROL RESULTS				Report Date.: 09/04/2008			
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
ISA	Interference Check Sample A	MS073008IA			08/18/2008	0852			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		485.05847		500.0		97.0		80-120	
Magnesium (Mg)		544.90545		500.0		109.0		80-120	
Potassium (K)		0.05409		0.0					
Sodium (Na)		0.03831		0.0					
ISA	Interference Check Sample A	MS073008IA			08/18/2008	1601			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		472.63363		500.0		94.5		80-120	
Magnesium (Mg)		523.46191		500.0		104.7		80-120	
Potassium (K)		-0.32830		0.0					
Sodium (Na)		0.02817		0.0					
ISA	Interference Check Sample A	MS073008IA			08/18/2008	1742			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		463.58325		500.0		92.7		80-120	
Magnesium (Mg)		511.31225		500.0		102.3		80-120	
Potassium (K)		-0.47760		0.0					
Sodium (Na)		0.02874		0.0					
ISB	Interference Check Sample B	MS073008IB			08/18/2008	0856			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		496.11413		510.0		97.3		80.0-120.0	
Magnesium (Mg)		556.62023		510.0		109.1		80.0-120.0	
ISB	Interference Check Sample B	MS073008IB			08/18/2008	1605			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		480.06036		510.0		94.1		80.0-120.0	
Magnesium (Mg)		530.67895		510.0		104.1		80.0-120.0	
Potassium (K)		14.01167							
ISB	Interference Check Sample B	MS073008IB			08/18/2008	1746			
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)		473.08453		510.0		92.8		80.0-120.0	
Magnesium (Mg)		519.55932		510.0		101.9		80.0-120.0	
Potassium (K)		13.93035							

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 09/04/2008		
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
LCS	Laboratory Control Sample	MSPIKEW	403614		08/18/2008	1128		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		9.77750		10.00		97.8	80.0-120.0	
Magnesium (Mg), Water		9.59702		10.00		96.0	80.0-120.0	
Sodium (Na), Water		10.24513		10.00		102.5	80.0-120.0	
MB	Method Blank		403614		08/18/2008	1124		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Water		-0.01663						
Magnesium (Mg), Water		-0.07431						
Sodium (Na), Water		0.01258						
MD	Method Duplicate		358699-1	10	08/18/2008	1140		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		6.06906	5.93093		5.93093	0.13813	2.00000	
Magnesium (Mg), Diss.		1.97813	1.92688		1.92688	0.05125	2.00000	
Sodium (Na), Diss.		11.69064	11.40290		11.40290	2.5	20	
MS	Matrix Spike	MSPIKEW	358699-1	10	08/18/2008	1144		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		7.14679		1.000000	5.93093	121.6	75-125	
Magnesium (Mg), Diss.		2.95179		1.000000	1.92688	102.5	75-125	
Sodium (Na), Diss.		12.67862		1.000000	11.40290	127.6	75-125	
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1	10	08/18/2008	1148		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca), Diss.		7.01182	7.14679	1.000000	5.93093	108.1	75-125	
						11.8	20	
Magnesium (Mg), Diss.		2.89842	2.95179	1.000000	1.92688	97.2	75-125	
						5.3	20	
Sodium (Na), Diss.		12.57971	12.67862	1.000000	11.40290	117.7	75-125	
						8.1	20	
S0	Calibration Blank				08/18/2008	0828		
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F	
Calcium (Ca)		0.00334						
Magnesium (Mg)		0.00672						
Potassium (K)		0.36252						
Sodium (Na)		0.02040						

Job Number.: 358699		Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 09/04/2008	
CUSTOMER: Conestoga-Rovers and Associates			PROJECT: GL ERWIN		ATTN:	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				08/18/2008	0832

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.28337						
Magnesium (Mg)	0.21195						
Potassium (K)	1.52170						
Sodium (Na)	4.11051						

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 09/04/2008

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field, (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
- 4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reported as the final result.
- m-Cresol (3-Methylphenol) and p-Cresol (4-methylphenol) co-elute. The result of the two is reported as either m&p-cresol or as 4-methylphenol (p-cresol).
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming dipheylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethylsilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MQL/PQL.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, multiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The 8260 and 1006 results will not require correction. The only corection required for water analysis is for method 1006 where the reported concentraiton must be multiplied by 0.1.
- Due to limitation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound reveiwed.
- The dilution factor listed on the report represents only the analytical dilutions necessary for the target compounds to be within the calibration range of the instrument. It does not include any preparation factors, dry weight or any other adjustment.

Explanation of Qualifiers:

- U - This qualifier indicates that the analyte was analyzed but not detected.
- J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic charachterization of a TIC, such as "chlorinated hydrocarbon", the "N" flag is not used.

Explanation of General QC Outliers:

- A - Matrix interference present in sample.
- a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
- b - Target analyte was found in the method blank.
- M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
- L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 09/04/2008

observed above the RL in the associated samples.

G - Marginal outlier within 1% of acceptance criteria.

r - RPD value is outside method acceptance criteria.

C - Poor RPD values observed due to the non-homogenous nature of the sample.

O - Sample required dilution due to matrix interference.

D - Sample reported from a dilution.

d - Spike and/or surrogate diluted.

E - The reported concentration exceeds the instrument calibration.

F - The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.

H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.

q - See the subcontract final report for qualifier explanation.

W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.

K - High recovery will not affect the quality of reported results.

Z - See case narrative.

Explanation of Organic QC Outliers:

e - Method blank analysis yielded phthalate concentrations above the RL. Phthalates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.

S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.

T - Sample analysis yielded poor surrogate recovery.

R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.

I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.

X - Gaseous compound. In-house QC limits are advisory.

Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.

f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.

V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.

e - Serial dilution failed due to matrix interference.

g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is greater than or equal to 0.995.

s - BOD/CBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.

l - BOD/CBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.

N - Spiked sample recovery is not within control limits.

n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.

* - Duplicate analysis is not within control limits.

Abbreviations:

Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.

CCV - Continuing Calibration Verification

CRA - Low level standard check - GEAA, Mercury

CRI - Low level standard check - ICP

Dil Fac - Dilution Factor - Secondary dilution analysis

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 09/04/2008

DLFac - Detection Limit Factor
DU - Duplicate
EB - Extraction Blank (TCLP, SPLP, etc.)
ICAL - Initial Calibration
ICB - Initial Calibration Blank
ICV - Initial Calibration Verification
ISA - Interference Check Sample A - ICP
ISB - Interference Check Sample B - ICP
LCD - Laboratory Control Duplicate
LCS - Laboratory Control Sample
MB - Method Blank
MD - Method Duplicate
MDL - Method Detection Limit
MQL - Method Quantitation Limit (TRRP)
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ND - Not Detected
PB - Preparation Blank
PREPF - Preparation Factor
RL - Reporting Limit
RPD - Relative Percent Difference
RRF - Relative Response Factor
RT - Retention Time
SQL - Sample Quantitation Limit (TRRP)
TIC - Tentatively Identified Compound

Method References:

- (1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-94-111 Methods for the Determination of Metals in Environmental Samples, Supplement I, May 1994.
- (3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
- (4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
- (5) HACH Water Analysis Handbook 3rd Edition (1997).
- (6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
- (7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.
- (9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

LABORATORY CHRONICLE

Job Number: 358699

Date: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Lab ID: 358699-1		Client ID: MW-1 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008	1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008	1200	
	Electronic Data Deliverables	1	197106			08/27/2008	0000	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1318	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1334	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1318	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008	1116	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008	1136	10
N/A	Sample Filtration	1	403608			08/14/2008	1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008	1500	
Lab ID: 358699-2		Client ID: MW-2 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008	1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008	1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1421	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1436	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1421	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1436	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008	1131	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008	1151	10
N/A	Sample Filtration	1	403608			08/14/2008	1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008	1500	
Lab ID: 358699-3		Client ID: MW-8 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008	1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008	1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1539	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1555	10
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1610	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1539	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1555	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008	1135	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008	1340	100
N/A	Sample Filtration	1	403608			08/14/2008	1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008	1500	
Lab ID: 358699-4		Client ID: MW-9 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008	1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008	1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1626	5
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1641	10
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008	1657	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1626	5
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008	1641	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008	1139	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008	1159	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008	1344	100
N/A	Sample Filtration	1	403608			08/14/2008	1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008	1500	
Lab ID: 358699-5		Client ID: MW-10 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008	1715	

LABORATORY CHRONICLE

Job Number: 358699

Date: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Lab ID: 358699-5		Client ID: MW-10 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1713		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1728	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1744	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1713		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1728	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1151		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1211	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-6		Client ID: MW-12 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1831	5	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1902	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1831	5	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1847	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1155		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1215	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-7		Client ID: MW-14 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1918	5	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 1949	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1918	5	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 1933	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1159		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1219	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1348	100	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-8		Client ID: MW-15 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2005		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2020	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2036	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2005		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2020	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1203		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1223	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-9		Client ID: MW-16 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		

LABORATORY CHRONICLE

Job Number: 358699

Date: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Lab ID: 358699-9	Client ID: MW-16 81208	Date Recvd: 08/13/2008	Sample Date: 08/12/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2123		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2138	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2154	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2123		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2138	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1206		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1227	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-10	Client ID: MW-17 81208	Date Recvd: 08/13/2008	Sample Date: 08/12/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2241		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2257	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2312	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2241		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2257	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1210		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1231	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-11	Client ID: MW-19 81208	Date Recvd: 08/13/2008	Sample Date: 08/12/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2328	5	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/13/2008 2343	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0030	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2328	5	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/13/2008 2343	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1234	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1352	100	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-12	Client ID: MW-20 81208	Date Recvd: 08/13/2008	Sample Date: 08/12/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0046		
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0102	10	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0117	100	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0046		
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0102	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1218		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1238	10	
N/A	Sample Filtration	1	403608			08/14/2008 1600		
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500		
Lab ID: 358699-13	Client ID: MW-21 81208	Date Recvd: 08/13/2008	Sample Date: 08/12/2008					
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715		

LABORATORY CHRONICLE

Job Number: 358699

Date: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Lab ID: 358699-13 Client ID: MW-21 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0133	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0149	10
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0204	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0133	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0149	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1222	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1242	10
N/A	Sample Filtration	1	403608			08/14/2008 1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500	
Lab ID: 358699-14 Client ID: MW-22 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0220	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0235	10
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0251	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0220	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0235	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403716	403614		08/15/2008 1226	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1246	10
N/A	Sample Filtration	1	403608			08/14/2008 1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500	
Lab ID: 358699-15 Client ID: RW-1 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0409	5
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0440	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0409	5
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0425	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1258	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1356	100
N/A	Sample Filtration	1	403608			08/14/2008 1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500	
Lab ID: 358699-16 Client ID: DUP 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	403614			08/14/2008 1715	
SM 2320 B	Alkalinity	1	403565			08/14/2008 1200	
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0456	5
EPA 300.0	Ion Chromatography Analysis	1	403577			08/14/2008 0527	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0456	5
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	403577			08/14/2008 0512	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1302	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	403795	403614		08/18/2008 1400	100
N/A	Sample Filtration	1	403608			08/14/2008 1600	
SM 2540C	Solids, Total Dissolved (TDS)	1	403559			08/13/2008 1500	

Chain of Custody Record

Temperature on Receipt _____

TestAmerica

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

TL-4124 (1007)

Client

CRA

Project Manager

1004 Wells w/ CRA

Date

8/12/08

Chain of Custody Number

091664

#358694

Address
2835 S. Loop 250 W.

Telephone Number (Area Code)/Fax Number
432-686-0086 / 432-686-0186

Lab Number

Page 1 of 2

City

Midland

State

TX

Zip Code

79403

Project Name and Location (State)

C.I. Fertilizer Tail, U.M.

Site Contact

MART HUDSON

Lab Contact

Sarina Kudachur

Analysis (Attach list if more samples needed)

TDS 5M 2540C
Dissolved Ca, Mg, K, Na 6008
Chloride, Fluoride, Sulfate, Nitrate 300
Carbonate Bicarbonate 400
Hydroxide 400
Total Alkalinity 400

Contract/Purchase Order/Quote No.

039124

Special Instructions/
Conditions of Receipt

Sample I.D. No. and Description
(Containers for each sample may be combined on one line)

Sample I.D. No. and Description	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	IRE	TDS 5M 2540C	Dissolved Ca, Mg, K, Na 6008	Chloride, Fluoride, Sulfate, Nitrate 300	Carbonate Bicarbonate 400	Hydroxide 400	Total Alkalinity 400
MW-1 81208	8/12/08	1635	X	X			X						X	X	X	X	X	X	X
MW-2 81208	8/12/08	1650	X	X			X						X	X	X	X	X	X	X
MW-8 81208	8/12/08	1440	X	X			X						X	X	X	X	X	X	X
MW-9 81208	8/12/08	1620	X	X			X						X	X	X	X	X	X	X
MW-10 81208	8/12/08	1545	X	X			X						X	X	X	X	X	X	X
MW-12 81208	8/12/08	1410	X	X			X						X	X	X	X	X	X	X
MW-14 81208	8/12/08	1515	X	X			X						X	X	X	X	X	X	X
MW-15 81208	8/12/08	1350	X	X			X						X	X	X	X	X	X	X
MW-16 81208	8/12/08	1425	X	X			X						X	X	X	X	X	X	X
MW-17 81208	8/12/08	1500	X	X			X						X	X	X	X	X	X	X
MW-19 81208	8/12/08	1530	X	X			X						X	X	X	X	X	X	X
MW-20 81208	8/12/08	1335	X	X			X						X	X	X	X	X	X	X

Possible Hazard Identification

☒ Non-Hazard

☐ Flammable

☐ Skin Irritant

☐ Poison B

☐ Unknown

Sample Disposal

☐ Return To Client

☒ Disposal By Lab

☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours

☐ 48 Hours

☐ 7 Days

☒ 14 Days

☐ 21 Days

☐ Other _____

QC Requirements (Specify)

Run Specificed Anions (including fluoride) By EPA 300 IC.

1. Relinquished By

8/12/08

Time

1100

2. Received By

8/13/08

Time

9:37

2. Relinquished By

8/12/08

Time

1100

3. Received By

8/13/08

Time

9:37

3. Relinquished By

8/12/08

Time

1100

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____
Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

#358699

TAL-4124 (1/007)

Client **CRA** Project Manager **Todd Wells** Date **8/12/08** Chain of Custody Number **091665**

Address **2135 S. Loop 250 W.** Telephone Number (Area Code)/Fax Number **432-686-0086 / 432-686-0186** Page **2** of **2**

City **Midland** State **TX** Zip Code **79703** Lab Contact **Sevin Vaca** Analysis (Attach list if Lab Number _____)

Project Name and Location (State) **O.L. Ertin / 5th, NW.** Carrier/Waybill Number **8608 3734 8634** Special Instructions/Conditions of Receipt **TEMP**

Contract/Purchase Order/Quote No. **039124** Matrix _____ Containers & Preservatives _____

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TOC	TDS	Dissolved Ca, Mg, K, Na-6016	Chloride-Fluoride-Sulfate-600	Carbonate-6016	Hydroxide-Su-2320	Total Alkalinity-Su-2320
MW-21 81208	8-12-08	1330	X				X							X	X	X	X	X	X
MW-22 81208	8-12-08	1605	X				X							X	X	X	X	X	X
RW-1 81208	8-12-08	1310	X				X							X	X	X	X	X	X
DUP 81208	8-12-08	—	X				X							X	X	X	X	X	X
TEMP Blank	—	—					X							X	X	X	X	X	X
TEMP Blank	—	—					X							X	X	X	X	X	X

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown
Sample Disposal ☒ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____
OC Requirements (Specify) **SEE Page 7**

1. Relinquished By **[Signature]** Date **8/12/08** Time **1600**
2. Received By **[Signature]** Date **8/13/08** Time **9:37**

3. Relinquished By _____ Date _____
3. Received By _____ Date _____

Comments _____